South Staffordshire Local Plan Regulation 19 Local Plan Representations

Representations on behalf of Miller Homes in respect of the Council's sustainability policies.

May 2024

Introduction

These representations have been prepared in response to South Staffordshire Council's Regulation 19 Local Plan consultation on behalf of Miller Homes with regards to the Council's Sustainability policies.

Miller Homes recognises the implications of climate change and has a proactive approach to design to ensure development mitigates and adapt to climate change. We support measures to reduce carbon emissions through both construction and operation and recognise the Council's ambition in setting policies which go beyond national requirements.

However, any specific requirements which go beyond the current Local Plan and national guidance need to be supported by an appropriate evidence base, including a viability assessment. In this context we have a number of concerns with regards to a number of requirements set out in the Council's sustainability policies. Our response to these policies is set out below.

Draft Policy NB6A: Net Zero New Built Residential Development (Operational Energy)

While we support the Council's ambition for delivery of net zero homes, we have some concerns over requirements of *Policy NB6A*.

Overarching Carbon Reduction

It is considered that any feasible and viable policy should be restricted to regulated energy only. As a housebuilder Miller Homes only has the ability to influence the regulated energy demand of homes through design and specification of materials and systems, and renewable energy technologies. The unregulated energy consumption, (often referred to as 'plug in load') of homes is ultimately the function of the residents' use of the building, which cannot be influenced by the developer and therefore the requirement on the developer to reduce or offset emissions from residents' unregulated energy use is not appropriate.

Post 2025 one of the greatest demands for unregulated energy in new homes will be to charge an electric vehicle. We consider it unreasonable to assume that a housebuilder could influence such demand or should effectively meet the cost of mitigating carbon from a resident charging their electric vehicle.

The FHS and FBS consultation[1] states, *'We consider that metrics which include unregulated loads are not a suitable because designers and housebuilders have little or no control over these end uses of energy'.*

Furthermore, points A2-A4 of the Policy refer to regulated energy only, therefore, in this context and to maintain consistency, any requirements which go beyond national standards should only relate to regulated energy.

Energy Efficiency

We agree with the Council's Policy requirement to achieve regulated carbon emissions reduction through energy efficiency features. However, any emissions reduction targets should be in line with the latest national standards, for example the forthcoming 2025 Future Homes Standards.

It is also important to note that as part of the FHS and FBS consultation from December 2023 the Government has reiterated its strategy to not set any specific energy performance targets at this time, instead focussing on improvements in carbon reduction.

In addition on December 13th the Government released a Written Ministerial Statement (WMS)[2] 'Local Energy Efficiency Standards Update', which sets out clarity on the development and application of local energy efficiency standards in the context of advancing national policy.

The WMS states, *'the Government does not expect plan-makers to set local energy efficiency standards for buildings that go beyond current or planned buildings regulations. The proliferation of multiple, local standards by local authority area can add further costs to building new homes by adding complexity and undermining economies of scale. 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.*

[1] https://www.gov.uk/government/consultations/the-future-homes-and-buildings-standards-2023-consultation/the-future-homes-and-buildings-standards-2023-consultation

[2] https://questions-statements.parliament.uk/written-statements/detail/2023-12-13/hcws123

- *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).'*

In this context we would recommend that the Policy is updated to only reference alignment with the 2025 Future Homes Standard requirements.

Renewable Energy Supply

We support the Policy's requirement on provision of renewable energy generation to help reduce carbon emissions. We would note that the FHS and FBS consultation includes requirements for the provision of Solar PV on new development from 2025. We are, however, cautious over a requirement to achieve a 100% reduction in TER via onsite generation.

The Options Appraisal to inform Policy NB6 prepared by Bioregional states that *'the prescriptive nature of such policies may not be applicable for all sites and can occasionally lead to the installation of inefficient onsite renewables. Some sites may not be able to meet a very high requirement for renewables, such as if they are overshadowed (meaning solar PV panels would not work well), or if it is a tall building where there is a larger amount of internal floor space demanding energy but a relatively smaller roof space for PV'.*

In addition, maximising the provision of renewable energy could lead to unintended consequences or contradictions in design. For example, where development aims to respond to the character of the local area maximising onsite generation would likely mean covering available roof space with Solar PV, precluding the provision of roof lights, dormer windows etc which would otherwise be part of the design aesthetic of the development.

With regards to the renewable energy target of 120kWh/yr/m^2 of building footprint we do not believe this is an achievable objective. For context below a worked example is included:

Example – 90m^2 three bedroom house
Footprint - 45m^2
Energy demand required (based on 120kWh/m^2/yr) – 5,400kWh/yr
Energy generated / kWp of Solar – 850 kWh/kWp
System size required– 6.4kWp
Area of PV /kWp – 5m^2/kWp
Area of PV required – 32m^2

As set out above, to meet this target, a typical three bedroom house would require around 32m^2 of PV. A typical three bedroom house has at most c.32m^2 of roof space,

reducing to c.24m^2 of available space when taking into account areas around the edge of the system. This is significantly less than the roof area available.

Other development types may include dormer windows, roof lights etc to provide a mix of design which is keeping with the design and character of the area, therefore, setting this best practice requirement will stifle design and the character of development.

In this context, we would recommend that the Policy wording here is updated to achieve net zero regulated carbon emissions where this is feasible and viable, in line with latest national policy requirements and the reference to the energy generation target is removed as it is technically note achievable.

Offsetting

We broadly support the addition of a mechanism to offset residual carbon emissions provided that the scope and cost of such a policy has been tested. We agree that offsetting payments should be linked to the Government's Green Book carbon pricing and should take account of grid decarbonisation.

However, we do have concerns that the policy refers to both regulated and unregulated emissions for the reasons outline above, therefore, we suggest that the Policy is amended to offsetting remaining regulated emissions only.

In addition, we do have concerns that a viability assessment for offsetting costs has not been undertaken due to the following reason set out in the Options Appraisal prepared by Bioregional: *'In the context of the South Staffordshire recommended offset approach for new residential development, offsetting does not need to be considered in viability assessments because the price set is equal to the cost of on-site measures and therefore does not represent an additional cost to the developer.'*

As set out above, the on-site measures only are unlikely to achieve net zero development, therefore, we consider Bioregional's conclusion inaccurate and a viability assessment for the cost of offsetting carbon has to be undertaken and included as part of the viability assessment for the Policy to be sound and deliverable.

Furthermore, the Policy needs to include reference to delivering the required carbon offset within a reasonable timeframe. The Council should set out its expectation on a timeframe for spending the funds collection. The National Planning Practice Guidance states, *'[S106] agreements should normally include clauses stating when and how the funds will be used by and allow for their return, after an agreed period of time, where they are not'* and, *'The Centre for Sustainable Energy notes that developers can ask for a refund of carbon offset payments that are unspent within 5 years.'* We would recommend the supporting text includes reference to the provision of a timeframe as above.

Post Occupancy Evaluation

We support the Council's requirement on monitoring and reporting energy use and renewable energy generation post-occupation, however, we are concerned over lack of clarity with regard to a sample size, which could potentially put a disproportionate burden on the housebuilder. As pointed out by the Options appraisal: *'the economy of scale would reduce the cost burden through sample testing only'*. We recommend that post-modelling is carried out on 10% of homes only as per the previous draft policy wording and recognised by the Council as *'a minimum sample size to gain knowledge on the performance of the development, whilst not being overly onerous on developers.'*

Viability

The viability of Policy NB6A is set out in the 'South Staffordshire Council Local Plan Review: Sustainable Construction Policy NB6, Task A, Rev 3.0', which notes that primary evidenced cost uplift data for South Staffordshire wasn't produced provides. Instead, cost uplifts are set based on the national and local government cost sources.

The evidence base includes FHS Impact Assessment 2019 and Currie & Brown (C&B) 2021 report for Cornwall Council's Development Plan Document Evidence Base. In addition, cost evidence bases for recent energy-based local plan policies in Greater Cambridge, Central Lincolnshire, Essex and a collection of London boroughs were utilised to assess cost uplifts for a range of potential South Staffordshire policies.

While evidence has been gathered from a number of sources the cost analysis from the 2023 FHS consultation has not been considered. The cost uplist included in the report noted above and the February Addendum which considers the Government's WMS note uplift costs of 2.6% and 2.9% respectively. However, the Government's FHS consultation notes a cost uplift of 1% for Option 2 and 4% for Option 1. If Option 1 is selected this cost is significantly higher than the 2.9% assumed, and does not include the additional offsetting costs.

Therefore, it is not clear how relevant this assessment is for South Staffordshire Council, as no specific costing exercise for South Staffordshire Council has been undertaken.

For the reasons as set out above, we consider there to be a number of potentially significant omissions from the viability assessment that justifies Policy NB6A and therefore recommend that the Council reviews the assessment to ensure it is sound and meets the requirements of the NPPF and Planning Practice Guidance (PPG).

Recommended Policy Updates

Below we have set out some recommended amendments to Policy NB6A.

A1. Overarching carbon reduction

New residential development of 1 or more homes shall achieve net zero regulated ~~***and unregulated***~~ *carbon emissions,* ***where feasible and viable,*** *through the application of requirements A2 – A4 laid out below.*

Regulated carbon emissions should be calculated with SAP10.2 or any more recent replacement methodology.

The regulated carbon reduction should be achieved through on-site measures, unless this is demonstrated to the council's satisfaction that it is unviable or unfeasible with reference to site-specific factors.

A2. Energy efficiency

A ~~***63%***~~ *reduction* ***in regulated carbon emissions in line with the latest national regulations*** ~~***on the Part L 2021 TER (regulated carbon emissions),***~~ *is to be achieved through energy efficiency features.*

Alternatively, where Passivhaus certification is proposed (or a space heat demand of ≤20kWh/m2/year and a total energy use intensity of ≤45kWh/m2/year) and the proposal is fossil fuel free, the applicant will not need to submit SAP calculations. In that case the applicant's Energy Statement should instead cite their PHPP calculations, and a condition will be set requiring evidence of fulfilment on completion.

A3. Renewable energy supply

Subsequent to point A2, a further reduction ***of*** ~~***to net zero***~~ *regulated carbon emissions* ***in line with the latest national regulations*** *is to be achieved through on-site renewable energy generation and/or connection to a certified renewable or low-carbon (fossil-free) local energy network.*

Where it is proven unfeasible or unviable to include enough on-site renewable energy to achieve a 100% reduction in TER in this way, and this can be demonstrated to the council's satisfaction with reference to site-specific factors, the applicant will first demonstrate inclusion of as much renewable energy as feasible and viable, then address the remaining regulated carbon emissions by offsetting as per point A4.

Large-scale development (50 residential units or more) should demonstrate that opportunities for on-site renewable energy infrastructure (on-site but not on or attached to individual dwellings), such as solar PV canopies on car parks, have been explored.

~~***Proposals are encouraged to demonstrate that the amount of on-site renewable energy generation equates to ≥120 kWh/m2 projected building footprint/year.***~~

A4. Offsetting

Only in exceptional circumstances and as a last resort where it is demonstrably unfeasible to achieve the requirements of A3 above, any residual carbon emissions from regulated ***~~and unregulated~~*** *energy are to be offset via a Section 106 financial contribution reflecting 30 years of the building's operation* ***and linked to decarbonisation****.*

Funds raised through this policy will be ring-fenced and transparently administered by the Council to deliver a range of projects that achieve measurable carbon savings as locally as possible, at the same average cost per tonne. Funds will be spent within 5 years of collection or returned to the developer.

A5. Reduced performance gap

Applicants are encouraged to submit, alongside their SAP figures, a set of total energy performance predictive calculations using Passivhaus Planning Package (PHPP), CIBSE TM54, or other method demonstrably proven to produce accurate predictions of total in-use energy.

An assured performance method must be implemented throughout all phases of construction to ensure operational energy in practice performs to predicted levels at the design stage.

A6. Smart energy systems

Proposals should demonstrate how they have considered the difference (in scale and time) of renewable energy generation and the on-site energy demand, with a view to maximising on-site consumption of energy generated on site and minimising the need for wider grid infrastructure reinforcement.

Where the on-site renewable energy generation peak is not expected to coincide with sufficient energy demand, resulting in a need to export or waste significant amounts of energy, proposals should demonstrate how they have explored scope for (and where appropriate implemented) energy storage and/or smart distribution systems.

A7. Post-occupancy evaluation

Large-scale development (over 50 homes) should monitor and report total energy use and renewable energy generation values ***for 10% of the proposed dwellings*** *on an annual basis for 5 years from first occupation. An outline plan for the implementation of this should be submitted with the application. Monitored data are to be reported to the local planning authority.*

Draft Policy NB6C: Embodied carbon and waste

We fully support the Council's objective to address embodied carbon and waste. With the introduction of the 2025 FHS and FBS, the operational emissions of development will continue to decrease, increasing the proportion of emissions which relate to construction and the embodied carbon of materials.

At this stage the embodied carbon of new development is not considered as part of the Building Regulations, however, as part of the FHS and FBS consultation the Government has requested information on embodied carbon and it is likely that embodied carbon will be included in the future.

While we support the Council's requirement for new developments to be supported by a Whole Life Cycle Assessment, we are concerned about setting any fixed targets. Currently the Building Regulations do not set a specific requirement for embodied carbon.

A number of guidance documents including the LETI Design Guide and RIBA 2030 Climate Challenge strategy set out potential embodied carbon targets, however the potential deliverability and viability of tackling embodied carbon is largely unknown at this stage. Reducing embodied carbon requires changes to design and specification of materials, often for more expensive materials. The London Plan which typically sets out targets ahead of other Local Authority plans currently only requires developers to assess embodied carbon and does not yet set any specific targets.

In addition, as recognised by LETI Design Guide and RIBA 2030 Climate Challenge strategy, the embodied carbon of residential and non-residential buildings differs significantly, therefore, setting a single target for various development types is not appropriate.

In addition the South Staffordshire Council Local Plan Review: Sustainable Construction Policy NB6, Task A, Rev 3.0 report sets out no costs associated with the requirements of NB6C and no costs are included within the Viability Assessment to take account of potential cost implications of this policy. In this context we do not believe this policy has been adequately tested to meet the requirements of the NPPF and Planning Practice Guidance (PPG).

We therefore recommend that the Policy is updated to reducing embodied carbon where feasible and viable and removing the fixed target to ensure the policy is effective and deliverable.

Recommended Policy Updates

Below we have set out some recommended amendments to Policy NB6C.

C1. Embodied carbon reporting

All new residential and non-residential developments are encouraged to complete a whole-life carbon assessment in accordance with RICS Whole Life Carbon Assessment guidance.

C2. Limiting embodied carbon

Where feasible and viable, *Large-scale new residential (50 and above units) and non-residential (5000m^2 commercial floorspace) development to* ~~*limit*~~ ***reduce*** *embodied carbon (RICS modules A1 – A5)* ~~***to 550 kgCO$_2$/m^2 GIA***~~.

C3. Building end-of-life

All new buildings are to be designed to enable easy material re-use and disassembly, subsequently reducing the need for end-of-life demolition.

C4. Demolition audits

All major development that contains existing buildings/structures to carry out a pre-redevelopment and/or pre-demolition audit, following a well-established industry best practice method (e.g. BRE).

Development proposals should be consistent with other Local Plan policies.