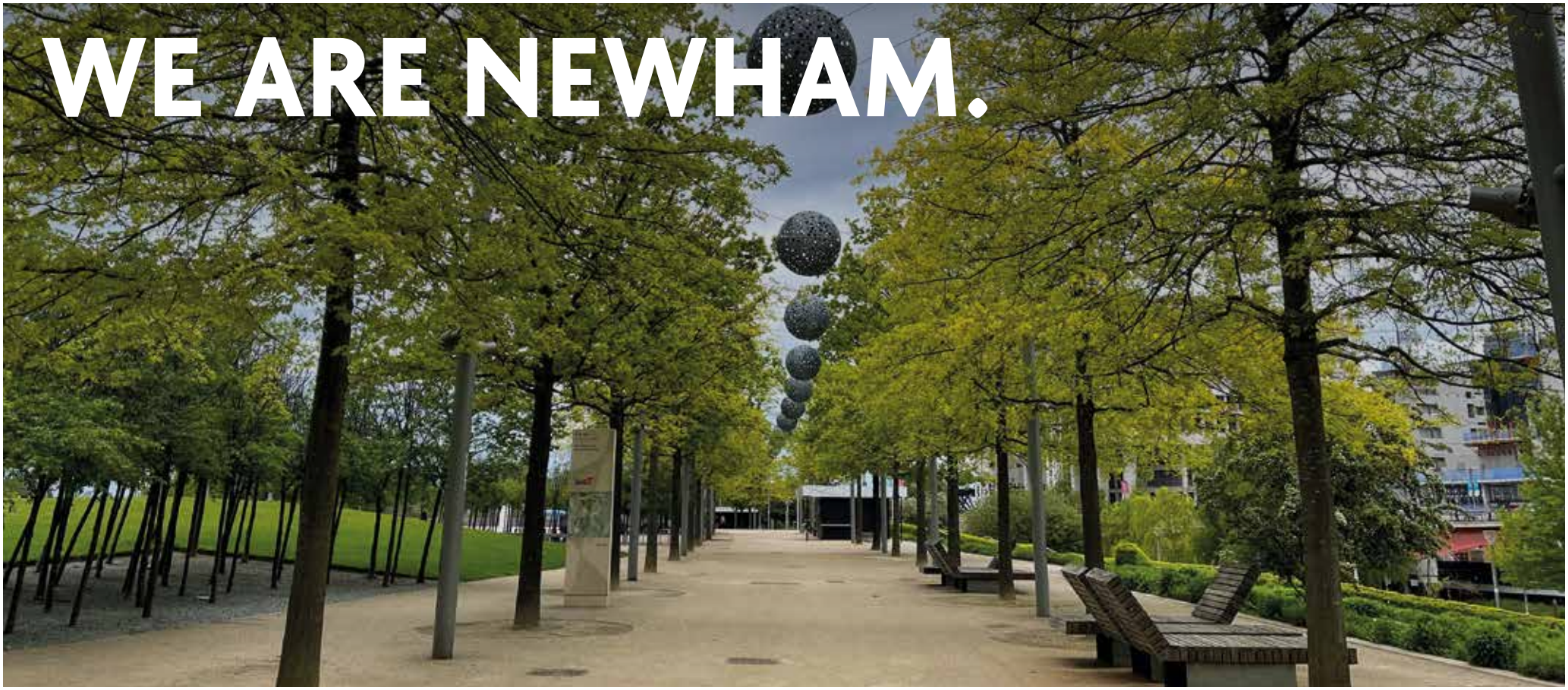
WE ARE SHAPING.



OUR CLIMATE.

Introduction

Ensuring that development can occur in Newham without adversely affecting, and ideally improving, the health of residents in the borough, the local environment and the climate itself is a crucial element of planning. This includes considering how to improve the borough's environment and air quality, reduce the emissions which contribute to the climate emergency, mitigate impacts of climate change, and minimise and avoid the risks of all sources of flooding.

In 2019, Newham Council declared a Climate Emergency, setting a wide range of measures to tackle climate change, poor air quality and low levels of recycling. In the lead up to COP26 in November, the Council is also keen to lead the way in how local government can respond to this emergency crisis. Planning policy has a key role in delivering these measures to meet our target to be carbon neutral by 2030.

The current Local Plan policies that relate to this topic are:

- SC1: Environmental Resilience
- SC2: Energy and Zero Carbon
- SC3: Flood Risk and Drainage
- SC5: Air Quality

What does our current policy seek to achieve?

Policy SC1 – Environmental Resilience

- Development will both protect the environment and become more resilient to it, particularly from effects of climate change.
- Development should also be more resource efficient.
- Remediate contaminated land.

Policy SC2 – Energy and Zero Carbon

- All development will minimise and reduce carbon emissions, with major development meeting London Plan Zero Carbon targets.
- Local energy generation and use of waste energy/ heat for other beneficial uses is also encouraged.

Policy SC3 – Flood Risk and Drainage

- Sequential Tests required to demonstrate flood risk reduction in line with national policy and Environment Agency advice as well as setting out detailed design and construction details to reduce the exposure of new development and occupiers to flooding.
- Flood risk will be reduced, and development will not increase flood risk to any location.

Policy SC5 – Air Quality

- Minimising air pollution generation, support a decrease in pollutants and support the actions of the Newham Air Quality Action Plan.

What you've told us

- The Citizens' Assembly on Climate Change issued recommendations for the Council, several of which are key to this policy:
  - Improve Newham's air quality by installing pollution monitors across the borough and by protecting trees, expanding green spaces and not allowing new buildings in existing public parks.
  - Planning decisions should all support biodiversity, cleaner air and 'greening' as a central priority. All new buildings to initiate green standards.
  - Introduce policies and planning for deep retrofit of all existing buildings and infrastructure to be completed by 2030 to be carbon neutral e.g. roofing spaces – introduce more greenery and solar panels and rainwater collection.
- As part of Newham High Streets programme, feedback from Forest Gate, Green St, Little Ilford, Manor Park indicated that the environment and climate was the most or second most important theme for respondents. Concerns were also raised regarding pollution and levels of traffic in local communities.
- Young people have told us that access to nature and green spaces is important to young people; large parts of Newham were felt to be industrial and grey - "Where I live it's just buildings going into the sky. We don't even have birds here"; that London City Airport harms young people's quality of life, with the feeling that neighbourhoods near the airport are very polluted and noisy.
- Suggestions from these young residents was that a cleaner air strategy should be implemented to improve air quality around polluted areas.
- Water conservation and flood risk are important issues for residents and there is support for the development of locally based strategies to better manage this.
- Surface water on roads in the Royal Docks make areas unpleasant and less desirable to walk and cycle and impacts key routes.
- The prevalence of poor air quality across the borough is a concern, with requests for more walking and cycling facilities and encouraging the number of zero emission vehicles.
- Overheating in new build dwellings in Newham is affecting residents, particularly in new build developments.
- There is concern about disproportionate heating costs (Combined Heat and Power) for new dwellings in Newham.

Sources:

- Newham Citizens' Assembly on Climate Change
- Newham High Streets consultation
- We Make Newham: Youth Assembly Event Findings Report 2021
- Newham Royal Docks Corridor scheme consultation

What does the data tell us?

- 14% of the borough's population is exposed to NO2 levels above the air quality objective (AQO) for human health and on average all Newham residents are exposed to levels of PM2.5 that is 35% greater than the WHO guideline.
- Over the last 20 years, CO2 emissions have gradually decreased in London, especially from Industrial, Commercial and Domestic sources – however emissions from transport have fallen just 3% since 1990.
- CO2 emissions in London by sector are 32.8% from Domestic sources, 32.5% from Industrial and Commercial sources and 25.2% from Transport sources.
- Two thirds of flats in London are estimated to experience overheating (temperatures greater than 28 degrees) by the 2030s.
- There have been substantial payments of net zero carbon offset payments to the Council - £13m – following the London Plan requirements. We are unaware of major developments in the borough that are being built as net zero developments without the need for offset payments – nor to standards closer to net zero on site.
- By 2070 it is expected that extreme hourly rainfall intensity associated with an event that typically occurs once every two years will increase by 25%.
- Sea levels in London are "very likely" to see between 0.53m and 1.15m of sea level rise by 2100 under a high carbon emission scenario.
- It should be noted, that monitoring of these policy areas can be challenging, with difficulties in tracking data and some data only available at national and regional levels.

Sources:

- Air Quality Action Plan
- BEIS 2021
- Newham Carbon offset fund
- Climate Change Risks for London: A review of the Evidence
- Met Office UK Climate Projections

What are we required to consider and plan for?

National Planning Policy Framework (2021)

- Environment is one of the three overarching objectives which need to be balanced in order to deliver sustainable development.

- Local Plans should:
  - Achieve Sustainable Development – allowing development to meet the needs of the present without compromising the future.
  - Meet the challenge of climate change, flooding and coastal change – supporting the transition to a low carbon future, taking into account flood risk and coastal change.
  - Shape places to radically reduce greenhouse gas emissions, minimise vulnerability and improve resilience.
  - Conserve and protect the natural environment – including addressing contaminated land, pollution and air quality.
  - Set out how the impacts of climate change will be reduced and its effects minimised.
  - Be informed by a Strategic Flood Risk Assessment (SFRA) and utilise data and information from the Environment Agency and other relevant flood risk management authorities.

The Climate Change Act 2008

- In 2019, the UK Government has set a target of net zero carbon by 2050.

- The forthcoming Environment Bill will expand on this further, with greater emphasis on biodiversity net gain and targets on air pollution, water quality and resource use.

The London Plan (2021)

- London will be a zero carbon city by 2050.

- Buildings and infrastructure should be resilient to climate change.

- Developments should be air quality neutral and in some cases air quality positive.

- Developments should follow the energy hierarchy: Be lean, clean, green and seen.

- Major development should be net zero carbon with a minimum on site reduction of at least 35% beyond Building Regulations.

- Developments should manage heat risk, in accordance with the cooling hierarchy.

- Developments should reduce water use and achieve consumption of 105 litres or less per head per day.

Relevant London Plan Chapters and Policies:

- Policy D14 Noise
- Policy SI 1 Improving air quality
- Policy SI 2 Minimising greenhouse gas emissions
- Policy SI 3 Energy infrastructure
- Policy SI 4 Managing heat risk
- Policy SI 12 Flood risk management
- Policy SI 13 Sustainable drainage

What new trends and objectives do we want to address?

- **Newham carbon neutral by 2030, and to achieve net zero greenhouse gas emissions nationally by 2050:** The ambitious targets set nationally and locally will require development in Newham to assist in achieving these goals. CO2 emissions data indicates that residential, commercial and industrial uses are all significant contributors to greenhouse gases. This is while ensuring that a high quality of life, economic development and Community Wealth Building is encouraged and maintained. Newham should be working towards greater delivery of Net Zero on site, reducing the amount of embodied carbon in the construction of buildings, as well as achieving higher standards for a wider range of buildings – following the guidance of the London wide Low Carbon Working Group, and the Newham Recovery Strategy.

- **Improved Air Quality:** Air Quality is a key issue in Newham. Although work to reduce transportation emissions will help in reducing air quality, it is likely that as development pressures increase and more constrained sites are brought forward there will be increasing pressure for residential development in areas of poor air quality. There is increasing research on ways air pollution can be both reduced and mitigated for, so that its impacts on occupants of new developments is reduced.

- **Concerns regarding 'urban heat island' and overheating in new dwellings:** The UK climate is changing. Headline impacts of climate change note that London will experience hotter and drier summers. Discussions with local residents indicates that increasing temperatures is a growing issue. This must be addressed given the trend of hotter average temperatures in recent years, and the quantum of high density, flatted development coming forward in Newham, which can be more prone to overheating.

- **Building a green economy:** This objective is discussed in more detail in the Inclusive Economy topic and can be supported through considering how environmental standards and greening can apply to industrial and commercial buildings.

- **Including considerations of environmental justice in our approach:** Reflecting Community Wealth Building objectives and our commitment to tackling racism, inequality and disproportionality, we want to consider how we can embed commitments to environmental justice in our approach. This approach ensures that the distribution of environmental benefits and any potential dis-benefits are fairly distributed and acknowledge other inequalities in the borough. This may impact our prioritisation of carbon offset funding or how we locate different uses in relate to pollution sources.

- **Increased risk of flooding and surface water runoff:** Flooding projections for London identify that more intense rainfall patterns will occur alongside the potential for increased storm surges from sea level rise. With the climate changing and in heavily urbanised areas which are less resilient to flooding, exposure to surface water runoff and drainage is increasingly important to people's experience and perception of place and their overall health and safety. Commitment supporting Newham Local Flood Risk Management Strategy is important as to how the Council manages these issues related to surface water and drainage requirements.

Sources:

- London Councils Low Carbon Working Group
- Newham Towards a Better Newham – Re-orientation and Recovery Strategy
- Newham Air Quality Action Plan
- Newham Community Wealth Building Strategy
- Newham Local Flood Risk Management Strategy
- Climate Change Risks for London: A review of the Evidence

What evidence will we use?

Carbon Reduction Evidence Base:

- An assessment of the most effective and deliverable measures to reduce carbon production from new buildings and construction work.
- This would also include work on overheating impacts, retrofitting existing buildings, and options regarding on site carbon reduction.

Strategic Flood Risk Assessment:

- A technical assessment and consideration of flood risk across the borough for the duration of the plan to inform the sequential and impact tests.
- Newham Local Flood Risk Management Strategy Guidance on how Newham manages issues relating to surface water flood risk and sustainable drainage requirements.

Riverside Strategy (led by Royal Docks Team)

- Will set out design guidance to support the implementation of raising flood defences and design detail to future changes to the riverside take place in a planned and integrated way which maximise the environmental, social and economic benefits.
- The document will be supplementary to the Royal Docks and Beckton Opportunity Area Planning Framework.

The Characterisation Study:

- Will investigate design approaches to air quality mitigation, including the impact of greenspace and air pollution funnelling.

Proposed policy changes:

1. **Encouraging Retrofit:** Many of Newham's houses have poor energy efficiency – to address this we need to encourage properties to be retrofitted. We are interested in how we should balance against heritage and design considerations.

2. **Overheating in homes and in streets:** It is currently challenging to measure potential overheating risks of a building. However, with the rise in temperatures we will need mitigate and monitor these risks, without causing further environmental impact. Using energy hungry air conditioners to cool buildings should not be the solution.

3. **Encourage greater energy efficiency on site:** At present, only major development must meet London Plan Zero Carbon targets. Many of these major developments cannot or will not deliver all carbon reductions on site, and pay carbon offset fees instead. To meet Zero Carbon by 2050, all properties will have to be retrofitted – including many of those under construction. We want to explore how we can reduce the need for this future retrofitting by improving current standards. Newham's own housing delivery is exploring delivering new affordable homes to ultra-low energy efficiency standards like Passivhaus. We want to explore how Newham can encourage smaller developments to be more energy efficient, and as well as ensuring more major developments get closer to or achieve net zero on site. Potential proposals include rewarding for developers where energy efficiency performance exceeds delivery targets and conversely, clawback where performance is below target. We want to explore how levels of embodied carbon in new development can be reduced. We want to encourage use of roof space to generate electricity and heat, while allowing for multi-functional benefits, for example, green roofs. Evidence around the best ways to achieve this will be developed to progress any policy requirements and would be subject to viability testing. This objective may also need to be balanced against other policy requirements.

4. **Use of greater quantity of air quality data in decision making to minimise exposure:** Air quality data is increasingly available to officers, and the policy should be strengthened in light of this, to both reduce exposure through design and also to require ongoing monitoring to ensure this is maintained. Approaches could include a hierarchy of vulnerable users – so schools and play spaces are placed furthest from roads as well as requirements which secure ongoing monitoring.

5. **Reducing impacts of noise and light pollution:** Given the increased density of development in Newham, the policies regarding noise and light pollution will be strengthened to ensure a high quality of life for new and existing residents alike. This will include consideration of post occupation monitoring and, where feasible, further mitigation measures.

6. **Providing more detailed flood risk reduction guidance:** To ensure new developments optimise their contributions towards reducing flood risk from all sources and for the long term, we want to provide further guidance on the measures which should be taken. This could include referencing in policy Newham's Sustainable Drainage System Design and Evaluation Guidance to better incorporate sustainable drainage solutions at the earliest possible stage as well as considering widening the types and locations of developments which should incorporate these requirements, due to the increasing likelihood, severity and geographic scope of flooding. We will also reference the Riverside Strategy, which will provide detailed guidance for the south of the borough on delivering long term flood defences at the earliest feasible stage.

You tell us

- Do you agree with the proposed changes?
- Are there other changes we should consider?
- Is there anything missing?
- How do we encourage all developers to deliver net zero on site today, and minimise retrofit costs in the next 20 years?
- In some parts of borough, the environment is harsh (windy, barren, poor air quality, too hot, bad smell) – how can policies mitigate the impact on residents, and prioritise interventions/ improvements before issues arise?
- What should else be included in this policy to ensure Newham is maximising opportunities to reduce the risks of fluvial and surface water flooding?
- How can Newham assess the potential for overheating of new buildings, and how can Newham monitor this following delivery of a development?