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Appendix: STRATEGIC ACTION PLAN



Councillor Paul Osborn Leader of London Borough of Harrow



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Cabinet Member for Cleaner
Streets and Public Safety

Living Harrow: Climate & Nature Strategy 2023-2030

Climate change affects us all. Our world is changing around us with rising temperatures, extreme weather, and pollution – these pose threats to our health, wildlife, ecosystems and food production.

The London Borough of Harrow declared a climate emergency in 2019 recognising these serious risks to our communities. In response, the Council has made good progress with initiatives to help protect our environment and reduce carbon emissions.

We have a fleet of 17 electric powered vehicles; flood alleviation and biodiversity schemes; heat pumps, solar panels and energy saving measures across schools and corporate sites; and we are introducing hundreds of new electric vehicle charging points. We are going even further by exploring greener and cleaner travel to help both staff and residents through our transport strategy.

We know there is a lot more to do – and it needs to be a team effort with our partners and residents. The Council will play its part as an organisation but our own direct greenhouse gas emissions are a small percentage of the borough's as a whole. To achieve the scale of change that is needed we must all support each other to take steps now to reduce greenhouse gas emissions over the coming years.

The purpose of this climate and nature strategy is to highlight key areas that we should focus on over the next seven years and beyond. The four areas are Clean Energy used Efficiently; Green Mobility; A Waste-free Economy; and Healthy Places for Us and Nature.

Our aim is to better enable everyone to contribute to this work – after all we are all part of this journey. Even small changes, for example our day-to-day decisions about how we get around, what we buy or how we use our gardens, can add up over time to make a big difference.

And it's not just about reducing greenhouse gas emissions. There are many other benefits of taking action on climate change and helping Nature, including reduced energy costs, new jobs and investment, improved health and wellbeing, and a thriving environment for local people.

All of this contributes directly to our vision to Restore Pride in Harrow. It ensures we are working towards a borough that is clean and safe – and helps to deliver a better place for future generations.

Strategy On A Page

The Vision

This strategy establishes a framework of key action areas around which the Council and our communities can significantly reduce our combined greenhouse gas emissions by 2030, whilst also enabling the recovery of the natural world upon which we depend.

By doing so, we will play our part to leave Harrow a better place for future generations: stabilising our climate, promoting climate resilience, and allowing the regeneration of ecosystems that support us all.

This will be a just transition that Restores Pride in Harrow by realising the opportunities of new jobs and investment, improved health, wellbeing and education, and a thriving environment for local people.

Key Action Areas

We will deliver our vision through a determined focus on:

Clean Energy used Efficiently – how we power and heat homes and buildings

Green Mobility - how we get around

A Waste-free Economy – the things we buy, use and dispose of

Healthy places for us and Nature – a healthy, resilient local environment

All four of the key action areas support the delivery of the Council's Priority of A Borough that is Clean and Safe, with the just transition supporting the Priority A Place where Those in Need are Supported

Our Approach

We will lead by example and help enable action by supporting the development of Eco-literate and Engaged Communities in Harrow, promoting Good Governance for Long Term Sustainability and ensuring a Socially Just Transition



1.1 Climate change and Nature recovery – the interlinked challenges

'We declare clearly and unequivocally that planet earth is facing a climate emergency ... An immense increase in scale of endeavours to conserve our biosphere is needed to avoid untold suffering due to the climate crisis ...To secure a sustainable future, we must change how we live. [This] entails major transformations in the ways our global society functions and interacts with natural ecosystems'

(Bioscience Statement, November 2019, endorsed by 11,000 scientists from 153 nations)

'Making peace with Nature is the defining task of the twenty first century'

(Antonio Guterres, UN Secretary-General, 2021)

What is climate change and how does it impact our planet?

The destabilisation of our climate by the burning of fossil fuels, and the associated weakening and depletion of ecosystems on our planet caused by human activity, are the two great, interlinked challenges of our age.

Fossil fuels such as oil (from which petrol, diesel and most plastics are derived), natural gas and coal are the remains of long dead plants and animals that once lived on our planet. The reserves of carbon

contained within their bodies were laid down in the earth by the processes of life operating over vast geological timespans of millions of years, as part of our planet's natural, self-regulating carbon cycle.

However, there is now overwhelming scientific consensus that the rapid extraction and burning of these fossil fuels by humans to meet our societies' energy demand, which has taken place at significant scale over only the last 100 years, is causing a substantial net increase of carbon dioxide (CO2) in the atmosphere. World Meteorological Office data suggests that in 2021 atmospheric CO2 was 149% of the pre-industrial level and average mean global temperatures were over 1°C higher, with a 50% chance of exceeding 1.5°C within the coming five years.¹²

CO2 is the most important of the 'greenhouse' gases (GHGs) that also include methane. Together these gases act like a blanket to trap the sun's heat in earth's atmosphere. On the one hand, this is an essential thermostatic function of our planetary system. Without this warming effect much of the sun's heat would radiate out into space leaving the earth too cold for life. However, too great a concentration of greenhouse gases has the opposite result, leading to global heating and increasingly dramatic and serious changes to the earth's climate.

The effects of climate change, that we have unfortunately begun to witness with increasing severity over recent years, include drought, heatwaves, famine, forest fires, flooding, storms and the spread of new pests and diseases. They affect not only human settlements but also significantly weaken the wider natural world and its ecosystems upon which we depend.

¹ Greenhouse Gas Bulletin | World Meteorological Organization (wmo.int);

At a global, national, and local level there is therefore a pressing need to rapidly reduce and eventually eliminate carbon emissions from the burning of fossil fuels. In this way we can contribute to mitigating the worst effects of runaway climate change and help to secure a more stable future.

The crisis in our natural world

"Biodiversity, the unique variety of life on our planet, is more than just flora and fauna. It's the lynchpin to the continued existence of our species. Remove the pin, and everything begins to come apart – climate, food chains, weather, the economy, our way of life and place in the natural world." 3

In tandem with climate change, recent decades have seen unprecedented declines in the quality and quantity of life on our planet, with global species populations plummeting by 69% on average since 1970.⁴

These declines are as a result of the unsustainable land use practices related to our high carbon lifestyles and include pollution, deforestation, and uncontrolled extraction of water and other resources. The effects of climate change further compound these high levels of habitat loss and destruction. The Intergovernmental Panel on Climate Change (IPCC) concluded in its Sixth Assessment Report⁵ that global heating has altered the distribution, growing area suitability and timing of key biological events, such as flowering and insect emergence, affecting food quality and harvest stability. The IPCC has also reported that a rise

of 2 degrees Celsius over pre-industrial global temperatures would be expected to result in the destruction of 99% of coral reefs globally. Tropical coral reefs are some of the most species rich environments on our planet and are worth billions to the global economy, supporting hundreds of thousands of jobs from fishing to medical research.⁶

In the UK, we live in one of the most nature depleted countries in the world. The Environment Agency found in 2022 that our long history of industrialisation and land use changes over millennia have resulted in the loss of 99.7% of fens, 97% of species-rich grasslands, 80% of lowland heathlands, up to 70% of ancient woodlands and up to 85% of saltmarshes destroyed or degraded. With just 13% remaining cover, the UK is one of the least densely forested countries in Europe. This compares with 38% for the EU as a whole and 31% worldwide. The impacts on our native species have also been severe, with a quarter of mammals in England and almost a fifth of UK plants threatened with extinction.

Nature is our most valuable asset. We depend upon biodiversity and healthy ecosystems for clean air, water, food, medicines, our health and wellbeing, in short the essentials of life. Although this simple truth is obscured by many aspects of modern life, we are of course ourselves also a part of Nature, and we all have a profound connection with it. This is something children intuitively recognise but which we can forget as we grow older. Re-establishing and cultivating that respect and wonder for the natural world so that we care for it better is a fundamental part of how as a society we must transform ourselves to meet the demands of climate change and biodiversity loss.

³ Nature and climate crises: two sides of the same coin – European Commission

⁴ Living Planet Report 2022, WWF.

⁵ IPCC_AR6_WGII_FullReport.pdf

⁶ Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by governments — IPCC

⁷ Forest cover: international comparisons - Forest Research

⁸ Environment Agency Working with Nature Report, July 2022.

The message is clear: we must all work together to rapidly develop and implement more sustainable ways of living that strengthen rather than deplete our planet's life support systems.

The international response

The Paris Agreement on Climate Change was adopted at a meeting of 195 nations in December 2015. This included the aim of 'holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels.'

In October 2018 the IPCC published a special report, further to the Paris Agreement, finding that globally actions to limit global greenhouse gas emissions to meet the 1.5°C target were not happening fast enough and that 'rapid and far-reaching' transitions were required across land use, energy use, industry, buildings and cities. The IPCC report warned that failure to act could result in 'tipping points' being reached in our planet's natural systems. It concluded that the coming decade to 2030 was a crucial window of opportunity that must be acted upon.

Subsequent Climate Summits (COP), including COP 26 hosted by the UK in 2021, have reaffirmed the commitments of the Paris Agreement. Although the Agreement targets are likely to have to be revised over coming years, it is encouraging that around 140 countries, including the biggest polluters – China, the United States, India and the European Union – have now set a net-zero target, covering almost 90% of global emissions.⁹ In December 2022 the historic Kunming-Montreal Global Biodiversity Framework was adopted by the world's nations at the UN's annual summit. It includes the flagship '30 x 30' commitment to protect 30% of global land and water by 2030.

The co-benefits of climate action

Climate action aims to reduce carbon emissions and restore the natural world, but it is increasingly clear that doing so also offers the opportunity for radical and positive change across a wide range of areas that matter most to people in their day to day lives, including cleaner air, greener spaces, warmer homes, healthier travel, and a thriving economy.

In Harrow, moving away from combustion vehicles and encouraging active transport along healthy, liveable streets has the potential to significantly improve public health outcomes. This can reduce the current costs of NHS treatment and in turn free up public funding to be spent on additional low carbon measures including home energy efficiency measures and local renewable generation, in turn positively impacting issues such as fuel poverty. Similarly, reducing waste and growing a local green economy in repair and re-use of goods, and in home retrofit, would result in more wealth being retained in the borough and create new local opportunities for skilled, meaningful work that directly benefits local communities and contributes to low carbon outcomes. Thriving biodiverse parks, open spaces and gardens that provide opportunities for people locally to spend time outdoors and connect with the natural world are also vital to maintaining our mental and physical health¹⁰.

Section 2 of this strategy highlights some of the key co-benefits associated with the four main thematic areas of action.

1.2 The UK and London-wide context

Net Zero, Carbon Neutrality and Offsetting

Achieving true net zero emissions globally refers to reducing the greenhouse gas emissions associated with human activity so far as possible and ensuring that all the remaining carbon emissions attributable to that activity are at least matched by absorbing, or sequestering, an equivalent amount of CO2 from the atmosphere. Typically this is achieved by natural processes, mainly through the assistance of land and ocean based plants, which capture and store CO2.

In the context of an individual, organisation or municipal area, net zero is often used interchangeably with carbon neutrality. In this case the balancing exercise to achieve a neutral carbon position is achieved by investing in initiatives which result in an equivalent reduction of carbon emissions elsewhere. This is also referred to as offsetting. This can take the form of tree planting or soil restoration initiatives inside or outside the area but can also include for example funding additional renewable energy generation capacity elsewhere that replaces the need for fossil fuel energy.

Carbon neutrality can technically be achieved by continuing a business-as-usual approach and paying to offset emissions by funding sequestration or carbon reduction initiatives elsewhere. However, such an approach on its own does not achieve the widespread, systems level social and economic change that is required to meet the challenge of the climate and nature crisis.

Instead, the first priority at an individual, organisational and municipal level should be to reduce and remove fossil fuel-based emissions at source, working towards ultimately transitioning to zero carbon emission

solutions in relation to key areas such as energy and transport requirements. Where the availability of technological solutions on an economic basis and / or the state national infrastructure at the time prevents further reductions in emissions, the individual or organisation may then choose to adopt offsetting measures in order to achieve an overall carbon neutral position.

UK Targets

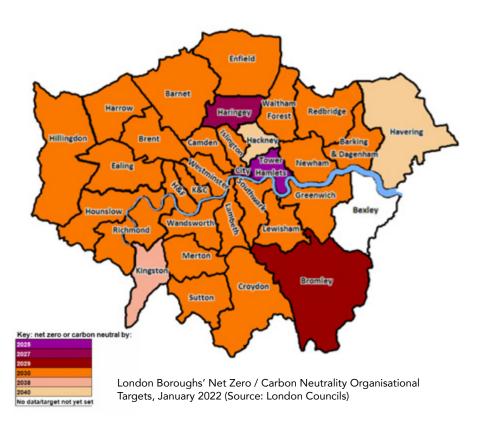
Under the Climate Change Act 2008 (as amended), the UK as a whole has a legally binding target to reach a net zero carbon position by 2050, with an interim target of reducing emissions by 78% by 2035, when compared to 1990 levels. In early 2023 the UK Government's commissioned independent review of its net zero targets, which focussed primarily on net zero through the lens of the economy and business growth, recommended that the target be pursued. The review describes net zero as 'the economic growth opportunity of the twenty first century' and emphasises that over coming years the costs of inaction to the UK economy would far exceed the cost of action.¹¹

London Targets

The Mayor of London has a net zero target for the metropolis of 2030, albeit with a degree of offsetting included within this. The 'Accelerated Green' pathway adopted in January 2022 has 22 per cent residual emissions by 2030 (i.e. a reduction in emissions of 78 per cent relative to 1990). To comparison, if the UK meets its targets, it will have 32 per cent residual emissions by 2030. It is reasonable to expect that London, with much denser populations, better public transport networks and scaled supply chains will be in advance of the UK as a whole in achieving carbon reductions.

A number of other London councils also have a 2030 borough wide target. However, all will likewise require some significant element of offsetting in order to achieve net zero / carbon neutrality by that date.

Since their own council's emissions are mostly within the direct control of local authorities, nearly all councils in London have a 2030 organisational target for net zero / carbon neutrality, as shown in the map below.



The Seven London Climate Programmes including One World Living

In November 2019, a grouping of London Environment Directors and the Transport and Environment Committee (TEC) came together to discuss common climate change issues facing boroughs and how they could work together to address them. The result was a Joint Statement on Climate Change, that sets out seven major programmes for cross-borough working.¹³

The programmes each have TEC-endorsed lead boroughs responsible for overseeing the implementation of an action plan:

- #1 Retrofit London Enfield & LB Waltham Forest
- #2 Low Carbon Development Hackney
- #3 Low Carbon Transport Kingston & Westminster
- #4 Renewable Energy TBC
- #5 One World Living Harrow (consumption emissions)
- #6 Green Economy Hounslow
- #7 Resilient and Green Southwark & Kensington & Chelsea

Such cross-borough action and collaboration on Climate Change is not only welcome but vital if London is to effectively meet the challenges ahead.

The Harrow co-ordinated programme, which is closely supported by West London Waste Authority, ReLondon and four designated sub-theme lead boroughs, focusses on reducing carbon emissions from food (Hackney), textiles (Wandsworth), electricals (Hammersmith & Fulham) and plastics (Richmond). Key actions to date include sponsoring, jointly with ReLondon, a campaign to reduce food waste and promote climate friendly diets. The campaign is due to launch later in 2023 and has received direct financial support from 26 London boroughs.

1.3 Harrow emissions and targets

An Overview of Emissions Data

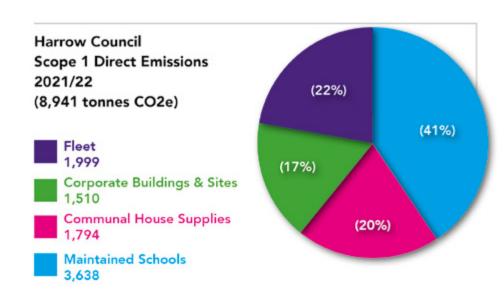
The internationally adopted Greenhouse Gas Protocol provides a high-level framework of three 'scopes' for categorising the sources of an organisation's or an area's GHG emissions:

Scope 1:

direct emissions produced by sources in the area (e.g., road transport and gas heating);

Scope 2:

indirect emissions from the generation of purchased energy used in the area (i.e. electricity);

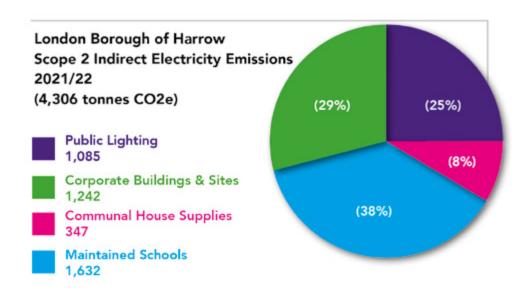


Scope 3:

indirect emissions, not included in Scope 2, that are generated outside the area but as a result of activity taking place within the area (e.g., embedded carbon emissions in goods and services consumed and international transport. These are also referred to as consumption emissions.

The Council's emissions

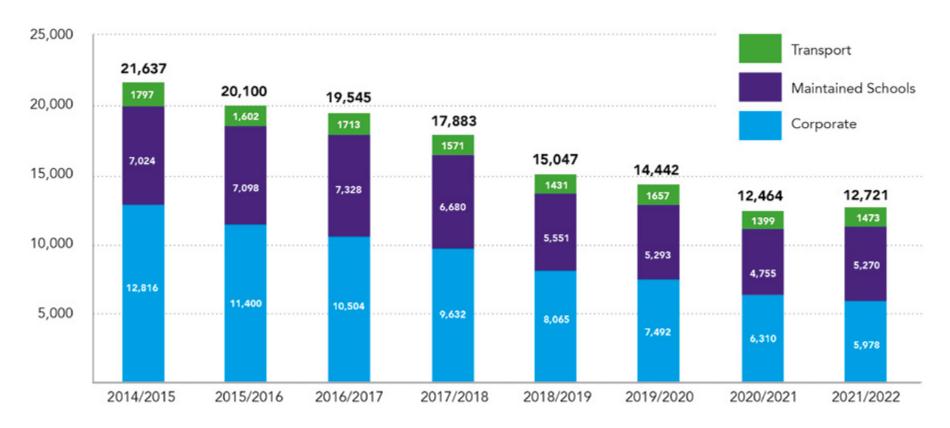
The Council's Scope 1 emissions mostly derive from gas heating of buildings within its estate and fossil fuels burnt in its fleet of vehicles. Its Scope 2 emissions represent the carbon content of grid-purchased electricity used within the estate. The emissions can be accurately ascertained from utility bills and fuel purchases, and are summarised in the following charts:



It should be recognised that the emissions within the above charts only include those buildings where the Council receives the utility bills. All let properties, which include the majority of the Council's housing stock, are not included in the above figures. In addition, although the Council does collect the data for the Borough's academy schools, it has no influence or control over capital

improvements to those schools, who are directly funded by the Department for Education, so academies are therefore also excluded from the figures.

With the exception of the fall back seen after 20/21, which was a highly unusual year worldwide for GHG emissions because of reductions in activity associated with Covid, there has been a steady year on year reduction in Council emissions, as demonstrated by the following graph.



London Borough of Harrow Scope 1 and Scope 2 Emissions reduction 2014 to 2022. (Tonnes Co2e)

The Council's combined Scope 1 and Scope 2 emissions in 2021/22 were 12,721 tonnes CO2e, a decrease of around 40% from 2014/15. Whilst there is much still to be done, this is a significant improvement, the result of a programme to upgrade boilers and improve energy efficiency in schools and some corporate buildings, the renewal of most of the Council's fleet in 2019 with more efficient modern vehicles, and reductions in the carbon content of grid-purchased electricity.

The Council's Scope 3 consumption emissions are those carbon emissions embodied in the goods and the services that we use and procure via our supply chain. There is currently no easy means of measuring these as supply chains are complex and often extend abroad. However, we know that in total they will be significantly greater than our direct emissions. For example, a global 2019 study found that businesses' Scope 3 emissions were on average over five times their combined Scope 1 and Scope 2 emissions. ¹⁴ It is expected that as more businesses measure their own supply chain emissions, the reporting of outline data on the Council's Scope 3 emissions will become possible. In the meantime, it is clear that there must continue to be a concerted focus on reductions of emissions via all key contracts let by the Council along with promoting more sustainable 'circular' ways of doing business.

Harrow's wider borough emissions

The SCATTER assessment tool for local authority emissions has been developed by Manchester and Nottingham in collaboration with research and consultancy partners. It uses national data applied to

Harrow according to its population and estimates of the different types of land use in the borough to calculate the area's Scope 1 and Scope 2 emissions. As such the figures are approximations only, but they do nevertheless serve to highlight the main sources of emissions for planning purposes.

According to SCATTER data for 2019, the borough's total Scope 1 emissions were 558,000 tCO2e and Scope 2 were 140,000 tCO2e, a combined total of just under 700,000 tCO2e for the borough.

Around 64% of Scope 1 emissions are from the burning of fossil fuels for building energy, primarily residential gas boilers, with 30% from road transport in the borough and the remaining 6% associated with waste and industrial processes. Of Scope 2 electricity related emissions, 62% are associated with residential buildings and the remaining 38% split across industrial, business and institutional buildings.¹⁵

This scope 1 and Scope 2 emissions data, however, only takes into account emissions directly occurring in the borough or related to power use. Given the suburban character of the borough, a large proportion of emissions are associated with the ordinary day to day activities of residents. A more comprehensive understanding of the emissions picture for the borough can therefore be obtained by looking at the overall consumption carbon footprint of the average resident in Harrow, to include the emissions attributable to their activity occurring both inside and outside the borough. This has recently become possible due to new data commissioned by London Councils from the University of Leeds, in association with the One World Living programme led by Harrow.

The chart shows that, for the average Harrow resident, transport emissions, comprising all travel inside and outside the borough including flights, are the single biggest part of their carbon footprint, around a third of the total. This is closely followed by the heating and electricity used in homes. The final third of the footprint is comprised of other goods and services consumed, with food being the single most carbon intensive area.

Emissions 2018 16

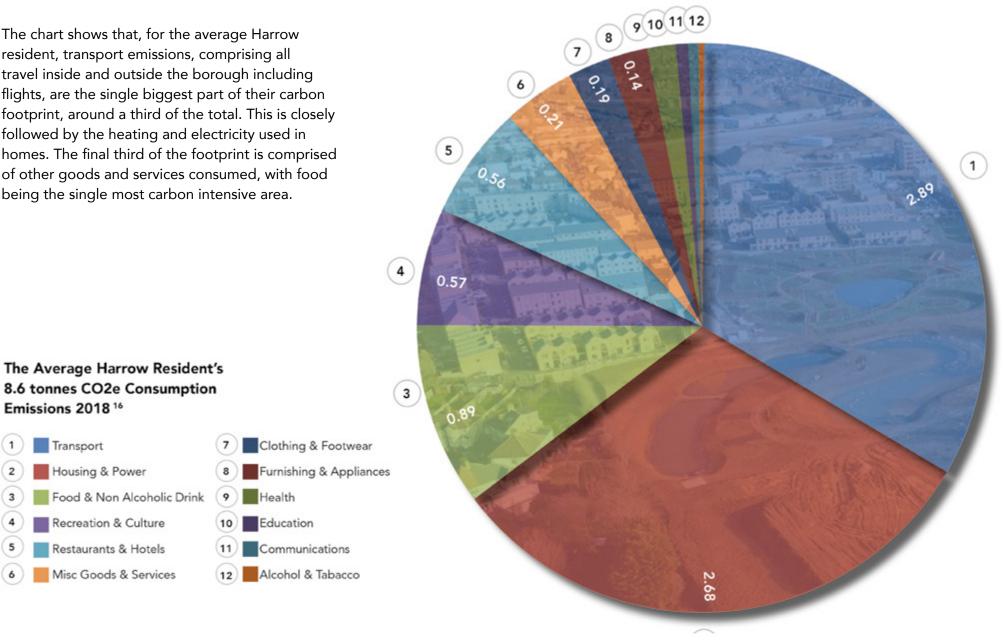
Transport

Housing & Power

Recreation & Culture

Restaurants & Hotels

Misc Goods & Services



Taken together, the data emphasises the importance of reducing the carbon impact of energy used in the borough's buildings, promoting green mobility solutions and reducing the impact of the things that we buy through sustainable consumption and the minimisation of waste. These areas of focus, in tandem with measures to improve the natural environment in the borough and its resilience to climate change, have informed the development of the key action areas set out in Section 2 and the Appendix of this Strategy.

The Council's Targets

On 18th July 2019 full Council debated a motion to declare a Climate Emergency and to resolve to 'Aim to make the London Borough of Harrow carbon neutral by 2030, taking into account both production and consumption of emissions.' The motion was approved for referral to the Executive and subsequently agreed at the meeting of Cabinet on 12th September 2019.

Having analysed the emissions data and undertaken pilot decarbonisation initiatives to our estate over the past two years, including a range of heat pump installations, it is clear that achieving carbon neutrality by 2030 as an organisation, taking into account Harrow Council's Scope 1 and Scope 2 measured emissions from its fleet and those buildings where it pays for the energy, remains an ambitious target but one that is potentially achievable and in line with most other London boroughs, including our neighbouring boroughs.

Meeting the target will however require significant and longterm investment in our property portfolio including the scaling up of heat pump technology at operational buildings and maintained schools, combined with a programme to move towards full electrification of the Council's fleet of vehicles by 2030, in each case building upon the work that has already been started (see Section 2 below). Once emissions have been minimised so far as is achievable within financial and technological constraints, the Council will need to explore options to offset remaining emissions, where possible within the borough focussing on further sequestration using its land and open spaces, and also through pursuing renewable power generation opportunities. The specific pathway and investment decisions for decarbonisation of our estate will be established through the development of the Council's Strategic Asset Management Plan during 23/24.

Our Council Housing stock comprises around 4,900 homes, with a current average Energy Performance Certificate (EPC) score of 67, equating to a high D rating. Whilst not currently within the scope of a carbon neutrality target, the Council will pursue decarbonisation of its stock as a priority within its HRA investment strategy, with an aim to meet at least a good average C rating across the portfolio by 2027/28. Further modelling will also be undertaken to see how this could be improved upon to raise a significant proportion of properties to EPC B or above,

in line with the ambition set by London Councils through its Retrofit London programme.¹⁷ Initial decarbonisation work has already been commenced by our Housing team. 79 properties are currently being retrofitted and a bid has been submitted to the Social Decarbonisation Fund for a two year £5million programme from 23/24 onwards, aimed at improving around a further 250 of the worst energy performing Council properties.

The Council will also continue its focus on decarbonisation of its supply chain, building upon work that began in 2022 with the introduction of a Low Carbon Procurement Policy and supplier Charter. It is recognised that our supply chain is a significant part of the Council's overall emissions profile and that our spending power also represents a crucial leverage point to help influence the growth in the green economy locally. All commissioners of major contracts will be expected to work with their suppliers to ensure carbon reduction and promotion of the circular economy is at the heart of new contract arrangements. It is also highly likely that as supply chain emission reporting and business net zero targets continue to be adopted widely, there will be the opportunity for the Council to bring particularly its major suppliers within the scope of its carbon neutrality target. This area of work will be kept under review and will be part of the annual reporting on this Strategy going forwards.

For the wider borough, the Strategy recognises that the majority of the emissions are beyond the Council's direct control and that achieving significant reductions in emissions across Harrow as a whole will therefore require concerted action from all of Harrow's residents and businesses. Whilst it will be extremely challenging to achieve a carbon neutral position for the borough as a whole by 2030, the Council has a key role to play as a convener and via its statutory services in order to encourage and support positive change across our communities. The consultation on the draft of this strategy has provided an opportunity to begin that process with our residents, businesses and partner organisations.



2.1 Clean Energy Used Efficiently

2.1.1 Theme summary and key areas of action

Overview

The clean energy transition involves moving electricity and heat production away from fossil fuels to those that release little to no greenhouse gases, e.g., hydropower, wind and solar. At the same time, we must reduce demand for energy through more efficient buildings, both in the design and construction of new high performing developments and through improvements to the insulation of existing buildings.

The importance of decarbonising heat

Over 75% of the Council's direct greenhouse gas emissions and around 63% of the wider borough's locally produced emissions are from the burning of natural gas for heating buildings, with 78% of the borough's 90,000 homes having gas as their only form of heating¹⁸. The reduction and eventual elimination of fossil fuel gas as a heat source must therefore be a cornerstone of the transition to a low carbon future both in Harrow and beyond.

Fortunately, alternative heating technologies do already exist and are well proven. Air source heat pumps¹⁹, which extract heat from the environment

and are powered by electricity, are between three and four times more efficient than gas boilers and, as the renewable content of our electricity supply continues to increase, have the potential to become a true zero carbon heating solution of the future. Planning controls for new developments in Harrow will generally now require heat pumps. However, it is estimated that 80% of the buildings that will be in use in 2050 have already been built²⁰. The decarbonisation of heat in existing buildings through a progressive replacement of boilers with heat pumps, combined with improvements in the insulation levels of those buildings to reduce their energy demand, must therefore be a key focus of national and local action over coming years.

Renewable power

There is also significant potential to generate more renewable electricity locally in Harrow through the installation of rooftop solar photovoltaic (PV) panels. It is estimated that 1/3 of the total area of London comprises roof space²¹ and Harrow, as a suburban borough with a large proportion of houses, is well suited to accommodate the technology. Not only is the electricity produced from solar PV completely renewable, but it can also have significant cost saving benefits, particularly in the context of the rapid global rise in energy costs that has been experienced in 2022 and 2023. The Energy Saving Trust estimates that a typical domestic installation generates around 3.5kwp of energy and costs around £5,500 to install. The payback period will vary according to a household's electricity usage in the

¹⁸ Type of central heating in household - Census Maps, ONS

¹⁹ Heat pumps - Energy Saving Trust

²⁰ Climate change - UKGBC - UK Green Building Council

²¹ Date (london.gov.uk)

daytime, but it is typically 4 to 12 years, with an expected system lifespan of around 25 years. Battery storage options are also increasingly available to store energy from the solar panels for use at other times of the day²².

2.1.2 Strategic objectives for this theme

- To transition our borough to renewable and low carbon energy solutions
- To maximise energy efficiency and conservation measures across the borough's new and existing buildings
- To ensure long-term access to secure and affordable energy supplies through a significant increase in local renewable energy generation

2.1.3 Progress / work completed to date

- In 2022 the Council has installed its first large scale heat pumps at four schools and corporate sites, part funded through the Public Sector Decarbonisation Scheme. This includes Harrow Arts Centre which has received 8 heat pumps and 65 solar panels in a project that saves over 50 tonnes of Co2 per annum. As part of the same scheme a total of 680 fluorescent lights were upgraded to LEDs across five sites.
- Approximately 70% of existing streetlighting columns in Harrow have been replaced and upgraded to highly energy efficient LEDs, including a £1.5 million investment in 2021/22. There is a trial underway in a limited number of residential roads to further reduce lighting to 50% intensity during (00.00 Hrs (Midnight) to 06.00am Hrs), to yield further energy savings.

- A programme to upgrade existing electricity and gas meters in Harrow corporate buildings and Schools to automatic meter reading (AMR) type has been completed, with 98% of sites included, which greatly aids accurate energy and carbon emission measurement across the estate.
- In 2022/23 the Council has begun progressing the installation of ground source heat pump systems at two sheltered housing blocks.
- In 2022 the Council has moved its main offices from large, ageing and energy inefficient 1960s civic centre to a newly constructed, modern Hub building at Forward Drive.
- As at March 2023 installation is underway of the Council's largest solar PV array to date at this new building - 311 solar panels generating 155kwp of renewable energy, enough to power the electricity demands of over 30 typical UK houses.
- In 2021 and 2022 the council has participated in Solar Together London, a group buying scheme organised by the GLA which enables residents to access lower cost solar panels for their homes. More Harrow residents than any other London borough opted to participate in the scheme, with 285 people committing to getting panels installed, 139 of which also opted for battery storage.

2.1.4 Co-benefits, including climate adaptation

- Healthy planet: Moving to less carbon intensive forms of energy reduces extractive land use practices and pollution, such as those associated with coal, oil and gas extraction.
- Economic growth: Significant economic growth and innovation opportunities, including the implementation at scale of renewable energy technologies such as heat pumps and solar PV.
- New jobs and skills: New skills and jobs through the growth of the clean energy sector and the low carbon economy.
- Improved public health: Warm and efficient homes, reducing pressure on health services. Cold homes are estimated to cost the NHS around £1.4 billion per year²³.
- Energy resilience: Increased resilience to fluctuations in the international energy markets through reduced overall demand from efficient buildings and more local energy generation.
- Lower ongoing utility costs: lower energy costs to the council and the taxpayer and to residents and businesses, positively impacting fuel poverty and the overall cost of living.

2.1.5 Main challenges

Whilst we have no choice but to transition to a clean energy future if we are to avoid catastrophic destabilisation of our climate, we

recognise that there are still significant challenges that we must all work together to overcome. These include:

- Access to up front funding: Unlocking the capital funding required by the Council to retrofit schools and other public buildings. Many homeowners also lack the financial means to fund the upfront costs of retrofit options, in order to realise the longer-term benefits, and there is a need for new financial and investment models to be developed to assist with this.
- Tenure issues: Developing new letting models for landlords that incentivise landlords to invest in building upgrades beyond statutory minimum levels (as under current models the tenant usually takes the benefit of lower utility costs).
- Retrofit skills: Meeting the current skills gap in the retrofit market, and addressing capacity issues and high prices for some technologies.
- Planning and housing policy: Balancing the financial and social pressures to build new affordable homes quickly in order to meet housing shortages against the need for more robust net zero requirements via planning policy.
- Managing works disruption: Understanding, planning for and managing the practical disruption to occupiers of retrofit solutions, particularly at large operational buildings such as schools which must remain in use.

2.2 GREEN MOBILITY

2.2.1 Theme summary and key areas of action

Overview

Green mobility explores how the Council and our communities can significantly reduce fossil fuel transport emissions by enabling low-carbon sustainable travel within Harrow. This involves a shift towards increased walking, cycling, public transport, car-sharing and electric vehicle usage. In addition to tackling a major part of Harrow's carbon emissions, doing so will significantly reduce air and noise pollution in Harrow, lead to better health outcomes, improve biodiversity and result in a more pleasant place in which to live and work.

Transport in Harrow

Transport, primarily the use of fossil fuel vehicles on our roads, makes up around 30% of all direct greenhouse gas emissions in Harrow and our fleet represents 22% of the Council's own direct organisational emissions. Taken as a whole, including in and out of borough travel and flights, transport is the single highest category of emissions for the average Harrow resident, comprising around 1/3 of the total.

Levels of private car use in the borough remains very high, with 108,000 Harrow vehicles registered with DVLA in 2022, of which nearly 99,000 are cars, along with 5800 Light Goods Vehicles (LGVs). There are currently 3293 EVs registered in Harrow in 2022 comprising mainly cars, of which 40% are plug in hybrid with petrol and 60% battery electric. Only 68 are LGVs.

Over the 3-year period 2017/18 to 2019/20 23.5% of journeys in Harrow were made by public transport, 28.7% by walking and 0.8% by cycling, to give an overall number of journeys by sustainable means of 53%. This compares to an outer London average of 55.1% and 64.8% for London as a whole.²⁴

How do we ensure that we travel more sustainably?

Although the Council has a modern fleet, including small vans that are now mostly electric, we recognise that we need to continue to reduce our own direct impact through a progressive electrification of larger vehicles over coming years, as technology becomes available and financially accessible. In a shift which has been mirrored across many businesses, our staff travel, especially commuting, has reduced as a result of more flexible working practices introduced as a result of the Coronavirus epidemic. Continued investment in our IT systems will enable this pattern to continue.

For the borough as a whole, our focus is on creating safe and pleasant pedestrian and cycling environments, alongside facilitating expansion in the publicly accessible electric vehicle charging infrastructure.

The Council has a range of policies to encourage active travel and sustainable transport choices, as set out in the Harrow Walking, Cycling and Sustainable Transport Strategy 2019²⁵. Furthermore, Harrow has adopted the Vision Zero approach towards eliminating all road traffic deaths and serious injuries by 2041²⁶. Specific interventions, such as 'school streets', where the roads around a school are restricted to cars at drop off and pick up times, have recently been introduced in the borough and have the potential to be expanded more widely in appropriate locations.

With the help of the Healthy Streets approach²⁷, Harrow can undergo changes that will make it easier for residents to go around on foot, by bike, public transportation and electric vehicles, with many positive effects on our communities and the quality of life in our borough.



²⁵ Harrow walking cycling and sustainable transport strategy 2019 26 Vision Zero for London - Transport for London (tfl.gov.uk) 27 Harrow Walking Cycling and Sustainable Transport Strategy 2019

2.2.2 Strategic objectives

- To decarbonise all council operated vehicles and to support significant decarbonisation of public and private transport in Harrow.
- To maximise the use of active and public transport options.
- To significantly improve air quality in the borough.

2.2.3 Progress / Work completed to date

- The Council has a modern and efficient fleet of vehicles, many of which were replaced in 2019. The majority of vehicles meet the highest Euro 6 emissions standard. They include 16 electric vans and, from 2021, a fully electric road sweeper.
- Our Hub building car park at Forward Drive has 31 dedicated EV bays with another floor wired for expansion in the future.
- 64 publicly accessible charging points delivered, or in delivery, with opportunities for further expansion subject to grant funding.
- 3 school streets made permanent in 2022.
- A new Highways Asset Strategy approved by the council in 2023, to include low carbon materials and implementation.

2.2.4 Co-Benefits, including Climate Adaptation

- Improvements to air quality: There were an estimated 3600 4100 deaths in London attributable to air pollution in 2019²⁸, and significant costs to the NHS and reductions in productivity linked with air pollution.
- Reductions in noise pollution: The social cost of urban road noise in England is estimated at c£7bn/yr ²⁹.

- Increased road safety: 23k people nationally were killed or seriously injured in 2020, with the social cost of road collisions estimated at c£9billion/yr³⁰.
- Decreased road congestion: Annual social cost nationally c £7bn/yr³¹, but estimates vary.
- Improving health: through more physical activity (inactivity costs NHS c£7.4bn/yr³²).
- Improving connectivity: supporting green jobs and growth, leading to a more resilient local transport network.
- Improvements to biodiversity and local ecosystems: through significantly better air quality and green infrastructure.

2.2.5 Main Challenges

The transition from fossil fuel vehicles is underway but as with any major societal change there are technological, financial and behavioural challenges that must be worked through. These include:

- Behaviour Change: Finding the most effective means to influence ingrained travel habits and make available attractive and affordable alternatives to fossil fuel journeys.
- Access to charging points: Access to a charging point is required before purchasing an electric vehicle, and this is best accomplished by having access to home charging facilities. This, however, is not always possible and the publicly accessible charging infrastructure in our borough must be improved.

²⁸ Air pollution: applying All Our Health - GOV.UK (www.gov.uk)

²⁹ Health impact of noise pollution – Healthy Streets Scorecard

³⁰ casualties-in-greater-london-2021.pdf (tfl.gov.uk)

³¹ fc-20211124-item11a-Impacts-of-Reduced-Funding.pdf (tfl.gov.uk)

³² Context | Physical activity and the environment | Guidance | NICE

- Funding: The council, like many other boroughs, is reliant on T f L funding being available to fund improvements to our highways network and ensure active and other green travel measures are introduced locally.
- Affordability: many of our residents are from less financially well-off households, which remains a current barrier to fully transitioning to electric vehicles.
- Infrastructure: Harrow currently lacks an integrated cycle network where residents feel safe to travel by bicycle.

2.3 A WASTE-FREE ECONOMY

2.3.1 Theme summary and key areas of action

Overview

The waste-free approach is one where the council, our communities and businesses are all working to reduce the adverse impacts upon the planet of the things that we use and consume. It ensures that goods and products are made to be reused, repaired and ultimately recycled back into nature or the marketplace and provides practical solutions that enable all to contribute to this endeavour. In this way we will grow a strong, resilient green economy that tackles climate change, waste, and pollution and actively supports the regeneration of nature.

Developing a circular economy

The approach requires a fundamental shift in our global, national and local economies that is encouragingly already underway in many industries. This can be understood as a shift from a linear TAKE-MAKE-WASTE approach to a circular -MAKE-USE-REPAIR/REUSE- RECYCLE-REMAKE cycle that is based on keeping materials in use and circulation in a sustainable loop. It is an approach that mirrors the way nature works, just as there is no waste in a natural ecosystem system such as a forest. All waste is recycled and re-incorporated.

LINEAR ECONOMY





ENERGY FROM FINITE SOURCES

CIRCULAR ECONOMY



This new low carbon and low-waste economy that works towards achieving net zero, has been described by various commentators as 'the fourth industrial revolution', and is recognized by global business leaders, and the government commissioned independent review of the UK's Net Zero target, as the economic opportunity of this century^{33,34}.

The Council's own supply chain

As an organisation, the Council has significant buying power that can help to influence this shift towards a low carbon circular economy. In 2021/22 its total spend on third party goods and services was around £350 million, nearly £84 million of which (24%) was with local businesses. This is why the Council has recently introduced, along with a number of other West London Boroughs, a Low Carbon Charter, Policy and Toolkit to ensure that we are actively working with all new major suppliers to deliver reductions in carbon emissions and other circular economy outcomes through the contracts that we enter in to. This will continue to be a keen focus of our activity in the future.

How our communities can help

Residents and businesses in Harrow also have, through their own consumption decisions, many daily opportunities to influence and shape positive change. According to the data for 2021/22, Harrow currently has the highest residual waste levels in West London, with 619kg of residual waste produced on average by each household in Harrow. Our recycling

rates of 35.70% are better than the London-wide average of 32.7%, and only marginally lower than some of our West London peers, but there remains significant room for improvement. We need everyone's help to do this. Positive steps that can be taken include trying to minimise single use plastics and moving to refill options, considering second-hand clothes and other consumer items, sharing goods between family and friends, and minimising residual waste by actively recycling household waste where possible.

Our food system accounts for around one third of all global greenhouse gas emissions as well as the cause of significant ecosystem destruction worldwide³⁵. With 99% of London's food imported, much of it from abroad, our daily food consumption decisions are far reaching³⁶. Minimising food waste, sourcing food locally and seasonally where possible and managing our meat and dairy intake are positive actions that we can all take which together will add up and make a big difference for our planet.

The Council does however recognise that knowing what action to take and what opportunities are available to live more sustainably is not always clear and can sometimes be confusing. We will work to support residents with better information and opportunities locally, including through improvements to our waste and recycling services.

³³ The Circular Economy Imperative | World Economic Forum (weforum.org)

³⁴ MISSION ZERO - Independent Review of Net Zero (publishing.service.gov.uk)

³⁵ Food systems account for over one-third of global greenhouse gas emissions | UN News

³⁶ Report - London's food footprint: An analysis of material flows, consumption-based emissions, and levers for climate action - ReLondon

2.3.2 Strategic objectives

- To ensure waste is minimised and enable goods to be re-used and recycled as part of a circular economy approach
- To build a thriving green economy with new skills and jobs
- To enable greater access to healthy and affordable sustainably produced food
- To minimise single use plastics across the organisation and support the borough to do the same

2.3.3 Progress / work completed to date

- In 2022 Harrow has led a multi-borough collaboration on the production of a low carbon procurement policy, charter and toolkit for implementation by 8 West London boroughs and West London Waste Authority.
- Tailored communications take place focused on recycling under #RecycleforHarrow.
- In 2022/23 the Council has been implementing a pilot project to increase food waste recycling for flats, food businesses and schools. 10% of flats in the borough are taking part in the trial and more bins will be rolled out across other flats. The project has also been introduced to commercial food businesses and schools within the borough.

- The Council has supported the expansion of the Restart Electrical Repair Directory to Harrow, to help residents find local repairers for their electrical goods^{37,38}.
- The Council held a repair, re-use and recycling competition in 2021 and has since funded 3 local projects. These include Harrow Sustain IT³⁹, delivered by Voluntary Action Harrow with support from local volunteers. The project collects, cleans and if necessary, repairs unwanted laptops and passes them on to local charities and voluntary organisations.
- The Economic Development Team has worked with the West London Green Skills Hub⁴⁰ to input into Green Skills Curriculum development across West London colleges.
- In 2022 Harrow Arts Centre has delivered repair workshops with partner WRAP⁴¹ and hosted a production of Plastic Ocean, a children's theatre show exploring the effect plastic has on our ocean ecosystems⁴².

2.3.4 Co-benefits, including climate adaptation

- Healthier planet: reducing pressure on scarce natural resources, including lower land use, water use and pollution, helping vital ecosystems to recover and adapt to climate change.
- Cleaner and safer local environment: a reduction in the levels of waste and pollution in our borough (e.g., single use plastic litter, microplastics).

³⁷ West London Waste | Electrical Repair Service Directory

³⁸ The Repair Directory now has 300 listings following our West London expansion! - The Restart Project

³⁹ Harrow Sustain IT – Harrow Council

⁴⁰ West London Green Skills Hub

⁴¹ The Boulevard of Broken Dreams | Harrow (harrowarts.com)

⁴² Plastic Ocean inside 'The Whale' | Harrow (harrowarts.com)

- New jobs and skills: Promote innovation, business growth and new jobs and skills that are sustainable in the long term.
- Improved public health: including through adopting healthier, climate-friendly diets.
- Local resilience: Stronger local supply chains that are more resilient to national and international disruptions, including climate change.
- Lower costs: to the council and the taxpayer, through a reduction in waste disposal costs.

2.3.4 Main challenges

The transition to a waste free, low carbon circular economy is underway. However, in this all of our choices matter and everyone has a part to play. Some of the main challenges that need to be addressed are:

- Normalising new consumer behaviours: Normalising sustainable consumption of goods, including more sharing, leasing, repair and re-use over buying new; tackling a culture of littering that exists in parts of the borough.
- Access to sustainable choices: Making sustainable choices more accessible and attractive than low cost, environmentally damaging options, e.g. refill options that minimise single use plastic.

- Making recycling easier: Increasing public knowledge and awareness of how to recycle different materials and enabling easy access to recycling options for residents (e.g. home textiles collections by TRAID).
- Support from business: Improving consumer support by manufacturers and retailers, ensuring goods are manufactured sustainably, designed for long-life by enabling repair and re-use, and capable of full recycling at end of life.
- Food choices: Improved education as to the damaging impact of certain food consumption habits, including minimising food waste and supporting residents on how to transition to healthy, climate friendly diets.

2.4 Healthy Places For Us And Nature

2.4.1 Theme summary and key areas of action

Overview

This theme explores how we can build a healthier, more resilient and thriving local natural environment that is valued by the people of Harrow. This will be one that makes space for Nature and increases biodiversity, whilst helping to protect people and places from climate impacts and risks. It includes enriching our parks and open spaces and improving residents' health and wellbeing through greater opportunities for connection with the natural world.

Harrow's green and blue spaces

Approximately 20% of our borough's land by area is identified as open space. Our green spaces are formed of more than 80 areas⁴³, including parks, allotments, nature reserves and cemeteries. Harrow's most visible green spaces include 36 parks and open spaces, 6 of which are green flag parks. 22 of our parks also have park user groups who play an active role in the management of those parks. Furthermore, Harrow has 44 designated Sites of Importance for Nature Conservation (SINCs). These include Bentley Priory Nature Reserve, the borough's only Site of Special Scientific Interest (SSSI) and one of a number of sites cared for by passionate volunteers at Harrow Nature Conservation Forum. Additionally, there are 446 ha of agricultural fields to the north of the borough and 163.5 ha of sports fields throughout Harrow. There are also approximately 80kms of watercourse in Harrow, including 13 flood storage areas all of which are in open spaces that provide a blue element to our green amenity spaces.⁴⁴

As a suburban borough, Harrow also of course has a wide variety of private gardens that have the potential to provide valuable space for both residents and local wildlife.

The importance of thriving local natural environment

Taking steps to enable Nature to recover and building local healthy ecosystems within our open spaces provides many benefits to the people of Harrow. These include cleaner air and water, aiding the recovery of insect life which is essential for pollination of gardens and local food growing initiatives, and sequestering carbon through the development of diverse woodland and grassland areas that promote soil health. Healthy, water retentive soils and improved tree canopy cover will also play a vital role

in mitigating drought and urban heating in our borough as the climate changes and we need to deal with more extreme weather. In addition there is also a wealth of evidence that human health and wellbeing - in short the quality of our daily lives - is dramatically enhanced by regular time outside in contact with nature rich environments.⁴⁵

However, the natural world in Harrow needs our help. With an increasing number of gardens paved over, widespread littering in some places, incidents of watercourse pollution and limited public funds to look after all of Harrow's open spaces, we need assistance from all in Harrow so that we can make the most of these precious assets. Learning to properly measure, value and then grow the many benefits that nature brings to Harrow – the borough's combined store of 'natural capital' – is essential. The actions in this theme look at how the Council and its communities can work together to do just that, for the long-term benefit of the borough.



The Amethyst Deceiver Fungus (Laccaria amethystea) in Stanmore Common

⁴³ Harrow's green spaces – Harrow Council

⁴⁴ Biodiversity Action Plan Harrow 2015 (harrow.gov.uk)

⁴⁵ Let's Go Outside: Using Nature to Recover - Harrow Annual Public Health Report 2021

2.4.2 Strategic objectives

- To ensure land and other natural resource use in our borough better balances the needs of people and nature, with the borough's natural capital valued and protected
- To ensure the protection and restoration of biodiversity and ecosystems in our borough
- To provide public access to high quality and ecologically diverse green spaces
- To optimise tree / hedge planting and other natural carbon sequestration measures in our borough
- To improve the health and wellbeing of residents through greater connection with the local natural environment
- To enable local adaptation to climate change
- To support local food growing

2.4.3 Progress / work completed to date

- Trials of reduced mowing to improve habitat and biodiversity were carried out at 3 Verge sites and part of Kenton Recreation ground in the summer of 2022. A public consultation on the trials and biodiversity interventions showed strong support for an extension of the initiative. An enhanced programme will be delivered in 2023.
- The Stop and Grow Project is a Public Health led initiative which encourages Harrow residents to access a safe green space

- within Harrow. The activities offered aim to improve health outcomes around mental health, by decreasing social isolation and encouraging people to improve their mental wellbeing by using their local green space: addressing physical health, by encouraging physical activity; and healthy eating, by growing food and promoting ways to enjoy plant- based eating. Volunteers and attendees maintain the grounds, greenhouses and grow produce from seed to harvest, and then sell on/ cook with the produce.
- The Council supported and promoted Harrow Go Green, a biodiversity competition delivered by the voluntary community.
 There were categories for Primary schools, Secondary schools, Adult residents and Juniors and prizes were awarded in October 2021 and winners promoted on the Council's website.
- Residents are encouraged to sponsor tree planting via our Trees for Streets partnership⁴⁶.
- In 2022 a major planting initiative was undertaken by Pinner Park School, with the creation of a new micro forest of 600 trees and 150m of hedgerow, as well developing a biodiversity plan for the school. All 800 children from the school were involved.
- The Council has continued to invest in major infrastructure projects to address flooding whilst enhancing the natural environment. Working closely with community groups, in 2021 we completed major flood resilience and biodiversity improvement works as part of the Headstone Manor Park Project⁴⁷. Barnet and Harrow have also secured a £6m grant bid to reduce river and surface water flooding in the Silk Stream catchment through an extensive programme of nature-based solutions to be implemented over coming years ⁴⁸.

2.4.4 Co-benefits including climate adaptation

Green space is linked to a range of positive effects, including reduced impact of deprivation. Actions to improve access, quality, and quantity of green spaces are therefore likely to have a particularly positive impact on Harrow's communities.

- Restoring pride in Harrow: through higher quality, more ecologically diverse and beautiful parks, gardens and open spaces.
- Climate resilience: Supporting our places and communities to better adapt to the impacts of climate change such as flooding, heat waves or other extreme weather events.
- Health: Improved access for residents to quality open space for exercise and mental wellbeing; better air quality and reduced local pollution through increased planting initiatives.
- Eco-literate communities: Residents, including schoolchildren, have greater opportunities locally in Harrow to explore, understand and value the natural world, and in turn care for it better.

2.4.5 Main challenges

Some challenges include:

- Land use pressure: Pressure on some spaces, especially private gardens and other
- Awareness & Volunteering: educating residents and businesses as to the benefits they derive directly and indirectly from nature; Encouraging greater numbers of people from all of Harrow's diverse communities to volunteer with our park user and nature conservation groups.

- Securing investment and ongoing maintenance: securing funding to undertake capital works to our parks and open spaces and establishing a sustainable ongoing maintenance regime.
- Connectivity: securing biodiversity corridors to facilitate interconnectedness of habitat, sometimes across both private and public space and working transboundary with other boroughs.
- Invasive species, pests and diseases and changing climate: removing invasive species and dealing with new pests and diseases that reduce biodiversity by affecting native species and altering habitats.
- Data and target setting: There is currently a lack of up-to-date data on the borough's natural capital and associated risks, including climate adaptation and resilience risks. Identifying key metrics and developing robust targets will be a key phase of upcoming work.



3.1 Eco-literate and engaged communities

Concern about climate change and nature

Recent polling undertaken London-wide in September 2022 shows that Londoners are worried about the effects of climate change and the severe impact it has on our communities.

The main findings are:

- 94% of Londoners say they are aware of climate change
- 84% of Londoners say they are concerned about climate change, and concern is high across all age groups
- 72% of Londoners say their level of concern has increased over the past 12 months
- 62% of Londoners say their day-to-day life in London has been impacted by the changing climate, compared to 55% last year.

The survey also highlighted anxiety over the cost-of-living crisis, with 75% of Londoners saying they are finding it more difficult to take action to prevent climate change as a result. However, more than half of those surveyed feel motivated to make environmentally friendly choices, which will help them reduce their costs during the cost-of-living crisis.

A survey of our residents undertaken in 2022 specifically about biodiversity overwhelmingly supported action to improve ecosystems and habitats in the borough, with 93% of those surveyed in favour of more being done to support biodiversity in Harrow.

Consultation undertaken with Harrow residents on the draft of this Strategy in the summer of 2023 demonstrated that a clear majority of respondents were concerned about climate change, motivated to take action and believe that this should be a priority of the Council. Over three quarters were 'very concerned' about climate change and a similar proportion thought that addressing it should be a top priority for the Council. Only a small minority of 5% or less were not concerned about climate change and not motivated to take any action.

Taking action together

Harrow prides itself in being one of the most ethnically and religiously diverse boroughs in the country with people of many different backgrounds and life experiences living side by side. It is the richness of this diversity, and the positive impact that it has on the borough and our community, that helps make Harrow such a great place to live, work and visit⁴⁹.

Climate Change and the nature crisis are global issues but they can only be tackled through concerted local action. To reach our borough-wide goal of significantly reducing our emissions and improving the vitality of our local natural world, community involvement and grassroots education are essential. Collective understanding is needed amongst all our staff, members, businesses and residents about the need for taking urgent action, as well as the many benefits that come from the transition to a low carbon future.

As a Council we can enable people to take action in their own sphere of influence by encouraging and incentivising sustainable choices. The Council through this strategy seeks to convey the critical nature of the current climate and nature crises and provide a framework for action. Through collaborating with members of our community, we can gain an understanding of which actions are already being taken within our borough that can be amplified and scaled up. Along with our religious and ethnic communities, it is recognised that the role of our schools and young people in this change are particularly critical, both in terms of empowering the new generation to drive action and influencing the wider Harrow community.

Following the consultation on this draft strategy over the summer of 2023 the views of respondents were reported to the Council's Cabinet in November 2023, prior to the adoption of this Strategy. Where appropriate the Strategic Action Plan and



Strategy were updated to reflect the themes emerging from the responses received to the consultation. The findings of the consultation showed that there is a lot being done and significant motivation to do more amongst Harrow residents, which is very encouraging. Furthermore, the Council acknowledges that it has a critical role as a convenor of residents and local groups, bringing together current initiatives and community projects and helping to highlight and share these with residents. Finding ways to continue meaningful and ongoing engagement with our communities, building upon the initial consultation, will be crucial to ensuring successful implementation of this Strategy.

3.2 Good governance for long-term sustainability

It is increasingly clear what we need to do in Harrow and elsewhere to reduce greenhouse gas emissions, and the key action areas in which we can all make positive changes are set out in Section 2 and the Appendix to this Strategy.

However, to truly transform to a low carbon borough that enables our natural world to regenerate requires a mindset shift, to ensure that all the many choices we make as an organisation and as private citizens, contribute to meeting these challenges and protecting our planet for future generations.

As an organisation the Council will ensure that the areas of action within this strategy are integrated into other strategic frameworks that we have and into our decision making as a public body. We will also pursue opportunities to align Council funding and investment, including maximising external funding opportunities.

Decision Making

The key strategies that are supported by, and in turn support, this Climate and Nature Strategy include:

<u>The Corporate Plan</u> – including the overall vision of Restoring Pride in Harrow, the environmental targets set out in the Council's corporate priority of A clean and safe borough and the just transition supporting the priority of A place where those in need are supported.

<u>The Health & Wellbeing Strategy 2022-2030</u> – there are many links between this strategy and the improvement of public health in Harrow, from cleaner air to more active travel to improvements in mental health from the restoration of nature in our borough.

<u>The Economic Strategy</u> (being refreshed in 2023/24) – The transition to a green and circular economy that benefits jobs and skills in Harrow.

<u>Strategic Asset Management Plan</u> (being developed in 2023/24) – this will set out how we will manage our non-housing estate of buildings will have decarbonisation as a key objective.

<u>Housing Asset Management Strategy</u> – the approach to management of the Council's housing stock has a key focus on investment in energy efficiency and decarbonisation.

Harrow Strategic Development Partnership / Regeneration Strategy – the overall approach taken as to how the Council will develop its key regeneration sites, including energy efficiency, travel and improvements to biodiversity at the sites.

The Local Plan (being consulted upon from 23/24 as part of the development of a new Plan)— the range of policies that enable sustainable, low carbon, nature positive development in Harrow.

<u>The Long-Term Transport Strategy and associated Electric Vehicle</u> <u>Strategy</u> (currently being developed for consultation in 2024) – the overall strategy guiding the development of transport infrastructure and policies in harrow, including electric vehicle charging infrastructure

Decision Making

The Council will strengthen internal knowledge and awareness around climate change and the recovery of nature, and wherever possible align its decisions on key initiatives to support the delivery of this Strategy over both the short and long term. In this process, all officers and members have a role to play as gatekeepers to ensure that opportunities for decarbonisation are realised.

This process is already underway in our procurement activity, with all major new procurements requiring bidders to demonstrate how they contributing to reducing greenhouse gas emissions and promoting the circular economy.

This will include developing and implementing a requirement that the climate change and nature recovery implications of cabinet decisions are considered as part of officer reports.

The Council has also taken steps to exert leverage through revisions to its Pension Fund. In 2021 the Council transferred 33% of the fund (c£330m) directly into low carbon and sustainable equity investments and committed a further £50m towards a renewable infrastructure fund, investing in green energy technologies. Opportunities for progressive decarbonisation of the fund and other council investments will continue to be pursued.

Finance and Funding

Climate change and related ecosystem collapse risk is acknowledged by the World Economic Forum as the pre-eminent long-term threat to our economy, comprising five of the top six risks globally.⁵⁰ In this context, and notwithstanding the extensive human toll and suffering that might be mitigated here and abroad, it is increasingly recognised that the costs to our economy and public services of inaction on climate change and ecosystem recovery will significantly exceed the costs of action. A study by LSE in 2022, for example, found that the net-zero transition in the UK would cost a maximum of 2% of UK GDP but would be expected to have a net benefit of around 4% of GDP⁵¹. Nevertheless, in the short and medium term it must be acknowledged that the delivery of net zero, both nationally and locally, is dependent upon unprecedented levels of private and public funding that represents a significant challenge in the current financial climate.

The capital costs to the Council for example of moving to an electric fleet so far as possible in 2022 (excluding minibuses as vehicles were not readily available in the mainstream market) were estimated to be around £20 million. Similarly, a comprehensive programme of energy efficiency upgrades, solar PV installations and heat pump replacements to our maintained schools and corporate buildings would require a level of investment of at least £35 million at today's prices. The Council will need to carefully plan for progressive and prioritised investment in both of these key areas with detailed analysis of

costs and benefits including analysis of full life costings, avoidance of other costs, energy efficiency savings, and levels of external investment.

To date the Council has successfully applied for £2.4 million of Public Sector Decarbonisation Scheme funding, that has been applied, together with match funding from our capital programme, towards a £4.2 million investment in seven school and corporate sites. As at March 2023 the council has been notified of a successful bid for over £2 million of funding from the Social Housing Decarbonisation Fund, to be used as part of a £5 million project towards our housing stock over the next two years.

The Council currently has £500,000 per annum allocated in its capital programme for each of the coming three financial years directly to decarbonisation projects, mainly energy related projects to our corporate buildings. Levels of investment in decarbonisation of our estate from 24/25 onwards, including prioritisation of projects according to current building condition and boiler age, will be informed by the development of the Strategic Asset Management Plan in 2023. The Borough and Neighbourhood components of the Community Infrastructure Levy, collected via the planning process, also have significant potential to be applied to improve the borough's blue and green infrastructure and contribute to climate mitigation and adaptation.

Making the most of future external funding opportunities, combined with strategic match funding through the Council's capital programme, will be a key part of our approach to meeting this funding challenge going forwards.

Review and Monitoring of this Strategy

The Council will continue to monitor and report the Council's own organisational Scope 1 and 2 emissions annually, along with collating borough data from either SCATTER or LEGGI and relevant consumption emissions data commissioned by London Councils periodically as this is updated.

The key actions identified in the Appendix to this strategy will be managed internally by the Council as a corporate programme overseen by the Climate and Sustainability Board, comprising senior officers and working closely with the Portfolio Holder for Highways, Infrastructure and Community Safety and other members of the executive.

Monitoring of the Council's overall progress, and review and updates to this Strategy, will be reported annually to the Council's cabinet.

3.3 A socially just transition

Climate change as a social issue

Climate change has the potential to impact the more vulnerable in our society, including those who are less financially well off, to a greater degree than the population at large and therefore deepen existing inequalities⁵². This includes risks to groups with characteristics that are protected according to UK law. Some of these protected groups (age, disability, gender reassignment, pregnancy and maternity, race/ethnicity, religion, or belief) are from disadvantaged communities and have less means to mitigate against the impacts of climate change.

That is why climate change is not just an ecological problem, but one of social justice where we must ensure our approach reduces inequality and does not place disproportionate obligations on those least able to adapt to change.

How we can help protect those most vulnerable to climate change

Making sure that the most vulnerable in our communities are supported and protected during this period of major social and economic transformation includes informing and advising on grants available, such as Warmer Homes⁵³ and Winter Fuel Payment⁵⁴ to help mitigate fuel poverty. It is also why the Council's involvement in the Green Homes Grant Scheme, which has delivered energy efficiency measures at 79 homes, specifically targeted poor energy performing households (EPC D and below) on low incomes of less than £30k per annum. Furthermore, educating individuals on how to cope with temperature extremes will also help to reduce the unequal impact of these events on certain age groups. Ensuring that buildings and homes are adapted to future climate risk is identified as a key element to this, as is tree planting and other greenspace measures that will help reduce urban heating effects.

Since October 2021, the Council, utilising the Household Support Fund⁵⁵ has also distributed vouchers to low-income residents to assist with the cost of living⁵⁶, including energy costs. Families of children on free school meals have also been supported through school holiday periods with vouchers funded from the same scheme. Over Winter 2022/23 an ongoing network of Warm Hubs⁵⁷ were made available to residents across the borough. These provide a warm and

52 wp152_2017.pdf (un.org)

53 Warmer Homes | London City Hall

54 Winter Fuel Payment: Overview - GOV.UK (www.gov.uk)

55 Household Support Fund – Harrow Council

56 Help with the cost of living – Harrow Council

57 Warm Hubs & Spaces - Harrow Giving

safe space for residents to use, and volunteers are available to give advice/signposting around cost of living and wellbeing concerns. The Council has worked with the local voluntary and community sector and partners to establish this network (e.g., Harrow Giving). Furthermore, the Council, through Help Harrow, has worked with London Community Kitchen to recycle and redistribute food for consumption by households in need. Socio economic issues and the ongoing cost of living crisis will continue to be a focus of the Council as it develops the implementation plan for this Strategy.

Promoting equality through this Strategy

Some climate actions such as the move to electric vehicles, home improvements to energy efficiency and heat pumps, and certain diet choices (e.g., organic food) are less accessible for those on lower incomes. Generally, those in lower socio-economic groups also lack the financial means to mitigate the worst effects of climate change, for example coping with energy and food price fluctuations caused by extreme weather events, international events, or natural disasters. However, those on lower incomes in many cases already have a significantly lower carbon footprint individually than those on higher incomes. This is because those on higher incomes generally have greater levels of consumption - for example: multiple cars, greater numbers of flights and larger more energy demanding houses. Those on higher incomes therefore can have a proportionally greater opportunity to reduce their carbon footprint as well as greater means to do so.

The Equalities Impact Assessment (EQIA) conducted on this Strategy indicates that exposure to air pollution⁵⁸ disproportionately affects socioeconomically disadvantaged populations including Black, Asian and Multi Ethnic communities. Furthermore, air pollution has been linked to a range of adverse pregnancy outcomes, including preterm labour and low birthweight, which are themselves risk factors for conditions such as cardiovascular disease and diabetes in adulthood. Exposure to pollution can also affect lung development and function and is thought to contribute to the development of childhood asthma. Ensuring the reduction of fossil fuel transportation in the borough, which is the main cause of poor air quality in Harrow, and monitoring air pollution should have a positive impact particularly for these protected groups. Furthermore, older, and disabled people sometimes are less able to take advantage of active travel options due to their frailty and disability. It will therefore be important to ensure that they still have access to low carbon vehicular transport options. Improvements to public travel and active travel infrastructure should also be undertaken to enable greater access for older and disabled people, for example step free access, and over time this will result in a more accessible public realm for the benefit of people with mobility issues.

According to the Office of National Statistics⁵⁹19.7%⁶⁰ of Harrow's residents are under 16 and 64.9% of Harrow's population are of working age (16 to 64). Younger people will benefit particularly from positive action to address climate change and nature recovery by helping to improve their future living conditions and economic prospects.



