

# Executive Summary

We live in a dense urban borough where the vibrancy and busy pace of life contribute to Climate Change. Indeed, cities are homes to half the world's population and are big producers of greenhouse gas emissions. The Borough has some of the main arterial roads of London running through it, with associated poor air quality. By contrast, we also have some of the best open spaces such as Holland Park and Kensington Palace Gardens which offer respite, but these are not within easy walking distance of all our communities. The restrictions imposed by the pandemic have brought to the fore the value of green open spaces, even when they are small, as they are still very effective in providing an oasis in a city.

Climate Change is one of the greatest challenges of our times and in October 2019, the Council declared a Climate Change Emergency. The Council is on a mission to reduce carbon emissions not only through its own operations but also tackling this challenge holistically. This means that there must be a step change in how we, and our businesses, residents and local organisations, operate so the Council is carbon-neutral by 2030 and that the Borough can become carbon-neutral by 2040.

Our planning policies are part of this holistic approach and must promote and require best practice in the built environment. This Draft Greening Supplementary Planning Document (SPD) covers all facets of planning that can contribute towards reducing carbon emissions and promoting a healthier borough. It includes guidance on our energy policies both for new build and retrofitting the substantial historic stock that we have, guidance on the reduction of toxic emissions and controlling air pollution, urban greening, flooding and biodiversity. A summary of the actions that we will require for each of these is provided below.



## Circular Economy

The SPD supports all developments to use Circular Economy principles with major developments required to demonstrate how this has been considered.

“**Circular Economy** is one where materials are retained in use at their highest value for as long as possible and are then reused or recycled, leaving a minimum of residual waste. For the built environment this is about prioritising retention and refurbishment over demolition and rebuilding.”

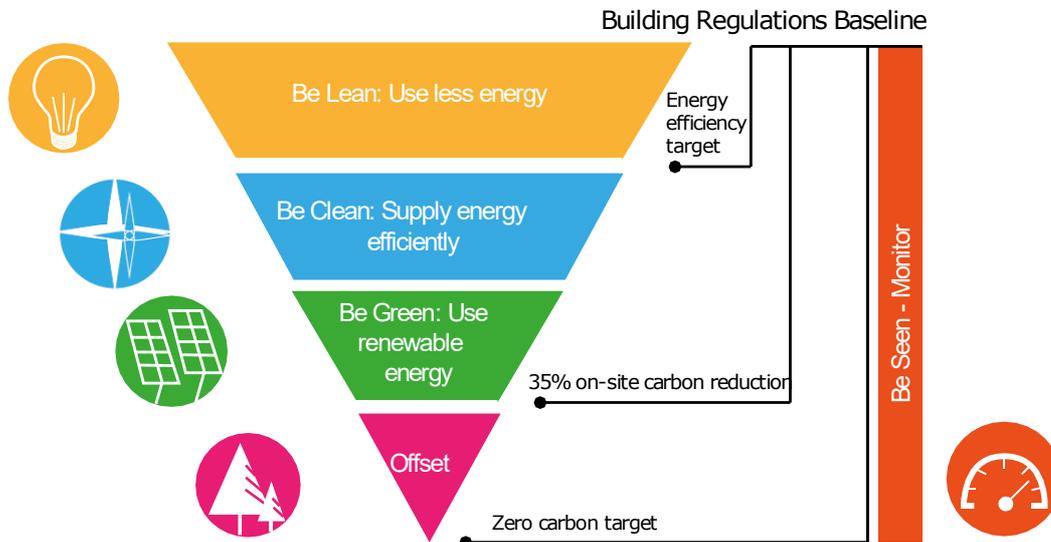


## Whole Life-Cycle Approach

This will require major development to not only consider their carbon footprint when the building is complete and is in operation but at all stages from inception to completion and dismantling. This approach recognises the carbon inherent in materials as well as their transport and manufacturing. Therefore, it will promote local sourcing and procurement. It will also help us reduce construction waste or enable it to be disposed of in a sustainable way.

## Energy Hierarchy

We require the energy hierarchy to inform the design, construction and operation of new buildings. This is a sequential approach with four essential strands presented in the diagram below. The key elements are then described in more detail in the text.



**Figure 1: Energy Hierarchy showing how new buildings can meet net zero carbon by following this sequential approach**



### Be Lean: Reducing Energy Demand

As the first step in the sequential approach described above, we will aim to reduce the energy demand of new buildings. This will be done by optimising the design of buildings to take full benefit of sun orientation or natural ventilation for example. We are also setting high energy standards and will require 'Net Zero Carbon' from all our major developments both residential and non-residential. In addition, we are encouraging applicants to adopt even higher voluntary standards and deliver exemplary standards. The Council is aiming to deliver these voluntary standards in a resident led refurbishment of the Lancaster West Estate.

**“Zero carbon:** Zero carbon, requires no net release of carbon dioxide and other greenhouse gas emissions into the atmosphere. Net-zero carbon refers to balancing the amount of emitted greenhouse gases with the equivalent emissions with no reliance on fossil fuels, using on-site renewable or offsetting elsewhere as a last resort.



### Be Clean: Supply energy efficiently

This is about reducing dependency on fossil fuels and promoting more localised heat networks particularly for larger schemes.



### Be Green: Use Renewable Energy

The government's recent Ten Point Plan for a Green Industrial Revolution declares the phasing out of gas boilers. This section of the SPD provides guidance on using alternative means such as heat pumps and other forms

of renewable energy which are suitable in the Borough such as photo voltaic solar panels.

**“Heat pumps:** *These are classed as renewable because it uses natural elements. There are two main types – air-source and ground-source heat pumps. An air-source heat pump extracts warmth from the air, it is a box that can be fixed to an exterior wall or roof or stand alone. A ground-source heat pump requires generous outside space and is buried under the soil.”*



### **Be Seen: Monitor**

Applicants will be required to provide details of the actual performance of building via a GLA portal so any discrepancies between design and implementation can be monitored.

### **Retrofitting existing buildings**

A key component of the SPD is to provide guidance to householders about suitable interventions that they can make to upgrade the energy standards of their homes. The principles of the Energy Hierarchy described above are used. The buildings are categorised as one of three – 1. Non-heritage buildings 2. Conservation Area buildings and 3. Listed Buildings. Clear guidance is provided on each of these buildings types for example double glazing is recommended for non-heritage buildings and suitable in conservation areas as long as they are slim line and fit the age and style of building but are unlikely to be acceptable in a listed building.

### **Air Quality**

There is a clear recognition that development proposals need to consider the air quality given that the whole Borough is in an air quality management area. We will require Air Quality Assessments as part of major developments. Amongst other measures to improve air quality we support the provision of electric vehicle charging points. For all new developments where parking is proposed, applicants should seek to provide on-site charging points to accommodate the current and future requirements of the occupants. We also recognise the benefits of retrofitting charging points to existing parking spaces and support this.

### **Urban Greening**

Green infrastructure provides wide ranging benefits including reducing pollution, climate change and its impacts and supporting a circular economy. To secure some form of greening in all our major developments we use a new approach called the Urban Greening Factor (UGF). This will require both residential and non-residential development to score a prescribed level of UGF. We have over 8,000 street trees in the Borough and will support developments to provide more.



**“Urban Greening:** *Urban greening describes the act of adding green infrastructure elements. Due to our dense built environment, green roofs, street trees, and additional vegetation are the most appropriate elements of green infrastructure.*

**Urban Greening Factor:** *This is a land-use planning tool to help determine the amount of greening required in new developments.”*

**Minimising Flood Risk**

The two most prevalent flood risk sources for the Borough are surface water and sewer water. Therefore, new developments should both be protected from flood risk and minimise it. We require an overall reduction in surface water run off so once developed there is an improvement. For the largest schemes we will require Integrated Water Management Strategies at an early stage to consider and address local sewerage capacity issues, so flood risk is not increased.

**Biodiversity**

We are looking to use the opportunities available in new development to improve biodiversity so there is a net gain.

These measures will make a significant contribution in tackling Climate Change and meet the targets we have set ourselves in the Borough. We will continue to monitor the effectiveness of what has been proposed and be fully aware of advancements in technology over time. This will enable us to understand and learn where we can further improve our policies in addressing this challenge.

# Greening Supplementary Planning Document (SPD) on a page

**“Zero and net zero carbon:** Zero carbon, requires no net release of carbon dioxide and other greenhouse gas emissions into the atmosphere. Net-zero carbon refers to balancing the amount of emitted greenhouse gases with no reliance on fossil fuels, using on-site renewable or offsetting elsewhere as a last resort.”

**“Circular Economy:** is one where materials are retained in use at their highest value for as long as possible and are then reused or recycled, leaving a minimum of residual waste. For the built environment this is about prioritising retention and refurbishment over demolition and rebuilding.”

**“Whole Life Carbon:** considers the carbon footprint not only when the building is complete and is in operation but at all stages from inception to completion and dismantling.”

