The background of the cover is a vibrant teal color with a pattern of diagonal rays emanating from the top. A large, dark teal silhouette of a globe is centered in the lower half. On the horizon line of the globe, various icons represent different aspects of climate action and community: a tall office building, a family walking, a recycling bin, a modern skyscraper, a car with a leaf on its roof, a house with a leaf on its roof, a wind turbine, a family walking, a bicycle, and another wind turbine. In the sky above the globe, there are silhouettes of a sun, several birds in flight, and two clouds. The overall theme is sustainable living and community involvement in addressing climate change.

# CLIMATE CHANGE ACTION PLAN

June 2021

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## Foreword from the Leader of the Council and Cabinet Member for Environment and Civic Pride

Our Climate Emergency declaration and this action plan represent a commitment to act on the causes and impacts of climate change. We recognise that without taking action, we are likely to see hotter, drier summers and milder, wetter winters. Which in turn will lead to biodiversity and public health impacts directly affecting Redbridge residents.

By taking action against the causes and impacts of climate change we can make Redbridge a better place to live. In the last year we have seen the value and potential of developing strong resilient communities to address global problems and now is the time to galvanise that action to tackle climate change. Through acting to reduce and prevent the effects of climate change we can continue to develop resilient households, ensure a healthier population, develop new skills and jobs, and, address inequalities.

With the UK hosting the upcoming annual UN Climate Change Conference (COP 26) and looking to lead the way in addressing the Climate Emergency we have a responsibility and opportunity in Redbridge to contribute towards the global effort.

The work of the cross-party Climate Change Corporate Panel and conversations with local residents represented the start of the council's journey. These conversations enabled us to understand the great work being undertaken across the country, borough, and, organisation, and, opportunities to build on these.

Both in the work of the Growth Commission and our efforts to become recognised as a child-friendly borough by UNICEF, we have heard that climate change is a priority for our residents and young people.

This action plan sets out the first three years of our journey. As a council we will work towards becoming carbon neutral where we have direct control over emissions. We will buy green energy,



**Cllr Jas Athwal**  
Leader of the Council



**Cllr Jo Blackman**  
Cabinet Member for  
Environment and Civic Pride

improve the energy standards of our buildings and gradually replace our fleet (rubbish trucks, buses) with more environmentally friendly vehicles.

Recognising the views of our residents and our role as a community leader, the action plan also seeks to use the council's role to support and mobilise communities, suppliers, high streets, businesses and individuals and to reduce their emissions and benefit from the associated environmental and health benefits.

National government policy, funding and legislation is crucial to provide the framework and means for local authorities to reduce emissions on the scale needed to tackle the climate emergency. We will therefore work with other councils and bodies to lobby for government policy to support local authorities in their efforts to become carbon neutral.

This action plan is only chapter 1 of our response to the climate emergency. We will continue to monitor our progress, respond to emerging technology and best practice, and, work with partner organisations, businesses and communities to enable them to lead the way in responding to the climate emergency. We are committed to stepping up to the challenge of climate change across the council's services and across the borough.



# Background to the Climate Emergency in Redbridge



Redbridge responded to the increasing public concern and extensive scientific evidence on climate change by unanimously passing a climate emergency declaration at a meeting of the Full Council on 20 June 2019.

Acknowledging the council's role as a leader, major local employer and partner with the local community we wanted to ensure that we are doing all we could to change this path.

The council committed to working towards making Redbridge Council carbon neutral by 2030, carbon zero by 2050, and, ensuring all council assets, existing and new, are as energy efficient as possible.

To carry out this work and review the next steps within Redbridge, a Corporate Panel of Councillors was set-up and chaired by Councillor Bert Jones. The Panel spoke to public bodies, academics, and, third and private sector experts to understand what work was already underway in Redbridge and how we could reduce emissions further.

This was supported with engagement work with residents, schools, voluntary and community groups from across all age groups and demographics to gather their views on the Climate Emergency.

To help understand what the Council was doing to impact the Climate Crisis through its own direct actions, Eunomia were commissioned to undertake a Green Audit. This looked at the data for the council's corporate, Vision and housing estate, and provided an understanding of the scale and source of the organisation's current greenhouse gas emissions in 2019. The Green Audit has provided a baseline against which progress for reaching the council's carbon neutral target will be monitored.

All of this evidence was used by the Corporate Panel to create a set of recommendations, presented to Cabinet in November 2020.

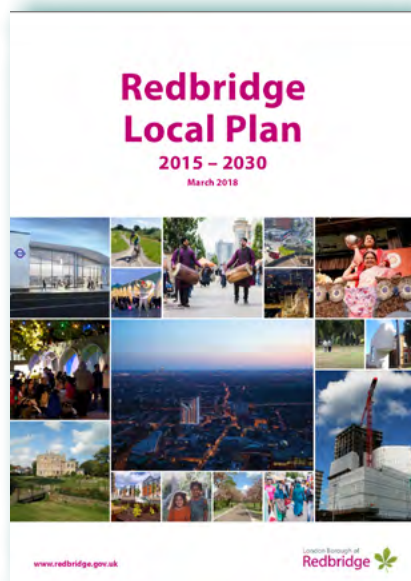


To successfully address the Climate Emergency we will need to adopt ambitious and innovative solutions that are aligned with global, national, regional and local priorities. However, the climate emergency is complex and we cannot reduce the Council's and borough's emissions without the active support, innovation and ownership from our businesses, residents and community groups. We will continue to work with partners to lobby and influence government policy to provide local authorities with the necessary funding and legislative framework to make accelerated progress on climate change.

This action plan sets out the start of the journey for reaching the council's commitment to become carbon neutral by 2030 for those emissions in its direct control whilst also outlining the council's ambition to become a community leader on climate change.

This work complements several other key council policies and strategies, including;

- Sustainable Modes of Travel Strategy 2016
- Redbridge Environment Action Plan 2010-2018 (REAct)
- The Redbridge Local Plan 2015-2030
- Waste Reduction Strategy 2020
- Redbridge Housing Strategy 2017-2022
- The Growth Commission 2021




# What does the Climate Emergency mean for Redbridge?



Whilst climate change presents a challenge for Redbridge and our residents, through prompt action we can create opportunities and make a difference. Our residents deserve to live in a place they are proud of. They deserve to have secure homes, affordable energy, clean air and green spaces.

We know the effects of climate change are not shared equally amongst our residents; lower income and vulnerable groups may be impacted more. For example, extreme weather patterns will likely lead to excess deaths in our most vulnerable communities as we know the second of the three heatwaves in 2019 caused 74 excess death in 65+ year olds in London whilst the colder winter between December 2017 and March 2018 resulted in 24.8% excess deaths compared to other years. <sup>1</sup>



Three heatwaves in 2019 caused 74 excess death in 65+ year olds in London

Addressing the climate emergency represents an opportunity to refocus efforts to tackle these inequalities, create a greener environment, develop new green skills and jobs, and ensure a healthier population. For example, improving the energy efficiency of our homes has the potential to support the 12.7% of households living in fuel poverty in Redbridge in 2018 as well as creating local green jobs; whilst improving air quality is likely to improve our residents' physical and mental health, reducing the strain on the NHS.

Action on climate change not only creates a better place to live but can also result in: better health and wellbeing, a strong community, improved economic opportunities, and, stronger equity and cohesion. The pandemic has shown the value in living differently and developing a strong sense of community to address global problems. We have seen the importance of communities working together and promoting active lifestyles as well as the vital role green spaces, parks and the natural environment play in supporting a healthy lifestyle. New working patterns involving less travel have emerged allowing us to support our local businesses and reduce our carbon emissions through travel. We now have the opportunity to build on this work.



# What does the Climate Emergency mean for Redbridge?



With **57%** of Londoners feeling their level of concern about climate change has increased in the last 12 months, we will need to integrate the green agenda into our recovery from the pandemic. <sup>2</sup>.

The work of Redbridge's Growth Commission has shown that enabling green and sustainable development and amplifying our green and blue infrastructure strengthens the ways in which growth has a positive effect on local health and wellbeing and the environment. Our work towards becoming a Child-friendly Redbridge has also shown a key priority for our young people is climate change.

Green growth will mean supporting homes and businesses to improve their energy efficiency, accelerating the shift to low carbon transport, delivering clean, smart and flexible power and enhancing the benefits and value of our natural resources. In turn, this provides an opportunity to develop resilient, low-carbon economies and a platform to drive job creation within our local communities.



<sup>1</sup> PHE heatwave mortality monitoring Summer 2019 and <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/4/gid/1000044/pat/6/par/E12000007/ati/202/are/E09000026/iid/90360/age/1/sex/4>

<sup>2</sup> <https://www.londoncouncils.gov.uk/members-area/member-briefings/environment/poll-attitudes-climate-change>



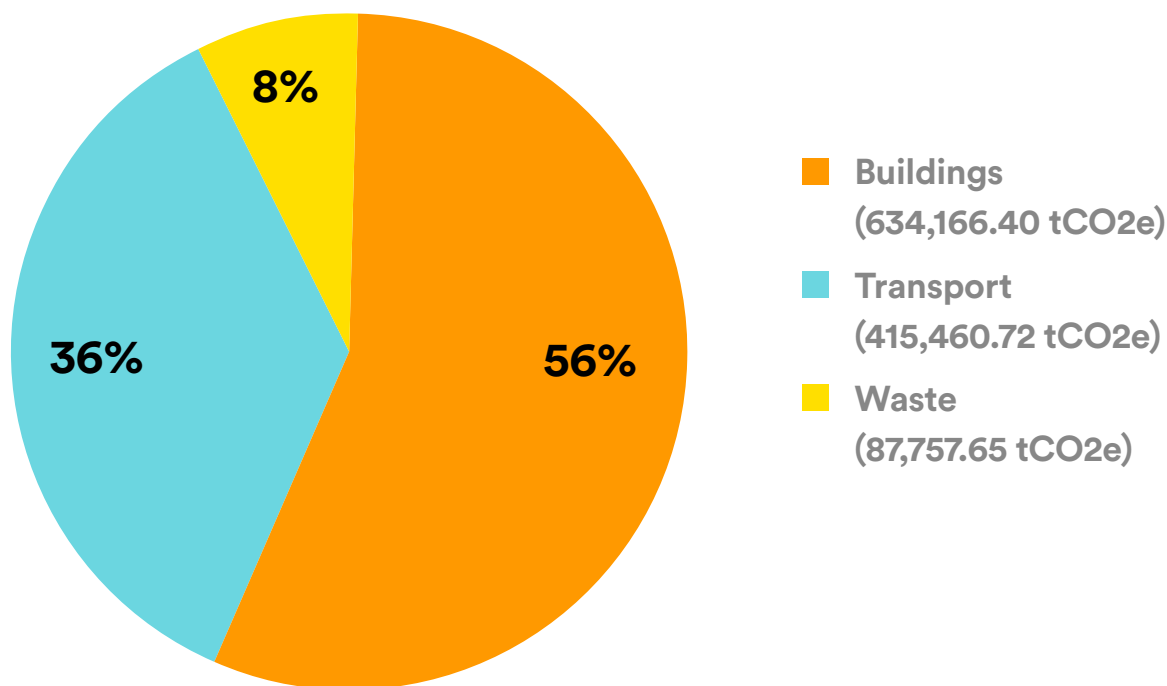
# Redbridge Borough Emissions

According to the latest figures published by the Department of Business, Enterprise and Industrial Strategy (BEIS) the total carbon emissions in 2017 for Redbridge as a borough were 1,137,384.76 tCO<sub>2</sub>e, this is equivalent to one person flying to Singapore and back 1,142 times.<sup>3</sup>

We know that 56% of the borough's emissions originated from our buildings including residential, commercial, institutional, and, industrial buildings and facilities. As a borough which is home to over 300,000 people, with nearly 100,000 households,<sup>4</sup> 75% of building emissions originate from residential buildings, this is equivalent to 42% of all reported borough emissions. Our 26,750 business establishments account for up to 25% of the emissions associated with the borough's total building emissions.

We also know that on average, residents in outer London are less likely to travel using a sustainable mode share compared to inner London and in Redbridge we know households on average have more than one car resulting in 36% of the borough's emissions arising from transport in the borough. When broken down, 61% of the borough's transport emissions arise from on-road transport, the second highest carbon emitter in the borough.<sup>5</sup> In addition, due to City Airport's flightpath being over Redbridge, aviation accounts for 39% of the borough's transport emissions.

## Percentage Borough Emissions by Sector 2017<sup>6</sup>



<sup>3</sup> <https://scattercities.com/>

<sup>4</sup> <https://www.redbridge.gov.uk/about-the-council/the-story-of-redbridge/>

<sup>5</sup> <https://content.tfl.gov.uk/travel-in-london-report-13.pdf>

<sup>6</sup> <https://scattercities.com/>





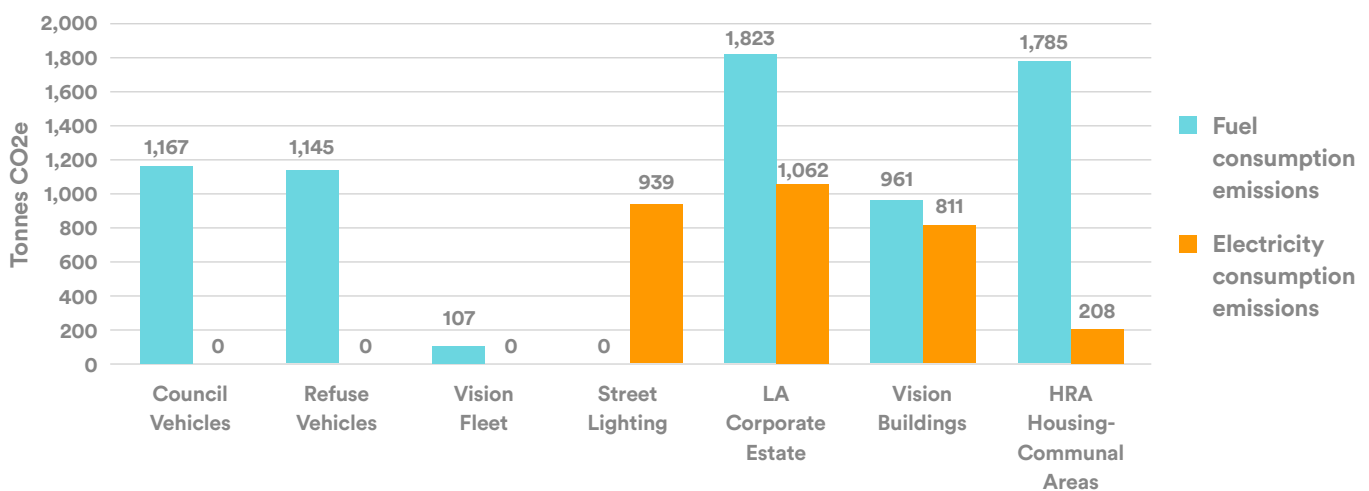
# Council's Emissions

To achieve the council's target to become carbon neutral by 2030 and carbon zero by 2050 we have measured the council's emissions over three areas;

- Scope 1 - Emissions generated directly via Redbridge's owned and operated assets. This includes: fuel used by the Redbridge vehicle fleet (petrol and diesel), and, fuel used to heat the Corporate Estate and Vision Estate buildings.
- Scope 2 - Electricity consumed in the Corporate Estate, Vision estate, communal areas of Housing Revenue Account (HRA) buildings, and, street lighting.
- Scope 3 - Other carbon emissions associated with Redbridge's operations, however, due to their complexity, these emissions should be considered estimations only. This includes emissions from HRA dwellings leased to tenants, and emissions from procured goods and services. These emissions are produced by other organisations, but illustrate the scale of emissions associated with our procurement activities.

Our baseline emissions from 2019 totalled 10,008 tCO<sub>2</sub>e, this includes the council's scope 1 and 2 emissions. A full breakdown of these emissions is provided in the graph below and is what we will measure our progress to achieve carbon neutrality against. The green bars represent scope 1 emissions, emissions from consumed fuels: petrol and diesel for vehicles, gas and heating oil for buildings, whilst the orange bars show electricity consumption, scope 2.

## Breakdown of the Council's footprint



A further 31,256 tCO<sub>2</sub>e emissions are attributable to our procured services (19,261 tCO<sub>2</sub>e) and council tenants (11,995 tCO<sub>2</sub>e). In Redbridge, maintenance and repairs for both housing and highways account for the largest emission sources of procured goods and services followed by emissions from vehicles used to support vulnerable residents and staff commuting. As Scope 3 emissions, consumption data is unavailable to the council we have therefore estimated these emissions based on spend for which emission factors provided by the government are less specific.

Over the next decade we will work with regional and national partners to reduce these emissions and develop a reporting framework that more accurately calculates scope 3 emissions.



# STARTING THE JOURNEY TO CARBON NEUTRAL 2030

## The climate emergency declaration focussed on the council becoming carbon neutral by 2030 and carbon zero by 2050.

Over the next three years we will work towards achieving carbon neutrality against our baseline 10,008 tCO<sub>2</sub>e emissions, seeking to reduce our emissions as far as possible.

However, as the council is only directly responsible for 2.4% of the borough's emissions this action plan gives additional focus to using the council's regulatory and strategic functions, role as a community leader, a large-scale procurer, and, as a social landlord to support the reduction of emissions in the borough. We will support our partner organisations, businesses and communities to enable them to lead the way in responding to the climate emergency be it through reducing their emissions, green jobs or improving biodiversity.



As we work to reduce our emissions we will continue to monitor our progress against our 2030 target as well as ensuring ongoing progress against the actions set out in this plan. We will annually review and develop the plan against evolving best practice and technological advances, seeking to be as ambitious as possible whilst ensuring we are able to meet our commitments.

In addition, in addressing the Climate Emergency we must not forget the role of the natural environment and impact climate change has on biodiversity in Redbridge. Climate change is likely to increase the risk of flooding from surface water following extreme rain events and the River Roding whilst the changing climate patterns will lead to a change in wildlife and biodiversity.

Plants and trees store and remove carbon and so have a role in reducing the amount of carbon present in the atmosphere. With over 1500 hectares of parkland of which 9 parks have received Green Flag Status it is important we continue to capitalise on the borough's natural assets, ensuring green infrastructure mitigates and adapts to climate change. In turn this will also provide opportunities for increased physical and mental wellbeing as well as a unique set of opportunities for our residents.



# STARTING THE JOURNEY TO CARBON NEUTRAL 2030

Over the last few years we have been undertaking various projects to maintain and improve the natural environment in Redbridge which complement efforts to mitigate and adapt to climate change. We have;

- planted over 1,100 trees on the highway between May 2020 and April 2021, increasing the number of tree positions by 24% compared to 20 years ago
- partnered with Trees for Cities to deliver an extensive tree planting programme across schools and parks. This has included planting 18,500 trees in parks and opens spaces across the borough
- developed grow zones, areas where grass will be left to grow long over summer to naturalise with wild flowers, in 20 locations across the borough totalling 20,000m<sup>2</sup> and over 3 times the area of that in 2019 when the scheme was trialled
- partnered with Transition Town Ilford to establish a Forest Garden programme in Ilford
- harvested 1.295 tonnes of apples for Cider and Apple Juice production
- secured £7.2 million for Hainault Forest in 2019
- managed and restored 1,455,200m<sup>2</sup> of wildlife habitat in 2019
- established a Nature and Environment Scrutiny Task and Finish Group to evaluate opportunities for increasing biodiversity in Redbridge

As part of our work to address the climate emergency we must therefore build on this work and adopt a green infrastructure approach that both mitigates and adapts to climate change. This work will be led by the upcoming Green Urban Landscape Policy and proposed updated Nature and Conservation Strategy which will complement this action plan and will help offset those emissions we cannot reduce or prevent, as well as encouraging more sustainable ways of life.

This action plan is divided into five themes and sets out our ambitions for reducing emissions across each of the following areas:

- Property and Energy
- Cleaner Journeys
- Waste
- Procurement and Investments
- Enabling Others



# PROPERTY AND ENERGY

**We know that the carbon emissions associated with our buildings arise from the energy inefficiency of the building (the energy leaking out), the building fabrics and materials, and, the lack of consumption of green energy.**

Therefore, as in 2030 we expect 66-80% of today's buildings to still exist and as the main source of carbon emissions for both the council and borough, we will need to improve the energy efficiency of our existing buildings. On our operational buildings we will need to install Building Management Systems (BMS) to understand how our buildings use fuel and electricity. We will then need to use this information to develop and implement the appropriate site-specific retrofit measures, resulting in more energy efficient buildings.

On our housing estate we will need to continue to understand and improve the energy efficiency of our buildings. We already know that 1043 properties have an Energy Performance Certificate (EPC) rating of C or B, placing these above the national average rating of EPC D. However, a further 968 properties in the council's housing stock have an EPC rating of D or below. We will need to undertake work to further understand the energy efficiency rating of the remainder of our housing stock as well as improve insulation, install double glazing, use renewable heat energy sources, and implement thermostatic controls of our lowest energy efficient properties. In turn this will mean lower energy bills for our tenants helping support those living in fuel poverty.

To complement improving the energy efficiency of our buildings we will need to make a change to low carbon and renewable energy sources. With the increased number of renewables, a decarbonised grid, further electrification and increase in lower carbon products we know there are increasing opportunities to use renewables. We will therefore need to work with partners and Government to explore opportunities in Redbridge.

Given an expected population increase of 7% in Redbridge by 2025 compared to 2018, the number of buildings in the borough is likely to grow. We will need to ensure developments are built to high environmental standards to reduce our carbon emissions. We will need to promote renewable and low carbon energy generation. This means working with developers to ensure the highest standards for domestic and non-domestic buildings are achieved. We will need to consider a circular economy, a whole life carbon approach and ensure renewable heat energy sources are considered from the start. For non-residential properties this means considering BREEAM Excellent standards, which would place our developments in the top 10% of UK new non-domestic buildings. For our ongoing HRA programme this means considering upcoming legislation and regulations and where feasible seeking to implement these standards ahead of them taking effect. For domestic buildings this means assessing the merits of current and forthcoming BREEAM programmes and considering how these can be applied. It means considering the installation of solar panels and making properties gas free from the start.

By undertaking these measures not only will we be reducing carbon emissions but we will also be making our buildings more resilient to changing climate patterns and supporting the development of new green skills and jobs.



# PROPERTY AND ENERGY

We have already started reducing our emissions from our buildings. We have;

- launched Redbridge Go Green Grant in 2021, a programme to support private landlords improve the energy efficiency of their homes
- commenced a programme in 2021 to retrofit properties within our housing stock
- rolled out LED street lighting across the borough since 2015, reducing annual emissions by 71% in 2019 compared to 2017
- prioritised energy efficiency in our building maintenance programme which since 2020 has included installing energy efficient lighting at Ley Street Depot, Redbridge Drama Centre, South Park Primary School, Fullwell Cross Leisure Centre and Sylvan road multi-story car park reducing energy usage and cost by 1% and avoided over 160tCO<sub>2</sub>e per annum
- commenced the installation of electricity smart metering systems across the Corporate Estate in 2020
- installed solar electricity panels on a number of schools and buildings across the borough since 2015, generating 724,573 kWh per annum in 2020/2021. This energy was used to supply local schools and council housing



# PROPERTY AND ENERGY

On our developments we have;

- included the installation of solar panel on all new council housing developments since 2015
- completed three houses in 2018 built to meet Passivhaus levels of thermal comfort, a performance-based set of design criteria for very low energy building. This is the first of any tenure in Redbridge
- committed to deliver 600 new council homes whereby site-specific analysis has been undertaken to identify opportunities to connect to District Heating Systems
- started a programme to deliver new council homes which link to existing foot or cycle pathways
- ensured developments in Ilford, including the Harrison and Gibson site, Britannia Music scheme and 226 High Rd (Metro Tower), have conditions attached that mean they need to safeguard future connection to any District Heating System (DHS)
- incorporated policies in the Redbridge Local Plan (2015-2030) that limit carbon emissions in new developments, support retrofitting of existing building stock to improve energy performance, and, ensure developments are constructed in accessible locations to reduce travel and promote transport
- incorporated policies in the Redbridge Local Plan (2015-2030) on energy hierarchy seeking to reduce energy use and demand and meet the remaining demand by the cleanest means possible. When this is not possible carbon off setting payments are requested



Marlyon Road

# PROPERTY AND ENERGY ACTION PLAN

ACTION PLAN COMMITMENT	Timescale
<b>Develop and identify a programme to reduce emissions from heat and electricity across Corporate and Vision buildings that we will retain beyond 2030 i.e. Community Hubs, Leisure Facilities etc.</b>	
Install Building Management Systems (BMS) across 36 Corporate sites.	Jun-21
Switch to a green electricity tariff across the controlled elements of the building stock.	Oct-21
Subject to feasibility switch to a green electricity tariff across the Vision estate.	Oct-21
From 2022, commit that all new non-residential Council buildings (i.e. Community Hubs, Schools and Leisure Facilities) will be at least BREEAM Excellent.	Dec-21
Install LED lighting on 22 corporate and school buildings that have an Energy Performance Certificate (EPC) or Display Energy Certificate (DEC) rating of C or below.	Dec-21
Identify the most suitable gas boiler replacement system and modifications required.	Apr-22
Undertake a review of green energy tariffs for the Council and consider longer-term approaches such as entering into Power Purchase Agreements, a contract between two parties where one generates electricity and one buys electricity.	Oct-22
Work with schools to install BMS systems.	Mar-23
Implement a programme of gas and electricity smart meter energy monitoring in all large corporate buildings.	Oct-23
Undertake portfolio-wide building surveys and start developing a long term retrofit and decarbonisation plan for buildings.	Oct-23
Using smart meter data, undertake portfolio-wide building surveys to accurately assess the feasibility of possible measures including insulation, heat pumps and heat networks, and receive quotations.	Jan-24
Create a costed programme to replace gas boilers and improve insulation where feasible.	Apr-24
Implement a programme of water smart meter energy monitoring in all large corporate buildings.	Oct-25
<b>Work to reduce the emissions originating from both council owned and private housing in the borough.</b>	
Further roll out of tenant green energy purchasing and develop solutions to challenges.	June-21
Work with private landlords to purchase green energy and consider potential for small scale community based renewable energy generation.	Jun-21
Improve the energy efficiency of the HRA stock through improved roof insulation and cavity filling.	Jun-21
Promote retrofit opportunities to landlords in the borough including through Landlord Consultation meetings.	Jun-21
Incorporate information on green energy tariffs in tenant welcome and leaseholder packs.	Sep-21
Carry out external enveloping of 1-56 Bradwell Close bringing the EPC rating to C.	Sep-21
Support low income households to retrofit approximately 250 buildings to EPC C.	Sep-21
Switch to a green electricity tariff across the controlled elements of the housing stock.	Oct-21
Undertake a stock condition survey to understand the EPC rating of the council's housing.	Dec-21
Through retrofit projects, bring a further 5% of housing stock up to EPC C each year.	Mar-22



# PROPERTY AND ENERGY ACTION PLAN

ACTION PLAN COMMITMENT	Timescale
<b>Work to reduce the emissions originating from both council owned and private housing in the borough.</b>	
Work with private landlords and housing associations to ensure all properties in the private rented sector are at least EPC D by April 2022.	Apr-22
Subject to feasibility and funding, implement solutions that enable tenants to access green electricity.	Mar-24
<b>Ensure developments are built to a high energy standard and consider the climate agenda.</b>	
Continue to request offset payments from developers and implement a Carbon Offset Fund through S.106.	Ongoing
Continue to ensure new council residential developments incorporate the provision of solar panels.	Jun-21
Request Circular Economy statements, whole life-cycle carbon assessments for major referable developments as well as energy performance data for all major developments from developers in line with New London Plan.	Jun-21
Require developers to build net zero homes in line with the New London Plan, pushing for the highest standards and renewables before offsets are considered. This will be aligned with the energy hierarchy as set out in the New London Plan.	Jun-21
Incorporate "Be seen" monitoring into planning conditions and/or S106 agreements to understand and monitor actual operational energy performance.	Jun-21
Incorporate circular economy statements reporting into planning conditions and/or S106 agreements.	Jun-21
Incorporate and monitor whole life-cycle carbon assessments (WLCA) reporting into planning conditions and/or S106 agreements.	Jun-21
Update the Local Planning Application Requirement List to incorporate New London Plan policies on "Be Seen" energy monitoring, Circular economy statements and Whole Life-cycle carbon assessments on all major new developments.	Jun-21
Request climate impact assessments on planning applications. These will be reviewed at time of Local Plan review.	Jun-21
Appoint a sustainability planning officer to support incorporating the Climate agenda into planning documents and to monitor the data submitted. To provide sustainability advice to developers at pre-application meetings.	Aug-21
As part of Phase 2 of the ongoing HRA developments incorporate the upcoming Building Regulation Standards ahead of enforcement in 2022.	Aug-21
Ensure all new development use renewable energy heat sources.	Aug-21
Develop an approach for measuring the embodied carbon for the Council's new developments.	Sep-21
Where feasible, incorporate upcoming New London Plan, Building Regulations and Future Home Standards in developments ahead of these coming into effect.	Oct-21
Consider the opportunity of Zero Carbon specifications in New Builds on a case by case basis.	Oct-21
Scope opportunities for developing a Green and Blue Infrastructure Plan.	Oct-21





# PROPERTY AND ENERGY ACTION PLAN

ACTION PLAN COMMITMENT	Timescale
<b>Ensure developments are built to a high energy standard and consider the climate agenda.</b>	
Assess the merits of current and forthcoming BREEAM programmes and consider how this can be applied to the council's developments.	Oct-22
Through the Local Plan review, evaluate opportunities for extending New London Plan policies to all major new developments.	Dec-22
Commence Local Plan Review.	Dec-22
<b>Review the opportunities and scope for energy generation in the borough.</b>	
Explore the feasibility of a local energy company.	Oct-22
Undertake detailed feasibility assessment across the corporate building portfolio for solar PV installation, in addition to other renewable technologies such as solar thermal, receive quotations and set targets.	Oct-23
Assess opportunities for solar power on schools and across the Vision estate.	Oct-23
Evaluate feasibility for developing a local solar farm.	Oct-23
Subject to resource assess the benefit of existing renewable energy infrastructure and consider further roll outs, in the context of progress in other areas of decarbonisation.	Oct-23



# CLEANER JOURNEYS



The fleet (refuse collection vehicles, school transport) accounts for 24% of the council's total emissions against which we will achieve carbon neutrality. To achieve carbon neutrality for the council we will need to convert the fleet to electric or hydrogen power sources and develop the necessary supporting infrastructure. Although this is currently not feasible for larger vehicles alternative fuel replacements are likely to be made available in the future.

We will work with residents and businesses to continue reduce road based travel emissions and support the Mayor's Transport Strategy target of achieving 80% of all journeys to be made by active, efficient and sustainable modes – public transport, walking and cycling – by 2041.

We will encourage our communities to make a modal shift through ensuring land-use planning considers public transport accessibility, zero or minimum car parking provisions, traffic management and parking controls, and/or investment in walking, cycling and public transport infrastructure. However, where vehicle use is unavoidable, we will need to support the accessibility to electric vehicles and charging points or car sharing schemes.



# CLEANER JOURNEYS

We have already started our journey to reduce the emissions from road based travel. We have achieved 48% of average journeys in Redbridge being made by walking, cycling and public transport. Since June 2019 and our Climate Emergency declaration we have;

- developed a comprehensive vehicle replacement programme to ensure Euro VI compliance which sets out emission standards for petrol and diesel cars in order to reduce levels of harmful car and van exhaust emissions
- started a fleet conversion programme to ensure Ultra Low Emission Zone (ULEZ) compliance
- provided a pool of electric cars and bikes for staff to use at Lynton House and Ley Street Depot
- introduced a workplace travel programme to reduce business travel and reduce the need for staff to drive to work
- required all major development applications to be accompanied by a travel plan including measures to actively reduce the use of the private car
- started developing a Business Low Emission Zone with the installation of ultra-fast vehicle charging depots at Ley Street Depot. This will be accessible to A12 road users as well as the council's fleet
- started rolling out a range of Electric Vehicle Charging Point (EVCPs) infrastructure borough wide
- started implementing school streets, a programme to make Redbridge safer and greener through banning vehicle traffic during term-time
- started developing two mobility hubs in South Woodford and Wanstead which provide small scale transport interconnection hubs with EVCP, bike racks, dedicated car club space and seating, enabling an easy change from one mode of transport to another
- developed cycling and walking routes across the borough



# CLEANER JOURNEYS ACTION PLAN

Action Plan Commitment	Timescale
<b>Continue to reduce the emissions associated with the council's fleet.</b>	
Replace 5% of council vehicles with electric vehicles and 1% with hybrid vehicles.	Jun-21
Subject to affordability, investigate opportunities to electrify a further 5% of the fleet.	Mar-23
Explore hydrogen technology as an alternative to electric to run the Large Goods Vehicle fleet.	Mar-23
<b>Continue to reduce associated emissions from road-based travel.</b>	
Support Transport for London with the roll out of Ultra Low Emission Zone (ULEZ).	Oct-21
Roll out 10 school streets programmes across the borough.	Dec-21
50% of all journeys to be made by active, efficient and sustainable modes of transport by 2021.	Dec-21
Work with car club providers to review opportunities to expand the public car club scheme.	Mar-22
Support zero emission car club vehicles through providing Electric Vehicle Charging Points.	Mar-22
Through procurement and where possible require future Highways contracts to use zero emission vehicles.	Mar-22
Evaluate the feasibility of introducing further cycle parking across the borough and focus on all local transport hubs.	Mar-22
Improve cycling provision including use of segregated bike lanes where appropriate.	Mar-22
Consult and expand Controlled Parking Zones (CPZ) across the borough.	Apr-22
Using artificial intelligence, review demand for electric vehicle charge points.	Jun-22
Develop a final business case for the Ilford Western Gyratory Project.	Dec-22
Explore the opportunity to introduce a borough-wide lorry control scheme.	Dec-22
Investigate opportunities to establish a freight hub to encourage last mile deliveries.	Dec-22
Pilot freight consolidation centre, a facility that channels deliveries into one central point, and last mile deliveries at Ley Street retail area.	Dec-22
Consult with residents and businesses on installing differential charging for parking permits.	Apr-23
Consult on implementing school streets for all schools across the borough.	Dec-23
Subject to a successful pilot expand opportunities for last mile deliveries.	Dec-23
Convert the public scheme fleet to 100% electric within 3 years.	Mar-24
Achieve 50% of schools TfL STARS (Sustainable Travel: Active, Responsible, Safe) accredited.	Mar-24
Subject to funding, complete Ilford Garden Junction project.	Dec-24
Roll out 2 Redbridge Low Emission Neighbourhoods per year.	2021-2024
Subject to feasibility and consultation install at least 100 Electric Vehicle charging points a year.	2021-2024
Subject to funding introduce 5km of new cycle lanes per year for the next 5 years.	2021-2026

# WASTE

Redbridge faces a number of challenges in the way we manage the waste we produce, the biggest of these is the amount of 'rubbish' we throw away. In 2017/2018 we disposed of 70,172 tonnes of residual (black bag) waste, enough to fill 2,511 London Routemaster double decker buses. This is the fourth highest amount per person of any Council in the UK and accounts for 8% of the borough's emissions. In addition, food waste makes up approximately 50% of the contents currently placed in black bags as rubbish.

The East London Waste Authority (ELWA) is responsible for disposing of waste and does this through Mechanical Biological Treatment (MBT), diverting 99.98% of waste collected by ELWA away from landfill. Despite this, the primary source of carbon emissions arises from managing plastic through MBT and our recycling performance. In 2017-2018, only 24% of what we collected was recycled, placing us amongst the 10th lowest performing of all local authorities in England.

We therefore need to change the way we think about waste and how we dispose of it. We need to reduce waste and increase the amount we re-use and recycle. The disposal of residual black bag waste should only be considered as a last resort.

We have already started our journey to reduce carbon emissions associated with waste, since our Climate Emergency declaration in 2019 we have;

- developed a Waste Reduction Strategy and introduced Waste Charter and Waste & Recycling Policies 2020
- rolled out a successful wheelie bin trial including an end to unlimited collection of residual waste
- continued to promote Ilford's Teen Challenge London (TCL) Reuse Centre to residents
- provided residents with a place to recycle otherwise non-recyclable waste through developing The James Leal Centre as a hub for two TerraCycle UK recycling schemes
- participated in Circular Construction in Regenerative Cities (CIRCult), a project exploring how circular construction principles and strategies can be replicated and scaled at city level
- started introducing a boroughwide "Red sack scheme" for flats above shops, encouraging a reduction in waste produced
- run a number of campaigns including;
  - a campaign to increase the quality and quantity of recycling from flatted properties.
  - an anti-Fly Tipping Campaign in 2020.
  - an untidy Front Garden Campaign 2020.
  - promoted the Real Nappy and the Love Food Hate Waste National campaigns.
- undertaken continuous Neighbourhood Engagement to educate residents on the benefits of recycling



# WASTE ACTION PLAN

Action Plan Commitment	Timescale
<b>Decrease waste and increase recycling amongst residents.</b>	
Extend the wheelie bin roll-out across the borough.	Jun-21
Engage with ELWA to understand opportunities for increasing re-use at Chigwell Road Reuse and Recycling Centre (RRC).	Jun-21
Subject to successful trials, implement specific sacks/containers for flats above shops.	Jun-21
Develop a recycling improvement plan for the borough.	Jun-21
Introduce a containerisation or restriction of residual waste for all suitable properties in Redbridge.	Mar-22
Using the findings from the 2019 Waste and Recycling Survey review the barriers to waste reduction and recycling in the borough.	Mar-22
Working with ELWA identify opportunities for increasing re-use at Chigwell Road RRC.	Mar-22
Develop a detailed waste and recycling communications plan for the period until 2027.	Oct-22
Lobby ELWA to increase recycling offer in the borough.	Mar-23
Reduce Redbridge's residual waste arising per household to less than 65kg per household per year.	Mar-25
<b>Reduce food waste and encourage food composting.</b>	
Develop and integrate a waste reduction plan for the borough.	Dec-21
Reduce avoidable food waste disposed of as residual waste by 10% against 2016/2017 levels.	Dec-25
To have worked successfully with ELWA to enable the introduction of separate food waste collections to all street level properties in Redbridge.	Dec-26
<b>Decrease waste and improve recycling across the Corporate Estate.</b>	
Review current recycling offer in schools and commercial waste to further levels of recycling.	Oct-21
Eliminate single use items for all London Borough of Redbridge offices and buildings.	Dec-21



# PROCUREMENT AND INVESTMENTS

Procurement and investments relates to how we use our money and the goods or services we buy. So, in addition to the emissions against which the Council will achieve carbon neutrality, a further 17,327 tCO<sub>2</sub>e are caused in this way. As scope 3 emissions these are outside the organisation's direct emissions however, we will change the way we work to incentivise change and enable innovation in the borough and amongst our suppliers.

We have already started reducing these carbon emissions, as part of our procurement processes we consider social value including environmental concerns at 10% of the contract evaluation value and within our investment processes, we have begun investing in a low carbon fund whilst meeting our obligations to our pension fund members.

Action Plan Commitment	Timescale
<b>Ensure the procurement of goods and services reflect the carbon neutral agenda.</b>	
Incorporate the green agenda and sustainable purchasing into the Council's updated Procurement Strategy.	Jun-21
Review social value guidance and provide appropriate training to staff within procurement services and contract management teams to promote the value of sustainable purchasing.	Jun-21
Develop a pilot requiring strategic suppliers to provide climate impact assessments.	Mar-22
Encourage consideration of the climate agenda at Strategic Commissioning Board.	Mar-22
Provide advice to smaller suppliers on how they can assist the council's efforts to be carbon neutral.	Mar-22
Evaluate opportunities within existing contracts to track supply chain emissions.	Mar-22
Work with suppliers during contract to identify opportunities for sustainable procurement.	Mar-22
Alongside regional partners, evaluate opportunities to ensure alignment of the procurement strategy with the green agenda.	Mar-23
Subject to pilot and viability, require identified suppliers to provide climate impact assessments.	Mar-23
Establish procedures for publicising local successes in sustainable procurement.	Mar-23
<b>Ensure investments consider the green agenda.</b>	
Continue to review the investment strategy as part of the Pension Fund Committee, to identify further ways to reduce its carbon footprint where possible.	Ongoing



# ENABLING OTHERS

As a council we have committed to becoming carbon neutral as an organisation. However, given the organisation is directly responsible for approximately 2.4% of the borough's emissions, action will be needed to address the majority of emissions in the borough and make Redbridge a great place to live. To reduce the borough's emissions our residents will need to choose lower carbon goods, food and services. Our residents will need to change their mode of transport preference, and, change the way their homes and buildings are heated and powered.

We cannot achieve this without the active support and ownership from our businesses, residents and community groups. Without their investment, energy and innovation we will be unable to reduce the borough's emissions. To do this, we need to provide our residents and businesses with clear information to help them understand how they can make a difference. We need to work with our local community through our engagement officers, community hubs, schools and community groups to set our shared green economy ambitions.

We know that 87% of Londoners feel motivated to help prevent climate change, and we have already seen some great work happening in Redbridge.

- transition Town Ilford have launched LEDs for Ilford a project to install LED lighting in community buildings and a Solar for Schools a project seeking to reduce energy emissions in the borough
- space Generators has established a Sustainable Solutions Centre in Ilford, hosting a variety of events on climate change and biodiversity
- Wild Wanstead and Cleaner Greener Wanstead group have developed local road verge greening schemes
- 70 schools across the borough are participating in eco-schools, an initiative encouraging schools to take action against climate change and improve the environment
- in line with our ambitions to become a child-friendly borough, Woodbridge High School hosted a virtual event at the Youth Climate Summit amongst numerous other projects and the Youth Council and Child-friendly ambassadors are leading on Keeping It Wild 2021

These are only some of the great examples the Redbridge community is undertaking to address the climate emergency and as a community leader we will need to enable and encourage other sectors to follow suit – this will mean leading a movement for change amongst our residents and businesses, and, providing them with support through the transition.





# ENABLING OTHERS ACTION PLAN

Action Plan Commitment	Timescale
<b>Encourage and enable local businesses and residents to reduce their emissions.</b>	
Create an online presence offering local information on how businesses and residents can address the climate emergency and connect with local initiatives.	July-21
Roll out a High street improvement grant which incorporates sustainability measures.	Aug-21
Integrate a communications and engagement plan for supporting and promoting national, regional and local initiatives for reducing carbon emissions.	Dec-21
Incorporate the green agenda during the 2021 review of the Corporate Plan, ensuring consideration in the future budget planning and decision making of the Council.	Mar-22
Develop opportunities to support staff to reduce their carbon footprint.	Mar-22
Work with the Voluntary and Community Sector to create a self-sustaining network to support groups to deliver projects and identify funding opportunities for addressing the climate emergency.	Jun-22
Lobby for Government on key actions and funding needed to reduce borough emissions.	Ongoing
Through continuous engagement and design, incorporate the green agenda into the development of the Community Hubs.	Ongoing
Work with businesses to understand and support them in developing sustainability measures to reduce their carbon emissions, adopt a green recovery including green jobs and green local high streets.	Ongoing
Work with partners to continue to support our local communities in adapting and addressing climate change.	Ongoing
Support schools in their ongoing work to reduce their carbon emissions and raise the importance of climate adaptation and mitigation.	Ongoing
Incorporate a Child-friendly approach towards addressing the climate emergency.	Ongoing

## Background Reading

Climate emergency Declaration – see point III, Page 5.

Reports to the Corporate Panel

Presentations to the Corporate Panel

LedNet papers

Green Audit Report

Climate Change Corporate Panel Recommendations – see Item 10, Pages 154-197.



# Appendix A: Glossary of Terms

## “Be Seen” Monitoring

All major development proposals to monitor and report on their actual operational energy performance for at least 5 years post construction.

## Building Management Systems

A Computer based system to monitor a buildings electricity and gas usage.

## Building Research Establishment Environmental Assessment Method (BREEAM) Excellent standard

A sustainability assessment method used to masterplan projects, infrastructure and buildings through setting standards for the environmental performance of buildings through the design, specification, construction and operation phases. BREEAM Excellent is considered to be the top 10%.

## Carbon footprint/Carbon emissions

The amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organisation or community.

## Carbon neutral

Where some emissions are still being generated by an organisation after carbon reductions, these emissions are being offset making the overall net emissions zero.

## Carbon Zero

Where no emissions are being generated by an organisation.

## Circular economy

An alternative to a traditional linear economy in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.

## Circular Economy Statements

Document intending to demonstrate how a development will incorporate circular economy measures into all aspects of the construction and operation process.

## Climate emergency

The intention to take immediate action and develop policy to mitigate climate change beyond current government targets and international agreements.

## Carbon sequestration

The long-term storage of carbon. In this instance using natural measures to store carbon.

## DEC rating

Display Energy Certificate which summarises the energy efficiency of buildings.

## EPC rating

Energy Performance Certificate which summarises the energy efficiency of buildings in the European Union. The scale spans from A to G, with A being considered very energy efficient.

## Euro VI Compliance

Emission standards for petrol and diesel cars in order to reduce levels of harmful car and van exhaust emissions.

## Green and Blue Infrastructure

A network of nature-based features situated in built-up areas that form part of the urban landscape. These features are either based on vegetation (green), water (blue), or both. Green roofs and walls, grassed areas, rain gardens, swales (shallow channels, or drains), trees, parks, rivers and ponds are all examples of this type of architecture.

## Greenhouse gas (GHG)

Any gas that has the property of absorbing infrared radiation (net heat energy) emitted from Earth's surface and radiating it back to Earth's surface, thus contributing to the greenhouse effect.

## Offsetting

Compensating for emissions which may have reached their limit of reduction by using low carbon technology, natural environment or funding an equivalent carbon dioxide saving.

## Passivhaus

A performance-based set of design criteria for very low energy buildings, which can help create buildings which use around 90% less energy than standard UK buildings.

## UN Climate Change Conference (COP 26)

A global United Nations Summit about climate change and how countries are planning to tackle it. It is due to take place 1 November 2021 to 12 November 2021.

## Vision RCL

A registered charity working in partnership with the Council to deliver a wide range of leisure and cultural services in Redbridge.

