Camden Local Plan Proposed Submission Draft 2025

Energy Use and the Generation of Renewable Energy Topic Paper

October 2025

1. Introduction

1.1 The purpose of this topic paper is to provide further information and background on the Camden Local Plan Submission Draft Policy CC6 (Energy use and the generation of renewable energy) to demonstrate that the approach is positively prepared, justified, effective, and consistent with national policy.

2. Background

- 2.1 The Council's current planning policy approach to climate change mitigation is set out in Policy CC1 Climate Change Mitigation of the Local Plan 2017. This requires new development to be net zero carbon, following the energy hierarchy and maximising on-site reductions. A minimum on-site carbon reduction beyond Part L Building Regulation is also required, allowing any shortfall as a financial contribution to the borough's agreed programme to provide for local low carbon projects.
- 2.2 Whilst the policy has been operating effectively, it was clear that the Council needed to go further to respond to the national commitment to be net zero carbon by 2050 (Climate Change Act 2008), and the Council's ambition to be net zero by 2030 (Camden Climate Action Plan).
- 2.3 The Proposed Submission Draft Local Plan seeks to address the long-term needs of the borough and to respond to the challenges faced. The Council declared a climate and ecological emergency in 2019. We Make Camden, the Council's corporate strategy, emphasises the need for the borough to adapt to meet the climate challenge, address the causes of the climate emergency, and work towards becoming net-zero, while ensuring that we are supporting and protecting the most vulnerable members of our communities from the impacts of climate change.
- 2.4 The approach in the draft Local Plan, set out in Policy CC6 Energy use and the generation of renewable energy, is justified at a local level and will ensure that the borough is able to:
 - Accommodate new development, taking account of grid capacity constraints and the need to ensure that buildings are designed to maximise energy efficiency, and increase the generation of renewable energy;
 - Strive towards the borough's local net zero target and reduce the effects of climate change upon lower income households and those with underlying health conditions; and
 - Use metrics which are capable of being monitored in line with the London Plan and associated London Plan Guidance.

Grid capacity and growth

- 2.5 In response to the increasing movement towards electrification, development in Camden needs to reduce the energy needed to heat and run buildings to ensure continued infrastructure capacity for growth in the borough. This growth includes thousands of homes, a growing demand for laboratory and research space, and a strong demand for high quality offices and hotels, all of which have high energy demand.
- 2.6 Most development in Camden relates to changes to existing buildings rather than new build development. The borough's phase 1 Local Area Energy Plan identified issues with headroom capacity at primary substations serving the borough. A phase 2 Local Area Energy Plan is being commissioned which will further consider capacity issues and future energy demand by considering options to reduce carbon. These include decarbonisation of existing buildings and deployment of district heat networks utilising waste heat where possible. In addition to potential demand increases from projected development there will be increased demand from the installation of hundreds more on-street electric vehicle charging points, including fast and rapid chargers which require significant additional electrical capacity.

Health and income inequalities

- 2.7 Camden has one of the highest poverty rates (households below average income) among London boroughs as evidenced from Department Work and Pensions figures 2023/24 (<u>Trust for London</u>, <u>Borough factsheet</u>). People suffering from poor health are generally concentrated in some of the borough's most deprived wards (<u>Camden JNSA</u>, <u>A summary of deprivation and poverty in Camden</u>). 10.2% of households in Camden were classified as fuel poor in 2022 (DBEIS sub-regional-fuel-poverty-2022-tables). Fuel poverty has an impact on health, with cold homes presenting health risks, particularly to those most vulnerable in society. A 2025 <u>Institute of Health Equity study</u> showed that health and income inequalities in the borough have widened. Following this Camden launched the <u>RAISE Camden Taskforce</u> to address child poverty and unfairness in children's health.
- 2.8 Local planning policies focused on reducing energy demand and generating renewable energy through solar photovoltaics in new development (including affordable homes) and existing buildings provide an opportunity to improve the quality of homes in the borough and reduce the proportion of non-decent housing. Energy efficient homes also cost significantly less money to heat, thus benefiting low income households.

Monitoring outcomes

2.9 The London Plan 2021 requires all major schemes to monitor and report on energy performance. To understand how a building is performing as built, compared to its design at the planning stage, a planning policy requiring information on Energy Use Intensity (EUI) is necessary. London Plan

- Guidance 'Energy Assessments' expects the submission of details of EUI and Space Heating Demand at the planning stage and this has been readily provided.
- 2.10 Details of Energy Use Intensity also feeds into Local Area Energy Planning. The Council has provided information to UK Power Networks on the Local Plan site allocations and on recent major planning applications, where information of predicted energy usage was requested. This informs forecasts for future demand on the energy network and aids infrastructure planning and delivery.
- 2.11 Given the above, the policy approach in the new Local Plan seeks to do more to incentivise sustainable design and construction, to ensure that new and existing buildings use less energy and maximise the generation of renewable energy on-site to support the transition to net zero in line with national policy and legislation. This will ensure that carbon dioxide emissions are reduced as far as practical, and that Camden's buildings are energy efficient, cost effective to run, warm, comfortable, healthy and fit for purpose for a zero-carbon future.

3. Legislative and Policy Context

National

Planning and Compulsory Purchase Act 2004

3.1 Section 19 Preparation of local development documents in the <u>Planning and</u> Compulsory Purchase Act 2004 states that:

"1A Development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change".

Climate Change Act 2008

3.2 The UK's national commitment to becoming net zero carbon is set through the Climate Change Act 2008 (as amended by The Climate Change Act 2008 (2050 Target Amendment) Order 2019). The Act sets out the UK's approach to tackling climate change and legislates that the UK must be net zero carbon by 2050 (which means reducing greenhouse gas emissions by at least 100% of 1990 levels). It also sets a system of carbon budgets to ensure that the UK does not emit more carbon than its allowance.

Planning and Energy Act 2008

3.3 Section 1 Energy of the Planning and Energy Act 2008 states that -

"A local planning authority in England may in their development plan documents, a [corporate joint committee] may in their strategic development

- plan,] and a local planning authority in Wales may in their local development plan, include policies imposing reasonable requirements for—
- (a) a proportion of energy used in development in their area to be energy from renewable sources in the locality of the development;
- (b) a proportion of energy used in development in their area to be low carbon energy from sources in the locality of the development;
- (c) development in their area to comply with energy efficiency standards that exceed the energy requirements of building regulations.
- (4) The power conferred by subsection (1) has effect subject 2 subsections (5) to (7) and to –
- (a) section 19 of the Planning and Compulsory Purchase Act 2004 (c.5), in the case of a local planning authority in England; [...]
- (5) policies included in development plan documents by virtue of subsection 1 must not be inconsistent with the relevant national policies for England."

National Planning Policy Framework (NPPF) 2024

- 3.4 The NPPF sets out three overarching objectives economic, social and environmental to ensure the delivery of sustainable development. The environmental objective seeks to "to protect and enhance our natural, built and historic environment; including.... mitigating and adapting to climate change, including moving to a low carbon economy." The NPPF goes on to state that these objectives "should be delivered through the preparation and implementation of plans" and for plan making this means all plans should "... improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects".
- 3.5 Paragraph 161 of the NPPF states that: "The planning system should support the transition to net zero by 2050 and take full account of all climate impacts including overheating, water scarcity, storm and flood risks and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure."
- 3.6 Paragraph 162 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 and drought from rising temperatures. Policies should support appropriate measures to ensure the future health and resilience of communities and infrastructure to climate change impacts, such

as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure."

Future Homes and Buildings Standards

- 3.7 The <u>Future Homes and Buildings Standards</u> aim to reduce the carbon emissions of new development at a national level. The Future Homes Standard (FHS) is linked to energy efficiency and was expected to apply in the UK from 2025. The key purpose of the standard is to reduce carbon emissions, with properties being built with 75% less carbon compared with 2013 Building Regulations and to be 'zero carbon ready'. The preferred option for the Future Buildings Standard (non-residential) was a 27% improvement relative to 2013 Building Regulations.
- 3.8 The proposed standards will help to nationally improve the Building Regulations on Part L for new buildings. However, they are not focussed on improving the efficiency of a building's fabric, the amount of thermal energy needed to heat a building (space heating demand), or on seeking to maximise renewable energy generation so the energy required to use a building is balanced by the energy it generates. A report by the Climate Change Committee noted the standards "lack a commitment to ultra-high levels of efficiency, which would minimise running costs and demands on the electricity grid which is particularly relevant to Camden. Higher energy efficiency requirements would see a space heat demand of 15 kWh/m2/year, sufficient to reduce the requirements for internal heating distribution systems and associated costs" (Independent Assessment: The UK's Heat and Building Strategy, 2022, page 41.)

Written Ministerial Statement 2023 - Local Energy Efficiency Standards Update

3.9 A Written Ministerial Statement (WMS) entitled 'Local Energy Efficiency Standards Update' was made on 13 December 2023 by Baroness Penn, Parliamentary Under Secretary of State for Levelling Up, Housing and Communities. This states that:

"Any planning policies that propose local energy efficiency standards for buildings that go beyond current or planned buildings regulation should be rejected at examination if they do not have a well-reasoned and robustly costed rationale that ensures:

- That development remains viable, and the impact on housing supply and affordability is considered in accordance with the National Planning Policy Framework.
- ii. The additional requirement is expressed as a percentage uplift of a dwelling's Target Emissions Rate (TER) calculated using a specified version of the Standard Assessment Procedure (SAP).

Where plan policies go beyond current or planned building regulations, those polices should be applied flexibly to decisions on planning applications and

appeals where the applicant can demonstrate that meeting the higher standards is not technically feasible."

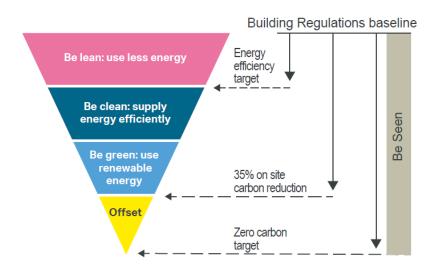
Regional

London Plan

- 3.10 The <u>London Plan 2021</u> Policy SI2 (Minimising greenhouse gas emissions) states:
 - A. Major development should be net zero-carbon. 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.
 - B. Major development proposals should include a detailed energy strategy to demonstrate how the zero-carbon target will be met within the framework of the energy hierarchy.
 - C. A minimum on-site reduction of at least 35 per cent beyond Building Regulations is required for major development. Residential development should achieve 10 per cent, and non-residential development should achieve 15 per cent through energy efficiency measures. 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:1) through a cash in lieu contribution to the borough's carbon offset fund, or
 - 2) off-site provided that an alternative proposal is identified and delivery is certain.
 - D. Boroughs must establish and administer a carbon offset fund. Offset fund payments must be ring-fenced to implement projects that deliver carbon reductions. The operation of offset funds should be monitored and reported on annually.
 - E. Major development proposals should calculate and minimise carbon emissions from any other part of the development, including plant or equipment, that are not covered by Building Regulations, i.e. unregulated emissions.
 - F. Development proposals referable to the Mayor should 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.

3.11 Under the approach in the London Plan, energy efficiency is the first stage of the energy hierarchy (see Figure 1 below). Energy demand should be reduced as far as possible before a heating strategy and installation of low carbon and renewable technologies is considered (paragraph 9.2.2). This is important in protecting consumers from high prices and limiting fuel poverty.

Figure 1 – The energy hierarchy and associated targets



Source: Greater London Authority

Mayor of London Guidance

- 3.12 The Mayor adopted an Energy Assessment Guidance supplementary planning document in 2022 to provide information for planning applicants on how to comply with London Plan climate mitigation policies. The Guidance states that major developments are required to achieve a minimum 35 per cent on-site carbon reduction over Building Regulations Part L 2021. Residential developments are expected to be able to exceed this, and so an additional benchmark of 50 per cent improvement over Building Regulations Part L 2021 was set, which residential developments should be aiming to achieve.
- 3.13 Applicants are also asked to report on and achieve the values in the table below on Energy Use Intensity (EUI) and the space heating demand of the development. The Guidance states: "These metrics will help applicants to demonstrate that they have maximised energy efficiency measures in line with the energy hierarchy, in addition to the percentage improvement target" (paragraph 2.4).
- 3.14 The Mayor's 'Be Seen' Energy Monitoring Guidance 2021 states:
 - "1.2.1 To truly achieve net zero-carbon buildings we need to have a better understanding of their actual operational energy performance. Although Part L

calculations and Energy Performance Certificates (EPCs) give an indication of the theoretical performance of buildings, it is well established that there is a 'performance gap' between design theory and measured reality.

1.2.2 To address this gap the London Plan Policy SI 2 'Minimising greenhouse gas emissions' introduces a fourth stage to the energy hierarchy; the 'be seen' stage, which requires monitoring and reporting of the actual operational energy performance of major developments for at least five years via the Mayor's 'be seen' monitoring portal."

Local

Camden Local Plan 2017

3.15 Policy CC1 Climate change mitigation of the Camden Local Plan 2017 states -

"The Council will require all development to minimise the effects of climate change and encourage all developments to meet the highest feasible environmental standards that are financially viable during construction and occupation.

We will:

- a) promote zero carbon development and require all development to reduce carbon dioxide emissions through following the steps in the energy hierarchy;
- b) require all major development to demonstrate how London Plan targets for carbon dioxide emissions have been met;
- c) ensure that the location of development and mix of land uses minimise the need to travel by car and help to support decentralised energy networks;
- d) support and encourage sensitive energy efficiency improvements to existing buildings;
- e) require all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building; and
- f) expect all developments to optimise resource efficiency."

Camden Climate Action Plan 2020

- 3.16 To respond to the Government's commitment for the UK to be net zero carbon by 2050, the Council declared a climate and ecological emergency in 2019. This recognised the threat of climate change and the irreversible damage to our planet it may cause. The Council held its first Citizen's Assembly on the climate crisis later that year. From this, the Council developed Climate Action Plan 2020-2025, which outlines a programme of projects and activities to help us achieve net zero by 2030.
- 3.17 Since then, Camden has made considerable progress. Borough-wide emissions have fallen by 52%, and emissions from the Council's own estate and operations have reduced by 64.5% (Camden Draft Climate Action Plan 2026 2030, page 6). The Climate Action Plan 2020-25 has also led to new levels of community-led climate action across Camden with more than £35

- million invested from community energy partnerships in retrofitting homes, planting trees and transforming neighbourhoods.
- 3.18 Despite this, the borough is already experiencing the impacts of a changing climate, including overheating homes, increasingly frequent heatwaves and severe floods in 2021 that damaged homes and businesses, as set out in the <u>Camden Climate Adaptation and Resilience Plan 2023 2025</u>. Furthermore, the impacts of climate change are felt disproportionately across the borough, affecting lower income households and those with underlying health conditions the most.

4. Evidence

Delivering Net Zero Study

- 4.1 In 2022, Camden and 17 other London boroughs commissioned a study on Delivering Net Zero (Etude et al) to help inform the approach taken to the delivery of net zero development in London.
- 4.2 The Delivering Net Zero Study considered and tested two main policy options:
 - Policy option 1 is based on using the Part L calculation of regulated carbon emissions, which evaluates the performance of a proposed building by comparing its performance to a baseline (i.e. a notional building) and expresses the results as a percentage improvement over that baseline. This is the approach currently adopted in the Camden Local Plan 2017.
 - Policy option 2 is a new approach and involves a policy requiring all new buildings to be designed and built to be Net Zero Carbon in operation, using a measure of Space Heating Demand, low carbon heat, Energy Use Intensity, on site renewable energy generation, assured energy performance, and offsetting as a last resort.
- 4.3 The Study included extensive energy and cost modelling to investigate how different building typologies¹ would perform against the metrics in Policy option 1 and Policy option 2, using different combinations of specifications. Further information on the approach taken to modelling and the specifications tested is set out in the Delivering Net Zero Study.

Decarbonising Camden's Existing Buildings study

4.4 In 2024 the Council commissioned a study to provide a technical evidence base to further inform the policy approach to decarbonising existing buildings in the Local Plan. The Decarbonising Camden's Existing Buildings (Etude and Currie & Brown) study looked at the value of a set of retrofit measures in

¹ Domestic: terraced house, low rise, mid-rise, and high rise. Non-domestic: office, school, industrial, hotel

reducing carbon emissions and examines factors influencing retrofit decision making.

- 4.5 The study included energy and cost modelling on two representative typologies that capture key building types in Camden a terraced home, and an office block. These typologies were modelled to determine the effect and the cost of specific improvements to the existing building fabric and services in conjunction with extension or conversion refurbishment works. A baseline case was also modelled for both scenarios to serve as a reference point for assessing the impact of various retrofit measures. Further information on the approach taken and the modelling results is set out in the study.
- 4.6 For the residential and office typology the study showed a significant reduction in carbon emissions through changing from fossil fuel (gas) to a low carbon heating system. However, it also showed that delivering a low carbon heating system using 'direct electric' increased energy bills in the residential typology and, as such, this form of low carbon heat was not considered to be acceptable. The study also showed that a heat pump could be optimised to reduce the annual energy consumption of a building through fabric improvements. The fabric improvements that had the greatest impact in reducing space heating demand were wall insulation and double/triple glazing with ventilation.
- 4.7 The study provides valuable local data on energy use; heating demand and associated carbon savings; and the capital cost implications of targeted retrofit measures carried out alongside refurbishments and redevelopments. The findings of this work were used to inform the approach taken in the Local Plan Proposed Submission Draft, including the Space Heating Demand and Energy Use Intensity targets for existing buildings.

Net Zero: The UK's Contribution to Stopping Global Warming

- 4.8 In 2019 the Climate Change Committee (CCC)² published the report 'Net Zero: The UK's Contribution to Stopping Global Warming' which reassesses the UK's long-term emissions targets. The report identifies that the following measures are required to achieve net zero carbon:
 - 100% low carbon electricity by 2050
 - Ultra-efficient new homes and non-domestic buildings
 - Low carbon heat to all but the most difficult to treat buildings
 - Ambitious programme of retrofit of existing buildings
 - Complete electrification of small vehicles.
- 4.9 In 2025 the CCC published a <u>Progress Report</u> to provide an overview of the government's progress to date in reducing carbon emissions. The report

² The Climate Change Committee is an independent, statutory body whose purpose is to advise the UK and devolved governments on emissions targets and to report to Parliament on progress made in reducing greenhouse gas emissions and preparing for and adapting to the impacts of climate change.

highlights a number of priority actions to ensure the UK's emissions targets are achievable. Those which are most relevant to planning include: the deployment of heat pumps in existing buildings; ensuring new homes are not connected to the gas grid; the expansion of low carbon electricity systems; tree planting; and supporting green skills.

5. Local Plan Approach

- 5.1 Policy CC6 seeks to tackle the causes of climate change in the borough by ensuring that developments use less energy and maximise the generation of renewable energy on-site. It sets out the Council's approach for new building construction, which includes proposals containing some existing built fabric (such as a façade, core, basement and foundation); and proposals for existing buildings that include the reprovision or addition of 500m2 or more in floorspace or the creation of one or more homes. It also sets out requirements applicable to both new buildings and existing buildings.
- 5.2 Furthermore, the policy approach taken:
 - seeks to provide a locally appropriate and evidenced response to national policy and legislation;
 - supports Camden's switch to the electrification of buildings and vehicles and aims to reduce energy demand in the borough and support energy capacity planning; and
 - will help to support Camden's communities by enabling the delivery more energy efficient buildings, which should lead to lower energy bills for occupiers, reducing fuel poverty, and provide more comfortable and healthy living conditions.

The paragraphs below provide further detail.

Energy demand and capacity

- 5.3 The policy approach taken in the Local Plan Proposed Submission Draft adopts the recommendations of the Climate Change Committee (as set out in paragraphs 4.8 and 4.9 above) by seeking to introduce local energy requirements, using energy based metrics (see Energy Metrics section below). This approach is critical for Camden as we move to the electrification of vehicles and heat, as this is expected to significantly increase electricity demand in the borough.
- 5.4 Camden's first phase <u>Local Area Energy Plan</u> (combined with Central, Inner East, and North London) highlighted issues with headroom capacity at several primary substations by 2027/2028. Whilst these sites are now being considered for either grid reinforcement or demand management, this indicates the relationship between demand and capacity. It also highlights the impact on demand from the 'electrification' of developments. Given pressures on capacity in the area, increased demand has the potential to constrain the

growth of businesses and Camden's economy; as well as impacting on smaller developments; the retrofitting of existing buildings and the increased deployment of electric charge points. There is therefore a need for the Local Plan to seek to minimise electricity demand in buildings.

- 5.5 Furthermore, there is continued demand in Camden for premises for laboratory, medical and other knowledge economy uses, in particular in the nationally important Knowledge Quarter in the south of the borough. These uses have a particularly high energy demand as evidenced in the Net Zero Carbon Building Standard EUI targets. Hotels, which support the local and London visitor economy, also have a particularly high energy demand. In addition to this, if electric vehicles are to become a viable alternative to fossil fuelled cars, then an extensive network of charging points will also be required to facilitate this.
- 5.6 The focus on maximising renewable energy generation through solar photovoltaics (PV) in Policy CC6 will assist with managing issues with peak energy demand. As noted in the Local Area Energy Plan:
 - "The majority of the primary substations experience their highest loads during the winter months however, a few substations experience higher loads during the summer. Summer constraints often indicate that an area has high levels of air conditioning, and with climate change, it is expected that the loads associated with air conditioning will increase. Peak summer loads offer an opportunity to supplement some of the demand with solar PV, and with the additional use of private wire networks the impact to the grid in these areas could be reduced. This could free up capacity and allow for the installation of other low carbon technologies, such as heat pumps and electric vehicle charging points" (page 36).
- 5.7 Energy Use Intensity considers total energy use, both regulated³ and unregulated⁴ energy whereas Building Regulations only covers regulated energy. Considering carbon reduction against Part L Building Regulations rather than energy use metrics makes future energy capacity planning more difficult as a development may appear to be low carbon, with an improvement over Part L Building Regulations, but may in fact use large amounts of electricity through its operation.
- 5.8 Specifically, it is the energy need of a development (not carbon emission calculations) that the NESO (National Energy Systems Operator)⁵ and Distribution Network Operators⁶ (such as UKPN) will be concerned with to

³ Regulated energy is building energy consumption resulting from the specification of controlled, fixed building services and fittings, including space heating and cooling, hot water, ventilation, fans, pumps and lighting.

⁴ Unregulated energy is building energy consumption resulting from a system or process that is not 'controlled', For example, this may include energy consumption from systems integral to the building.

⁵ with their new responsibility to produce Regional Energy Strategic Plans (RESP)

⁶ when producing Distribution Future Energy Scenarios

ensure that there is sufficient energy generated and distribution capacity available at primary substations to support the development of homes, businesses, and the continued growth of the knowledge economy in Camden.

Improving outcomes for Camden's communities

- 5.9 The approach taken in the Local Plan recognises that lower-income households and people with long term health conditions are often those who are most affected by climate impacts and the least able to protect themselves from those impacts.
- 5.10 Camden has some of the most deprived neighbourhoods in London as well as some of the most prosperous. In Camden, life expectancy at birth for females living in the most deprived areas is 82.3 years, compared to 92.1 years in the least deprived areas, a difference of 9.8 years. For males, this gap is 12.2 years with life expectancy at birth of 77.3 years in the most deprived areas and 89.5 years in the least deprived areas (Camden JNSA Hub, Deprivation A summary of deprivation and poverty in Camden). Also, as mentioned in paragraph 2.7 above, 10% of households in Camden are in fuel poverty.
- 5.11 Policy CC6 Energy Reduction and the Generation of Renewable Energy is intended to drive good practice in sustainable construction. This should help deliver more energy efficient buildings, which should lead to lower energy bills for occupiers, helping to reduce fuel poverty, and provide more comfortable and healthy living conditions.
- 5.12 The Council's Community Investment Programme (CIP) redevelopment scheme at the Agar Grove Estate has delivered over 200 homes to Passivhaus standards. These use significantly less energy to heat, lowering carbon emissions and helping to tackle fuel poverty, with residents in the new build properties saving on average up to 70% on their energy bills.⁷
- 5.13 Camden cannot solely rely on the improvements planned through the Future Homes and Buildings Standards to meet the borough's net zero carbon ambition, to reduce energy demand on the grid, or to maximise the generation of renewable energy. The standards relate to new build development only, while the built-up character of Camden means that development in the borough mainly involves changes to existing buildings, and partial demolition and rebuild, and therefore would not be covered by the standards.
- 5.14 Furthermore, the national standards aim to reduce carbon emissions through improvements to Part L Building Regulations and the decarbonisation of the grid, whereas the Local Plan policy approach seeks to reduce energy demand in the first instance, which the future homes standard does not include. A policy approach that takes account of total operational carbon (regulated and unregulated) helps designers / contractors understand how a building is

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⁷ climate-action-plan-2026---2030-for-consultation-1.pdf

expected to perform and include measures to reduce energy use further, to deliver net zero operational buildings.

Energy metrics

- 5.15 Through the Sustainability Appraisal of the draft Local Plan, the Council assessed both policy options considered by the Delivering Net Zero Study (see Section 4 of this topic paper) and concluded that policy option 2 was the preferred approach for the reasons set out below:
 - An absolute energy use target in kWh/m2 yr (as per Policy option 2) can be checked against metered energy in the occupied building. This makes post-construction verification and learning from a feedback loop easier and more accurate.
 - Option 2 considers all the energy used in a building (total operational energy), whereas policy option 1 only considers regulated energy. This is important for understanding future energy use in the borough for infrastructure planning, understanding how buildings are expected to perform, which can influence alterations, and provides a predicted energy usage whereby buildings are able to balance their energy demand with the energy generated by renewable systems (such as rooftop PV) to be net zero in operation.
 - Improving the design of a building by reducing the extent of heat loss areas, the number of junctions, and by optimising elevation design are essential components of an energy efficient design and this option minimises the risk of inefficient building designs. With Policy option 2, the benefits (or disbenefits) of changes to the building form and design can also robustly be assessed.
- 5.16 The recommended target levels for Energy Use Intensity and Space Heating Demand set out in the Delivering Net Zero study were therefore included in the new Camden Local Plan in Policy CC6. The policy also includes criteria for development to use low carbon heat; be fossil fuel free; contribute towards the generation of renewable energy through solar PV; and achieve an energy balance. These were also informed by the findings of the Study.
- 5.17 The 2023 Written Ministerial Statement states that planning policies which propose local energy efficiency standards for buildings that go beyond current or planned buildings regulations should ensure that the additional requirement is expressed as a percentage uplift of a dwelling's Target Emissions Rate (TER) calculated using a specified version of the Standard Assessment Procedure (SAP).
- 5.18 The Target Emissions Rate (TER) demonstrates the carbon emissions that the Part L notional dwelling would achieve. In building regulations, a notional building is generated by a computer model, which has the same shape as the actual building being developed. The building regulations notional specification is applied by the computer model based on building fabric and

heating, hot water and lighting system, etc. A computer model is also generated to represent the actual building being developed. A policy based on a percentage reduction from the Target Emission Rate (TER) means that the carbon emissions from the actual building must be a certain percentage lower than the notional building regulations compliant building. This percentage improvement is intangible and cannot be measured post construction.

- 5.19 In addition to this, the Building Regulations have an additional requirement, the Fabric Energy Efficiency Rate. This uses the same computer model as the percentage reduction from TER. A policy based on percentage reduction from Fabric Energy Efficiency Rate means that the total energy efficiency of the fabric from the actual building must be a certain percentage lower than the notional building regulations compliant building. Where improving the design of a building, reducing the extent of heat loss areas, reducing the amount of junctions, and optimising elevation design for winter solar gains are widely considered as essential components of an energy efficient design. However, comparing an actual development to a notional building of the same shape and size (which may not be designed for energy efficiency) does not reward efficient design as it essentially neutralises the impact of these measures.
- 5.20 The Council therefore considers that using a space heating demand and energy use intensity metric would be more effective than using TER in responding to the issues of climate change in the borough, and therefore better achieve its statutory duties under Section 19 1A of the Planning and Compulsory Purchase Act 2004. Space Heating Demand (SHD) is the amount of energy per square metre needed to maintain a comfortable internal temperature in a building over the course of an average year. It is a measure of the thermal efficiency (performance) of building elements. Various design and specification decisions affect space heating demand, including building form and orientation, insulation, air tightness, windows, doors and the type of ventilation system.
- 5.21 The use of Space Heating Demand in the new Local Plan will encourage developers to improve sustainable design and construction, which will reduce the amount of energy needed to heat buildings. As the heat used in future buildings will likely be from low carbon systems, this approach will reduce unnecessary energy need from primary substations, which will contribute to reducing the headroom capacity issues in the borough.
- 5.22 Energy Use Intensity (EUI) is the amount of total energy needed to run a building over a year (per sqm). Using an energy-based metrics approach means there is an initial focus on minimising energy use, which reduces pressure on the electricity grid and mitigates climate change. It is a simple metric that can be understood by developers, design teams, contractors, residents and those managing housing/building asset portfolios. At the design stage, predictive energy modelling is used to estimate the EUI. This helps

- inform the design team on how to reduce energy use, giving the ability to consider options to reduce the total energy and carbon emissions of a building.
- 5.23 As noted above, using EUI helps to monitor both the expected performance of buildings and in use performance, as it can be directly derived from utility meters or energy bills. This means that the outcomes of the policy can be monitored once the buildings are built and occupied, which builds knowledge and can be used to inform future planning policy.
- 5.24 To achieve net zero buildings in practice requires a robust understanding of actual energy performance. As noted in the Mayor's 'Be Seen' guidance, Part L calculations and Energy Performance Certificates (EPCs) give an indication of the theoretical performance of buildings rather than measured reality. The Local Plan therefore proposes the use of robust and readily monitored metrics.
- 5.25 The Local Plan's approach also aligns with the requirements in the London Plan Guidance on Energy Assessment, which promotes reporting on Energy Use Intensity and Space Heating Demand for new developments.
- 5.26 The Council is also aware of a number of other adopted local plans that include space heating demand and energy metrics that have been found sound by Planning Inspectors following the publication of the WMS. These include the Tendring Colchester Borders Garden Community Development Plan Document 2025, Uttlesford Local Plan 2025, Salt Cross Village Area Action Plan 2025 and, most recently, Winchester Local Plan 2025 (links are to Inspector's reports).
- 5.27 The Inspector for the Salt Cross Village Area Action Plan observed:
 - "I acknowledge that the WMS is a material consideration, but it should also be read in the context of wider national policy and legislative considerations. Reducing carbon emissions and supporting the transition to net zero forms a central part of the Framework in line with the objectives and provisions of the Climate Change Act 2008. However, no matter how energy efficiency is proposed to be measured, the environmental outcome, to mitigate climate change and contribute to meeting the net zero obligation, will remain the same" (paragraph 15).
- 5.28 The approach taken in the Local Plan has been to reduce carbon emissions in line with national, regional and local commitments. Although Policy CC6 Energy Reduction and Generation of Renewable Energy does not use the Target Emission Rate (TER), as promoted by the WMS, we consider there is strong local justification for the approach taken and it is therefore sound.

Consideration of viability

- 5.29 The Written Ministerial Statement 2023 states that planning policies that propose local energy efficiency standards for buildings that go beyond current or planned building regulations should have a well-reasoned and robustly costed rationale to ensure that development remains viable, and that impact on housing supply and affordability is considered in accordance with the National Planning Policy Framework.
- 5.30 The Delivering Net Zero study commissioned to help inform the approach taken to the delivery of net zero development in the Local Plan (see section 4 above) included cost modelling undertaken by Currie and Brown. The uplift costs associated with each specification tested were estimated based on Currie and Brown's cost datasets for energy efficiency and low carbon technologies, which incorporate information from their specialist quantity surveyors. The costs are based on Q4 2022 prices and reflect a London cost base inclusive of overheads, profit and preliminaries. Costs were developed for each affected element to identify the variance in price between the baseline and the enhanced specifications.
- 5.31 The study provides construction costs for each combination of specifications compared to a 'cost reference scenario' or 'baseline' selected on the basis that it is Building Regulation Part L 2021 compliant. As part of the study three scenarios were tested 'Business as usual', 'Good practice', and 'Ultra-low energy'. The Regulation 18 draft Local Plan required a space heating demand target of 15 or less kWh/m2 GIA/yr which represents the 'ultra-low energy' scenario modelled in the study. The Regulation 19 draft Local Plan has however altered this figure to 20 or less kWh/m2 GIA/yr which represents 'Good practice' nearing to 'Ultra-low energy'. As a result, it is anticipated that the cost associated with meeting the target in the Proposed Submission Draft Plan will be less than the cost of meeting the target in the draft Local Plan. This is evidenced in the Delivering Net Zero Study, Chapter 9 Cost modelling. Furthermore, the Local Plan also provides flexibility where it is demonstrated that the target cannot be met (paragraph 8.83), in accordance with the Written Ministerial Statement.
- 5.32 The Viability Study of the Local Plan Proposed Submission Draft tested the impact of the main policies in the plan and their impact on scheme viability. It found that the sustainability and climate change policies in the Plan have an impact on base build costs of between 7.75% to 11.75%. The study noted that whilst the impact of these additional costs will vary between schemes and between locations within the borough, this is shown to result in a reduction in the amount of viable affordable housing deliverable of up to 5% 10% in the development typologies tested.
- 5.33 It should however be noted that the assessment took account of a number of the sustainability policies in the Plan, not just Policy CC6 Energy Reduction and Generation of Renewable Energy. Furthermore, the testing identifies the cumulative impact of the Council's policy requirements, by layering on

additional requirements each time, to test the increased effect on development. Here, the requirements relating to achieving BREEAM Excellent (in Policy CC6), the renewable offset payment (in Policy CC6), the combined sustainability requirements in the Plan, and the requirements in Policy CC4 in relation to embodied carbon, are separated out and tested cumulatively (in the order set out above).

- 5.34 Whilst we have not specifically tested the difference between the proposed approach set out in Policy CC6 of the Local Plan and that in the consultation version of the Future Homes Standard, as the Future Homes Standard may yet change. It should be noted that as the Future Homes Standard will increase requirements for buildings compared to the current Building Regulations, it is also likely to increase build costs and therefore have an impact on scheme viability.
- 5.35 Furthermore, the Council understands that evidence currently being prepared to support the update of the London Plan will include a detailed viability assessment of using EUI and Space Heating Demand, the approach taken in the Local Plan. This is expected to be published later this year.
- 5.36 The Local Plan Viability Study recognises that the costs associated with delivering carbon reductions and more energy efficient development will come down over time as technologies improve. The conclusions and recommendations of the Study (Chapter 7) note that:
 - "7.3 Although the NPPF sets an ambition for plan policies to be set in the plan with little use of viability assessments when planning applications are brought forward, this is only a realistic expectation in rural district authorities with homogenous greenfield development. In common with other London boroughs, Camden has a complex range of development scenarios, with development sites that are in various existing uses; significant variation in the types of developments that come forward; and a high degree of variability in residential sales values. In such circumstances, setting a policy that all schemes can viably deliver would require the level of affordable housing to be set at such a low level, it would be relatively meaningless in terms of meeting affordable housing need. It would be a policy that is determined by the lowest common denominator and schemes that could have viably delivered a higher percentage would no longer be required to do so.
 - 7.5 In considering the outputs of the appraisals, it is important to recognise that some developments will be unviable regardless of the Council's requirements. In these cases, the value of the existing building or the base costs (excluding policy requirements) will be higher than a redevelopment opportunity over the medium term. However, this situation should not be taken as an indication of the viability (or otherwise) of the Council's policies and requirements. In these situations, there will be little pressure from owners to redevelop for residential use and they might re-consider the situation when values change over time."

- 5.37 Overall, the Viability Study supports the Local Plan approach. It notes that where policies cannot be delivered in every situation, this does not mean that they should "be scaled back or abandoned", merely that a case-by-case assessment should be made, taking into account the merits of the proposal, with the aim of striking a planning balance.
- 5.38 Furthermore, in response to the Written Ministerial Statement, amendments were made to Policy CC6 in the Proposed Submission Draft Local Plan to:
 - alter the Space Heating Demand target in Part A. 2. from 15 kwhr/m2 GIA/yr (ultra-low energy) to 20kwhr/m2 GIA/yr in line with current good practice to reduce impact on the viability of development. This will enable the transition to more sustainable design while ensuring development costs will be reduced (as evidenced in the Delivering Net Zero Study Cost modelling). The amended specification remains within the range of 15 20kwhr/m2 GIA yr recommended by the Climate Change Committee in 2019 (UK Housing Fit for the Future, page 14);
 - update the wording in Part A criteria 4 of the Policy in relation to achieving an energy balance, to acknowledge that this may not be achievable for some parts of the borough at present, and therefore viability will be taken into consideration at the planning application stage; and
 - ensure it can be applied flexibly, and enable applicants to demonstrate to the Council's satisfaction why the EUI target or Space Heating Demand target cannot be met.
- 5.39 These amendments should enable any potential impact on housing supply and affordability to be considered and an appropriate balance to be struck.

6. Conclusion

- 6.1 The approach taken in Policy CC6 Energy Use and the Generation of Renewable Energy has been developed in response to legislation and national and regional policy in relation to climate change and carbon emissions, and Camden's local net zero carbon aspirations.
- 6.2 The policy aims to:
 - contribute to the mitigation of, and adaptation to, climate change and drive good practice in sustainable construction;
 - reduce energy use in existing and new buildings, which should lead to lower energy bills for residents, helping to reduce fuel poverty in the borough;
 - provide comfortable and healthy living conditions for occupiers;
 - maximise the use of renewable energy and assist with future energy demand and capacity planning;
 - set out robust metrics to effectively measure and report on energy performance.
- 6.3 Evidence to support the Plan shows that the approach in Policy CC6 should deliver better outcomes in terms of energy efficiency than the current

approach to energy reduction, which requires a minimum percentage improvement over Part L Building Regulations. It therefore allows the Council to better achieve its statutory duties, in particular under Section 19 1A of the Planning and Compulsory Purchase Act 2004, and contribute to national and local zero-carbon aspirations.

- 6.4 By ensuring that buildings in Camden are designed to maximise energy efficiency, the policy responds to local grid capacity constraints and allows capacity for growth in Camden's national important economy. It will help to reduce the effects of climate change on residents with underlying health conditions and to reduce fuel poverty and inequalities the borough. The Policy also secures robust monitoring from developments, in line with the London Plan, which will inform forecasts of future demand on the energy network and aid infrastructure delivery.
- 6.5 The Written Ministerial Statement 2023 allows for planning policies that propose local energy efficiency standards for buildings that go beyond current or planned buildings regulations provided that they have a well-reasoned and robustly costed rationale and are applied flexibly to decisions on planning applications. It is a material consideration which should be read in the context of wider national policy and legislation, and does not constrain or de-limit the extent of the duty in Section 19 Planning and Compulsory Purchase Act 2004 to include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change. The Council considers that the approach taken in Policy CC6 has a well-reasoned and robustly costed rationale, taking account of Camden's specific circumstances, and is therefore in line with the WMS.
- 6.6 Camden cannot solely rely on the future improvements planned through the Future Homes and Buildings Standards as they only relate to new build development, while the built-up character of Camden means that development in the borough mainly involves changes to existing buildings that would not be covered by the standards.
- 6.7 For the reasons set out in this paper, the Council considers that the policy approach in Policy CC6 Energy Use and the Generation of Renewable Energy is legally compliant and positively prepared, justified, effective, consistent with national policy and therefore sound.