



Warwick District Council NZC DPD Supplementary Planning Document Scoping

Warwick District

Prepared for: Warwick District Council

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1 Introduction and Overview

1.1 This scoping document sets out the expected scope of supplementary planning document to assist the implementation of the Net Zero Carbon DPD. It provides an update to the scoping document presented as Appendix 1 to the Council's Matter 2 Examination Statement and takes into account the comments and actions arising from the Examination Hearings as set out in the Inspector's Post Hearing Letter (EXAM 12).

1.2 It is envisaged that to assist the implementation of the DPD the Council will prepare supplementary guidance addressing the following matters:

- Requirements of an energy statement - this will take the form of an Energy Statement Pro Forma with the intention that this will be included in the Council's Validation List (Section 2 below);
- Supplementary Planning Document to aid and assist applicants to demonstrate compliance with the policies, and aid decision makers to assess applications against the DPD. Including:
 - NCZ1 including; further guidance on Passivhaus and PHPP calculations, the required quality assurance checks and recommended quality assurance methods including BS40101
 - NCZ 2(A) including; notional building specification to comply with policy, U values and air tightness values, and consideration to other factors effecting efficiency
 - NZC2(B) including; acceptable forms of low carbon and renewable technologies, design considerations to help guide applicants and advise planners on whether an optimal system selection has been made, including larger scale district heating
 - NZC2(C) including; detail of WDC Carbon Offsetting fund and WESTP
 - NZC3 including; further guidance on embodied carbon assessments
 - NZC4 including; a general introduction to measures applicants can consider and signposting to guidance.

2 Energy Statement Pro Forma

Policy NZC1 states that: *New developments of one or more dwellings (C3 or C4 use class) and/or 1,000sqm or more of new non-residential floorspace, hotels (C1) or residential institutions (C2 use class) will be required to submit an **Energy Statement**.*

Section 1 – Application Types

2.1 The Energy Statement Pro Forma needs to guide applicants to what information is required for the type of application they are applying for. Therefore, the first section of the Energy Statement Pro Forma will include application types and information requirements.

2.2 The Application types covered by the DPD policies include:

- Outline
- Reserved Matters
- Full
- S73
- Householder - only NZC4
- LBC - only NZC4

Section 2 – Detailed Information & Calculations

2.3 The Energy Statement will be expected to include more detailed technical information to comply with the energy efficiency and carbon emission reduction requirements of the suite of policies within the DPD.

2.4 The Energy Statement should include an Executive Summary outlining the following information:

Table 1: Energy Statement Summary		
Target Emission Rate kgCO ₂ /m ² /yr.	Building Emission Rate kgCO ₂ /m ² /yr.	% Reduction in CO ₂ Emissions

2.5 An Energy Statement should comply with Net Zero Carbon DPD policies, and include presentation of data against the policies. See Table 2 for details.

2.6 In the event that full compliance with NZC DPD policies is not feasible or viable, the Energy Statement must demonstrate that carbon reductions have been considered and incorporated to the greatest extent through the application of the energy hierarchy, and the applicant would be required to submit a financial viability assessment to demonstrate why the policy requirement could not be met.

2.7 Table 2 below outlines the sections and information to be covered in the Energy Statement Pro Forma.

Table 2: Scope of detailed information within the Energy Statement	
Details of the proposed development	<p>Details of the proposed development must include:</p> <ul style="list-style-type: none"> • Location of the development • Description of the development. • Number of buildings • Proposed Use of Building (Use Class) • Gross internal floor area (square metres) • Primary (and secondary heating). <ul style="list-style-type: none"> • Heating split. This is the percentage split (in energy use — kWh/annum) between the two heating fuels. (Only required where more than one heating fuel is to be used).
NZC1 The overall % carbon emissions reduction against Building Regulations reported in Target Emission Rate (TER) and Dwelling Emission Rate (DER) / Building Emission Rate (BER)	
Predicted regulated carbon reduction measures (over and above the Building Regulations)	<p>Expressed as:</p> <ul style="list-style-type: none"> • Target Emission Rate (TER)* • Dwelling Emission Rate (DER) / Building Emission Rate (BER) • Overall % Reduction in CO₂ emissions <p>*Based on the relevant version of Building Regulations Part L as outlined in policy NZC1.</p> <p>These figures should be obtained from calculations using either SAP (the Standard Assessment Procedure for domestic buildings) or SBEM (the Simplified Building Energy Model for non-domestic buildings)</p>
<u>ENERGY HIERARCHY STAGE 1</u>	
NZC2(A): % improvement of energy efficiency against Building Regulations	
Energy Efficiency Measures (over and above the building regulations requirements)	<p>Details about each measure should be included, (including the resulting predicted energy savings in kWh/m²/annum - Fabric Energy Efficiency in the case of residential).</p> <p>Energy Efficiency measures / materials to consider (all should be presented in terms of the proposed building value compared to the notional building value in Part L):</p>

	<ul style="list-style-type: none"> • External wall insulation (U-value) • Floor insulation (U-value) • Roof insulation (U-value) • Doors (U-value) • Glazing (U-value and glazing ratio) • Air permeability (m³/(h·m²) at 50 Pa) • Fixed appliances; heating, hot water, cooling and lighting <p>And consideration of:</p> <ul style="list-style-type: none"> • Optimising solar gain (while avoiding overheating risk and thus the need for active cooling) • Building form and layout • Natural ventilation • Thermal bridging <p><u>Expressed as:</u></p> <p>Residential:</p> <ul style="list-style-type: none"> • Dwelling Fabric Energy Efficiency (DFEE) after the proposed improvements have been applied • DFEE as a % improvement on TFEE (Target Fabric Energy Efficiency) <p>Non-residential:</p> <ul style="list-style-type: none"> • BER after all energy efficiency improvements (including fabric) have been applied in pursuit of NZC2(A), excluding any renewable/low carbon energy measures • BER % improvement on TER as a result of energy efficiency improvements, excluding any renewable energy measures • Optional: Building Primary Energy Rate as a % improvement on Part L Target Primary Energy Rate.
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ENERGY HIERARCHY STAGE 2

NZC2(B): kWh of energy generated onsite through zero or low carbon energy sources, and regulated carbon emissions reduction as a result of this

<p>Choosing/Discounting a renewable/low carbon energy technology</p>	<p>An assessment of renewable and low carbon technologies.</p> <p>Information on each technology and why one is chosen above the other should be provided. A summary of low or zero carbon technologies is provided in Table 3 in the following section.</p> <p>Information to be provided for each technology is provided in the supplementary guidance.</p>
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	<p>Where it is considered that renewable or low energy technology cannot be provided in the development a clear explanation should be provided along with a viability and feasibility assessment.</p>
<p>Renewable and Low Carbon Energy Technologies</p>	<p>Details on renewable and low carbon technologies employed. This should include specification for each technology and carbon mitigated by each approach</p> <ul style="list-style-type: none"> • System design; size, orientation • Energy generation (approx) kWh/annum • Carbon factor of alternate energy source <hr/> <p><u>Expressed as:</u></p> <ul style="list-style-type: none"> • BER or DER after energy efficiency measures (NZC2(A) have been applied. • BER or DER after renewable and low carbon energy measures towards NZC2(B) have been applied, <i>subsequent to the improvement made by measures under NZC2(A).</i> • Actual % improvement on TER as a result of renewable and low carbon energy measures
<p><u>ENERGY HIERARCHY STAGE 3</u></p> <p>NZC2(C): residual carbon emissions are offset</p>	
	<p>Offsetting calculated in accordance with NZC2(C) and paragraphs 8.2 & 8.3.</p> <hr/> <p><u>Expressed as:</u></p> <ul style="list-style-type: none"> • Actual BER or DER after all on-site measures have been applied; • Actual % improvement on TER after all on-site measures have been applied; • Residual regulated CO₂ emissions per annum multiplied over 30 years (with option to take into account BEIS projected grid carbon reductions if the development is all-electric, with calculations transparently shown): <ul style="list-style-type: none"> • Per m² of development; and • Total across the whole development. • CO₂ emissions x BEIS carbon value; • If the option is taken for all-electric developments to take into account future grid carbon reductions, then the increased BEIS carbon £value should also be used for each respective year; and • Final Offset Figure - £

	<p><i>Please note that all emission figures should express CO₂ in tonnes, and not kg.</i></p>
<p>NZC3: embodied carbon assessment; consideration and reduction of embodied carbon</p>	
	<p>All major development proposals should, as applicable by use type, include reference to:</p> <ul style="list-style-type: none"> • RICS Whole-Life Carbon Assessment for the Built Environment. Modules: A1 – A5 (material production through to completion) (applicable to any use type); or • BREEAM assessment (Mat 01 LCA, and narrative on any other targeted Mat credits that could affect embodied carbon); or • HQM pre-assessment with reference to BRE Green Guide <p>Super major schemes:</p> <ul style="list-style-type: none"> • RICS Whole-Life Carbon Assessment for the Built Environment. Modules: A1 – A5 (material production through to completion), B1 – B7 (in use – e.g. refurbishment and maintenance), and C1 – C4 (end of life). <p>Any similar whole life carbon assessment – to be agreed with the local authority.</p> <p>If the applicant is submitting the whole carbon assessment that is not recommended through the supplementary document, then it will have to be independently reviewed by independent consultants. The applicant will be required to meet the costs associated with that review.</p>
<p>NZC4: applications relating to existing buildings are required to consider low/zero carbon assessment; alternatives to conventional fossil fuel boilers.</p>	
	<p>Link to requirement of CC1.</p> <p>In addition to this information, consideration of the alternatives to conventional fossil fuel boilers must be provided.</p> <p>Furthermore, additional information on proposed interventions to the existing building that would relate to operational energy and carbon performance, and the results achieved by these (quantified as far as possible) should be included.</p> <p>Information on low or zero carbon technologies is set out in the supplementary planning document.</p>

NZC DPD Supplementary Planning Document

2.8 It is intended that the Supplementary Document's format will follow the same structure as the Energy Pro Forma so information can be cross referenced easily.

2.9 This will include the following Sections.

NZC1

2.10 Including:

- A brief description of how the % reductions sought by Policy NZC1 can be achieved with cross reference to guidance under NZC2A and NZC2B;
- A brief description of the Future Homes Specification and how it can be achieved for residential dwellings (i.e notional building specification);
- A brief description on how the policy can be achieved for non-residential development – i.e. upgrading insulation and energy efficient lighting and fittings;
- Further guidance on Passivhaus and PHPP calculations;
- Further guidance on the required quality assurance checks referenced in paragraph 5.8 of the DPD;
- Further guidance on recommended quality assurance methods as referenced in paragraph 5.9 of the DPD and inclusion of BS40101.

NCZ2(A)

2.11 Including:

- An introduction to the importance of fabric efficiency in securing reductions in carbon emissions;
- Provide a notional building specification to illustrate how a building could comply with the policy;
- Details of U values and air tightness values which are considered to align with Future Homes Standard;
- Details on other factors effecting efficiency including; building form and layout.

NZC2(B)

2.12 Including

- Acceptable forms of low carbon and renewable technologies as listed in Table 3;
- Design considerations to help guide applicants, planning officers and decision makers on whether an optimal system selection has been made, including larger scale district heating.

Table 3: Low/Zero Carbon technologies	
<p>Efficient energy supply and low carbon heating</p> <p><i>(reduction of reliance on fossil fuel technologies and move away from gas boilers, for both space heat and hot water)</i></p> <p>This list is not exhaustive</p>	<ul style="list-style-type: none"> • Air source heat pumps • Ground/ water source heat pumps • Domestic hot water thermal storage • Heat recovery (MVHR, WWHR) • Direct electric/panel heating • Energy storage – electrical batteries, heat batteries • District heat powered by recycled heat, heat pumps, or CHP (not fossil gas powered) • Biomass heat (less preferred; only in specific limited circumstances)
<p>Renewable electricity generation types</p> <p>This list is not exhaustive</p>	<ul style="list-style-type: none"> • Photovoltaic (PV) panels • Solar thermal • CHP (not fossil gas powered) • Biomass • Wind power • Hydro power

NZC2(C)

2.13 Including:

- Detail of Warwick District Council Carbon Offsetting fund and link with the Warwickshire Ecosystem Services Trading Protocol (WESTP) operated by Warwickshire County Council as the initial preferred offsetting mechanism;
- Details of WESTP and how nature based carbon offsetting solutions are sought, secured and monitoring;
- Guidance on acceptable alternative verified local off-site offsetting schemes and the relationship with WESTP.

NZC3

2.14 Including:

- Provide examples of typical materials and guidance on low carbon alternatives;
- Further guidance on whole life embodied carbon assessment methodologies;
- Guidance on the level of detail expected with different types of application (i.e. full, outline, reserved matters).

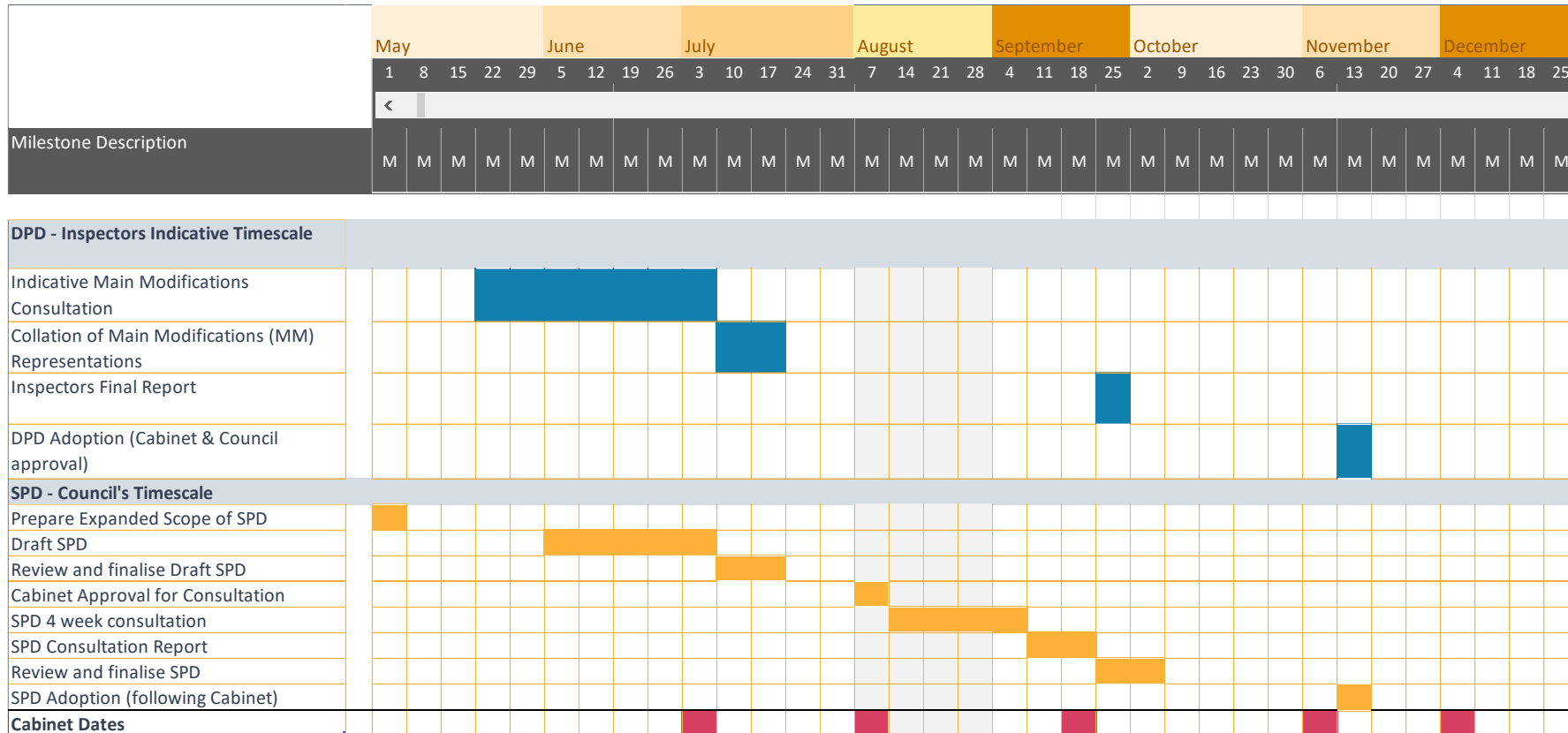
NZC4

2.15 Including:

- Guidance on general measures applicants can consider and signposting to guidance, including:
 - [LETI Climate Emergency Retrofit Guide](#) (LETI, 2021)
 - [Net Zero Carbon Toolkit](#) (Etude, Elementa, Passivhaus, Levitt Bernstein, 2021);
or
 - [Retrofit and Energy Efficiency in Historic Buildings](#) (Historic England, 2020)
- Detail low carbon heating sources which need to be considered to comply with the policy (as per table 3 under NZC2(B)).

3 Timescales

3.1 It is the Council's intention to prepare the Supplementary Planning Guidance, and undertake public consultation on the SPD to align with the adoption of the NZC DPD. Therefore, the Council is currently working to the following indicative timescales of the DPD examination as follows:



3.2 The formation, consultation and subsequent adoption of the SPD will have due regard to Warwick's Statement of Community Involvement and Town and County Planning (Local Planning) (England) Regulations 2012.