City of London Local Plan
City Plan 2036
Proposed Submission Draft
Topic Paper 4 – CLIMATE CHANGE

Photovoltaic Panels Blackfriars Bridge

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CITY OF LONDON

Contents

1. Policy Context

Below is a summary of the policies at different levels which have been taken into account in the development of the sustainability and climate change related policies in the City Plan 2036.

International

The Paris Agreement is a landmark international accord that was signed by 195 countries and the European Union in 2015. The agreement aims to substantially reduce global greenhouse gas emissions in an effort to limit the global temperature increase in this century to 2 degrees Celsius above preindustrial levels, while pursuing the means to limit the increase to 1.5 degrees.

The agreement includes commitments from all major emitting nations to cut their climate pollution and to strengthen those commitments over time. The accord provides a pathway for developed nations to assist developing nations in their climate mitigation and adaptation efforts, and creates a framework for the transparent monitoring and reporting of progress. There is no mechanism to require a nation to set a specific emissions reduction target by a specific date, but each target should go beyond previously set targets.

National

The Climate Change Act 2008 commits the UK to reducing its greenhouse gas emissions by 80 per cent by 2050, compared to 1990 levels. However, this target was made more ambitious in 2019 when the UK Government became the first major economy to commit to a 'net zero' target. The new target requires the UK to bring all greenhouse gas emissions to net zero by 2050.

The Flood and Water Management Act 2010 aims to reduce the flood risk associated with extreme weather, compounded by climate change. The Act created the role of Lead Local Flood Authority, which is the local government authority responsible for managing flood risk and is a statutory consultee for planning applications in England and Wales. in the local government area. The Act also brought the use of sustainable drainage systems into law.

The national planning policy context is provided by the National Planning Policy Framework (NPPF), February 2019 and the national Planning Practice Guidance (PPG). The NPPF is prepared by the Ministry of Housing, Communities and Local Government to set out the planning policies for

England and how these are to be applied. The NPPF emphases the importance of sustainable development that must be taken into account when preparing a local plan.

Paragraph 148 requires the planning system to support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. Paragraph 149 states that "Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures."

Paragraph 151 indicates that to help increase the use and supply of renewable and low carbon energy and heat, plans should:

"a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);

c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers."

Government Planning Policy Guidance (PPG) was published in 2018 and is updated regularly, most recently in July 2020 in relation to plan making. The PPG aims to ensure that planning decisions are taken in accordance with the development plan. The PPG states that local plans should set out the vision and framework for development and identify strategic priorities and policies. The provisions of the PPG must be taken into account in the preparation of local plans and are material to decisions on individual planning applications and appeals.

In relation to climate change, PPG highlights the opportunities to integrate climate change mitigation and adaptation objectives into local plans and indicates that sustainability appraisal can be used to help shape appropriate strategies in line with the Climate Change Act 2008.

The PPG cites examples of mitigating climate change by reducing emissions such as reducing the need to travel and providing for sustainable transport; providing opportunities for renewable and low carbon energy technologies; providing opportunities for decentralised energy and heating; and promoting low carbon design approaches to reduce energy consumption in buildings, such as passive solar design.

The PPG also cites examples of adapting to changing climate, such as considering the impact of and promoting design responses to flood risk and coastal change for the lifetime of the development; considering availability of water and water infrastructure for the lifetime of the development and design responses to promote water efficiency and protect water quality; and promoting adaptation approaches in design policies for developments and the public realm.

In relation to flood risk, PPG provides guidance on the use of Strategic Flood Risk Assessments in order to fully understand the flood risk in an area to inform local plan preparation. Local planning authorities are required to apply a sequential approach to site selection so that development is, as far as reasonably possible, located where the risk of flooding (from all sources) is lowest, taking account of climate change and the vulnerability of future uses to flood risk. In plan-making this involves applying the 'Sequential Test' and, if needed, the 'Exception Test' to local plans.

London Plan

The Mayor of London has prepared a revised London Plan which was published on 2nd March 2021. The London Plan is the spatial development strategy for Greater London including City of London. The purpose of this plan is to establish strategic development policies for London, clarifying the extent and location of development and providing a framework for public and private agencies in their investment decisions relating to land use.

The London Plan contains a number of policies relating to mitigating and adapting to climate change. Of particular note is Policy SI 2: Minimising greenhouse gas emissions, which states that major development should be net zero-carbon. The policy states that "This means reducing greenhouse gas emissions in operation and minimising both annual and peak energy demand in accordance with the following energy hierarchy:
1) be lean: use less energy and manage demand during operation
2) be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly

3) be green: maximise opportunities for renewable energy by producing, storing and using renewable energy on-site
4) be seen: monitor, verify and report on energy performance"

Policy SI 2 states that where it is clearly demonstrated that the zero-carbon target cannot be fully achieved on-site, any shortfall should be provided, in agreement with the borough, either through a cash in lieu contribution or off site. It includes a requirement for boroughs to establish and administer a carbon offset fund to manage and report on the use of carbon offset payments. The policy also requires development proposals referable to the Mayor to calculate whole life cycle carbon emissions through a nationally recognised Whole Life-Cycle Carbon Assessment and demonstrate actions taken to reduce life-cycle carbon emissions.

Also of note is Policy SI 7: Reducing waste and supporting the circular economy, which seeks to promote a more circular economy that improves resource efficiency and innovation to keep products and materials at their highest use for as long as possible. Policy SI 7 requires referable applications t submit a Circular Economy Statement showing how they will promote circular economy outcomes and aim to be net zero-waste.

Policy SI 1: Improving air quality, requires development plans, through relevant strategic, site-specific and area-based policies, to seek opportunities to identify and deliver further improvements to air quality. This policy requires development proposals to be at least Air Quality Neutral.

The London Plan is supported by a suite of Supplementary Planning Guidance (SPG), which provides further information about how the policies in the London Plan should be implemented. Energy Planning Guidance was updated in April 2020 and in October 2020, the GLA published for consultation the following draft SPG to support policies in the new London Plan:

- Circular Economy Statements;
- Whole-life Carbon Assessments; and
- 'Be Seen' Energy Monitoring Guidance

Environment Agency

The Thames Estuary 2100 Plan sets out how the Environment Agency and its partners can work together to manage tidal flood risk in the Thames Estuary. The Thames Estuary 2100 Plan was the first adaptive flood risk management strategy developed in England. The Plan aims to:

- manage the risk of flooding to people, property and the environment;
- adapt to the challenges of climate change;
- ensure sustainable and resilient development in the floodplain;
- protect the social, cultural and commercial value of the tidal Thames, tributaries and floodplain; and
- enhance and restore ecosystems and maximise benefits of natural floods.

One of the key implications of the Thames Estuary 2100 for riparian local planning authorities, including the City of London, is the proposal to raise flood defences by up to 0.5m by 2065 and 1m by 2100.

2. Background and evidence reports

There are numerous drivers compelling the City Corporation to transition towards a Zero Emissions City, including the Paris Agreement, the UK Climate Change Act, the London Plan and the City Corporation's Responsible Business Strategy and Climate Action Strategy. Development in the Square Mile presents opportunities to assist with this transition.

City of London Climate Action Strategy 2020-27

Evidence for the City's Climate Action Strategy demonstrates the importance of new development in the move away from fossil fuels to a Square Mile where the total carbon emissions from energy use reach net zero i.e. achieving an overall balance between the emissions produced and those taken out of the atmosphere.

By adopting the strategy, the City Corporation has committed to:

- Achieve net zero carbon emissions from our own operations by 2027;
- Achieve net zero carbon emissions across our investments and supply chain by 2040;
- Support the achievement of net zero for the Square Mile by 2040;
- Invest £68m over the next six years to support these goals of which £15m is dedicated to preparing the Square Mile for extreme weather events.

City Plan 2036 will be key to achieving this Square Mile target and developing climate resilience across the City.

Zero Emissions City Report – AECOM 2018

The Zero Emissions City report demonstrates that the trajectory to Zero Carbon will largely be driven by the decarbonisation of the national electricity grid supply. Compared with other areas, the Square Mile already derives a higher proportion of its energy from electricity rather than gas or other fossil fuels due to the absence of large housing stocks using gas boilers for heating. A continued move away from fossil fuels in new development will accelerate this trend. In addition, a collective approach to temperature moderation in buildings through the use of district heating and cooling networks will contribute as long as the energy centres for these networks also decarbonise. Figure 1 shows the relative contributions that different elements will play in the move to zero carbon.

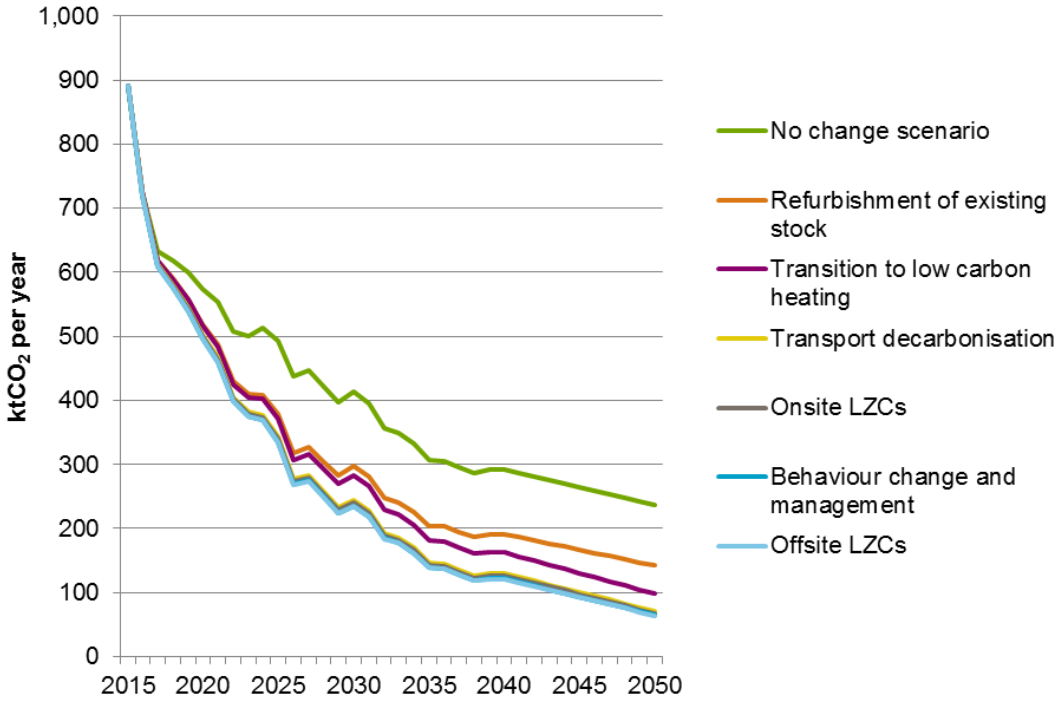

Figure 1 - Accelerated pathway to net zero carbon including grid decarbonisation Source: Zero Emissions City Report AECOM for the City Corporation, July 2018.

Greenhouse gas emissions strategic implications report – Arup & Carbon Trust 2020

The Greenhouse Gas Emissions Strategic Implications report prepared by Arup and the Carbon Trust for the City Corporation provides a series of scenarios for the achievement of net zero carbon for the Square Mile. Standardised accounting and reporting processes have been followed to establish the Scope 1 and 2 emissions footprint for the Square Mile (766ktCO2e). The baseline footprints have been projected considering external drivers, such as grid emissions decarbonisation and projected change in Square Mile building floorspace over time.

This Business as Usual (BAU) scenario forms the basis for three scenarios that describe different levels of climate ambition. Aligning with legislation, policy and strategy, these scenarios comprise sectoral targets that have been modelled to generate emissions reduction pathways for the Square Mile. Grid decarbonisation will continue to be significant during the period up to 2050, evident most clearly in the BAU scenario which delivers 63% reduction in emissions over 2017 by 2050. The most ambitious scenario includes grid decarbonisation but goes much further, achieving 95% reduction, while also acting faster, cutting emissions by 78% by 2030. The result is that cumulative emissions between 2017 and 2050 are 57% lower than the BAU scenario.

The most ambitious scenario is represented in Figure 2 below

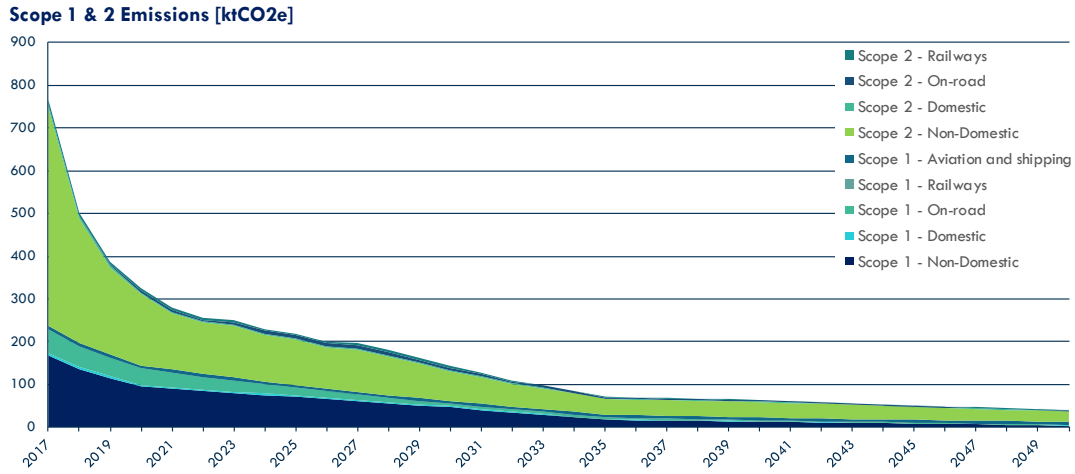

Figure 2 - Square Mile Scenario 3: Innovator (source GHG Emissions Strategic Implications Report 2020)

Emissions reduction over 2017						
2020	2025	2030	2035	2040	2045	2050
58%	71%	81%	91%	92%	93%	95%

Table 1 - Selected target for City Corporation Scope 1-3 emissions

Commentary

- 81% reduction between 2017 and 2030.
- 57% lower cumulative emissions than BAU.
- Replacement gas excluded from 2035 and completely removed by 2050.
- New non-domestic buildings built to UKGBC net-zero standards in 2030.
- New PV technologies required to maximise deployment

When scope 3 emissions are included using the BASIC+ boundary definition, the trajectory to net zero for the City of London is as shown in Figure 3 and must be coupled with action elsewhere to remove carbon from the atmosphere to achieve net zero targets.

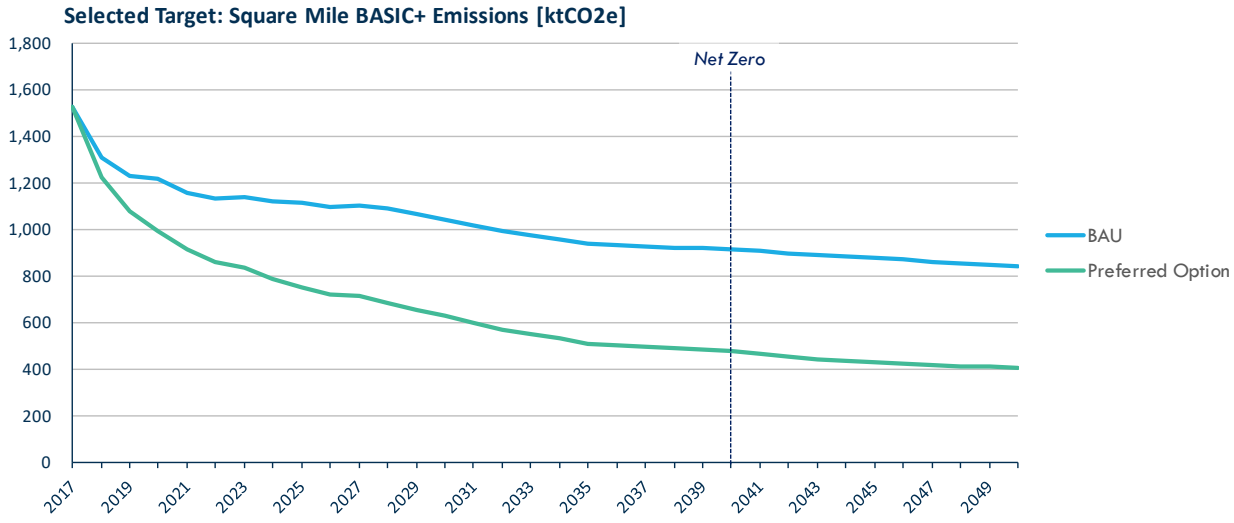

Figure 3 - Selected target for Square Mile BASIC+ emissions

The pathway to zero carbon for the City of London will require a series of actions relating to buildings and transport, many of which can be influenced by the planning process. Proposed actions for the Square Mile which have been carried forward to the Climate Action Strategy implementation plan are as follows:

- Square Mile renewable energy strategy
- Historic buildings energy efficiency retrofit challenge
- Exemplar guidance on Square Mile refurbishment
- Tighten standards for new buildings through SPG
- Support SMEs to make net zero plans
- Engagement and consultation on the above actions.

These actions will be taken forward in planning through supplementary planning guidance and advice to ensure maximum reductions in scope 1, 2 and 3 carbon emissions from development in the City of London.

Local Plan Monitoring Paper – Sustainable Development and Climate Change

BREEAM

The City Corporation publishes a series of Local Plan Monitoring Reports including one on Sustainability. This shows BREEAM ratings for development in the City between 2011 and 2019, demonstrating that the majority are targeting BREEAM "Excellent". Development consistently achieves more than 50% of the available credits for the City's priorities (water, energy, pollution and materials) with energy frequently approaching 70-75% of the available credits. This demonstrates the feasibility and viability of

achieving these ratings, despite tightening of criteria in 2018 which make these targets more difficult to achieve.

Energy and carbon emissions

The Sustainability Monitoring Report shows that for 2018/19, the first year of post construction energy monitoring, half of completed developments (8 out of 16) managed to achieve the London Plan's carbon targets on site. For the remainder carbon offsetting payments were secured through S106 agreements.

Embodied carbon / whole life carbon

The Sustainability Monitoring report shows that almost half (14 out of 32) of the Major schemes with post construction BREEAM certificates in the City since 2011/12 were refurbishments rather than new build. The reuse and refurbishment of existing buildings provides benefits in terms of embodied carbon and whole life carbon, minimising the extraction and use of virgin materials.

District heating and cooling networks

Map 1 in the Sustainability Monitoring Report shows the area of the City of London which is currently served by the Citigen district heating and cooling network. This shows that opportunities for network connection are limited by the practicalities of connection given the high cost of district heat and cooling network infrastructure, and the City's highly congested streets.

Climate Resilience – Adaptive pathways study – Buro Happold 2020

This study analyses the UK CP18 Climate Projections for the City of London and concludes that by 2080:

- Maximum air temperatures may be 5^{o}C higher than today
- Heatwave periods may be four times more frequent and last up to three weeks
- There is likely to be 20mm more rainfall on the wettest days
- There is likely to be double the days of drought
- There is likely to be lower summer humidity
- There is likely to be decreased winter snowfall

Buildings approved now should still be in place in 2080 and therefore must be designed to take account of the impacts of the changed climate, such as overheating, flooding, water scarcity, biodiversity impacts, pests and diseases and changes to food and trade.

A series of actions to address these risks have been identified, many of which can be implemented through planning. Greening, flood defence raising, SuDS implementation and climate resilient landscaping provide some of the solutions and these are required through City Plan 2036 Proposed Submission Draft policies. Further guidance on their implementation will be developed alongside the City Plan 2036.

Strategic Flood Risk Assessment – WSP 2017

The City of London Strategic Flood Risk Assessment shows that the City is at relatively low risk of flooding. The risk from river flooding is confined to the south of Thames Street since the land rises sharply to the north of this line. This area is also vulnerable to surface water/sewer overflow flood risk along with the area along Farringdon Street which was the former Fleet river valley. Modelling and maps show the area at risk taking climate change into account.

Riverside Strategy Survey – Arcadis 2020

The Riverside Strategy Survey report shows the vulnerabilities and challenges of the variety of flood defence structures on the City's riverside. This demonstrates the importance of riparian development sites in protecting the City from flooding as a result of sea level rise which will affect the tidal Thames. The City Corporation is preparing a Riverside Strategy which will highlight the challenges and solutions to implementation of the Thames Estuary 2100 project including flood defence raising in the City.

Urban Greening Factor Study – Green Infrastructure Consultancy 2018

The Urban Greening Factor Study was published in July 2018 and through the City Plan seeks to actively encourage the installation of green infrastructure such as green roofs, green walls, trees and amenity such as roof terraces. For further information see Section 5 of this paper (City Greening).

Transport Strategy 2019

The City of London Transport Strategy, adopted in May 2019, includes ambitious proposals to:

- Prioritise the needs of people walking, make streets more accessible and deliver world-class public realm.
- Make the most efficient and effective use of street space by significantly reducing motor traffic, including the number of delivery and servicing vehicles in the Square Mile.

- Eliminate death and serious injuries from our streets through measures to deliver safer streets and reduce speeds.
- Enable more people to choose to cycle by making conditions for cycling in the Square Mile safer and more pleasant.
- Improve air quality and reduce noise by encouraging and enabling the switch to zero emission capable vehicles.

City Public Realm SPD 2016

The City Public Realm SPD, adopted in July 2016, provides guidance on the management, design and improvement of the City's streets and spaces between buildings and includes guidance on climate resilient streets.

Air Quality Strategy and Annual reviews

The City Corporation has a statutory obligation to take a wide range of action to improve air quality and protect public health. The Air Quality Strategy 2019-2024 contains actions that the City Corporation will be taking over the next few years to achieve better air quality in the City of London.
The Air Quality Strategy aims for over 90% of the Square Mile to meet the health-based limits for nitrogen dioxide by the beginning of 2025. The strategy also supports the Mayor of London's target to meet World Health Organisation Guidelines for particulate matter by 2030. This demonstrates the importance of, and links between, clean air and good health in the City of London. An annual report on air quality data is published on the City Corporation's website.

3. Sustainability Standards & Transition to a Zero Carbon and Zero Emission City

BREEAM

The Sustainability Monitoring report shows that the BREEAM targets set in the adopted Local Plan are feasible for most major developments in the City of London. Therefore, these targets have been carried forward into the City Plan 2036 Proposed Submission Draft with an enhanced aspiration for development to achieve BREEAM "Outstanding". The City's priorities have been chosen to address particular issues which affect the City of London. The Square Mile is a high user of **energy**, in an area of **water stress** and an Air Quality Management Area with high levels of **pollution** where the rate of redevelopment results in high use of **materials**. By emphasising the BREEAM credits in these categories the City Corporation aims to minimise the impact of development on these issues.

Policy reference: Proposed Submission Draft City Plan 2036 Policy DE1: Sustainability Standards

Pathway to Zero Carbon and Zero Emissions

The rate and scale of development in the City of London demonstrates the importance of policies which help to drive down carbon emissions, both during the operational life of the building but also during construction and end of life phases. Addressing both operational and embodied carbon will assist in driving emissions towards a zero carbon Square Mile.

Policy DE1 sets out the sustainability standards for development in the City. This refers to the London Plan for carbon targets and circular economy embodied carbon requirements.

Policy reference: Proposed Submission Draft City Plan 2036 Policy DE1: Sustainability Standards

Carbon emissions and carbon offsetting

The importance of setting energy and carbon targets with an associated carbon offsetting scheme is demonstrated through the Sustainability Monitoring Report findings that only half of developments achieve the London Plan target on site. This shows that it is possible to achieve these targets in many cases but where constraints prevent this, a carbon offsetting scheme is essential in helping to drive down the carbon emissions from the

Square Mile as a whole. Policy DE 1 requires London Plan carbon targets to be met on site or a carbon offsetting contribution to be paid to account for the shortfall.

Policy reference: Proposed Submission Draft City Plan 2036 Policy DE1: Sustainability Standards

Embodied carbon / whole life carbon

Policy DE1 requires major development to retain embodied carbon within building structures. This aligns with Policy CE1: Zero Waste City, which requires circular economy principles to be applied to each phase of a building's lifecycle. The decision to include materials as a BREEAM priority also promotes a sustainable approach to embodied carbon.

For developments that are referable to the London Mayor detailed whole life carbon assessments will be required. Any requirement for whole life carbon assessment for smaller City schemes is encouraged through the requirement for all development to demonstrate the highest feasible and viable sustainability standards throughout its lifespan. This will be kept under review as the Mayor's requirements for whole life carbon assessments are applied and analysed.

Policy references: Proposed Submission Draft City Plan 2036 Policy DE1: Sustainability Standards and Policy CE1: Zero Waste City

Heating and cooling networks

The City Plan 2036 supports the London Plan hierarchy (London Plan Policy SI 3 Energy Infrastructure) highlighting the advantages of connection to district heating and cooling networks and providing specific policy support for connection to the Citigen network in the north of the City. The decarbonisation of grid electricity is challenging the carbon performance of district heat network connection. Networks such as Citigen currently run on gas and will need to decarbonise going forward to compete in carbon emission reduction terms with electricity-based heating and cooling systems.

Policy references: Proposed Submission Draft City Plan 2036 Policy DE1: Sustainability Standards, Policy DE2: New Development, Policy IN1: Infrastructure provision and connection, and Strategic Policy S23: Smithfield and Barbican.

Air quality

The City Plan 2036 seeks an improvement in air quality in the City of London through policies requiring developments and transport to minimise adverse impacts on air quality. While the main source of pollutants in the City has historically been road transport, following implementation of the Mayor's Ultra Low Emission Zone in 2019, it is forecast that a greater share of remaining air pollutants will be generated by buildings.

The Plan requires all developments to be at least Air Quality Neutral and developments subject to an Environmental Impact Assessment are strongly encouraged to adopt an air quality positive approach. The City Corporation's Air Quality Strategy contains a wide range of actions that will improve air quality in the City, which will be progressed and regularly monitored. The City Corporation's Transport Strategy contains proposals to reduce air pollution associated with road traffic in the Square Mile, including the introduction of local Zero Emission Zones.

Policy references: Proposed Submission Draft City Plan 2036 Policy HL2: Air Quality, Policy HL8: Play Areas and Facilities, Strategic Policy S8: Design, Policy DE1: Sustainability Standards, Policy DE3: Public Realm, Strategic Policy S9: Vehicular Transport and Servicing, Policy CE3: New Waste Management Sites, Strategic Policy S20: Aldgate, Tower and Portsoken, Strategic Policy S22: Fleet Street and Ludgate, and Strategic Policy S23: Smithfield and Barbican.

4. Climate Resilience

The City of London's climate is changing. We are experiencing hotter drier summers, warmer wetter winters, sea level rise and more frequent extreme weather events. This trend is set to continue throughout this century.

Overheating and urban heat island effect

The UK Climate Projections show that the City of London could experience temperatures up to 5 degrees centigrade hotter than today with more frequent periods of heatwave which could last up to 3 weeks. In addition to this the proximity of buildings means that the City does not cool down at night adding to the overheating effect. Building designs which minimise the risk of overheating will be essential to avoid excessive use of energy intensive air conditioning during the lifespan of the building. Incorporation of these measures now will avoid costly and potentially unsightly retrofits in the future.

Policy references: Proposed Submission Draft City Plan 2036 Strategic Policy S15: Climate Resilience and Flood Risk and Policy CR1: Overheating and Urban Heat Island Effect

Flood risk

The City Plan 2036 flood risk policy (CR2) carries forward the sequential and exception test elements from the existing Local Plan 2015 policy along with the requirement for Site Specific Flood Risk Assessments for development in the City Flood Risk Area and major developments elsewhere. Additions and changes that have been made are in response to new guidance from the Environment Agency, in the NPPF and in anticipation of the impacts that climate change will have on flood risk in the City.

Sleeping accommodation

The supporting text of Policy CR2 includes specific reference to the Environment Agency's new guidance that sleeping accommodation should not be allowed within the modelled tidal breach level.

Safe Access and Egress

The NPPF requires that "safe access and escape routes are included where appropriate as part of an agreed emergency plan". Flood Emergency Plans must be submitted to demonstrate that safe egress routes are available to future occupants of the building in the event of a flood. The City's SFRA provides initial guidance on these plans and more comprehensive guidance is

available in the Flood Emergency Plans for new Developments Planning Advice Note published in June 2020.

Flood resistance and resilience

The requirement for flood resistance and resilience measures associated with development has been included to prevent excessive damage during a flood event and to enable speedy recovery following a flood. Flood resistance includes measures to prevent ingress of flood water such as raised kerbs, flood gates etc. whereas flood resilience relates to building designs that enable speedy recovery after a flood. This includes positioning of vulnerable equipment above the flood level and use of water resilient finishes in areas that are at risk of flooding.

Policy references: Proposed Submission Draft City Plan 2036 Strategic Policy S15: Climate Resilience and Flood Risk and Policy CR2: Flood Risk

SuDS

Climate projections show that the intensity of rainfall events is increasing with climate change. This risks overwhelming the combined sewer network in central London resulting in overflow of diluted sewage during flood events. To combat this, it is important to reduce the speed and volume of surface water running into drains and sewers. Sustainable Drainage Systems (SuDS) in development, transport and public realm schemes will help with this and must be well designed and maintained as required in Policy CR3.

Policy Reference: Proposed Submission Draft City Plan 2036 Policy CR3: Sustainable Drainage Systems

Flood protection

The City's short stretch of riverside has over twenty riparian properties with numerous different structures making up the flood defences. The Environment Agency's TE2100 plan recognises the need for these flood defences to be raised by up to 1 metre to account for predicted sea level rise. Policy CR4 requires protection and enhancement of these flood defences. The City Corporation is working with the Environment Agency to develop a riverside strategy approach which will incorporate multiple benefits into this flood defence raising and may be achieved to some degree through development of riverside sites.

Policy reference: Proposed Submission Draft City Plan 2036 Policy CR4: Flood Protection and Flood Defences

5. City Greening

The provision of urban greening should be integral to the design and layout of buildings and the public realm. Green infrastructure such as green open spaces, green roofs and green walls can provide multiple benefits such as contributing to improved health and well-being, improved air quality and mitigating flood risk.

National policy, the London Plan and the City Plan 2036 (Policy OS2) set out requirements for additional greening in and around major new developments. Developments are expected to retain and where possible enhance existing open space within a development site's footprint as well as improving connectivity with surrounding open spaces. The City Corporation's Open Space Strategy SPD sets out how the City will prioritise the provision of green public open space and protect and promote the provision of green private open space where practicable.

The Mayor of London has also made a commitment to deliver more than 50 per cent green cover across London by 2050. London is officially the world's first National Park City which aims to make the city greener, healthier and wilder by protecting existing and open green space and seeking the provision of new space.

Urban Greening Factor

The Urban Greening Factor (UGF) is a tool to assess the amount, type and value of greenery for major development proposals as a means of delivering additional greening. The UGF will be applied as a separate consideration to other certification or benchmarking methods designed to measure the sustainability or environmental performance of developments, such as BREEAM.

The London Plan (Policy G5) requires major development to consider greening as a fundamental element of site and building design and requires boroughs to use a UGF concept to identify the appropriate amount of urban greening required in new development and to assess proposals against it.

The City Corporation published a bespoke evidence report entitled 'Urban Greening Factor Study' in July 2018 and through the City Plan seeks to actively encourage the installation of green infrastructure. The study findings suggest that the London Plan target of 0.3 for predominantly commercial developments would be an appropriate target for such developments in the

City. Although the London Plan contains a target score of 0.4 for predominantly residential developments, a score of 0.3 was felt to be more appropriate in the City of London. This reflects the fact that 97% of households in the City live in flats, maisonettes or apartments. The high-density nature of residential development in the City means that there is likely to be less opportunity to incorporate greenery than there would be in suburban locations where residential dwellings are generally more likely to have access to private and/or communal gardens.

Major development proposals will be required to include a UGF calculation demonstrating how the development will meet the City's target UGF score and provide justification for levels of greening which fall below the minimum target score. In addition, an operation and maintenance plan would be required to demonstrate that the green features will remain successful throughout the life of the building. Although increased greening would add some additional costs the UGF approach was part of the viability testing of the London Plan and the City Plan 2036 Proposed Submission Draft was not considered to jeopardise overall viability.

Policy references: Proposed Submission Draft City Plan 2036 Strategic Policy S14: Open Spaces and Green Infrastructure and Policy OS2: City Greening