Appendix 14.4 Legislation, Policy and Guidance

Legislation

Paris Agreement (United Nations Framework Convention on Climate Change, 2015)

Negotiations at the Conference of the Parties (COP) 21 led to the 2015 Paris Agreement, the aim of which is to maintain the increase in global average temperature at 'well below' 2°C and 'pursue efforts' to limit the temperature increase even further to 1.5°C.

A total of 160 parties, including the UK, made voluntary pledges to reduce emissions by 2030, however the cumulative effect of these would still lead to an estimated 3°C of warming or greater.

The Special Report on Global Warming of 1.5oC, international Panel on Climate Change (IPPC) 2018

The IPCC published a special report in response to the Paris Agreement, to present the impacts of the targeted 1.5°C temperature rise. The report highlighted that to achieve this, global emissions must decrease by 45% by 2030 (against a 1990 baseline), and that net zero global emissions (where emissions and removals from the atmosphere are balanced) must be achieved by 2050. This is noted to require rapid and far-reaching transitions of every sector on an unprecedented scale.

The Climate Change Act (2008) & The Climate Change Act 2008 (2050 Target Amendment) Order 2019

To support international efforts, the UK Climate Change Act set a legal GHG target for the year of 2050 for the reduction of GHG emissions. The target set by this Act is 'at least 80% lower than the 1990 baseline' by 2050.

The Act introduced a series of carbon 'budgets' to be implemented for succeeding five-year periods to gradually result in an overall reduction in GHGs.

In June 2019 the Climate Change Act was amended to set the overall reduction target to 100% by 2050 to ensure that the net UK carbon account is lower than the 1990 baseline.

According to the Progress in reducing emissions 2024 Report to Parliament*, 'The UK has a successful track record of emissions reductions, having met all its targets so far'* for its first, second, and third carbon budget, however '*the previous Government signalled a slowing of pace and reversed or delayed key policies. The new Government will have to act fast to hit the country's commitments*.' Furthermore, with regards to the UK's 2030 target to reduce emissions by 68% compared to 1990, the report states that 'the country is not on track to hit this target despite a significant reduction in emissions in 2023'.

Section 56 of the Climate Change Act requires the UK Government to undertake a Climate Change Risk Assessment (CCRA) on a five-yearly cycle, with the subsequent development of an adaptation programme to deliver resilience against these risks. This act stipulates that the Government must assess 'the risks for the United Kingdom of the current and predicted impacts of climate change'.

Planning and Energy Act (2008)

The Planning and Energy Act allows local planning authorities to set requirements for energy use and energy efficiency in local plans. It states that a local planning authority may impose 'reasonable requirements for':

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- *'a proportion of energy used in development in their area to be energy from renewable sources in the locality of the development';*
- *'a proportion of energy used in development in their area to be low carbon energy from sources in the locality of the development'; and*
- *'development in their area to comply with energy efficiency standards that exceed the energy requirements of building regulations'.*

Carbon Budgets Order (2021)

A series of Orders set the carbon budget for these five-year budgetary periods. These carbon budgets set a cap on the maximum level of the net UK carbon 'account' for each five-year budgetary period. The net UK carbon account is defined in section 27 of the Climate Change Act 2008.

There are budgets currently set up to 2037. The UK is currently in the fourth carbon budgetary period (2023 - 2027), the budget for which is 1,950 $MtCO_2e$. The UK cannot legally emit more GHGs than this within this budgetary period. The future carbon budgets set are:

- 2023–2027: 1,950 $MtCO_2e$;
- 2028-2032: 1,725 $MtCO_2e$; and
- 2033-2037: 965 $MtCO_2e$.

Recommendations for the Seventh Carbon Budget have been presented to the UK government, however this is undergoing consultation and yet to be set into legislation. There is legal requirement for the UK to reach 0 $MtCO_2e$ by 2050.

The Seventh Carbon Budget (2025)

The Seventh Carbon Budget is a statutory report published by the UK's Climate Change Committee (CCC) on 26 February 2025, covering the period 2038 to 2042. It provides advice to the UK Government on the level of greenhouse gas emissions the UK should be allowed to emit during this five-year period to achieve Net Zero by 2050. The greenhouse gas (GHG) emissions limit recommended to be set for the seventh carbon Budget is 535 $MtCO_2e$. However, it should be noted that the UK Government has not yet formally adopted a seventh carbon budget.

Policy

National

National Planning Policy Framework (NPPF) Ministry of Housing Communities & Local Government (MHCLG, formerly DLUHC) (2025)

'In determining planning applications, local planning authorities should expect new development to:

- *Comply with any development plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and*
- *take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.'*

Section 14 of the NPPF focuses on meeting the challenge of climate change, flooding and coastal change. Paragraph 164 states that new developments should be planned in ways that:

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- *'avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through incorporating green infrastructure and sustainable drainage systems.'; and*
- *'help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings in plans should reflect the Government's policy for national technical standards.'*

National Planning Practice Guidance (NPPG) (MHCLG, formerly DLUHC), 2025

The Climate Change Guidance states the importance of planning to consider climate change:

'Effective spatial planning is an important part of a successful response to climate change as it can influence the emission of greenhouse gases. In doing so, local planning authorities should ensure that protecting the local environment is properly considered alongside the broader issues of protecting the global environment. Planning can also help increase resilience to climate change impact through the location, mix and design of development.'

The Building Regulations Part L 2021 Edition

Building regulations Part L1A and Part L2A set out minimum legal requirements for energy efficiency in residential (Part L1A) and non-residential (Part L2A) building construction. These regulations are typically updated every 3 years with new minimum performance benchmarks set. The Proposed Development will have to comply with the relevant version of Part L.

An additional update was issued in February 2023; however, the modifications made within this update are not relevant to the assessment reported in this ES chapter.

The Carbon Plan: Delivering our Low Carbon Future (DESNZ, formerly DECC, 2011)

The Carbon Plan '*sets out how the UK will achieve decarbonisation within the framework of our energy policy: to make the transition to a low carbon economy while maintaining energy security*'.

To outline the methods available to achieve this, the Carbon Plan lists a series of "sectoral plans", which are provided below with highlights:

- Low carbon buildings:
    - *'Buildings will need to become better insulated, use more energy-efficient products and obtain their heating from low carbon sources.';*
- Energy efficiency:
    - Over the next decade, '*all cavity walls and lofts, where practical, will be insulated. Alongside this, the Government will support up to 1.5 million solid wall insulations and other energy efficiency measures such as double glazing.*'; and

'During the 2020s, deployment of solid wall insulation will increase and installation costs will fall';

- Low carbon heating:

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  - *'During the 2020s, we need to begin the mass deployment of low carbon heat. Technologies such as heat pumps will begin to expand at scale into residential areas, overcoming current barriers such as cost and unfamiliarity';*

- Low carbon transport:
  - '*During the 2020s, we will move towards the mass market roll-out of ultra-low emission vehicles, although further improvements in the efficiency of conventional vehicles and sustainable biofuels are also anticipated to play a key role'*; and
  - '*To support people to make lower carbon travel choices, such as walking, cycling or public transport, the Government is providing a £560 million Local Sustainable Transport Fund over the lifetime of this Parliament*'

- Low carbon electricity:
  - '*Over the next decade, we need to continue reducing emissions from electricity generation through increasing the use of gas instead of coal, and more generation from renewable sources.*'

Net Zero Strategy: Build Back Greener (HM Government, 2021)

On 20th April 2021, the UK Government announced that it 'will set the world's most ambitious climate change target' to reduce emissions by 78% by 2035 compared to 1990 levels as part of its sixth carbon budget.

The Net Zero Strategy identifies the following commitments:

- Delivering a decarbonised power system by 2035;
- An ambition for 5 GW UK low carbon hydrogen production capacity by 2030;
- Ambition to deliver 6 $MtCO_2$ per year of industrial Carbon Capture, Utilisation and Storage (CCUS) by 2030, and 9 $MtCO_2$ per year by 2035;
- Making the transition to low carbon buildings affordable and achievable for all by:
  - Aiming to phase out the installation of new and replacement natural gas boilers by 2035;
  - Making heat pumps as cheap to buy and run as a gas boiler by growing the heat pump market to support 600,000 installations per year by 2028 and expanding UK manufacturing;
  - Consulting on phasing out the dirtiest and most expensive fossil fuels first – new oil, coal and liquefied petroleum gas heating - and replace with low carbon alternatives in non-domestic buildings from 2024 and homes from 2026, following natural appliance replacement cycles; and
  - Ensure the UK's charging infrastructure network is reliable, accessible, and meets the demands of all motorists.

Regional

Places for Everyone (PfE) Joint Development Plan for Boulton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan (2024)

The following policies in the joint development plan are of relevance to GHG emissions:

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Policy JP-S 1 Sustainable development

'To help tackle climate change, development should aim to maximise its economic, social and environmental benefits simultaneously, minimise its adverse impacts, utilise sustainable construction techniques and actively seek opportunities to secure net gains across each of the different objectives.

In preparing plans, authorities should make as much use as possible of suitable previously-developed (brownfield) land and vacant buildings to meet development needs.'

Policy JP-S 2 Carbon and Energy states the following:

'The aim of delivering a carbon neutral Greater Manchester no later than 2038, with a dramatic reduction in greenhouse gas emissions, will be supported through a range of measures including:

1. Promoting the retrofitting of existing buildings with measures to improve energy efficiency and generate renewable and low carbon energy, heating and cooling;
2. Promoting the use of life cycle cost and carbon assessment tools to ensure the long-term impacts from development can be captured;
3. Taking a positive approach to renewable and low carbon energy schemes, particularly schemes that are led by, or meet the needs of local communities;
4. Increasing the range of nature-based solutions including carbon sequestration through the restoration of peat-based habitats, woodland management, tree planting and natural flood management techniques;
5. An expectation that new development will, unless it can be demonstrated that it is not practicable or financially viable;'

    a. *'Be net zero carbon'*

    b. *'Incorporate adequate electric vehicle charging points'*

    c. *'Where practicable, prioritise connection to a renewable energy/heating/cooling network in the first instance or a low carbon energy/heating/cooling network that is adaptable to non-fossil fuels at a later date'*

    d. *'In residential developments, achieve energy demand reductions in terms of space heat demand; hot water energy demand and the delivery of on-site renewable energy generation'*

Policy JP-S6: Resource Efficiency states the following:

'The achievement of a circular economy and a zero-waste economy will play a key role in meeting Greater Manchester's ambition of becoming a leading green city region by 2038. The following measures will help achieve this:

6. *Development and implementation of the Zero Waste Strategy for Greater Manchester which promotes overall reduction in the level of waste produced and supports resource efficiency within the Plan area in order to gain the maximum value from the things we produce;*
7. *Recognition of the role of existing infrastructure in managing our waste and protecting such facilities to ensure adequate waste management capacity is maintained; and*

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8. *Using sustainable design and construction techniques to reduce carbon emissions, adapt and future proof to the impact of climate change, reduce and recycle waste and minimise water use.'*

Local

Guide to Development in Manchester Supplementary Planning Document and Planning Guidance. Adopted April 2007

The Environmental Standards section states *'The Council is committed to making Manchester "the Greenest City in Britain". Climate change is the biggest challenge facing the future sustainability of the City and new developments play an important part in Manchester's ability to meet UK national and Kyoto commitments for tackling climate change.'*

The following is set out in relation to GHG emissions:

Energy Efficiency

'*Part 1 Policy E1.5 encourages high standards of energy efficiency in new development.' [ ] 'Developers should aim to reduce CO_2 emissions by at least 25% more than the requirements of the current Building Regulations, which at present are Building Regulations: Approved Document L (2006) – 'Conservation of Fuel and Power.' The following design principles will assist developers in achieving energy efficiency targets:*

- *Minimise reliance on energy-using equipment for heating, cooling, lighting and natural ventilation;*
- *Position trees and soft landscaping on and around the development and within buildings to provide natural shading, insulation and air conditioning*
- *Integrate energy efficient micro-generation and community heating schemes, such as combined heat and power (CHP)*
- *Site layout and building design principles should maximise the capture and use of daylight and passive solar energy, whilst avoiding excessive solar gain in summer Specify energy and water efficient appliances and systems'*

Renewable Energy

'To reduce energy demand and the harmful impact of using energy from non-renewables, in line with UDP Part 1 Policy E1.5, developers should aim for at least 20% of final site energy demand to be met by on-site renewable energy technologies. Renewable energy targets can be achieved more readily by undertaking the measures suggested above to reduce the total energy demand of the building. It is possible to produce developments that use 50% and even 100% energy from renewable sources. To achieve this, developers should:

- *Assess opportunities for integrating small and large scale renewable energy generation systems (i) to improve the energy security of occupants and the neighbourhood, including siting of energy generation businesses on-site and export of surplus energy*
- *Use a mix of technologies to help generation patterns match demand*
- *Investigate energy generation opportunities before designing building envelopes or fixing their location, to optimise utilisation of wind, solar and geothermal resources*
- *Consider final energy demand rather than building energy consumption in the selection and sizing of generation equipment*
- *Explore opportunities to tackle waste and energy issues collectively through use of anaerobic digesters linked to CHPs (Combined Heat and Power devices)*

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- *Consider private wire networks as an alternative to grid connection and availability charges on larger developments.'*

Water Management and Water Resilience

'*New developments should seek to use water efficiently, through specification of water efficient device and through the use of rainwater harvesting and grey water recycling'*.

Construction Management

'UDP Part 1 Policy E1.6 requires the building materials used in new development and refurbishment schemes to be environmentally friendly wherever possible, and encourages the use of recycled building materials, which is also energy efficient. Site waste management plans should, therefore, be implemented to reduce the quantity of waste generated, and to increase re-use and recycling. Opportunities for reuse of existing structures should be explored, and where this is not appropriate, materials should be reused on site and incorporated into the new design where practicable. Materials that are environmentally friendly, of low embodied energy, locally sourced, and can be recycled or reclaimed when the building comes to the end of its life should be prioritised. Materials that contain environmentally damaging chemicals should be avoided.

In addition, activities carried out during the construction of new developments have the potential to cause significant environmental impact. In order to avoid such impacts it is important that appropriate measures are put in place to manage and control the waste generated, the amount of water and energy used, and any potential releases to water, land and air. Use of the Considerate Constructor scheme is recommended.'

Manchester's Local Development Framework. Core Strategy Development Plan Document (MCC, 2012) (as amended, 2024)

The Core Strategy was adopted in July 2012, and includes the following spatial objectives relating to the reduction of GHG emissions:

- SO1. Spatial Principles: Provide a framework within which the sustainable development of the city can contribute to halting climate change; and
- SO6. Environment: Protect and enhance both the natural and built environment of the city and ensure the sustainable use of natural resources, in order to mitigate and adapt to climate change, support biodiversity and wildlife, improve air, water and land quality, recreational opportunities and provide networks of high-quality green infrastructure, ensuring that the city is inclusive and attractive to residents, workers, investors and visitors.

Policies relevant to GHG emissions are set out below:

Policy EC 1 Employment and Economic Growth in Manchester states the following:

'*Development proposals should have regard to:*

Climate change resilience demonstrating how CO_2 emissions will be minimised with an aim of zero carbon emissions, through energy efficiency, renewable energy and contributing to low and zero carbon decentralised energy infrastructure.'

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Policy C2 District centres states the following:

'New development should deliver improvements to the quality and accessibility of the centre environment. Opportunities should be taken to adopt sustainable building design and practices to assist in adapting to climate change.'

Policy EN 4 Reducing CO_2 Emissions by Enabling Low and Zero Carbon Development states the following:

'*The Council will seek to reduce fuel poverty and decouple growth in the economy, growth in CO_2 emissions, and rising fossil fuel prices, through the following actions:*

- *All development must follow the principle of the Energy Hierarchy, being designed;*
    - *to reduce the need for energy through design features that provide passive heating, natural lighting and cooling;*
    - to reduce *the need for energy through energy efficient features such as improved insulation and glazing; and*
    - *to meet residual energy requirements through the use of low or zero carbon energy generating technologies.*
- *Wherever possible new development and retrofit projects, including energy generation plant, must be located and designed in a manner that allows advantage to be taken of opportunities for low and zero carbon energy supplies;*
- *Where possible new development and retrofit projects will be used as a mechanism to help improve energy efficiency and provide low and zero carbon energy supplies to existing buildings;*
- *Where appropriate new development and retrofit projects will be required to connect to and/or make contributions to low or zero carbon energy schemes and/or to incorporate provision to enable future connection to any existing/potential decentralised energy schemes; and*
- *The use of building materials with low embodied carbon in new development and refurbishment schemes.'*

Policy EN 6: Target Framework for CO_2 reductions from low or zero carbon energy supplies states the following:

'Applications for residential development of 10 or more units and all other development over 1,000 sq m will be expected as a minimum to meet the target shown in Tables 12.1 and 12.2, unless this can be shown not to be viable. This should be demonstrated through an energy statement, submitted as part of the Design and Access Statement. Such a statement will be expected to set out the projected regulated energy demand and associated CO_2 emissions for all phases of the development.'

Following the adoption of the PfE Joint Development Plan document in 2024, 'Tables 12.1' and '12.2' have been replaced by the strategies outlined in PfE Policy JP-S2 (see section 2.2.4) and have not been included within this report.

Policy EN 6 also states: 'The energy statement will be required to be submitted at the outset of any proposed development (outline application or before). Developers will be permitted to use green infrastructure elements such as green roofs, green walls, street trees and waterways to contribute to compliance with CO_2 mitigation, subject to the energy statement incorporating evidence such as modelling to demonstrate compliance.'

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Policy EN 8 Adaptation to Climate Change states the following

'Developers will be permitted to use green infrastructure elements such as green roofs, green walls, street trees and waterways to contribute to compliance with CO_2 mitigation under Policy EN 6, subject to sufficient evidence to quantify their contribution to compliance.'

Manchester City Council Climate Change Action Plan 2020 – 2025

The Manchester City Council (MCC) Climate Change Action Plan sets out MCC's commitments to tackling climate change from 2020-2025 and builds on previous plans over the last decade.

It summarises the specific actions which are required to ensure that MCC reduces its direct emissions by at least 50% by 2025 (compared to 2019/20) whilst also playing its full part in supporting and influencing the city to do the same.

The purpose of the plan is as follows:

"The document sets out MCC's commitments to tackling climate change over the next 5 years and builds on previous action plans over the last decade; and

It covers MCC's plans for adapting to the expected impacts of climate change and supporting and influencing others, including through the implementation of the Manchester Green and Blue Infrastructure Strategy 2015-2025"

Specific commitments that MCC are making are:

- *'Deliver at least a 50% reduction in carbon emissions from our buildings, energy and transport by 2025 (from circa 30-32,000 tonnes in 2019/20 to circa 15-16,000 tonnes in 2024/25) via a 13% year on year reduction;*
- *Report quarterly on progress against the actions in the plan and provide quantitative reports on data in tonnes of CO_2; and*
- *Become zero carbon by 2038 at the latest (based on the Tyndall Centre for Climate Research definition of zero which is at least a 95% reduction i.e., a reduction of 35,547 tonnes CO_2 from the 2018/19 total which would mean that the Council's direct emissions in 2037/38 would be less than 1,871 tonnes CO_2).'*

The plan states the following in relation to citywide emissions:

'The Council also recognises the importance of supporting and influencing our residents and organisations to take action to reduce their direct and indirect CO_2 emissions and to adapt to the changing climate.'

In 2022, the Action Plan was refreshed to '*show progress made to date, set out new milestones and include new actions, to ensure the Council is remaining on track in reducing its own carbon emissions and importantly, leading by example, giving renewed focus on the City-wide actions, the Council's leadership role, and helping others to take action'*.

Commitments stated in this revised version of the action plan include*:*

- '*Support building retrofit and energy generation across the city's buildings and ensure all future development across the city is as close to zero carbon as possible.';*
- *'To support external stakeholders to adopt more sustainable practices, including food and reducing the use of Single Use Plastics on Council land.';*

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- *'Ensure that the city's infrastructure is resilient to climate change and that nature-based solutions are used to combat issues such as flooding. Develop an intelligence led approach to tree and hedge planting, and the implementation of Nature Based Solutions to support the delivery of the Green and Blue Infrastructure Strategy.'; and*
- *'Ensure that everyone across the city understands the scale of the challenge, they are positively engaged, empowered and supported in taking action to reduce emissions and increase resilience across the city.'*

Manchester Climate Change Framework 2020 – 2025

Produced by the Manchester Climate Change Partnership, the Manchester Climate Change Framework 2020-2025 is the city's high-level strategy for tackling climate change. It sets out how Manchester will 'play its full part in limiting the impacts of climate change'.

The objectives and targets include:

- '*Staying within our carbon budgets';*
- *'Climate adaptation and resilience'; and*
- *'Inclusive*, zero carbon and climate resilient economy.'

Areas for action to meet the objectives and targets include:

- *'Buildings (existing and new);*
- *Renewable energy; and*
- *Green infrastructure and nature-based solutions'*

In 2022, the Manchester Climate Change Framework was updated as '*Manchester has not been reducing its direct emissions by the targeted 13% per year and so we are not currently on track to stay within our carbon budget and are at risk of missing our first milestone: to reduce the city's direct emissions by 50% by 2025.'*

The updated framework summarises the actions MCC is committing to in response to this, including:

- *'We need to construct new buildings to high and rising standards of low carbon performance, covering operational and embodied energy';*
- *'We need to see a rapid shift away from fossil fuels to electricity for heating, transport, and industry. To support this, we need to increase renewable energy generation, both locally and at national level.';*
- *'This needs to be coupled with a step change in energy efficiency across all sectors, and increase adoption of smart grid technologies and local storage to balance energy supply and demand for maximum efficiency';*
- *'We need to reduce waste, including unnecessary food waste, and manage unavoidable waste as sustainably as possible, maximising reusing and recycling';*
- *'We need to understand our exposure to climate change risk and make detailed plans that support all our residents, and all parts of our city, its economy and natural environment to adapt'; and*
- *'We need to ensure all the investments we make are low carbon and resilient to climate change and we need to develop innovative models to unlock private investment into both climate mitigation and adaptation.'*

Guidance

IEMA EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance 2nd Edition (Institute of Environmental Management and Assessment (IEMA), 2022)

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This is the second edition of the IEMA EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance, published in 2022, which replaces the previous edition, published in 2017. The guidance sets out a best practice methodology for assessing the GHG emissions from a proposed development, across its lifecycle, including the assessment of effect significance.

The guidance document advises that 'GHG emissions should be assessed and reported as part of a good practice approach to EIA.' It provides the following justification for this position:

- *'All projects create GHG emissions that contribute to climate change';*
- *'climate change has the potential to lead to significant environmental effects'; and*
- *'there is a GHG emission budget that defines a level of dangerous climate change whereby any GHG emissions within that budget can be considered as significant'*.

The document states that the following factors should be considered when determining a proportionate approach to the assessment of GHG emissions in EIA:

- *'The type, size, location and temporal scale of the proposed project;*
- *Whether other assessment work has already considered life cycle GHG emissions;*
- *Whether mitigation has already been agreed with the design team, particularly if this is beyond minimum policy requirements;*
- *Whether the proposed project has specific goals or aspirations (e.g. achieving BREEAM certification)'*

One of the major updates in this version of the guidance is that the recommended methodology now gives greater prominence to the consideration of mitigation in the assessment. It is no longer an element to be considered in the later stages of the EIA process but should rather be considered at the outset and throughout the project's lifetime. The approach to the assessment of effect significance now also includes a consideration of mitigation at its core.

RIBA 2030 Climate Challenge (Royal Institute of British Architects (RIBA), 2021)

This guidance provides voluntary performance targets for operational energy use, water use and embodied carbon aligning with the UK's 2050 Net Zero aspirations. It 'has set RIBA Chartered Practices a challenge of achieving the following reductions as soon as possible but as a minimum for projects in operation in 2030':

- *'Reduce operational energy demand by at least 60% from current business as usual baseline figures, before offsetting';*
- *'Reduce embodied carbon by at least 40% from current business as usual baseline figures, before offsetting';*
- *'Reduce potable water use by at least 40% from CIRIA benchmark/ Building Regulation figures'; and*
- *'Achieve all core health and wellbeing metrics'*.

BS EN 15978 Sustainability of Construction Works – Assessment of Environmental Performance and Buildings – Calculation Method (British Standards Institution (BSI), 2024)

The purpose of this standard is to provide a consistent framework for the assessment of lifecycle GHG emissions from new and existing buildings. This follows a modular approach, breaking down the lifecycle of the development into the product stage, the construction stage, the in-use stage, the end-of-life stage, and elements beyond the building lifecycle.

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Royal Institution of Chartered Surveyors (RICS) Whole Life Carbon Assessment for the Built Environment 2nd edition (RICS, 2023)

This guidance document aims to harmonise whole life carbon assessment by applying consistency to the interpretation and implementation of the methodology BS EN 15978 to achieve coherent and comparable results that can be used to benchmark whole lifecycle carbon performance of built assets across the industry.

UK Green Building Council (UKGBC) Embodied Carbon: Developing a Carbon Brief (UKGBC, 2017)

This document provides guidance on writing effective briefs for commissioning embodied carbon measurements and provides extensive information on the latest applications, standards and tools.

Waste and Resource Action Programme (WRAP) Cutting Embodied Carbon in Construction Projects (WRAP, 2011a)

This guidance document helps designers identify basic cost-effective actions to reduce the carbon impact of the materials used in construction projects.

WRAP Procurement Requirements for Carbon Efficiency (WRAP, 2011b)

This guidance document helps to set requirements for 'carbon efficiency' for low-carbon building projects and estates management when procuring design, construction, refurbishment and facilities management services for existing and new buildings.

Greater London Authority Construction Scope 3 (Embodied) Guidance on Greenhouse Gas Accounting and Reporting (GLA, 2013)

Although the Proposed Development is not located in London, this accounting and reporting guidance written for the Greater London Authority provides information on best practice that is relevant across the UK. The guidance contains a series of recommendations to improve the understanding and consistency of the accounting and reporting of embodied emissions within the construction sector from cradle-to-grave. The document provides guidance on how to carry out calculations to measure the embodied carbon impact of buildings.

Mayor of London Whole Life-Cycle Carbon Assessments Guidance (GLA, 2022)

Draft London Plan Policy SI 2 sets out a requirement for developments in London to calculate and reduce whole lifecycle carbon emissions. The guidance explains how the assessment of these carbon emissions should be approached and presented. Although the Proposed Development is not located in London, the best practice approach set out in the guidance is relevant across the UK.

Low Energy Transformation Initiative (LETI) Embodied Carbon Primer (LETI, 2020).

The Embodied Carbon Primer offers supplementary guidance to that already set out in the Climate Emergency Design Guide, for those exploring embodied carbon in more detail. There is a current lack of knowledge in the built environment industry surrounding embodied carbon reduction strategies and calculations. Therefore, the London Energy Transformation Initiative has produced this document to help project teams design buildings that deliver ambitious embodied carbon reductions. Although the Proposed Development is not located in London, the best practice approach set out in the guidance is relevant across the UK.

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LETI Climate Emergency Design Guide (2020)

The Climate Emergency Design Guide provides developers, designers and policy makers with a methodology to ensure that new developments meet the requirement of climate targets. It covers five key areas: operational energy, embodied carbon, the future of heat, demand response and data disclosure.

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