## Housing Sustainability and Fuel Poverty Strategy





# Housing Sustainability and Fuel Poverty Strategy

#### Introduction

Climate Change is one of the biggest challenges facing the world in the 21st century. Radical action and bold changes are required if global temperatures are to be kept within 1.5°C of pre-industrial levels.



The Council is therefore determined to reduce carbon emissions from its own operations and activities, and to work with everyone to make the borough a fairer, greener and healthier place with less polluted and safer streets.

To demonstrate its commitment to reducing its environmental impact and carbon footprint, the Council declared a climate emergency in October 2019, adopting two carbon reduction targets:

- 1.To lead by example by becoming net zero carbon by 2030 from its operations and buildings - embedding the reduction of carbon emissions in all relevant Council decision-making and operations where we have direct influence.
- 2.To be a carbon neutral borough by 2040, ten years ahead of the Government's targets.

Meeting these targets will require significant changes in the way the Council operates.
Collective action is required, and thus the Council will work to support residents, local organisations, community groups, businesses and housing associations to continue cutting our emissions at pace and build a more sustainable and fairer local environment.

The latest carbon emissions data for local authorities from the Department for Business, Energy and Industrial Strategy (BEIS), published in June 2020, revealed that the domestic sector is the second highest emitting sector in Kensington and Chelsea. In 2018, carbon emissions from the domestic sector represented 32 per cent of total emissions.

Our homes, how we build them and how we live in them, form a huge part of our carbon footprint, and consequently present an opportunity to reduce it. This means Housing Management has a key role to play in the Council's carbon reduction targets. We are committed to working with and for residents to achieve the Council's vision to have a healthier, cleaner and greener borough for all.

### Our vision is:

To achieve net zero carbon emissions in our housing stock by 2030 and reduce fuel poverty among our residents.



- To reduce our carbon footprint, from both our own and our contractors' operations in order to support the Council to achieve its net zero ambition for council housing and our corporate buildings.
- To empower and support our tenants and leaseholders to reduce their own carbon footprint in their homes, and their environmental impact in their local areas and day- to-day lives.

For Housing Management, reducing our carbon footprint and improving the energy efficiency of homes is tied to another tangible issue for our tenants: fuel poverty.

Alleviating fuel poverty in the borough is a key ambition for the Council. Housing Management has developed this strategy to demonstrate its commitment to tackling both challenges; working towards making homes warmer and healthier, as well as more sustainable.

## Climate change action and sustainability also have to go beyond energy:

- Poor air quality, linked to air pollution is having a detrimental impact on communities and is affecting people's health, leading to premature deaths. It is one of London's bigger public health challenges, and the Council is committed to reducing pollutant concentrations by implementing actions to curtail emissions of particulate matter and nitrogen dioxide.
- Changing weather patterns linked to climate change are also leading to increased local flooding events, affecting various communities across the UK. London faces the highest flood risk of any UK conurbation, and adapting to the increased risks posed by climate change is an essential part of our local response.
- London must also tackle the problem of waste.
   The issue of resource depletion, the harm this does to natural habitats and the enormous amount of energy required to manufacture, transport and dispose of goods, is one of the biggest environmental challenges facing our planet. Reduced availability of landfill space and the need to transition to a circular economy, creates an increased need to re-use and recycle.

Given the Council's recent agreement on targets, we are starting the work to gather data on the sustainability of our housing stock and the levels of fuel poverty faced by our tenants and leaseholders. We will proceed by setting ambitious objectives, establishing a baseline of performance, and monitoring our progress and achievements in partnership with our residents.

The Council has commissioned Parity Projects to undertake a CHROM (Carbon Reduction Options for Housing Managers) assessment, which will provide a model of energy performance of the Council's owned housing stock. This will help us plan strategic and cost-effective retrofitting works to meet our net zero carbon targets. Housing Management will develop a Sustainability Action Plan for the Council housing stock as part of the climate emergency response.

The Council is developing an overarching Environmental Sustainability Strategy which will set out its holistic vision for becoming more environmentally sustainable, incorporating the Green (COVID-19) Recovery Strategy. The strategy will bring together all environmental commitments and ambitions under one single umbrella, including tackling climate change and responding to the climate emergency declaration, improving air quality, reducing fuel poverty, increasing biodiversity and minimising waste.

As part of its climate emergency response, the Council will be developing a Carbon Neutral Action Plan during 2020, and a new Air Quality Action Plan in 2021. Housing Management will support the implementation of these plans. While they are being developed corporately, Housing Management is releasing its own Sustainability and Fuel Poverty Strategy now, to demonstrate to residents who want to see action taken on sustainability that we are committed to including sustainability and energy efficiency into our work and thinking.

Although the capital programme of refurbishment presents the opportunity to improve our housing stock, it was planned out before the adoption of our zero carbon targets. This means that we will need to seek additional sources of funding to meet our zero carbon ambitions; developing this strategy will help us identify where those gaps lie.

We are currently at the scoping and feasibility stages for energy-efficiency improvements included within the capital works. Our teams are researching the best options, which may differ from property to property. This means that our strategy cannot outline the exact works we plan to do. It does however, demonstrate our commitment to incorporating the issues we outline here into our planning and thinking, to investigate the best solutions, and make sustainability a priority.

In this strategy, we set out our broad aims for how to support the Council in meeting its target to be net zero carbon in its own buildings and operations by 2030. We will do this through changes to our housing stock, estates, and Housing Management operations, and by providing support to ensure we can all live and work in more energy efficient, sustainable, and less wasteful ways.

This represents a vast and challenging programme of work, and a significant expense. We are at the early stages of costing the work to take our properties to net zero carbon, which will require more detailed financial investigation and cost-benefit analyses for the different elements involved. However, as well as energy-efficient homes delivering savings for our residents, making these improvements now is not only vital in the face of the climate crisis, but is the more cost-effective strategy in the long run.

In order to meet local and national carbon reduction targets, these energy efficiency works are required. Investing in our buildings now to make them sustainable as well as better to live in, will mean making changes that can last, rather than having to replace changes we make now with more sustainable options a few years down

the line. The reviewing of the capital programme will be a first step enabling us to identify additional costs that will be required to make the additional, necessary carbon savings.

Reducing the borough's environmental impact also represents a joint effort between the Council and residents. We cannot make an important enough difference without the agreement and participation of residents, which is why a crucial element of this strategy is the provision of support and joint working with our communities. It also means that this strategy should be jointly owned, by the Council and our residents. Low carbon homes succeed best when the people living in them are committed to energy-efficiency and carbon reduction and have the knowledge and ability to take advantage of energy saving measures.

Empowering our tenants and leaseholders in this way is key if we are to successfully make changes in the face of the climate emergency. Some of the steps we are already taking to ensure this are outlined in this document, as well as our ambition to work with residents to support their needs and initiatives, as we work together to make our borough greener.

We have defined nine areas of sustainability that we, as Housing Management, can focus on to improve energy efficiency and environmental outcomes. Our objectives for this strategy are:

Energy and Fuel Poverty: to improve the energy efficiency of our housing stock in order to meet the Council's target of achieving net zero carbon by 2030 and to ensure our residents are able to live in adequately warm homes at an affordable cost.

Responding and Adapting to
Climate Change: to tackle the
effects of extreme weather events and
changing weather patterns by making
our estates more resistant to flood risk and hot
weather.



**Air quality:** to reduce the amount of air pollution produced by our housing stock and operations.



**Transport:** to support the Council's commitment to reduce motor traffic by encouraging greener modes of transport on and around our estates.



**Waste management:** to reduce waste and increase recycling in our estates and operations, including in our procurement arrangements.



**Water management:** to promote and enable water saving in our estates.

Green neighbourhoods and communities: to work with the community to enable resident-led change in carbon footprint reduction and creating greener neighbourhoods, through initiatives such as local growing projects and community kitchen areas



**Ecology and increasing biodiversity:** to work with residents to increase biodiversity on our estates.

to make improvements to the way we work on a day-to-day basis in order to become more sustainable, both in our own operations and throughout our supply chain, ensuring that our contractors are also embedding environmental sustainability and climate change across their operations.

## How we will work towards our objectives:



The Royal Borough of Kensington and Chelsea has the third highest carbon emissions per capita in London. Stated in 2018, carbon emissions from the domestic sector represented 32 per cent of total emissions in Kensington and Chelsea.

Domestic carbon emissions are related to consumption of electricity and gas occurring in residential buildings in the borough. In 2018, electricity consumption in the domestic sector was responsible for emitting 85.3 kilotons of CO2, a decrease of 58.14 per cent compared to 2005.

Gas consumption is the highest source of domestic carbon emissions, and although these emissions in 2018 had decreased by 19.34 per cent compared to 2005, they had increased by 4.49 per cent compared to 2017. Although domestic carbon emissions have broadly decreased since 2005, they remain high, and reducing the amount of electricity and gas consumed in residential buildings is crucial if we are to reach net zero carbon.

Increasing the energy efficiency of homes, by improving the fabric of our buildings and by moving towards less polluting sources of energy, is therefore essential.



It will create homes that are better insulated, use less energy, and therefore face reduced energy costs. This addresses another priority for the Council: alleviating fuel poverty, which is a tangible issue for local tenants.

Households living in homes with low energy-efficiency ratings are more likely to be in fuel poverty, and to live in cold, damp, uncomfortable conditions that deepen health inequalities.

This is more likely to affect the most vulnerable households that often live in less affluent areas. We will support the Council's commitment to address fuel poverty by improving heating and energy efficiency in our housing stock, to improve living conditions in residents' homes and reduce bills. This will require a two-pronged approach: improving both the fabric of our buildings, and the sources of energy that supply them.

The Council is building new social homes and has developed a strategy for the new-build programme, with the aim of reaching above the current Council sustainability standards and targets. We will ensure that we minimise the environmental impact of building new properties and deliver homes that use less energy and allow residents to more easily minimise their carbon footprint and save money on heating costs.

With regard to retrofitting existing homes, the energy-efficiency and sustainability related improvements that are part of our capital programme are still at the feasibility stage. We are exploring options to find the right solutions, which will be different from one property to another. Additionally, this funding will not be sufficient to take us all the way to net zero carbon, and we are working towards finding alternative funding solutions in order to meet our targets. As this is still ongoing, we are not yet able to outline precisely what works we will undertake.

Our aims here are therefore not a detailed plan of action, which will be released at a later date, but present what we will endeavour to do as part of the feasibility work and thereafter:

- We will review the 2021-22 capital works
   programme ahead of its start date, to identify
   opportunities for energy-efficiency improvements
   and gaps in plans and funding that may have
   appeared in light of the new 2030 carbon targets.
   Refurbishment works that are necessary but do
   not work towards net zero carbon, such as the
   installation of additional heating systems, will be
   factored into the carbon neutral target.
- We will minimise the environmental impact of the building works for our new social homes and ensure that these allow residents to easily reduce their carbon footprint and save money on heating costs.
- We will develop a planned programme of communal boiler upgrades, replacements or system change, depending on the best solution for each property. We will assess the options for potential future decentralised energy networks and explore opportunities to install renewable energy technologies in the Council's social housing (e.g. photovoltaic and solar panels and heat pumps). Alongside this, we will investigate opportunities to generate income from renewable technologies such as Feed in Tariff.

- We will seek additional funding, such as the Mayor's Energy Efficiency Fund (MEEF), Green Homes Grants (GHG LAD)Green Heat Networks Fund (GHNF) and other funding streams, to meet the costs of energy efficiency adaptations that cannot be met through the capital programme budget.
- We will develop baseline data to understand the sources and emissions of greenhouse gases within our housing stock and the current energy efficiency levels of the properties, using the CHROM energy analysis commissioned by the Climate Change Team. We will use the data to develop the Housing Sustainability Action Plan.
- We will work with wider Council colleagues to develop a borough wide heat map to facilitate decentralised energy networks.
- We will initially work towards achieving a minimum EPC rating of C in all dwellings owned by the Council.
- We will develop and implement a borough-wide programme for communal lighting replacement, moving to LED panels and lighting with security and energy saving mechanisms including daylight sensing and motion sensing technologies.
- We will, as far as possible, work in partnership with energy companies to support the installation of smart meters in all homes.
- We will continue to work with Groundwork London, who will provide energy efficiency advice and energy switching options to fuel poor and vulnerable residents through the Green Doctors personalised energy advice visits and telephone consultations, which will enable savings for our residents. We will publicise other relevant schemes with residents such as The Big London Energy Switch which can provide access to cheaper energy tariffs.
- We will provide information and support to residents, encouraging behavioural change that leads to reducing individual, household and neighbourhood environmental impact and carbon footprint. To alleviate fuel poverty, we will also provide improved guidance and support to residents experiencing financial difficulty by continuing to develop the work programmes of the Tenancy Sustainability and Financial Inclusions team as well as Housing and Employment. A key element of this work will relate to financial planning and reducing the cost of gas, electricity and water consumption.



In response to the 2015 report from the Intergovernmental Panel on Climate Change (IPCC), the Council declared a climate emergency, recognising climate change as one of the biggest issues of the 21st century, and demonstrating its contribution to the 2015 Paris Agreement.

The climate is already changing, and London is vulnerable to extreme weather patterns which are expected to become more frequent and intense such as floods, heavy rainfalls, droughts, heatwaves and very cold weather. We should therefore act now to manage the risks and build more resilience to further climate change and extreme weather.

Residents exposed to the highest levels of fuel poverty are the least able to respond to extreme weather events such as cold winters and heatwaves. Homes that are harder to heat are also harder to keep cool when hot summer temperatures occur. As we work towards tackling fuel poverty and wider sustainability issues, we aim to develop a robust housing stock that is better prepared to cope with changing weather patterns and the future risks this could pose. We will:

- Review the resilience of estate drainage systems to extreme weather events and investigate opportunities to install sustainable urban drainage systems and rain gardens as part of any planned works to hard landscapes on estates.
- Make resilience to hot and cold weather a priority for new and existing homes through our building fabric works on energy efficiency and fuel poverty.



Air pollution is a pressing public health and environmental issue in London. Central London, because of its dense traffic, road network and high buildings, is one of the most polluted places in the UK. As well as the detrimental effects of air pollution on the environment and biodiversity, high levels of damaging pollutants are dangerous for human health and affect quality of life. Exposure to air pollution causes up to 9,400 Londoners to lose their lives each year. A study conducted by the Greater London Authority in 2012 found that 8.3 per cent of mortality in RBKC could be attributed to long term exposure to fine particulate matter (PM2.5), more than the UK average of 5.6 per cent.

The expiry of the 2016-2021 combined Air Quality and Climate Change Action Plan (AQCCAP) provides an opportunity to consider how best to address the commitments being made across the Council and borough on air quality and other environmental priorities. The Council will be producing a new Air Quality Action Plan in 2021, as a part of its overarching response to the climate emergency, which will set out how the Council will continue to work towards achieving the World Health Organisation Guideline Values on air quality. This will inform Housing's own Sustainability Action Plan.

The Mayor of London has set out the ambition for London to have the best air quality of any major world city by 2050. To help meet city and borough-wide targets, to strive for better health for our residents, and to reduce the amounts of air pollution from our housing stock, we aim to:

- Make air pollution and carbon emissions a key consideration as we investigate the best solutions for boiler replacements and upgrades in Council homes, which will include exploring the possible use of ultra-low NOx boilers.
- Investigate the feasibility of installing electric vehicle charging points on our estates as part of our parking review and assess resident requests for new charging points.
- Support the Council's commitment to ensure that major building sites minimise dust and carbon emission, and that they are monitored. We incorporated this into our procurement approach by the end 2021.
- Increase awareness around the negative effects of engine idling and noise nuisance from vehicles on our estates and look into possible control measures. We will also work to increase public awareness of sustainable travel options, and as a joint initiative with transport, investigate potential options for cycling and walking routes that support our estates and housing stock.



The need for increased capacity and better accessibility in London's transport infrastructure, the adverse environmental



impacts of transport, and the consequences on human health and wellbeing, make a strong case for a shift in how we travel, towards greener vehicles and public transport, walking and cycling. The COVID-19 crisis has also thrown into sharp relief the need for local, alternative modes of travel in the city. We will support the Council's commitment to reduce motor traffic levels and promote sustainable transport options, in particular cycling and walking, in the following ways:

 We will promote cycling among our residents, encourage our residents to receive cycle training, and increase the volume of secure cycle parking on our estates.

- We will assist Transport colleagues in implementing walking and cycling schemes that support our estates and housing stock.
- We will review and consult on parking charges and on introducing carbon-based parking permits on our estates, to encourage the uptake of less polluting vehicles and support both central governments commitment to ban petrol and diesel vehicles in 2030 Mayoral targets on the Ultra-Low Emission Zone (ULEZ) and the London congestion charge.
- We will green our own fleet by replacing diesel vehicles with low emissions vehicles, such as electric cars, and develop the necessary charging infrastructure for staff and residents.



Resource depletion linked to excessive consumption, the harm this does to natural habitats and the enormous amount of energy required to manufacture, transport and dispose of goods,



is one of the biggest environmental challenges facing our planet. Moving towards less wasteful ways of living is key to fighting climate change and achieving carbon reduction targets. Reducing the amount of waste we produce will also help tackle London's large-scale issue of waste disposal, as we are running out of space and seeing the cost of waste disposal increase.

The waste produced by households on our estates, and the waste produced throughout Housing Management's supply chain, particularly in our capital works, all need to be looked into and tackled. We aim to reduce the amount of waste produced in our estates and operations though the following actions:

 Review and investigate ways to improve waste and recycling infrastructure at all sites that use communal bins, to make recycling easier. New approaches are currently being developed to pilot on the Lancaster West estate.

- Promote and support the development of community garden and food waste composting initiatives and other waste reduction community activities, such as repair workshops and zero waste event days.
- Review how items removed from households can be repaired and reused.
- Support the Waste Management team in delivering advice and guidance to residents in relation to waste reduction and recycling ensuring appropriate use of waste facilities to reduce contamination of recycling as well as providing information and guidance on particular waste streams such as bulky waste.
- Support the Council's commitment to increase recycling rates year-on-year. To do this we will work with the Waste Management team to find a baseline for current recycling rates and set targets for improvement. We will also work towards phasing out single use plastics.
- Review opportunities to source sustainable and/or recycled materials for repairs where cost-effective, and identify and implement channels to recycle and reuse materials, instead of disposing of them.
- Requirements for waste minimisation and recycled and/or sustainable materials will be specified in Housing Management procurement arrangements with suppliers and contractors.

### Water Management

London suffers from having both too much water and too little.
London faces the highest flood risk of any UK conurbation, and flooding will become more likely as sea levels rise and rainfall increases.



Additionally, London's water supply is under pressure and increasingly uncertain. We are using more water than we should, and the demand is increasing, while climate change is likely to affect how much water is available as we face an increasing risk of heatwaves. The city is forecast

to see a shortfall in its water supply, which could reach 20 per cent by 2040 if no mitigating action is taken, meaning the risk of being unable to meet Londoners' needs. In the face of this dual crisis, we will support residents to manage water effectively and efficiently, by:

- Encouraging the early reporting of leaks.
- Working with Groundwork London through the Green Doctors home energy visits and telephone consultations, to promote and install water saving devices such as water hippos and aerated taps
- Through the Green Doctors programme, refer eligible residents to the WaterSecure scheme in cases of water debt, with where possible, the Green Doctors officer completing an application on behalf of residents.
- We will establish the current position and work to support the installation of smart water meters.

# Green Neighbourhoods and Communities

The Council wants to enable the community to make choices and take steps to reduce their impact on the environment. We have partnered



with the charity Groundwork London who is delivering the Green Doctors Home Energy Scheme, a free service that provides health and financial advice to residents of the borough. Green Doctor visits and telephone consultations provide guidance to better understand heating systems, energy usage and how this can be made more efficient, and the installation of small energy measures. More details on the scheme can be found here: https://www.rbkc.gov.uk/housing/living-healthy-homes/affordable-warmth-and-energy-efficiency-home. Further information to help us all act now can be found

on our website at: https://www.rbkc.gov.uk/environment/climate-change/greener-borough and https://www.rbkc.gov.uk/housing/living-healthy-homes/greener-housing. This includes simple steps that we can all take such as reducing energy use, reducing and recycling waste, as well as reducing water consumption.

We want to form partnerships to engage and empower our residents to take an active role in improving sustainability and reducing fuel poverty. The housing context also provides unique opportunities to make use of the local area and land space for resident-led initiatives, to develop green spaces and growing projects which will also help tackle an often-overlooked aspect of sustainability: food, through projects such as local growing initiatives and community kitchen areas.

Indeed, London's food system, including food transportation, is a high contributor to greenhouse gas emissions and to London's waste problem. With residents living in densely populated urban areas and having limited access to outdoor space, green spaces and small food growing projects can enable residents to easily participate in gardening projects, community food growing and horticultural therapy. We want to empower residents to lead their sustainable initiatives, so we will:

- Provide information to residents on ways to make sustainable choices and provide support to residents who want to work towards green outcomes. We will support residents to take an active role and to implement communityled initiatives linked to raising awareness and increasing sustainability on our estates, though for example a 'Resident Champions' initiative or similar.
- Research opportunities for grants and support residents to seek funding for improvements to their own estates.
- Support the Council's commitment to continue developing the Community Kitchen Garden scheme and incorporating it into estate schemes where appropriate. Kitchen gardens will require access to water and where feasible this should utilise rainfall or grey water.





There is significant and growing evidence of the health benefits of access to good quality green spaces, including good mental health and wellbeing, and increased longevity. Residents living in less affluent areas often have fewer quality green spaces near to their homes. In London, the amount of green space has reduced, and the quality of what is left has been declining. The range of plants and animals that live in London has consequently decreased. However, biodiversity and ecological resilience are key in the fight against climate change and cannot be separated from it.

Our estates make up a large portion of the borough's open spaces, which provides the opportunity not only to make the borough a greener place, but also to create a wider range of habitats. Trees and plants also play a key role in reducing rainfall run-off, reducing air pollution and providing shading in outdoor space.

To make our estates greener and contribute to the effort to increase biodiversity, we aim to:

- Support the Council's commitment to ensure that biodiversity is improved, and not damaged by new build and refurbishment works, by facilitating the delivery of the Council's upcoming Biodiversity Action Plan, and by specifying appropriate protection measures during future construction works, including consideration of the nesting season for tree works.
- Investigate the feasibility of installing green roofs and walls as part of new build programmes and retrofit works.

- Support the development of bee habitats through gardening schemes.
- Look into options for increasing and improving public open space within our estates to help encourage use of outdoor space, as a joint initiative with Greener Neighbourhoods.
- Identify opportunities for tree planting and creating new habitats on our lands, such as hedges and meadows.
- Review the land use options across estates
  to increase access to green space as well as
  ensuring design capitalises on opportunities to
  create an integrated sense of community.
- Review the grounds maintenance approaches such as amending mowing regimes to support.
- Work with resident groups to encourage biodiversity and greening projects on estates and including biodiversity concerns in the criteria for Environmental Improvement Budgets by end of 2021. Relevant initiatives may include the creation of new habitats, linkages to adjoining green spaces, and providing nesting sites.
- Work with residents to promote the importance of biodiversity, by joining up with national campaigns, such as the RSPB's Big Garden Birdwatch, and to support estate participation in community gardening events, such as London in Bloom.

#### Housing Management Operations



As Housing Management, we will incorporate sustainability into our own operations. We will ensure that how we work on a day-to-day basis reflects our ambition to transition to net zero carbon. We will work to minimise our negative

impact on the environment, and maximise our positive impacts, and this throughout our supply chain by ensuring our contracted services also embed sustainability in their operations. We will do this through the following actions:

- We will develop and implement a programme of carbon reduction in the way we work, ensuring all staff "do their bit" to reduce energy consumption by adopting sustainable habits such as powering down equipment at the end of the day.
- We will also develop and implement a Green Travel Plan for staff.
- We will make sustainability criteria a prominent part of our Housing Procurement Strategy, regarding materials, goods and services. We will produce a "sustainable tips" guide for contractors and suppliers, to ensure they are equipped to deliver environmental best practice on our behalf, and they keep us informed about improvements and changes to their service delivery. We will continue to work with our main contractors to reduce their energy consumption and improve their supply chain practices, and work with our partners and contractors to minimise their environmental impacts across all areas. The Council is developing a strategy on social investment which will also inform our procurement practices going forward.
- We will ensure that our vehicle fleet is LEZ/ ULEZ compliant, and work with the Climate Change Team to deliver eco-driving training for the Repairs Team and colleagues who drive the Council's vehicles.
- We will move towards electronic meetings, reducing the need to produce paper copies of materials and reducing the amount of transport taken by staff where remote meetings are the right choice.
- We will phase out single use plastics from our operations and offices, as well as increasing the use of recycling in our repairs, and encourage suppliers to do the same.