

Reduction of Carbon in New Development Supplementary Planning Document

Consultant Brief

Introduction

Tenders are invited to undertake a study focussed on the progression of a Reduction of Carbon in New Development Supplementary Planning Document, ensuring that targets relating to Carbon Dioxide (CO₂) emissions reduction are robust and viable. **This document sets out the Specification Brief for the tender.**

Objectives of the Commission

Nottingham City Council (NCC) is committed to building on the recently adopted 'Reducing Carbon in New Development' Informal Planning Policy Guidance and wishes to appoint consultants to advise on the content and targets to be included in the forthcoming 'Reducing Carbon in New Development' Supplementary Planning Document (SPD). The objective is to provide up to date advice in order to support the City's ambitions to be carbon neutral by 2028.

The SPD will tie in with the Government's Future Buildings Standard (FBS) and Future Homes Standard (FHS), and clarify the role of planning policy in securing CO₂ emissions savings primarily associated with the 'fabric first' approach. It will also elevate relevant parts of the NCC Design Quality Framework to SPD status. It will bring together local and national best practice together with case studies that help illustrate practical interventions as part of the development management process. The SPD will be ambitious, building on the current adopted policies, and inform the direction of future policies, consistent with a net zero CO₂ emissions future, limiting global temperature rises, mitigating the damaging impacts of climate change and limiting biodiversity loss.

The commission will be in two stages:

Stage 1 will establish the scope of the SPD and provide recommendations to the Council on preferred options and the resource implications of each of these.

On City Council agreement of a preferred option, the consultants will then proceed to Stage 2, drafting the SPD.

Background to the Commission

2028 Carbon Neutral Action Plan

Nottingham City Council has made the commitment to become a carbon neutral city by 2028. This means cutting carbon dioxide (CO₂) emissions from direct and indirect sources that arise from the consumption of energy within the city to near zero and offsetting those emissions that cannot be eliminated.

The action plan builds on a Nottingham 2028 Carbon Neutral Charter setting out high-level objectives in order to achieve a resilient and carbon neutral Nottingham by 2028. These are broken down into four main sections: Carbon Reduction Measures,

Carbon Removal and Offsetting, Resilience and Adaptation, Ecology and Biodiversity.

Local Policy Response to Climate Change

Nottingham's Local Plan comprises three parts; the Aligned Core Strategies: Part 1 Local Plan (2014), the Land and Planning Policies Document (LAPP): Part 2 Local Plan (2020) and the Waste Core Strategy (2013).

The Local Plans were prepared prior to the Carbon Neutral Charter however many policies focus on tackling climate change in line with the NPPF. Policy 1 of the Core Strategy seeks to promote sustainable design and reduce carbon dioxide emissions. It implements an energy hierarchy, which applies a fabric first approach, followed by a requirement to use energy efficient supplies (such as connection to heat or power networks), and maximise the use of renewable and low carbon energy generating systems. It does not prescribe targets relating to energy performance in new development but seeks to secure sustainable design features to maximise resilience and adaptation to climate change. More specifically, it encourages developers to produce energy statements in support of development as an effective way of demonstrating how development contributes to both mitigating the causes of climate change and adapting to its effects.

The LAPP relies on three main development management policies relating to Climate Change: Policy CC1: Sustainable Design and Construction, CC2: Decentralised Energy and Heat Networks and CC3: Water. Other LAPP policies are also of relevance and are referenced in the Informal Planning Guidance.

Adopted Informal Planning Guidance

The 'Reducing Carbon in New Development' Informal Planning Policy Guidance promotes a range of measures that developers can employ to reduce CO₂ emissions in their development proposals. These relate to energy efficiency, renewable energy and sustainable design and construction. It is intended that by requiring a Carbon Reduction/Energy Statement for all major planning applications significant reductions in CO₂ emissions will be achieved.

It formalises the City Council's approach and can help reduce city wide CO₂ emissions by requiring developers to demonstrate how their buildings use energy, and strongly promotes low CO₂ emissions methods as they relate to energy efficiency, renewable energy and sustainable design and construction.

The Informal Planning Policy Guidance supports the City Council's strategic policy and supporting Action Plan to achieve Carbon Neutrality by 2028. It provides further guidance on the policies of the Aligned Core Strategy and Land and Planning Policies Document (LAPP) and is a material consideration in the determination of planning applications. It advises on the range of measures possible to reduce CO₂ emissions in new residential and commercial development proposals and explains existing planning policies as contained in the Nottingham City Aligned Core Strategy (2014) and the Local Plan Part 2 (LAPP, 2020).

The Council requires a carbon reduction/energy statement to be submitted for all major planning applications. This should demonstrate that the energy use of the building (Regulated emissions, which include the energy consumed in the operation of the space heating/cooling and hot-water systems, ventilation, internal lighting) will be provided through low CO₂ emissions methods. It also strongly encourages this statement to address issues of embodied CO₂ in materials.

Nottingham City Design Quality Framework

The Nottingham Design Quality Framework, available at www.dqfnottingham.org.uk, provides information to designers, developers and applicants on early stage considerations and design measures to help reduce the carbon footprint of their proposals. Primarily, it promotes passive design principles early on in the design process. It encourages applicants to demonstrate how they address CO₂ emissions reduction and climate change adaptation through design. This can be achieved by adding a section on carbon neutrality in the Design and Access Statement, or as a separate document supporting the planning application.

The Design Quality Framework also encourages the use of the Carbon Neutral Review Panel, and gives information about the operation of this design support mechanism.

Methodology

The Council will require a justified methodology for deriving targets based on current best practice associated with energy efficiency in the fabric of new development as well as emerging standards. The methodology should take into account: exemplar CO₂ emissions reduction guidance, policies, and SPDs in the UK including matrices/calculators being used; existing and emerging government targets, and the likely impacts of rising build costs and associated viability. It should also explore how any proposed targets can be monitored/assessed.

Requirements of the Commission

Consultants should:

- Recommend and agree a methodology for the commission,
- Focus on building structures, fabric and energy in order for the SPD to sit alongside the Informal Planning Guidance rather than replicate it.
- Use Plain English that it is easily understood by all users of the planning system as well as appropriate graphics and illustrations.
- Recommend relevant parts of the Council's Design Quality Framework to be elevated to SPD status.
- Be clearly linked to existing Council Local Plan policies.
- Take account of the government's FHS and FBS.

- Explore the potential to include targets relating to reduction of operational CO₂ emissions in new development to move towards Net Zero and advise on the refinement of the relevant questions in the checklist currently used informally by Development Management.
- Advise on appropriate targets for new developments in order to move towards Net Zero CO₂ emissions through energy efficiency, low CO₂ emissions heating and renewable energy generation,
- Recommend appropriate measurable targets e.g. kWh/m² per year for housing, commercial development and changes of use and a carbon intensity target for new buildings e.g. kgCO₂e/m²
- Explore the merits of including the influences on energy demand in new development in the SPD, such as; site and orientation, window design, form, building fabric, materials and detailing and ventilation. Space heating demand, choice of heating system, ventilation system, lighting, cooking, appliances and equipment. Providing examples of best practice in relation to these.
- Advise on effective ways in which developers can demonstrate that they meet the targets e.g. PassivHaus planning package.
- Set realistic recommendations of the study in the context of development viability in Nottingham.
- Provide a narrative on the carbon neutral aspirations of the Council and how the recommended targets will contribute to the 2028 ambition.
- Explore issues of local viability as opposed to national and advise on how viability differs for different uses – residential, commercial and change of use.
- Engage with stakeholders in shaping the SPD, hosting a workshop and providing a written record of comments made. (stakeholders to be agreed with NCC)
- Explain how the SPD delivers social sustainability outcomes through the process, please refer to: www.dqfnottingham.org.uk/social-value

Outputs for the commission

Stage 1

A draft report of recommendations/options including a preferred option for the scope, content and targets to be included in the SPD and the resource implications in terms of full time/part time posts etc. for each of the options. This is to include advice on how any proposed targets could be monitored/assessed.

A final report to include assessments and conclusions.

Electronic versions of the final report and all appendices. These should meet the government's accessibility standards.

A presentation of the report, by the consultants, to an appropriate grouping of officers and councillors, (it will be confirmed whether or not this could be a virtual session).

Stage 2

An initial draft SPD

A final report of evidence to support the basis of all assumptions in respect of targets and viability and the limitations of the work. This is to include advice on how any proposed targets could be monitored/assessed.

A final draft SPD on which the Council can undertake a statutory six week consultation.

Electronic/word versions of the final report and all appendices. These should meet the government's accessibility standards.

A presentation of the SPD by the consultants, to an appropriate grouping of officers and members, as well as all engaged stakeholders in a dedicated consultation event and provide written records of these events (the stakeholders are to be agreed with NCC and it will be confirmed whether or not these could be a virtual session).

Selection Process

Details of procurement process

Timescales for Completion of the two stages of the Study

September	Invitation to tender/shortlist	3 weeks	
October	Select and appoint consultant	2 weeks	
End of November	Completion of Stage 1	6 weeks	
February 23	Completion of SPD	12 weeks	
March 23	Formal consultation*	6 weeks	
April **	Amend SPD following consultation	2 weeks	

* NCC to lead consultation. Consultants to facilitate workshop and provide a written record of attendees/comments.

** In addition to the tasks detailed above, NCC would like consultants to offer an hourly rate for amending the SPD in response to technical representations made during the formal consultation.

Working Arrangements

Provide a readily accessible point of contact from the consultant team etc.
Fortnightly updates.

APPENDIX 1 - Planning Policy Context

National legislation, Planning Policy and Practice

Section 19 of the Planning and Compulsory Purchase Act 2004 requires Local Planning Authorities (LPAs) to include Local Plan policies ensure that development and use of land contributes to the mitigation of, and adaptation to, climate change. The Planning and Energy Act 2008 allows LPAs to set energy efficient standards in their development plans policies that exceed the energy efficiency requirements of the building regulations. Such policies must not be inconsistent with relevant national policies for England.

The National Planning Policy Framework (2021) (NPPF) sets out national requirements for planning and climate change. LPAs are required to adopt proactive strategies to adapt to and mitigate against the impacts of climate change. Government Planning Practice Guidance advises how suitable mitigation and adaptation measures can be implemented in the planning process in order to address the impacts of climate change.

Local Policy Response to Climate Change

Nottingham's Local Plan comprises three parts; the Aligned Core Strategies: Part 1 Local Plan (2014), the Land and Planning Policies Document (LAPP): Part 2 Local Plan (2020) and the Waste Core Strategy (2013).

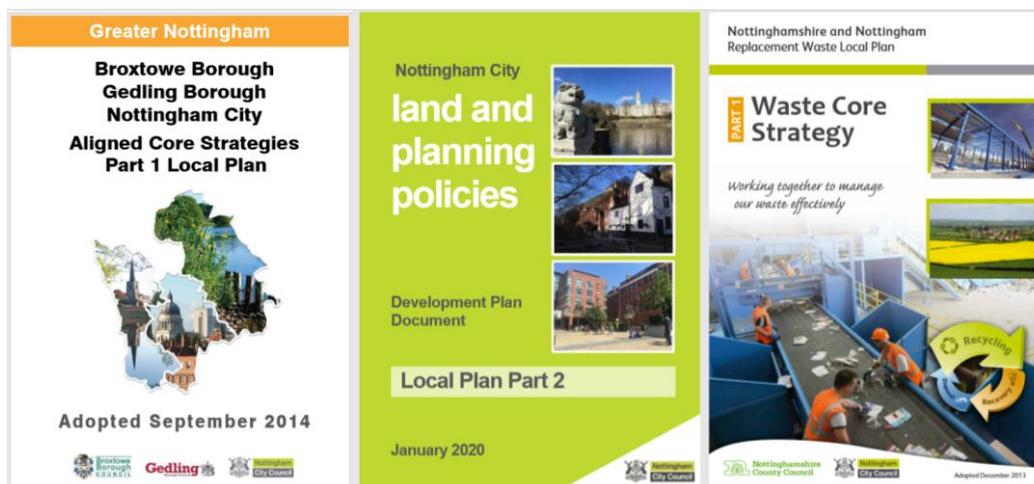


Figure 1: Nottingham City Council Adopted Local Plan documents

The Local Plan policies lead with sustainability in line with the NPPF and its presumption in favour of sustainable development. Policy 1 of the Core Strategy seeks to reduce CO₂ emissions by implementing an energy hierarchy, which applies a fabric first approach, followed by a requirement to use energy efficient supplies (such as connection to heat or power networks, and finally the need to maximise the use of renewable and low CO₂ emissions energy generating systems. It does not prescribe requirements relating to energy performance in new dwellings but seeks to

secure sustainable design features to maximise resilience and adaptation to climate change. However, for new non-domestic buildings Policy CC1 of the LAPP requires sustainable construction standards which also include energy performance standards.

The LAPP relies on three main development management policies relating to Climate Change: Policy CC1: Sustainable Design and Construction, CC2: Decentralised Energy and Heat Networks and CC3: Water.

All the Local Plan policies offer general advice and guidelines in relation to sustainable development and Policy 1 specifically encourages developers to produce energy statements in support of development as an effective way of demonstrating how development contributes to both mitigating the causes of climate change and adapting to its effects.

Insert link to Aligned Core Strategies

Insert link to LAPP

APPENDIX 2 - The Fabric First approach

The SPD is intended to promote a 'fabric first' approach to building design which involves maximising the performance of the components and materials that make up the building fabric itself, before considering the use of mechanical or electrical building services systems.

It is considered that this can help reduce capital and operational costs, improve energy efficiency and reduce CO₂ emissions. A fabric first method can also reduce the need for maintenance during the building's life.

Buildings designed and constructed using the fabric first approach aim to minimise the need for energy consumption through methods such as:

- Maximising air-tightness
- Using Super-high insulation
- Optimising solar gain through the provision of openings and shading
- Optimising natural ventilation
- Using the thermal mass of the building fabric
- Using energy from occupants, electronic devices, cookers and so on

The Council considers that focusing on the building fabric first, is more sustainable than relying on energy saving technology, or renewable energy generation, which can be expensive, can have a high embodied energy and may or may not be used efficiently by the consumer. Having energy efficiency integrated into the building envelope can mean occupants are required to do less to operate their building and not have to adjust their habits or learn about new technologies. This can result in less reliance on the end user regarding the buildings energy efficiency. Fabric first building systems can be constructed off site, resulting in higher quality and so better performance, reduced labour costs and an increased speed of build.

APPENDIX 3 – Further Information

Insert link to Carbon Neutral Action Plan

**Insert link to Reduction of Carbon in New Development Informal Planning
Guidance**