

London Borough of

Redbridge



CLIMATE CHANGE CORPORATE PANEL REPORT

November 2020

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Foreword from the Chair

On behalf of the Panel I would like to express my gratitude for the inspiring and informative presentations which we received from a number of speakers. As speakers, you provided clarity around our ambitious targets, motivated us to think creatively and holistically, and, provided inspiring case studies to consider.

Thank you to our residents who participated in the online engagement and helped shape our proposals. Your feedback and comments helped us understand the great work being undertaken across the borough which we can support and build on as well as your priorities and expertise.

I would also like to thank the Panel for their ongoing work and commitment to continue addressing the climate emergency despite moving to an online platform during the pandemic. Without your perseverance and dedication, we would not have developed a set of recommendations to support Redbridge's journey to address the climate emergency.

All of this work has helped us develop a range of recommendations to address our declaration to be carbon neutral by 2030 and carbon zero by 2050 but this is only the beginning of the journey. As a council we can make an impact, but we cannot achieve the improvement Redbridge needs and deserves alone. No matter how small or big the action, everyone has a role to play. We need to work together to give people the chance to be part of the change. Underpinning the proposals is a need to consider fairness and the impact these may have to different residents in the borough. We will need to educate and inform Redbridge residents to provide them with the opportunity to choose the solution that works for them. By working with our businesses, residents and community groups we will see a number of economic, environmental and health benefits for our local communities, high streets and businesses.

The Panel hopes that this report will provide Cabinet with a range of useful ideas rooted in local priorities that will help Redbridge address the climate emergency. We look forward to working with our local community to achieve these goals.

Executive Summary

Climate change is both a challenge and an opportunity for Redbridge. Our role as a leader and unique insight into our local community means we have a vital role to play.

We have already started to see the consequences of climate change with increased wildfires, floods, and, drastic weather patterns across the globe. We have seen the challenges our residents have faced with an increased number of heat waves, colder winters, and, flooding such as the increasing risk around the River Roding.

The pandemic has illustrated the value in living differently and developing a strong sense of community to address global problems such as the climate emergency. We have seen the importance of building resilient communities 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. We now have the opportunity to build on this work and develop a greener community.

To successfully address climate change, we will need to adopt ambitious and innovative solutions that are aligned with global, national, regional and local priorities. As an organisation, this means we will need to use green power, insulate our buildings more effectively, reduce our journeys and use electric vehicles, amongst other actions.

Whilst the Corporate Panel was set-up to investigate how the organisation could reach carbon neutrality by 2030 and carbon zero by 2050, the Panel has given additional focus to the borough's emissions. 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. The climate emergency represents an opportunity to achieve this through creating a greener environment, developing new green skills, creating resilient households and ensuring a healthier population. It also provides an opportunity for our businesses to engage in the green agenda.

The climate emergency is multi-faceted, we therefore cannot reduce our organisation's and borough's emissions without the active support, innovation and ownership from our businesses, residents and community groups. We must ensure our partners have shared green economy ambitions and we must engage with our residents, community groups and government to achieve this.

This report provides an overview of the evidence presented to the Corporate Panel including the sources of carbon emissions in Redbridge, information presented by guest speakers and the current position of Redbridge Council. The Panel heard about the inspiring work underway across the country and great examples of how other councils are tackling the climate emergency. Although some of these measures are costly, the Panel also heard about various sources of external funding available. Within each theme the Corporate Panel has identified commitments and actions that should be considered to eliminate or offset these emissions in the future.

Summary of Recommendations

Property and Energy

Buildings are the largest source of emissions for both the borough and the council.

Action	Timescales	Cost
	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
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.		
Transfer to a green energy tariff for buildings in the Council's operational estate.	Short-term	Low
Commit that all new non-residential Council buildings (i.e. Community Hubs, Schools and Leisure Facilities) will be at least BREEAM Excellent.	Short-term	High
Implement a smart metering and Building Management Systems (BMS) in all main corporate sites to maximise the energy efficiency and improve knowledge of building energy use and performance.	Medium-term	Medium
Bring all Council operational buildings up to EPC B through insulating, improving energy efficiency and on-site power generation.	Long-term	Very High
Work to reduce the emissions originating from both council owned and private housing in the borough.		
Transfer void council properties onto a green energy tariff.	Short-term	Low
Bring all Council owned housing up to EPC B through insulation, retrofit and on-site power generation.	Long-term	Very High
Support tenants to switch to a green energy tariff.	Short-term (and ongoing)	Low
Continue to use our powers to ensure that properties in the private rented sector reach the minimum level of energy efficiency as set by the recent improved legislation.	Medium-term	Low-Medium
Identify and promote support for residents, businesses and organisations to improve the environmental standards of their properties.	Ongoing	Low
Require all new homes to be built to EPC B.	Long-term	Very High
Review the opportunities and scope for energy generation in the borough.		
Identify possible scope and means for green energy (solar, heat pumps etc) on existing buildings (including schools) through establishing a solar fund.	Medium-term	High
Identify potential opportunities for a local energy company based on solar, biogas or other technologies to remove LBR homes from the grid.	Medium-term	Very High
Support local renewable energy projects in the local community.	Ongoing	Low

Action	Timescales	Cost
	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
Use planning powers to ensure developments are of a high energy standard and developers are held accountable to standards.		
Implement a Carbon Offset Fund through S.106 agreements.	Short-term	Low
Request climate impact assessments on planning applications.	Short-term	Low
Develop a Green and Blue Infrastructure Plan.	Medium-term	Low
Develop a Redbridge Sustainable Construction Code.	Medium-term	Low
Incorporate sustainable and carbon standards in the Local Plan, building regulations and policies.	Medium-long term	Medium

Cleaner Journeys

Transport is the second largest source of emissions for the borough and accounts for 10% of the organisation's carbon footprint.

Action	Timescales	Cost
	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
Continue to reduce the emissions associated with the council's fleet.		
Review the current fleet replacement programme to identify opportunities for improving fuel efficiency and EV replacement.	Ongoing- By 2021, 5% of the fleet will be electric and 1% will be hybrid.	Very High
Implement a council fleet vehicle maintenance programme to maximise vehicle longevity in accordance with recommended vehicle life expectancy.	Ongoing	Very High
Where vehicles are unsuitable for electrification, ensure, where available, selection of alternative new technologies for vehicle replacement.	Ongoing	Very High
Continue to support staff to reduce their emissions associated with travel.		
Encourage and incentivise staff to opt for low carbon travel for their business travels and commuting journeys.	Ongoing	Medium
Provide facilities for a green travel programme across main operational sites.	Medium-term	Low
Continue to reduce associated emissions from road-based travel.		
Work with partners to reduce associated emissions from road-based travel, i.e. TfL STARS programme, community groups, NHS, contractors etc.	Ongoing	Low
Work with businesses and residents to encourage a modal shift for 50% of all journeys to be made by active, efficient and sustainable modes of transport by 2021 and 65% by 2041 i.e. car free zones, improved cycling infrastructure, promoting cycle training and Try before you bike, developing playstreet programmes, promoting cycle to work schemes and school streets.	Ongoing	High
Continue to expand the electric vehicle (EV) charging infrastructure to ensure installation of 200 chargers by December 2021 including highspeed chargers where feasible and designated parking bays.	Ongoing	Medium
Continue to seek to make physical interventions such as the Ilford Garden Junction and Ilford Gyratory projects to physically reduce the prevalence of exceptionally high private car use and prioritise more sustainable modes of travel including walking and cycling.	Ongoing-Short-term	High

Waste

Action	Timescales	Cost
Decrease waste and increase recycling amongst residents.		
Extend wheelie bin roll-out across the borough.	Medium-term	High
Implement a Redsack refuse scheme.	Short-term	Low
Monitor and improve recycling and waste collection facilities from flatted properties.	Ongoing	Medium
Support and encourage residents in flatted properties to improve recycling rates.	Medium-term	Medium
Work with flat management agencies to improve recycling rates in flatted properties.	Medium-term	Medium
Work with schools to encourage waste reduction and increase recycling rates.	Medium-term	Low
Improve kerbside recycling of waste.	Medium-term	Medium
Reduce food waste and encourage food composting.		
Support residents to reduce waste through the 'LoveFoodHateWaste' campaign.	Ongoing	Low
Support residents in growing their own produce and composting on their properties.	Medium-term	Low-Medium

Biodiversity

Action	Timescales	Cost
Increase blue and green infrastructure across the borough.		
Develop a tree planting strategy and increase tree cover by 10% within the borough's parks, green spaces and urban areas.	Ongoing	Low
Prioritise and protect biodiversity in Redbridge.	Ongoing	Low
Ensure the local plan and future planning developments contain commitments and targets to maintain and increase biodiversity in the borough.	Ongoing	Low
Encourage community lead projects that support biodiversity i.e. food growing, composting, community orchards.	Ongoing	Low
Ensure that new developments plans include requirements for biodiverse and rich habitats – especially in urban areas.	Medium-term	Low
Develop a New Nature and Conservation Strategy.	Medium-term	Low

Procurement and Investments

Action	Timescales	Cost
Ensure the procurement of goods and services reflect the carbon neutral agenda.		
Identify priority areas for new procurement criteria using the TOMS framework, and integrate these into supplier requirements.	Short-term	Low
Encourage procurement frameworks to integrate carbon neutral principles.	Short-term	Low
Engage with suppliers to communicate new procurement ambitions, working together to reach solutions.	Short-term	Low
Ensure ongoing alignment of the procurement strategy with carbon neutral ambitions through ongoing reviews of procurement frameworks and supply chain networks.	Medium-term to long-term	Low
Implement a system to track supply chain emissions and report on progress.	Medium-term to long-term	Medium
Ensure housing and highways maintenance repair contracts consider the climate agenda.	Medium-term to long-term	Low
Ensure investments consider the green agenda.		
Undertake a review of the pension and investment schemes and set a timeframe for divesting from fossil fuels.	Medium-term	Low

Enabling Others

Action	Timescales	Cost
Encourage and enable local businesses and residents to reduce their emissions.		
Work with local environment groups to support community projects.	Ongoing	Low
Create an online presence offering local information on how businesses and residents can address the climate emergency.	Short-term	Low
Roll out carbon literacy training across the borough.	Short-term	Low
Participate in UK100 Network to demonstrate the council's commitment to the climate agenda.	Short-term	Low
Encourage schools to participate in eco-schools.	Short-term	Low
Provide a resource to identify funding opportunities for our local residents and businesses to make lifestyle changes.	Short-term	Low

Offsetting

Action	Timescales	Cost
	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
Ensure any offsetting initiatives benefit our residents.		
Undertake a programme to offset the estimated carbon emissions the organisation cannot reduce.	Ongoing	Medium
Undertake natural offsetting through green infrastructure. This includes tree planting and evaluating local opportunities for woodland creation and other biological sequestration tools.	Ongoing	Low
Develop a spending programme for income generated from the Carbon offset fund which benefits residents.	Short-term	Low

Monitoring and Implementation

Action	Timescales	Cost
	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
Continue to monitor implementation and emission reduction projects.		
Develop a plan, including timeframes, to deliver the recommendations in this report and provide an annual progress update to Cabinet and full council on the delivery of the recommendations, progress in reducing the emissions and meeting the 2030 carbon neutrality target and 2050 zero carbon target.	Medium-term to long-term	Low
Commit a dedicated resource to lead the implementation, explore funding opportunities, provide expert advice across the council, and, periodically monitor and coordinate the delivery of the organisation's carbon projects.	Short-term	Medium
Encourage consideration of carbon implications in decisions and democratic process across the organisation.	Short-term	Low
Support staff and Redbridge communities to understand the carbon emissions from their everyday activities and how to reduce them.	Short-term	Low

Why did Redbridge declare a Climate Emergency?

Under the 2008 Climate Change Act, the UK government set a statutory target to reduce greenhouse gas (GHG) emissions by 80% from 1990 levels by 2050. In June 2019, this target was amended to reduce all GHG emissions to net zero by 2050.

The Intergovernmental Panel on Climate Change (IPCC)'s Special Report on Global Warming of 1.5°C (October 2018) sets out the impacts of global warming of 1.5°C above pre-industrial levels illustrating the need for urgent and unprecedented changes to keep global warming to a maximum of 1.5°C. According to the World Health Organisation (WHO), between 2030 and 2050 climate change will cause around 250,000 excess deaths per year.¹ In Redbridge, climate change is likely to;

- Lead to new climate patterns which in turn will lead to a loss of wildlife and biodiversity.
- Lead to an increased frequency of heat waves resulting in heat stroke, increased airborne infectious disease transmission and reduced fresh water sources. For example, in 2019, England recorded 3 heatwaves, the second causing 74 excess death in 65+ year olds in London.²
- Present colder winters whereby older people, people with chronic diseases/mental illness, pregnant women, children under the age of 5, people in deprived circumstances, and rough sleepers are at greater risk of harm. For example, in Redbridge between December 2017 and March 2018 there were 24.8% excess deaths compared to other non-winter months which was higher than previous years.³
- Increase the risk of flooding from surface water following extreme rain events and the River Roding.
- Increase levels of ultraviolet radiation (UVR) exposure which can lead to increased risk of non-melanoma skin cancers and melanoma skin cancers.⁴
- Impact air quality whereby lowering air pollution leads to a reduction in deaths and cases of asthma, diabetes, lung cancer, COPD, stroke and coronary heart disease.
- Increase the risk of vector borne diseases (VBDs) which have previously been confined to specific regions.⁵
- Increase human migration as certain areas of the world become less viable to live.⁶

With the rising public concern and scientific evidence on climate change, Redbridge Council passed a motion declaring a climate emergency at a meeting of the Full Council on 20 June 2019. The motion committed the council to working towards making Redbridge Council carbon neutral by 2030 and 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 cross-party Corporate Panel was established.

¹ <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

² PHE heatwave mortality monitoring Summer 2019.

³ <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>

⁴ <http://www.ncin.org.uk/skin/laua/atlas.html>

⁵ https://www.cdc.gov/climateandhealth/pubs/VECTOR-BORNE-DISEASE-Final_508.pdf

⁶ IOM Migration Research Series.

In addition, through participating in London Environment Directors' Network (LEDNet) and the Transport and Environment Committee (TEC), Redbridge has committed to collaborate with other boroughs, wider partners, residents and the businesses to support the delivery of the following priorities;

- **Retrofit London:** Retrofit all domestic and non-domestic buildings to an average level of EPC B. Programme timescale: 2020 – 2030.
- **Low-carbon development:** Secure low carbon buildings and infrastructure via borough planning. Programme timescale: 2020 – 2022.
- **Halve petrol and diesel road journeys:** Halve road journeys made by petrol and diesel via combined measures that can restrict polluting journeys and incentivise sustainable and active travel options. Programme timescale: 2020 – 2030.
- **Renewable power for London:** Secure 100% renewable energy for London's public sector now and in the future. Programme timescale: 2020 – 2030.
- **Reduce consumption emissions:** Reduce consumption emissions by two thirds, focusing on food, clothing, electronics and aviation. Programme timescale: 2020 – 2030.
- **Build the green economy:** Develop London's low carbon sector and green our broader economy. Programme timescale: 2020 – 2030.
- **Create a resilient and green London:** Ensure London is resilient to the effects of climate change, whilst enhancing its biodiversity and green spaces. Programme timescale: 2020-2030.

Establishing the Corporate Panel

The work on the climate emergency has been led by a cross-party Corporate Panel of Councillors chaired by Councillor Bert Jones with an initial plan going to Cabinet for approval in November 2020. Membership of the Panel included;

- Councillor Bert Jones (Chair)
- Councillor Saima Ahmed (Vice-Chair)
- Councillor Jo Blackman
- Councillor Namreen Chaudhry
- Councillor Linda Huggett, and,
- Councillor Saira Jamil.

As set out within the declaration, the Corporate Panel was tasked with considering how Redbridge Council could become Carbon Neutral by 2030 and Carbon Free by 2050, and, its role as a community leader in enabling and encouraging residents, businesses and organisations to become greener. To achieve this, the Corporate Panel met regularly between January and September 2020 to discuss the council's response to the climate emergency in the areas of Property and Energy, Cleaner Journeys, Waste, Biodiversity and Public Health, and, Community Leadership. For each meeting, a report on the relevant strategies and policies was provided as well as presentations from guest speakers which included other public bodies, academics, and, third and private sector organisations. An overview of the meetings and speakers can be found in Figure 1 below.

Figure 1: Overview of Corporate Panel meetings

Date	Theme	Speakers
Wednesday 8 January	Introduction Meeting	n/a
Tuesday 11 February	Scoping	UK100 Engie London Borough of Camden
Wednesday 11 March	Waste	Eunomia East London Waste Authority
Tuesday 20 May	Engagement and Green Audit	Eunomia
Monday June 8th	Property and Energy	Gbolade Design Studios Useful Projects Carbon Trust
Tuesday July 7th	Cleaner Journeys	Cenex TfL Prof. McMahon, University of Warwick
Thursday July 23rd	Community Leadership	South East London Community Energy Eunomia
Monday August 10th	Biodiversity and Public Health	Cllr Donovan – Chair of Nature and Environment Scrutiny Task and Finish Group Ian Diley – Public Health Consultant

Alongside the work of the Panel, Eunomia were commissioned to undertake a Green Audit. This work reviewed the council's estate, providing an understanding of the scale and source of the organisation's current greenhouse gas emissions. It identified initial priority actions that would have the greatest impact on reducing emissions.

The Corporate Panel also worked with residents, schools, voluntary and community groups to gather their views and perspectives on the climate emergency in Redbridge. Residents were invited to submit their ideas on what the council, the community and individuals in Redbridge could do, as well as asked to set the council's carbon budget. Residents were then invited to participate in online workshops developing on the contributions already made. These workshops were originally scheduled to be held at Local Forums however, due to the pandemic, online workshops were held. Contributions from the various engagement activities were presented to the Panel as part of their consideration on the council's role as a Community Leader.

This report sets out the evidence presented to the Corporate Panel including the sources of carbon emissions in Redbridge, information presented by guest speakers and the current position of Redbridge Council. Within each theme the Corporate Panel have identified commitments and actions that should be considered to eliminate or offset these emissions in the future.

This report 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

Overview of Engagement

Alongside the Corporate Panel's meetings, the Panel and officers worked with residents, schools, and, the voluntary and community groups to gather their views and perspectives on the climate emergency in Redbridge. At the first Corporate Panel meeting it was agreed that the engagement activities would occur in three phases:

- 1) A Call for Ideas to Tackle Climate Change – online – February/March
- 2) Set the Council's Carbon Budget – online – March/April
- 3) Review of ideas and proposals – Local Forums – May/June

However, due to the pandemic, the timetable was shifted to the following;

- 1) A Call for Ideas to Tackle Climate Change – online – March – June 2020
- 2) Set the Council's Carbon Budget – online – June – August 2020
- 3) Review of ideas and proposals – online workshop – July – August 2020

In total, across all three stages, there were approximately 300 respondents who shared their ideas.

During the call for ideas, residents were asked the following four questions;

- What are your ideas of how the council can reduce its emissions?
- What do you think the community and businesses can do to reduce emissions?
- What, if anything, are you doing personally to reduce your emissions?
- How could the council help you further reduce your emissions?

The second phase of engagement challenged residents to set a carbon budget based on ideas they proposed in the "Call for Ideas" and suggestions from various toolkits. This was undertaken using Delib's point simulator, providing respondents an opportunity to make choices based on a set carbon budget. Respondents moved the sliders to reflect their priorities in each of the following themes; transport, waste, food, property and energy, and, businesses. Each of these themes included a set of actions the council could undertake to help residents reduce their emissions and the associated carbon reduction. The greater the associated carbon reduction, the greater the reduction in the carbon budget. Respondents were able to view the consequences of their selection and leave comments on each theme.

Due to the pandemic, officers were unable to hold Local Forums and discuss the climate emergency. Instead, four online workshops were organised for the final phase. Residents were invited to discuss the outcomes of the two engagement activities and ideas on the role of the council as a community leader. Two of these four sessions were open to members of the public, another was for young people and the fourth was for local environment groups.

For each of the Corporate Panel's themes, the workshop participants were asked;

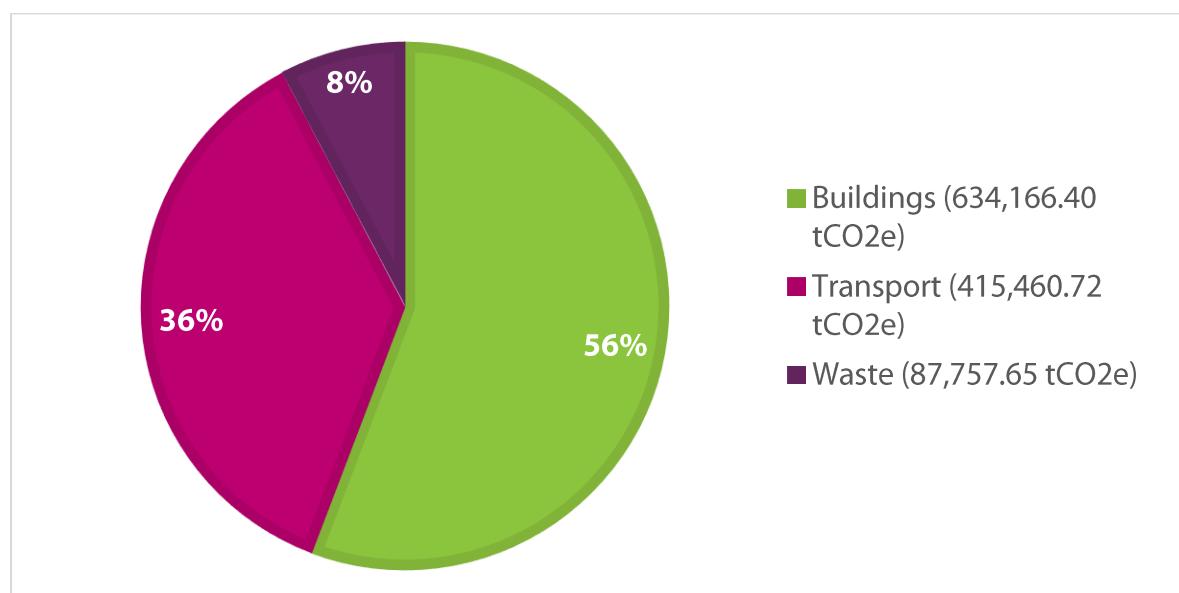
- Where have you seen good examples in Redbridge or elsewhere?
- How can we encourage other organisations, groups, or schools to become greener?
- How should we talk about this work with our different communities in the borough?

Overall, the different phases of engagement illustrated that residents predominantly viewed the council as a community leader with a key role in enabling the local community to reduce its footprint. Throughout the various stages, respondents' top priorities included enabling and encouraging active travel, improving recycling in the borough, facilitating residents to improve their energy efficiency, purchasing green energy, and, facilitating the transition to EV vehicles. A number of residents highlighted the need for financial support and guidance on improving their energy efficiency at home including guidance on retrofitting and insulating their homes.

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 tCO₂e.⁷ Figure 2 below illustrates a breakdown of these emissions whereby the borough's emissions predominantly originate from its buildings followed by transport. In the graph, emissions from buildings includes residential, commercial, institutional, and, industrial buildings and facilities. Transport emissions include those arising from on-road, rail, waterborne navigation, aviation and off-road emissions. Waste includes emissions from solid waste disposal, biological treatment, incineration and open burning and waste-water emissions.

Figure 2: Percentage Borough Emissions by Sector 2017⁸



As a borough which is home to over 300,000 people, with nearly 100,000 households,⁹ it is not surprising that 75% of building emissions originate from residential buildings, this is equivalent to 42% of all reported borough emissions. Figure 3 (below) illustrates the percentage breakdown of the borough's building emissions, whereby the 26,750 business establishments account for up to 25% of the emissions associated with the borough's total building emissions.

⁷ <https://scattercities.com/>.

⁸ <https://scattercities.com/>.

⁹ <https://www.redbridge.gov.uk/about-the-council/the-story-of-redbridge/>.

Figure 3: Percentage Breakdown of the Borough's Building Emissions¹⁰

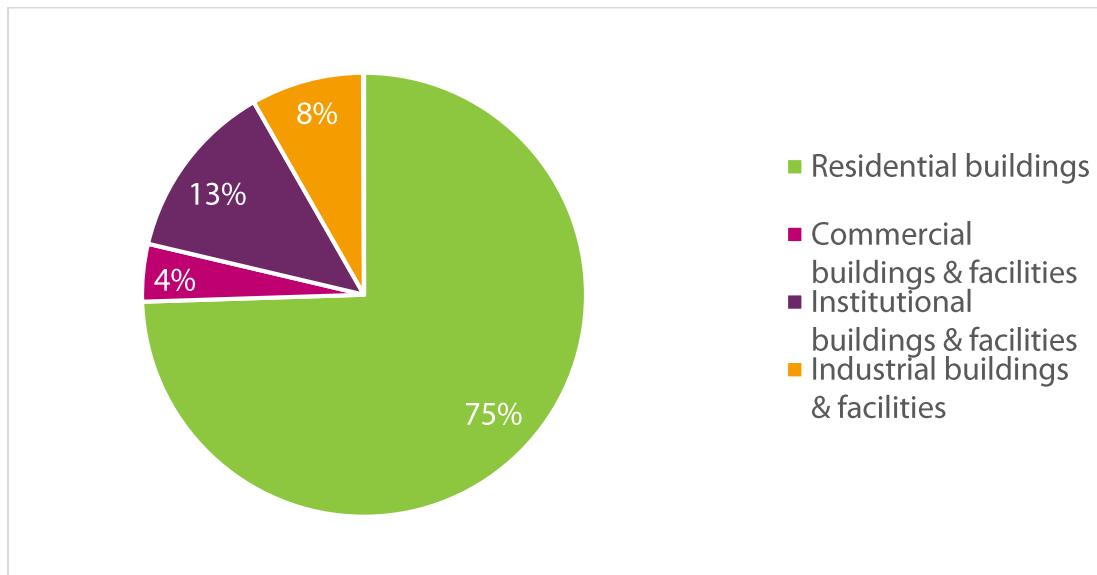
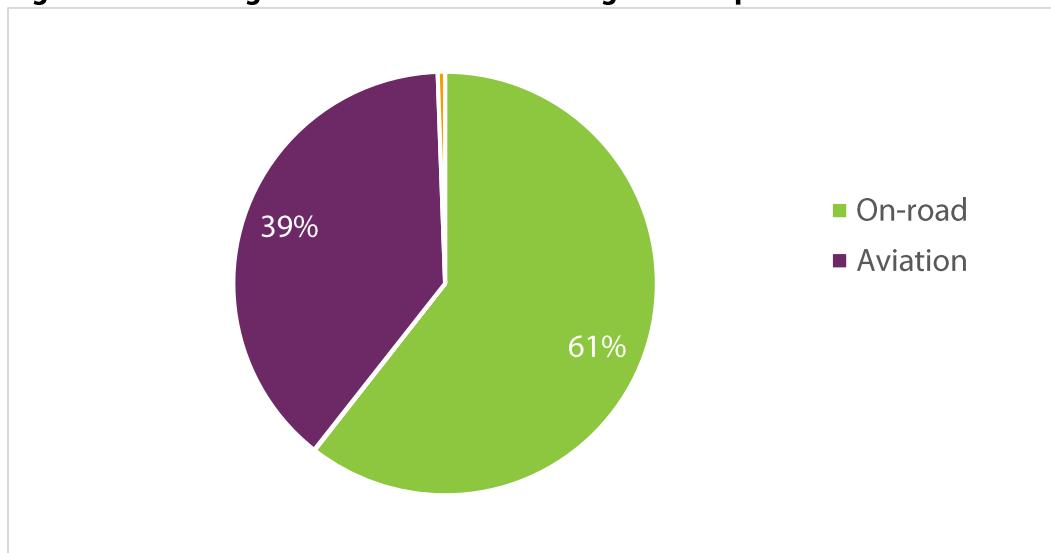


Figure 4 (below) illustrates the percentage breakdown of the borough's transport emissions. Given that on average households in Redbridge have more than one car,¹¹ and, with other Outer London boroughs on average having 4% more adults cycling,¹² it is unsurprising that in Redbridge, on-road transport accounts for 61% of all transport emissions in the borough, the second highest carbon emitter in the borough. In addition, due to City Airport's flightpath being over Redbridge, aviation accounts for 39% of the borough's transport emissions.

Figure 4: Percentage Breakdown of the Borough's Transport Emissions¹³



¹⁰ <https://scattercities.com/>.

¹¹ LSOA Atlas, GLA 2014.

¹² Participation in Walking and Cycling (based on the National Travel Survey and Active Lives Survey), DfT 2018.

¹³ <https://scattercities.com/>.

The Council's Direct Emissions

Within the original declaration a commitment was made to undertake a Green Audit of council services to understand the scale of the challenge the organisation faces in reaching its target to become carbon neutral by 2030. Eunomia were commissioned to calculate an emission baseline of the council's operations within the council estate, housing stock and Vision buildings. As there are varying governance structures, and, the council does not hold consumption data for all the schools in the borough, schools were defined as out of scope. However, schools have been considered in the council's role as a community leader.

In order to ensure the data was as complete as possible, the calendar year 2019 has been used as the baseline and it is proposed that it could be the carbon emissions against which progress can be monitored going forward. The Green Audit illustrated that the council is directly responsible for 10,007 tCO₂e, with a further 31,256 tCO₂e attributable to procured services and council tenants. When compared to the borough's emissions, the council is directly responsible for roughly 2.4% of the emissions.

In line with emissions reporting, Eunomia broke down the council's emissions by scope.

Scope 1 are 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 accounts for electricity consumed in the Corporate Estate, Vision estate, communal areas of Housing Revenue Account (HRA) buildings, and, street lighting. Scope 3 are other emissions associated with Redbridge's operations, however, due to their complexity, these emissions should be considered estimations only.

Scope 3 can be broken down into; emissions from HRA dwellings leased to tenants, and emissions from procured goods and services. These emissions are produced by other organisations, but feature in the baseline to illustrate the scale of emissions associated with our procurement activities.

Figures 5 and 6 below provide a breakdown of the organisation's emissions and illustrates the priority areas for emission reduction. These illustrate that the largest source of emissions is those associated with the running and maintenance of the council's buildings. These can be attributed to the energy inefficiency of the building, the building fabrics and materials, and, the lack of consumption of green energy. When broken down further, the HRA housing portfolio is a major contributor of these emissions with 43% of the total building emissions arising from HRA dwellings and a further 18% originating from HRA communal areas.¹⁴

It should also be noted that the emissions associated with street lighting are unlikely to be reduced further as in 2017 these were converted to LED lighting decreasing the levels of emissions generated significantly.

As scope 3, procured good and services, are perceived to be outside of the council's direct control and therefore can be addressed through the council's role as a community leader and contract standards.

¹⁴ The HRA housing portfolio is equivalent to roughly 4422 households and does not consider those households where the tenants own the leasehold.

Figure 5: Council Emissions by sector excluding Waste

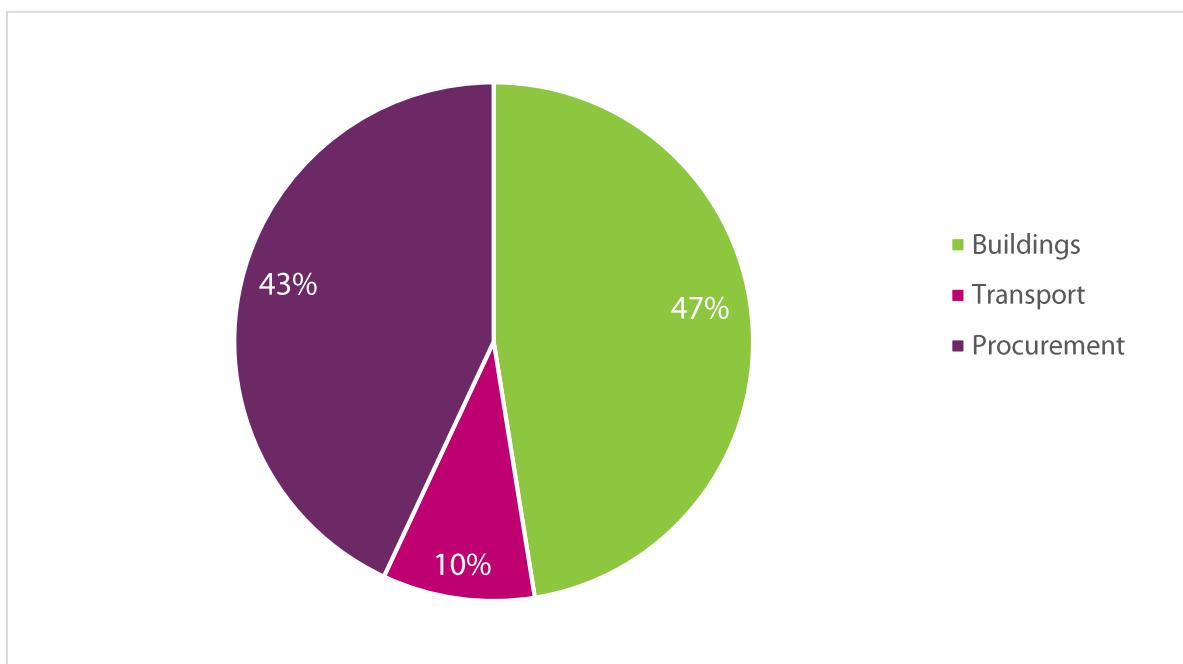
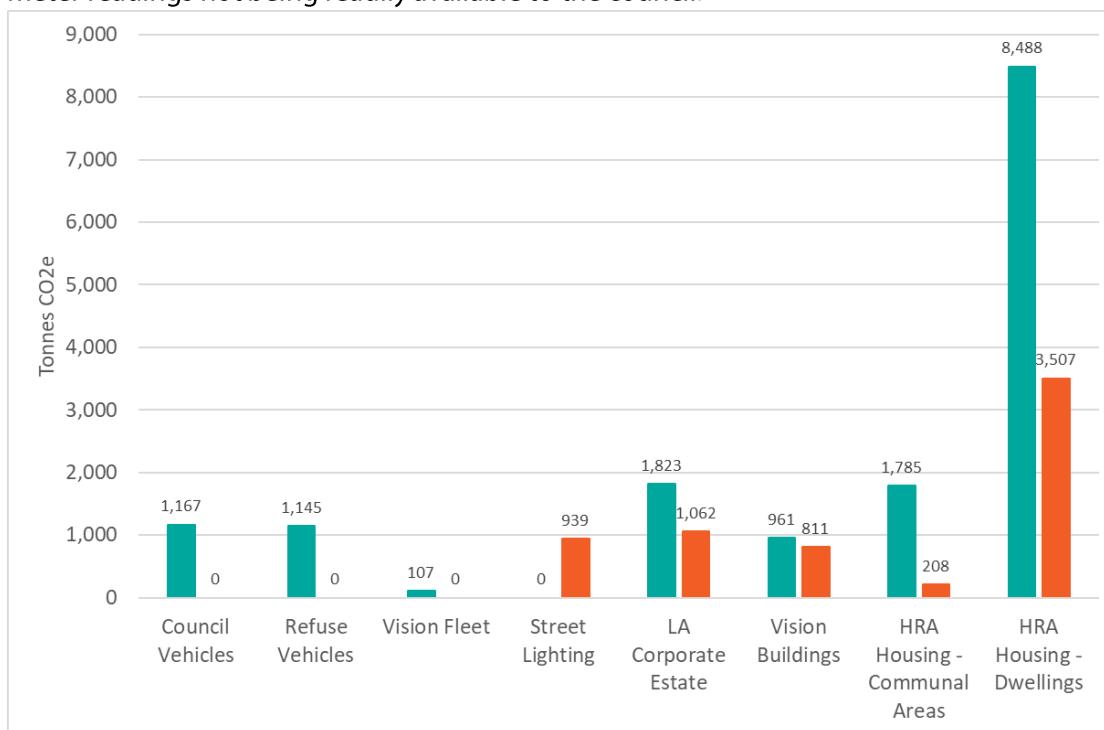


Figure 6: Breakdown of emissions generated by council vehicles and buildings

The green bars represent emissions from consumed fuels (Scope 1): petrol and diesel for vehicles, gas and heating oil for buildings, whilst the orange bars show electricity consumption, Scope 2.

The total emissions from dwellings have been distinguished from emissions generated in communal areas as emissions from communal areas are based on meter readings provided to the council whilst emissions from dwellings are estimated due to energy being paid for by tenants and meter readings not being readily available to the council.



The Green Audit also looked at the council's supply chain emissions and identified that the largest emitters from procured goods and services were around maintenance and repairs in both housing and highways. Following this, the largest emissions were from vehicles used to support vulnerable residents and staff commuting. These supply chain emissions should be considered estimates only. They are based on the spend in each category, for which emissions factors provided by the government are less specific. Additionally, the procurement categories covered are the result of available data and therefore there may be additional categories of expenditure that were not included.

The Corporate Panel explored the organisation's emissions within more detail within the different themes to consider where interventions could have the largest impact.

Corporate Panel Research

How Redbridge Council, as an organisation, will become carbon neutral by 2030 and carbon zero by 2050 is a key part of the climate emergency response. Between January and September 2020, the Panel were presented with papers outlining the current position for Redbridge Council, how it could use its position as a Community Leader to influence areas outside of its direct control and recommendations to consider. In addition, the Panel heard from experts in each of the themed meetings, a summary of the discussions can be found below.

Property and Energy

The Panel met in May to discuss how carbon emissions associated with property and energy could be reduced. The Panel heard that research undertaken by Migrate, who have compiled information from the Department of Business, Energy and Industrial Strategy, ranked Redbridge as the 6th greenest council in London with a CO₂e rate of 2.64 tonnes per person. However, given that 66%-80% of the buildings that exist today will still be here in 2050, evidence from Gbolade Design Studio, Useful Projects and the Carbon Trust demonstrated that improving energy efficiency in buildings was the first step to reducing the carbon footprint in our existing buildings. Ways to achieve this include; insulating buildings, implementing thermostatic control and double glazing to reduce the demand for heat, minimise the power requirements of new heating systems and reduce long term costs. Once insulated, Useful Projects highlighted the need to replace fossil fuel heating system with low-carbon heating and cooling infrastructure, and, maximise renewable energy generation storage distribution. This may include installing heat pumps or adopting a centralised energy system as well as procuring green electricity.

The Panel heard how by retrofitting rather than demolishing buildings, the associated whole life carbon is likely to be closer to carbon neutral than most new builds. A fabric first approach allows energy savings to be locked into the building fabric for the life of the building and mean that any subsequent local renewable energy generation would represent additionality rather than simply offset poor building performance.

The Green Audit demonstrated that within the council's existing buildings, ways of addressing our buildings energy efficiency included replacing gas boiler systems with an electric form of heating, improving wall and roof insulation, installing energy efficient fittings and the using renewables. For our housing stock, the Green Audit recommended addressing these emissions through working with our tenants to encourage the consumption of green energy. In turn, the Panel heard how this would support our tenants in becoming more resilient to future climate conditions and help address fuel poverty through a reduction energy bills.

For our new builds, the Panel heard the importance of working with developers on basic standards that can accelerate homebuilding, ensuring they are gas-free from the start, progressively reducing carbon emissions and developing green skills within the built environment. When carrying out capital works, speakers highlighted that requirements need to go beyond regulations and policies: the circular economy and a whole life carbon approach should be considered in order to ensure the design minimises the amount of materials required and eliminates the need for future works.¹⁵

The Panel heard that despite these actions also supporting a green recovery from the pandemic and the development of new green skills and jobs, there are several constraints that need to be considered. In particular;

- The fabric of some individual buildings will be better suited to certain energy efficiency measures above others. For example, external, internal or cavity wall insulation will be appropriate to different buildings, and in some instances it may not be possible to achieve desirable levels of energy efficiency.
- Installing energy efficiency measures is likely to cause disruption to building use in the commercial, Vision and housing portfolios. There may be periods where buildings cannot be used during retrofit works and alternative properties will have to be identified.
- Within the housing portfolio, necessary consent will be required from residents to proceed with retrofit works. In addition, where social housing exists alongside leasehold dwellings in buildings, the necessary consent of other residents will also be required, as well as considering the additional proportionate costs that leaseholders will be required to pay.
- The necessary low carbon heating solutions will vary by building. Some of these solutions, for example Air Source Heat Pumps, may be less invasive than other solutions, such as Ground Source Heat Pumps or Heat Networks, which require more substantial building work. The necessary work may cause wider disruption to local transport networks and local amenities.
- Due to the available technology, improving our current buildings will be a greater challenge and cost than incorporating the green agenda into our new developments. We will need to keep up to date with best practice and continually evaluate the most effective changes.
- Proposals for external wall insulation in certain areas and locations will not be acceptable under current planning rules.
- Installation of solar panels in some cases will require planning permission in conservation areas and on flat roofs.
- The capacity of the local electricity grid would need to be increased to support a shift to electric-based heating systems.

¹⁵ A circular economy is an alternative to a traditional linear economy (make, use, dispose) 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.

We have already started reducing our emissions from our buildings and energy having;

- Rolled out LED street lighting across the borough, reducing annual emissions by 71% in 2019 compared to 2017.
- Prioritised energy efficiency in our building maintenance programme which 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 160tCO₂e per annum.
- Reduced the council's own building carbon emissions by 9% through improved building insulation, upgrading of inefficient boilers and the replacement of older, less efficient air-conditioning units.
- Committed to deliver 1000 new homes whereby sustainability specialists have been procured. In addition, we have undertaken site-specific analysis to identify opportunities to connect to District Heating Systems and 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.
- Installed solar electricity panels on a number of schools and buildings across the borough generating 307,589.52 kWh per annum in 2018/2019. This energy was used to supply local schools and council housing.

Having heard from experts and considering the findings of the Green Audit, the Panel felt emissions on the organisation's own estate, including Vision's, could be further reduced to reach our carbon neutral 2030 targets.

Recommendations

Action	Timescales	Cost
	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
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.		
Transfer to a green energy tariff for buildings in the Council's operational estate.	Short-term	Low
Commit that all new non-residential Council buildings (i.e. Community Hubs, Schools and Leisure Facilities) will be at least BREEAM Excellent.	Short-term	High
Implement a smart metering and Building Management Systems (BMS) in all main corporate sites to maximise the energy efficiency and improve knowledge of building energy use and performance.	Medium-term	Medium
Bring all Council operational buildings up to EPC B through insulating, improving energy efficiency and on-site power generation.	Long-term	Very High
Work to reduce the emissions originating from both council owned and private housing in the borough.		
Transfer void council properties onto a green energy tariff.	Short-term	Low
Bring all Council owned housing up to EPC B through insulation, retrofit and on-site power generation.	Long-term	Very High
Support tenants to switch to a green energy tariff.	Short-term (and ongoing)	Low
Continue to use our powers to ensure that properties in the private rented sector reach the minimum level of energy efficiency as set by the recent improved legislation.	Medium-term	Low-Medium
Identify and promote support for residents, businesses and organisations to improve the environmental standards of their properties.	Ongoing	Low
Require all new homes to be built to EPC B.	Long-term	Very High
Review the opportunities and scope for energy generation in the borough.		
Identify possible scope and means for green energy (solar, heat pumps etc) on existing buildings (including schools) through establishing a solar fund.	Medium-term	High
Identify potential opportunities for a local energy company based on solar, biogas or other technologies to remove LBR homes from the grid.	Medium-term	Very High
Support local renewable energy projects in the local community.	Ongoing	Low

Action	Timescales	Cost
Use planning powers to ensure developments are of a high energy standard and developers are held accountable to standards.	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
Implement a Carbon Offset Fund through S.106 agreements.	Short-term	Low
Request climate impact assessments on planning applications.	Short-term	Low
Develop a Green and Blue Infrastructure Plan.	Medium-term	Low
Develop a Redbridge Sustainable Construction Code.	Medium-term	Low
Incorporate sustainable and carbon standards in the Local Plan, building regulations and policies.	Medium-long term	Medium

Cleaner Journeys

The Panel heard evidence that transport is the second largest sector for carbon emissions in both the borough and the organisation. The Green Audit illustrated that as an organisation, the council and vision's fleet produces 2,419 tCO₂e, 6% of the organisation's total emissions. It is estimated a further 1,500 tCO₂e arise from staff commuting, equivalent to 4% of the council's total emissions. This needs to be treated as an estimate only as it has been calculated based on a staff survey and modelled for the organisation by Eunomia.

Having heard from Cenex, TfL and Professor McMahon of the University of Warwick, there are various roles the council has in reducing transport emissions. Cenex highlighted that the emissions from our vehicle fleet could be addressed through converting the council's and vision's fleet to electric or hydrogen power sources and developing the necessary supporting infrastructure. With regard to larger vehicles, the technology is not yet available however, it is likely that a greater variety of options for alternative fuel replacements will be available in the coming years. The Green Audit highlighted the following challenges in decarbonising the council's fleet;

- The required mileage per charge of vehicles and the technical constraints of current electric vehicles.
- The extent of charging infrastructure required to service the fleet.
- The availability of suitable electric replacements for larger vehicles such as trucks and buses.

TfL highlighted that 58% of road transport greenhouse gas emissions are from car travel and 24% of emissions arise from commercial vehicles. With the Mayor's Transport Strategy setting a target of 80% of all journeys to be made by active, efficient and sustainable modes – public transport, walking and cycling – by 2041, TfL emphasized the role of the organisation in supporting staff and residents to change their transport mode of preference.

The Panel heard different ways of encouraging this modal shift, which included 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, despite the apparent abundance of buses and the network of both TfL Rail and London Underground services across the borough, most of Redbridge is in the lower to middle section of the public transport accessibility index. Thus, where vehicle use is unavoidable, Professor McMahon highlighted the importance of increased accessibility to electric vehicles and charging points or car sharing schemes. Through developing this infrastructure, our residents would be connected to the local area and encouraged to support local businesses. In addition, a healthier population and reduced air pollution is likely to be evidenced in the borough.

In reducing the carbon emissions associated with business and resident's travel, the Panel notes the following the technical challenges;

- Decarbonising business travel and commuting may be limited by the availability of low carbon public transport.
- The destinations of travel may inhibit the use of low carbon transport.
- Switching transport modes for both business travel and commuting will require a behaviour change.
- The requirements of individuals may not be suited to low carbon transport types, depending on the journey and the availability of alternative transport modes.

The Panel heard work has already started to reduce our emissions from transport. The council has;

- Developed a comprehensive vehicle replacement programme to ensure Euro VI compliance.
- Started a fleet conversion programme to ensure ULEZ compliance.
- Provided electric pool cars and pool bikes for staff to use at Lynton House and the 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.
- Implemented school streets.
- Started developing two mobility hubs in South Woodford and Wanstead.
- Developed cycling and walking routes across the borough including off-road trackways and segregated cycle lanes.
- Achieved 48% of average daily trips in Redbridge made by walking, cycling and public transport.

Considering the evidence presented, to reduce the organisation's transport emissions, the Panel believes the organisation could be going further.

Recommendations

Action	Timescales	Cost
	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
Continue to reduce the emissions associated with the council's fleet.		
Review the current fleet replacement programme to identify opportunities for improving fuel efficiency and EV replacement.	Ongoing- By 2021, 5% of the fleet will be electric and 1% will be hybrid.	Very High
Implement a council fleet vehicle maintenance programme to maximise vehicle longevity in accordance with recommended vehicle life expectancy.	Ongoing	Very High
Where vehicles are unsuitable for electrification, ensure, where available, selection of alternative new technologies for vehicle replacement.	Ongoing	Very High
Continue to support staff to reduce their emissions associated with travel.		
Encourage and incentivise staff to opt for low carbon travel for their business travels and commuting journeys.	Ongoing	Medium
Provide facilities for a green travel programme across main operational sites.	Medium-term	Low
Continue to reduce associated emissions from road-based travel.		
Work with partners to reduce associated emissions from road-based travel, i.e. TfL STARS programme, community groups, NHS, contractors etc.	Ongoing	Low
Work with businesses and residents to encourage a modal shift for 50% of all journeys to be made by active, efficient and sustainable modes of transport by 2021 and 65% by 2041 i.e. car free zones, improved cycling infrastructure, promoting cycle training and Try before you bike, developing playstreet programmes, promoting cycle to work schemes and school streets.	Ongoing	High
Continue to expand the electric vehicle (EV) charging infrastructure to ensure installation of 200 chargers by December 2021 including highspeed chargers where feasible and designated parking bays.	Ongoing	Medium
Continue to seek to make physical interventions such as the Ilford Garden Junction and Ilford Gyratory projects to physically reduce the prevalence of exceptionally high private car use and prioritise more sustainable modes of travel including walking and cycling.	Ongoing-Short-term	High

Waste

The Greenhouse Gases Methane, Carbon Dioxide and Nitrous Oxide are the prime causes of climate change, of which Methane and Carbon Dioxide are generated by waste decomposition. The connection between decomposing waste in landfill and climate change gases is now firmly established. The European Union legislated the Landfill Directive in April 1999 which aims "to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and, on the global environment, including the greenhouse effect, as well as any resulting risk to human health, from the landfilling of waste, during the whole life-cycle of the landfill".

In March, the Panel heard from Eunomia and the East London Waste Authority (ELWA) on how the organisation could address its carbon emissions associated with waste. Through the Green Audit, Eunomia highlighted that emissions associated with waste management predominantly arise through the plastic waste managed through Mechanical Biological Treatment (MBT). The Panel notes that although 99.98% of every tonne of waste delivered to Renewi for disposal and treatment is diverted from landfill, we do not perform strongly against the top tiers of the waste hierarchy – reduce, reuse and recycle. In 2017-2018, Redbridge's recycling performance had the 4th highest residual kg/household per annum in the UK at 26.7%.

To address the carbon emissions associated with waste, speakers highlighted the need to encourage waste reduction, evaluate the supply chain of the goods bought and consider the whole-life costs of goods including the impact of producing and transporting them. This means considering a circular economy whereby we keep resources in use for as long as possible through recovering and regenerating products and materials at the end of each service life. Consideration also needs to be given to evaluating the role of the circular economy in the procurement of goods and development of planning policies.

The reduction of emissions associated with waste faces a number of challenges due to the nature of the waste contract with ELWA, the organisation responsible for making the decisions on how waste is managed and is made up of four East London Boroughs (Redbridge, Barking and Dagenham, Havering and Newham). ELWA transports and disposes of the waste collected in these boroughs, through MBT, diverting 99.98% of all waste from across the four boroughs away from landfill. When the contract was awarded in 2002, it was ground-breaking, basing key performance indicators around Landfill Diversion. However, the current ELWA contract limits the opportunity to collect additional streams at kerbside as additional collection costs would not be offset by decreased disposal costs and/or recyclate income that a more modern disposal contract could offer. The Panel heard that the contract is up for renewal in 2027 and one of the key priorities already identified for the future Waste Disposal Strategy is climate impact.

The Panel heard how a Waste and Resources Action Programme (WRAP) study had recently found "the more urban, less prosperous and more deprived an area is the lower its recycling rate is likely to be". The study found that the socio-demographic and geographic make-up of a local authority was found to account for almost a quarter of the variations between different council's recycling rates. As a borough ranked 11th out of 32 boroughs in London for overall deprivation, the Panel heard how the borough's recycling performance and therefore environmental impact is limited by its areas of deprivation and density of dwelling.¹⁶ In particular, flatted properties are challenging property types to build good recycling practice in and boroughs with a high proportion of flatted/communal properties find achieving high recycling percentages very difficult. The Panel notes that whilst the London target for recycling is set at 65% it is understood by the Greater London Authority (GLA) that this is an aggregated score across London with higher performing boroughs supporting those boroughs whose demographics and deprivation levels will struggle to reach these high-performance targets

We have already started our journey to reduce carbon emissions associated with waste, as an organisation we have;

- Developed a Waste Reduction Strategy and introduced Waste Charter and Waste & Recycling Policies 2020.
- Implemented a "no extra rubbish rule" to restrict household waste.
- Rolled out a successful wheelie bin trial.
- 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.
- 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.

During the engagement phase, residents expressed concern around waste management in the borough and the recycling offer. Noting these concerns and the nature of the ELWA contract, the Panel proposes the following recommendations are considered.

¹⁶ English Indices of Deprivation, MHCLG 2015 & 2019.

Recommendations

Action	Timescales	Cost
Decrease waste and increase recycling amongst residents.	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
Extend wheelie bin roll-out across the borough.	Medium-term	High
Implement a Redsack refuse scheme.	Short-term	Low
Monitor and improve recycling and waste collection facilities from flatted properties.	Ongoing	Medium
Support and encourage residents in flatted properties to improve recycling rates.	Medium-term	Medium
Work with flat management agencies to improve recycling rates in flatted properties.	Medium-term	Medium
Work with schools to encourage waste reduction and increase recycling rates.	Medium-term	Low
Improve kerbside recycling of waste.	Medium-term	Medium
Reduce food waste and encourage food composting.	Ongoing	Low
Support residents to reduce waste through the 'LoveFoodHateWaste' campaign.	Medium-term	Low-Medium
Support residents in growing their own produce and composting on their properties.		

Biodiversity

Redbridge is one of the greenest boroughs in London with over 1500 hectares of parkland of which 9 parks have received Green Flag Status.¹⁷ The Panel heard from Cllr Donovan, Chair of the Nature and Environment Scrutiny Task and Finish Group, on how the council has an important role in mitigating against the effects of climate change through developing green infrastructure. In turn, this improves air quality and the microclimate, and, protects and enhances the borough's biodiversity.

To address the effects of climate change on biodiversity, possible ways include, capitalising on the natural assets in the borough, and, ensuring green infrastructure mitigates and adapts to climate change. The Panel highlighted the need to maintain and increase the provision of green and blue space in the borough, and, increase carbon sequestration opportunities in the borough.

¹⁷ <https://www.redbridge.gov.uk/about-the-council/the-story-of-redbridge/#:~:text=The%20Story%20of%20Redbridge%20is,visually%20rich%20Power%20Bi%20dashboard>.

We have already started this work, of which some has been funded by the Community Infrastructure Levey, we;

- Have worked on a number of tree planting projects including;
 - Partnering 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 and a further 859 on Highways.
 - Working with the student led Climate Emergency Committee at Woodbridge High School to plant a further 100 trees on school grounds and bee friendly spring bulbs.
 - Working with residents to encourage planting of trees in residential gardens.
 - Having over 800 Highway tree pits adopted in the last year.
 - Creating a community orchard in a disused pocket park located at the bottom of George Lane in South Woodford.
 - Undertaking work to secure further capital to plant an additional 5,000 trees across the borough.
- Have worked with Wild Wanstead and Cleaner Greener Wanstead Group to facilitate local road verge greening schemes, and, installing grow zone signs across Wanstead.
- Partnered with Transition Town Ilford to establish a Forest Garden programme in Ilford.
- Developed a community-led organic vegetable growing organisation.
- Harvested 1.295 tonnes of apples for Cider and Apple Juice production and awarded £7.2 million to Hainault Forest in 2019.
- Have managed and restored 1,455,200m² of wildlife habitat in 2019.
- Have undertaken 114 Nature Conservation volunteer workdays collecting 1,145 bags of litter and carrying out valuable habitat enhancement work across 18 sites in Redbridge in 2019, equating to 4,357 hours of volunteering. Between July and September 2020, our Nature Conservation Volunteers have been litter picking along the Roding Valley and Claybury Park, generating 404 hours of volunteer time and collecting 481 bin bags of rubbish.
- Request swift, boxes and/or bricks as an enhancement measure for major developments as well as bat or bird boxes.
- Ensure all major applications submit a thorough Preliminary Ecological Appraisal (PEA)/Phase 1 Ecology Survey and any recommended follow up Protected Species Surveys/Phase 2 Surveys and action any recommendations and measures.
- Are developing a successful bid to the Environment Agency, to fund £45K of Natural Flood Management works at Hainault Forest.

The Panel supports the draft recommendations of the Nature and Environment Task and Finish Group and seeks to ensure the organisations actions are in line with the 2020 Environment Bill.

Recommendations

Action	Timescales	Cost
	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
Increase blue and green infrastructure across the borough.		
Develop a tree planting strategy and increase tree cover by 10% within the borough's parks, green spaces and urban areas.	Ongoing	Low
Prioritise and protect biodiversity in Redbridge.	Ongoing	Low
Ensure the local plan and future planning developments contain commitments and targets to maintain and increase biodiversity in the borough.	Ongoing	Low
Encourage community lead projects that support biodiversity i.e. food growing, composting, community orchards.	Ongoing	Low
Ensure that new developments plans include requirements for biodiverse and rich habitats – especially in urban areas.	Medium-term	Low
Develop a New Nature and Conservation Strategy.	Medium-term	Low

Procurement and Investments

At 43% of the council's total emissions, equating to 17,761 tCO₂e, procured goods and services is the second largest emitter of emissions within the council. As the associated carbon emissions for procured goods and services are based on spend within the available data sources, for which emissions factors provided by the government are less specific, this figure is only an estimate. The Panel considered these emissions to be outside the organisation's direct control however by changing the way we procure services, we can use our collective leverage to incentivise change and enable innovation in the borough and amongst our suppliers.

Recommendations

Action	Timescales	Cost
Ensure the procurement of goods and services reflect the carbon neutral agenda.		
Identify priority areas for new procurement criteria using the TOMS framework, and integrate these into supplier requirements.	Short-term	Low
Encourage procurement frameworks to integrate carbon neutral principles.	Short-term	Low
Engage with suppliers to communicate new procurement ambitions, working together to reach solutions.	Short-term	Low
Ensure ongoing alignment of the procurement strategy with carbon neutral ambitions through ongoing reviews of procurement frameworks and supply chain networks.	Medium-term to long-term	Low
Implement a system to track supply chain emissions and report on progress.	Medium-term to long-term	Medium
Ensure housing and highways maintenance repair contracts consider the climate agenda.	Medium-term to long-term	Low
Ensure investments consider the green agenda.		
Undertake a review of the pension and investment schemes and set a timeframe for divesting from fossil fuels.	Medium-term	Low

Enabling Others

The Panel recognises that the climate emergency declaration focussed on the council's own activity and direct emissions, however, given the organisation only has direct control over approximately 2.4% of the borough's emissions, action will be needed to address the majority of borough's emissions and improve our borough. The Panel heard that 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.

Redbridge Council is in a strong position to lead the borough's response to the climate emergency, however, the Panel recognises that we cannot reduce emissions in the borough 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, the Panel notes the 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.

Therefore, it will not be enough to rely solely on the council to take all of the necessary action. Reducing emissions in the borough will need residents, businesses, public bodies and the third sector to work together and take action. As the principal agency for Redbridge, the Panel proposes the council enables and encourages 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.

We have already started this work. We have delivered environmental education sessions to 695 local school children in 2019, offered self-led forest and farm experiences at Hainault Forest in 2019 to classes from 23 schools from 5 different boroughs, and, held workshop on recycling and waste minimisation. However, considering the evidence, the Panel believes the organisation should go further.

Recommendations

Action	Timescales	Cost
Encourage and enable local businesses and residents to reduce their emissions.		
Work with local environment groups to support community projects.	Ongoing	Low
Create an online presence offering local information on how businesses and residents can address the climate emergency.	Short-term	Low
Roll out carbon literacy training across the borough.	Short-term	Low
Participate in UK100 Network to demonstrate the council's commitment to the climate agenda.	Short-term	Low
Encourage schools to participate in eco-schools.	Short-term	Low
Provide a resource to identify funding opportunities for our local residents and businesses to make lifestyle changes.	Short-term	Low

Offsetting

The Panel heard that there are a number of actions Redbridge council can implement to reduce its annual carbon emissions, however due to technical limitations, speed of implementation and a lack of alternate technologies this may take a number of years to achieve. Achieving carbon neutrality by 2030 will require any of Redbridge's remaining emissions to be balanced or offset through funding emission reductions outside of the council's estate, and claiming the benefit. The Green Audit illustrated that where we implement 80-90% reduction in the areas of energy, our buildings, our fleet and staff commuting, a residual footprint of around 6000 tCO₂e per year will need to be offset. The Green Audit estimated this would cost between £18,000 and £486,000 depending on how these emissions are offset.

Considering the evidence and the scale of the challenge to reach carbon neutral by 2030, the panel proposes the following.

Recommendations

Action	Timescales	Cost
Ensure any offsetting initiatives benefit our residents.		
Undertake a programme to offset the estimated carbon emissions the organisation cannot reduce.	Ongoing	Medium
Undertake natural offsetting through green infrastructure. This includes tree planting and evaluating local opportunities for woodland creation and other biological sequestration tools.	Ongoing	Low
Develop a spending programme for income generated from the Carbon offset fund which benefits residents.	Short-term	Low

Monitoring and Implementation

Given the current budgetary pressures on local government, achieving carbon neutrality will be challenging. Many of the policies required to help us achieve our targets are set at the regional or national level and therefore are beyond our control. Despite these challenges, the Panel recognises the importance of starting to implement the Green Audit, the need to continue to lobby for change, and, the requirement to work with partners and external organisations to reach the council's targets. Speakers have illustrated the need to work in a co-ordinated way, maximising the financial resources available to further develop ongoing work as well as delivering our carbon neutral agenda. Alongside our existing budget, the Panel recognises funding is available from the Mayor, government and other sources.

Recommendations

Action	Timescales	Cost
	Short – within 12 months Medium – 1-3 years Long - 3 years plus	Low – less than £100k Medium- £100k – £1m High - £1-5m Very High - £5m+
Continue to monitor implementation and emission reduction projects.		
Develop a plan, including timeframes, to deliver the recommendations in this report and provide an annual progress update to Cabinet and full council on the delivery of the recommendations, progress in reducing the emissions and meeting the 2030 carbon neutrality target and 2050 zero carbon target.	Medium-term to long-term	Low
Commit a dedicated resource to lead the implementation, explore funding opportunities, provide expert advice across the council, and, periodically monitor and coordinate the delivery of the organisation's carbon projects.	Short-term	Medium
Encourage consideration of carbon implications in decisions and democratic process across the organisation.	Short-term	Low
Support staff and Redbridge communities to understand the carbon emissions from their everyday activities and how to reduce them.	Short-term	Low

Next Steps

In undertaking this work, the panel recognises that the council and its partners have already begun the process of tackling the emissions that it produces and supports our residents to do the same. This work has been effective, however to achieve the aims set out within the climate emergency Declaration in 2019, and, to enable the council to become carbon neutral by 2030 there needs to be more investment in tackling our direct emissions and supporting the wider borough to do the same. Although at the time of writing the results of the Growth Commission were not available to the Panel, the Panel recognises and supports the emerging recommendations around enabling green growth.

This report sets out how the Corporate Panel proses this could be achieved based on the evidence reviewed during its lifespan. It recognises that many of these actions are longer term so technological changes may occur or further feasibility testing may be required. However, there are a number of actions that could be taken in the next three years that will support the council on its journey.

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

Appendix A: Glossary of Terms

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.

Carbon footprint

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

Carbon Literacy

Having a general awareness of climate change and the impact of humankind on the climate.

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.

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.

EPC rating

Energy Performance Certificate which summarises the energy efficiency of buildings in the European Union.

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 reradiating 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.

TOMS Framework

A framework providing a minimum reporting standard for measuring social value.