## Consultation comments on CN3 - energy efficiency standards to reduce carbon emissions.

- Support 36
- Neither support of object 19
- Object 29

The changes to the supporting text and the Local Plan policies have not only been informed by the responses to the Regulation 18 consultation but they have also taken on board any additional feedback that has come out of discussions/meetings with statutory consultees and members in order to improve the clarity and understanding of the contents of the Local Plan.

Respondent number	Comments in support	Officer comment
ANON- KSAR- NKQ5-G Curdridge Parish Council	I would like to see encouragement of additional PV panels in south-facing buildings. Developers might allowed to compensate for shortfalls elsewhere in a development, providing there is a net contribution to the grid.	In order to meet the requirements of Policy CN3 residential buildings would need to install PV panels which is a key consideration that needs to be addressed through the design process. <b>Recommended Response:</b> No change.
ANON- KSAR- NKWV-Q	The Council were pleased to see the action that is being taken by Winchester City Council to become carbon neutral.	Support welcomed and comments noted.
ANON- KSAR- NKTH-6	Need to consider local schemes to enable people to get discount schemes for multiple home insulation, solar panels etc.	Discount schemes for multiple home insulattion and solar panels is unfortunately, not a matter that can dealt with via the Local Plan process. There are, however, schemes available that encourage people to sign up to i they are interested in purchasing solar panels – please refer to Hampshire County Council website for further details. <b>Recommended Response:</b> No change.
ANON- KSAR- NKFC-K	Kennedy Wilson fully support the inclusion of a policy to require new development to be energy efficient and to seek to demonstrate the lowest level of carbon	Support welcomed and comments noted.

emissions possible. Specifically, Kennedy Wilson support the requirement set out in criteria v. for new non-residential development to meet BREEAM Excellent.

Kennedy Wilson will ensure that new development at Solent Business Park is sustainable and minimises greenhouse gas emissions, such as through employing a 'fabric first' approach to design and incorporating suitable on-site renewables. This aligns with Kennedy Wilson's ESG objectives, the Council's own priorities with regards to their declaration of a climate emergency and planning for climate change as set out in the National Planning Policy Framework.

Kennedy Wilson welcome the flexibility included within the policy, which takes a design-led approach and allows for deviations from these standards where achieving them would be harmful to the setting or character of the wider area. In addition to this, the policy should also provide flexibility for deviations from these standards "where it is demonstrated to not be feasible or viable". The inclusion of this wording allows for technical and practical design reasons to be considered, which is a sound approach. This would ensure that new development is not unduly constrained, can be designed to reflect site-specific circumstances and can also respond to changing standards, legislation and technology. For example, bespoke and measurable sustainability and energy strategies for new developments which don't explicitly fall within the BREEAM standards but deliver the same or improved sustainability outcomes, should also be supported. This would ensure that the best

Support welcomed and comments noted.

Support welcomed and comments noted.

	solution for that site at that point in time can come forward.	
ANON- KSAR- NKDW-5 Littleton and Harestock Parish Council	Littleton and Harestock Parish Council warmly welcomes the intentions to put climate change, adaptation and mitigation at the heart of the Plan's strategy. Given the challenges we face, there is no other option than to address these head on. Of course future practice needs to match the good intentions, but whenever there is a perceived balance between climate considerations and other factors, the imperatives of addressing climate change should be uppermost. Littleton and Harestock Parish Council supports these policies.	Support welcomed and comments noted.
	Support policies CN1-7 inclusive.  As landowner, Hampshire County Council supports in principle the City Council's approach to meeting their	Support welcomed and comments noted.
ANON- KSAR-NKJY- D Hampshire County Council	targets in the council's Climate Emergency Declaration.  Hampshire County Council in its role as a public landowner and Property Services function delivering operational public-built assets, such as new schools, questions the technical viability of Policy CN3 (iv) when applied to all developments, considering differing scales and site-specific considerations (be effective).  The County Council suggests that the City Council may wish to consider an alternative approach, such as that of the UK Green Building Council or use of the RIBA 2030 Climate Challenge targets with its stepped targets for 2020, 2025 and 2030 for operational energy, embodied carbon, maximising on-site	For non-residential dwellings (i.e. new schools) they would need to meet BREEAM Excellent standard – criterion iv would not apply as this criterion relates to residential dwellings.  The council has based Policy CN3 on LETI energy efficincy standards as this is a widely used and easy to understand standard that has been developed with the housebuilding industry, developers and local planning authorities.  Recommended response: No change.  In terms of non residential development, Policy CN3 is currently based on BREEAM standards. It is, however, accepted that there are other energy efficiency standards that could be used for non residential development that meet the same standard. Recommended response: include the words 'or an agreed equivalent industry standard assessment process. Developers that propose a scheme to meet BREEAM standards should submit a post construction assessment and BREEAM certificate to the local planning

renewable energy, additionality of off-site renewables and potable water for new development in the Plan period. This approach is expected to be achievable and deliverable for new development during the Plan period to 2039 (sound).

In relation to non-residential standards, the City Council may also consider applying the UK Green Building Council approach or use of the RIBA 2030 Climate Challenge standards. In any regard, the County Council would request that the any forthcoming draft policy should be open to demonstrating meeting BREEAM standards by alternative equivalent standards and take into account financial viability to allow for competing demand on public service budgets over the plan period (flexible and deliverable).

The County Council suggests that the following amended wording could be included: 'In respect of non-residential standards, developments will be supported that meet BREEAM Excellent standards or an agreed equivalent industry standard assessment process, where viable. Developers that propose a scheme to meet BREEAM standards should submit a post construction assessment and BREEAM certificate to the local planning authority to demonstrate compliance.' This wording is based on Fareham Borough Local Plan, Main modifications, (November 2022) which is awaiting adoption.

The County Council also considers that any introduction of zero-carbon standards which are

authority to demonstrate compliance'. as this wording would recognise that this is the case.

A Local Plan Viability Assessment has been undertaken alongside the development of the Local Plan and this forms part of the evidence base for the Local Plan at the Examination. **Recommended Response:** No change.

ANON- KSAR- NK9M-G	above Building Regulations, needs to be carefully considered to avoid development being financially unviable (be positively prepared), which in turn negatively impact on housing supply (be effective).  In the past it has seemed to me that developers have included "token" solar panels etc, i.e. not enough to be worthwhile, in order to satisfy (inadequate) planning requirements. I would like to see a much higher requirement for all future developments.	Policy CN3 has been specifically included in the Reg 18 LP to raise the bar on energy efficiency standards for new residential development.  Recommended Response: No change.
ANON- KSAR- NKXV-R	This is an ambitious policy. Arguably some of this should have been put into place for the last local plan. It is extremely frustrating to see so many new build houses without any solar provision or where there are solar panels, generally only 1 or 2 panels. Most of the new houses in Whiteley have been built without any solar panels.  However, Passivhaus standards are difficult to achieve on a budget and I am concerned that large scale developers will use this policy to reduce the threshold of affordable houses that a site would normally require on the basis of commercial outcomes. We already see plenty of 'wriggle-room' permitted on the affordable homes requirement and this may make this worse. We do need to ensure that the right number of affordable homes are actually being built or we will suffer from key workers not being able to afford to live in this district.  We also need to ensure that our houses are being built with regards to the highest safety standards particularly with regards to the putting of domestic energy batteries on to houses. This is new technology with unknown long term consequences. Already the UK Institute for Fire Engineers reports that "the	Policy CN3 has been specifically included in the Reg 18 LP to raise the bar on energy efficiency standards for new residential development. It is unfortunately, not possible for the policies in the emerging Local Plan to apply to development that has already been granted planning permission.  Recommended Response: No change.  All newly constructed residential properties in the UK currently require an individual new build to the Standard Assessment Procedure (SAP) calculation which needs to be submitted to the appointed Building Control Body (BCB) before any building work commencing. Policy CN3 refers to predicted energy modelling such as Planning Package Passivhaus (PHPP) standards but it is not requiring residential dwellings to achieve Passivhaus standards. PHPP has been referred to in Policy CN3 as this is more accurate assessment of energy performance than undertaking a SAP calculation.  Policy H6 deals with the provision of affordable homes. The costs of Policy CN3 have been assessed as part of the LP Viability Assessment.  The Building Regulations do not include battery storage at the moment, although there are Building Regulation requirements for oil and lpg storage. British Standards that would current apply to an installation for battery storage and it would be the responsibility of the home owner to check that installations are carried out by installers who are registered with the Micro Generation Competent Persons Scheme for Solar Panel Installation or Electricians register with Competent Persons Schemes. In both cases they

	implications of on-site solar PV generation for Fire and Rescue and other Emergency Services personnel are "significant". " https://www.fsmatters.com/IFE-highlights-fire-risk-posed-by-solar-panels	have to demonstrate they have attained a level of competence, have to register each installation and their work is subject to spot checks from the scheme.
ANON- KSAR- N8QD-C	The Climate Assembly participants are concerned about cost of living as well as the climate emergency. Therefore they welcome paragraph 4.27 whereby energy efficient designs can reduce costs. They also strongly endorse paragraph 4.30 as they want to see solar PV installations on all commercial, industrial and car park roofs.	Support welcomed and comments noted.
ANON- KSAR- N8XY-8	I strongly support points i to iv which set out the requirements for new dwellings. The policy could be improved by saying 'should' rather than seek to demonstrate the lowest level of carbon emissions.	Agree. <b>Recommended Response:</b> The policy could be strengthened by deleting the words 'seek to'.
ANON- KSAR-N81T- V Sparsholt Parish Council	2030 is an unrealistic target for WCC when the Govt target for net zero is 2050. it is worth noting that new developments will be able to achieve the targets more easily than older and existing dwellings and there are no plans and finances to deal with existing homes and premises.	Winchester City Council has declared a climate emergency and has taken the decision that it wants to moves faster that the Government's 2050 target. It is beyond the remit of a LP to offer finances to deal with improving existing homes but there are schemes run by Hampshire County Council on encoraging people that have an interest in purchasing solar panels to register their interest on the HCC website. <b>Recommended Response:</b> No change.
ANON- KSAR-N85J- P	Yes, as per response to policy CN1, please refer to submitted (emailed) representations titled 'Manor Parks Regulation 18 Representations' and accompanying appendices.	This representation has been addressed in the 'Omission sites'.
BHLF-KSAR- N8T8-3	OBPC supports the setting of higher standards including requiring residential development to have a total energy use of <35kWh/m2/year and to be netzero carbon and for non-residential development to meet BREEAM Excellent standard. However, WCC must ensure that they will only allow lower standards where there are truly exceptionally clear and	Support welcomed and comments noted.

BHLF-KSAR- N8TB-D	compelling reasons demonstrated, beyond reasonable doubt.  Positive elements: - Attempts to make developers accountable for achieving the sustainability and energy efficiency standards. Energy and climate change: notwithstanding the incoherent 2030 climate neutrality target, the practical energy policies mostly make great sense and are well crafted.  There is no robust policy proposal for upgrade and the Local Plan should put more emphasis on how to retrofit existing building stock to improve energy efficiency, if there is any chance that the whole District is to become carbon neutral. There is rightly emphasis on mitigating climate change. There is also some recognition of the need for adaptation to the inevitable effects of climate change outside WCC remit. But there should be a greater emphasis on adaptation. Despite WCC best endeavours, some climate change is inevitable and it would be honest to recognise this and show to District residents that WCC know this and have integrated it into the plan. For example, in the forward remarks, more strongly in the climate objectives and in greater emphasis on the risk of flooding and water management, loss of green space and biodiversity in development	Retrofitting properties is by its very nature much more complicated and costly than ensuring that new residential development meets higher energy efficiency standards. There are Government schemes available to encourage people to improve the energy efficiency of their existing residential properties. Many alterations to existing residential dwellings fall under 'Permitted Development Rights' and it would not be possible to include a Local Plan policy that could address this point. It is important to read the LP as whole as Policy CN1 picks up on the measures that are needed for mitigating and adapating to climate change and how these matters should be incorporated into the Design Process (Policy D1). Recommended Response: No change.
	management, loss of green space and biodiversity in development proposals.	
BHLF-KSAR- N8TG-J	We commend the Council for its vision that new residential dwelling should not burn any fossil fuels on site for space heating, hot water or cooking and for onsite renewables to provide 100% of the energy consumption.	Support welcomed and comments noted.

BHLF-KSAR- N8ZJ-U	Policy CN3 sets out the Council approach to energy efficiency standards to reduce carbon emissions. Whilst Sovereign are supportive of policies that apply aspirational energy efficiency standards, we ask the Council to be wary of the ways in which such policies could impact development viability which may restrict the provision of affordable housing in Winchester.	Support welcomed and comments noted. A Local Plan Viability Assessment has been undertaken alongside the development of the Local Plan and this will form part of the evidence base for the Local Plan at the Examination.  Recommended Response: No change.
BHLF-KSAR- N8ZF-Q	Although Dudsbury Homes supports the objective of this policy, it is concerned the requirements could make many residential schemes unviable and threaten the deliverability of much needed housing. Additionally, if these measures do prove more costly than National Building Regulation compliant methods, it is likely to jeopardise the provision of affordable housing and community benefits. In this respect, the Council will have to prioritise the policies it most wishes to see implemented. As such, Dudsbury Homes request the Policy is amended so that the application of energy efficiency standards beyond those required by National Building Regulations, is subject to financial viability, with clarification as to which policy requirements take priority.	The additional costs that are associated with this particular policy (7%) have been assessed through the LP Viability Assessment and this additional cost has been refelected in the policy on affordable housing which Winchester City Council agrees is also a major priority for the whole of the district.  Recommended Response: No change
BHLF-KSAR- N8BQ-A Historic Environment Link here	We support this approach, subject to inclusion of the stated caveat, covering circumstances where "achieving these standards produces a development that would be harmful to its setting or the character of the wider area".  The Council's approach on renewable energy generation in historic places will need carefully consideration and articulation – underscoring the importance of policy CN5.	There is no reason, apart from the installation of PV panels on the roof, houses that are built to meet Policy CN3 will need look any different from houses that are currently built now. The only difference is that they will not be allowed to burn fossil fuels on site for space heating, hot water or used for cooking. <b>Recommended Response:</b> No change.
BHLF-KSAR- N8BS-C	BSP support the policy and the commitment to reduce carbon emissions when considered in the context of the climate emergency Winchester City Council declared. In making the declaration the Council has	Support welcomed and comments noted.

	committed to be carbon neutral by 2030 which is important given the UK's legally binding target of net zero carbon by 2050.  The policy refers to 'Measurement and verification'. This aspect of the policy requires applicants to confirm the metering, monitoring, and reporting strategy as part of the detailed planning application with energy efficiency calculations carried out for both outline and detailed planning submissions. Unfortunately, the measurement and verification is unrealistic for efficiency calculations to be of the same level of detail for both outline and detailed planning applications and the policy should differentiate the requirements for the two different forms of application.	Agreed that it is unclear- Recommended Response: Policy CN3 Measurement and Verification to be been amended by clarifying the energy efficiency calculations and modelling requirements at different planning application stages.
BHLF-KSAR- N8BP-9 Southampton City Council	This Council also supports the focus on climate change within the draft Winchester Local Plan 2039 including the requirement for development to meet BREEAM (Policies CN3 and CN4) and the London Energy Transformation Initiative (LETI) standards (linked to Policies CN2 and CN3).	Support welcomed and comments noted.

Comments which neither support or object CN3 - energy efficiency standards to reduce carbon emissions		
Respondent number	Comments which neither support or object	Officer comment
Richone	CN3 Page 48 4.34 Comment: Water harvesting is covered in CN1, but, for clarity, it should be induced in this section as well?	It is important that the Local Plan is read as a whole. Policy CN3 deals with energy efficiency standards whereas Policy CN3 deals with water efficiency. <b>Recommended Response:</b> No change.

Parish Council		
ANON-KSAR- NKBJ-P Soberton Parish Council	All new residential dwelling should not burn any fossil fuels on site for space heating, hot water or used for cooking. This might be too onerous for single isolated properties in the countryside.	The city council's climate emergency covers the whole of the district and the LP needs to be read as a whole. Single isolated properties in the countryside would not be in accordance with the other policies in the LP. <b>Recommended Response:</b> No change.
		Disagree. Whilst Policy CN3 is much wider than 'operational carbon' (which deals with the use, management, and maintenance of a product or structure) as it requires applicants through the design process to not burn any fossil fuels for space heating, hot water or used in cooking. <b>Recommended Response:</b> No change.
ANON-KSAR- NK29-N	CN3 – Change Title to: 'Energy efficiency standards to reduce operational carbon emissions'  CN3 – Query: How are the point i and point ii requirements for energy levels monitored? What measures will be taken if the finished building fails to comply? Suggest adding a requirement for pre-occupation verification.  CN3 – Modify point v to include: Demand for space heating should be	The policy does not mandate meterting, monitoring and reporting, It recomends it for schemes that are able to implement in-use energy monitoring. Ths will support minimizing the performance gap and assessing the effectiveness of the policy in driving better performing buildings. The policy does not have penalties for compleated buildings that fail to meet the policy. There is not a requirment for pre-occupancy verification in the form post completion predictive energy modeling.  Recommended Response: No change.
	met by renewables.	Agree that non residential should include renewables  Recommended Response: This would be useful addition to the criterion. Policy CN3: Non-Residential development to be amended by adding a requirement for all new non-residential developments to maximize on-site renewable energy generation. See Policy Amendments for further details.

CALA Homes supports the objective of the Regulation 18 draft Local Plan to accelerate the delivery of net-zero operational carbon homes. This general approach aligns with CALA's own sustainability targets where all new homes delivered from 2030 will be operationally net zero - https://www.cala.co.uk/social-value/our-sustainability-journey/.

There are however challenges to delivering operationally net zero homes ranging from added build cost to the maturity of emerging technologies to scaling up the necessary materials and trades to install them. It is for these reasons that the building regulations are phasing improvements to the energy efficiency of new homes to allow the industry, and those trades that supply the industry, to adapt. CALA is fully supportive of the Regulation 18 draft Local Plan seeking to accelerate the delivery of operationally net-zero carbon homes but this must be done in a manner that fully engages with the development industry to understand the practical challenges of achieving this step-change including the reasons cited above. This is particularly important when such fundamental changes are being introduced through a Local Plan which introduces new policies from the day on which it is adopted without a staggered transition. Cala, as a major developer in the City, is more than happy to meet with officers to explain the challenges we face to bringing forward operationally net-zero homes in advance of 2030.

Whilst we expect economies of scale and continued technological enhancements to reduce the cost of delivering operationally net-zero homes in the coming years, at the current time such a policy change would have a material impact on scheme viability, especially in the context of exceptional build cost inflation and the prospect of a cooling market. Clearly such factors should not prevent the introduction of a zero-carbon policy approach, but the Council must give consideration to viability especially for developments such as King's Barton where many of the principles of development, including the affordable housing offer and S106 financial contributions, are already established. It is noted for example, that in the context of Policy H6, there is the suggestion that the percentage of affordable housing for schemes affected by phosphate

Support welcomed and comments noted.

The additional costs that are associated with this particular policy (7%) have been assessed through the LP Viability Assessment and have been refelected in the policy on affordable housing which Winchester City Council agrees is a major priority for the whole of the district. Whilst it is fully recognised the contribution that the Kings Barton scheme is making, the policy requirements should be reflected in the sale of the land. **Recommended Response:** No change.

ANON-KSAR-NKAK-P neutrality could be reduced due to increased cost. It is unclear why such an approach could not be considered to allow the acceleration of zero-carbon development in a manner which is viable ahead of national and building regulation targets.

CALA would welcome discussions with Winchester on accelerating the early delivery of operationally net-zero carbon housing but in a manner that is viable and recognises the practical challenges associated with a fundamental step change in housing design, specification, delivery and management. This is particularly important on a site such as King's Barton which is working within the confines of a historic outline planning permission and fixed parameters regarding affordable housing and financial contributions which restrict flexibility surrounding scheme viability. As the development is also on site, there are real issues to consider around utility supplies, capacity and existing utility contracts which we would be happy to discuss with the Council to ensure Policy CN3 is workable, realistic and does not challenge the future viability of developments.

The comments above also relate to some of the sub criteria within Policy CN3, particularly (iv) regarding 100% renewable technology provision.

	Paragraph 4.20 should clarify which version of the Building Regulations is being referred to. We assume 2022 version.	Agree. As the Local Plan will, when it has been adopted, be in force for a number of years, the addition of (2021) would be beneficial. <b>Recommended response:</b> Add (2021) after Building Regulations.
ANON-KSAR- NKDG-N ANON-KSAR- NKFQ-1 (Upham PC)	Policy CN3 Explanatory paragraph 2, lines 2/3, should be amended to read: "all new developments SHOULD (omit "seek to") DEMONSTRATE the lowest leveletc	"4.20 Since the Code for Sustainable Homes was withdrawn by the Government, higher energy efficiency standards for residential buildings have been introduced by making changes to the Building Regulations which are intended to deliver a reduction in carbon emissions, while ensuring the delivery of high-quality homes. New homes in England currently need to be constructed to meet Part L 2021 of the Building Regulations which covers the conservation of fuel and power in the building of new homes and establishes the national standard for energy efficiency levels."
	Policy CN3 We strongly endorse points i to iv which set challenging requirements for all new dwellings (omit residential - all dwellings are residential)	See response on page 5 Agree. Recommended Response: The policy could be strengthened by deleting the word 'seek to'.
	Policy CN3 Point v - Non residential development. This is inadequate because BREEAM is not a tool for driving zero carbon development. The following should therefore be added to Point v - "Demand for space heating	

	should be met by renewables".  Policy CN3 - Measurement and verification It should be stated that the metering, monitoring and reporting strategy will be assessed when determining whether to grant planning permission and it should explain how this will be carried out. A requirement for pre occupation validation should be added.	Agree. Recommended Response: This would be useful addition to the criterion. Policy CN3: Non-Residential development has now been amended by adding a requirement for all new non-residential developments to maximize on-site renewable energy generation. See Policy Amendments for further details.
	Policy CN3 point v - Non residential development.	Measurement and verification is currently not a policy requirement, but a recommendation. Applicant are not required to implement in-use energy monitoring, but are recommended to implement in-use energy monitoring. Applicants are only required to report in the detailed planning application if a metering, monitoring and reporting strategy will been in place or not. <b>Recommended Response:</b> Policy CN3 – Measurement and Verification wording has been amended to clarify this policy further.
ANON-KSAR- N8MP-M	Crest Nicholson is committed to tackling the challenges of climate change and acknowledges the important role the development industry has to play in the national transition to a low and zero carbon society.	Support welcomed and comments noted.
ANON-KSAR- N81Y-1	It is recognised that the target for non-residential development is to achieve BREEAM Excellent. However, the current policy wording relates to a pre-assessment being provided at planning submission stage. This wording should be clarified to refer to detailed planning application. It may not be practical to undertake this level of pre-assessment for Outline schemes and so the policy should reflect the differences in the nature of planning applications.	Agree ,Recommended Response: At outline planning application stage a commitment to BREEAM Excellent should be made, and at full planning application a BREEAM preassessment should be provided
	In addition, the draft policy only makes reference to operational carbon.  London Energy Transformation Initiative (LETI) or other industry	

	standard targets should be mentioned for embodied carbon in more detail than the brief mention on page 34 and 76 of the draft Local Plan.	Embodied carbon was not part of the scope of the original Net Zero Carbon Target evidence base study, however a separate report is now being prepared looking into policy options that addresses this.
	The Council's commitment to meeting both its and the UK Government's target of net zero carbon emissions by 2030 is commendable and detailed at length in the supporting text.	Support welcomed and comments noted.
BHLF-KSAR- N8TK-P	The wording of the policy stipulates that new residential development will need to demonstrate net zero operational carbon from the date of adoption of the Local Plan, with criteria as to how this will be achieved. It is our view that the stepped approach to net zero provided through the Building Regulations is pragmatic, as it allows developers appropriate time to suitably amend their designs and specifications in an efficient way for the cost of energy efficiency technologies to fall. The likelihood is that, by the time the Local Plan is adopted, new residential development will need to be net zero carbon ready, as per the Future Homes Standard.  Where the Council to seek net zero from new development from the point of the Local Plan's adoption then we would respectfully remind the Council that the PPG states that "The role for viability assessment is primarily at the plan making stage. Viability assessment should not comprise sustainable development but should be used to ensure that policies are realistic, and that the total cumulative cost of all relevant policies will not undermine deliverability of the plan" (Paragraph 002: Reference ID: 10-002-20190509).	Winchester City Council has declared a climate emergency and has taken the decision that it wants to moves faster that the Building Regulations. Greenfield sites have been phased to come forward no earlier than 2030 which will give the Building industry and developers time to adapt. The additional costs that are associated with this particular policy (7%) have been assessed through the LP Viability Assessment and this has been reflected in the policy on affordable housing which Winchester City Council agrees is also a major priority for the whole of the district. It is not clear what standards will be included in the FHS and in the past changes to Part L have not taken place at the time projected (eg 2016) the council's position thereby provides additional assurance that high standards will be achieved. Recommended Response: No change.
	We note that the Net Zero Carbon Targets Evidence Base for Winchester City Council by Elementa Consulting provides evidence for the cost of modelling results. This section of the report provides little justification or detail on how the capital cost uplift has been determined. It is also unclear if the uplift has considered the significant inflation in the build costs that has occurred in the past two years.	

		Costs used were based on current costs at the time of analysis (Q2 2022) and reflected inflation at that point. Detail on the build up of capital costs can be shared to provide substantiation to the analysis. The viability assessment is being carried out in accordance with the PPG based on an appropriate range of assumptions made for the study purpose, based on a range of evidence. The assessment testing to date includes bespoke costs for meeting the policy requirements set out in CN3. The cost uplift is informed by the Elementa report plus an additional uplift from Part L 2013 to Part L 2021, as the baseline of the Elementa report was Part L 2021.
	Clarification is required on the requirements and whether these apply to new build and conversions. It is not clear whether the requirements are deliverable and viable for conversions.	Recommended Response: No change.  Paragraph 4.23 of the Reg 18 LP has identified that improving energy efficiency standards for conversions and extensions is more problematic than new build and energy efficiency measures for this type of development should be considered through the design process. Policy CN3 would not cover extensions or conversions as often this type of development would be 'Permitted Development'. Recommended Response: Add additional text to make this point clearer.
BHLF-KSAR- N8T1-V	The second paragraph refers to 'exceptionally clear and compelling reasons' to deviate from the standards. These narrowly refer to 'harmful to its setting or the character of the wider area'. Such exceptions should be expanded to take into account the viability of provision, impact to historic fabric, harm to significance of heritage assets.  Additional exemptions are also within CN5 and CN6 as reasons to depart. The requirements of part 4 preclude consideration of combined or district systems that may not be 'on-site' as a means of meeting 100% of the energy consumption.	The additional costs that are associated with this particular policy (7%) have been assessed through the LP Viability Assessment and this has been reflected in the policy on affordable housing which Winchester City Council agrees is also major priority for the whole of the district. Policy HE14 would cover improvements or alterations to improve the energy efficiency of designated and non-designated historic assets. <b>Recommended Response:</b> No change.

BHLF-KSAR- N8TW-2	This Council also supports the focus on climate change within the draft Winchester Local Plan 2039 including the requirement for development	Policies CN5 and CN6 cover entirely different matters and in this respect, there are reasons for identifying the various matters that a planning application for a renewable and low carbon energy scheme and a micro generation scheme would need to take into account. <b>Recommended Response:</b> No change.  Support welcomed and comments noted.
Eastleigh Borough Council	to meet BREEAM (Policies CN3 and CN4) and the London Energy Transformation Initiative (LETI) standards (linked to Policies CN2 and CN3).	
	Abri is committed to decarbonisation and delivering sustainability through all its work, as demonstrated by our partnership work with Anchor Hanover Group, Home Group, the Hyde Group and Sanctuary Group in The Greener Futures Partnership. That work is seeking to lower emissions, reduce fuel poverty and improve living conditions for residents by creating sustainable, affordable, healthier and safer homes. This sits alongside our work to deliver high quality, affordable homes, increasingly through Modern Methods of Construction and with efficiency standards working towards becoming carbon neutral.	
BHLF-KSAR- N8RP-S	The aim for net carbon zero is clearly supported as a common aspiration which we are also beginning to roll out across our new developments wherever possible. The mandatory nature of this policy however presents a challenge for development as the housebuilding sector faces serious difficulties arising from rapidly rising costs and the wider inflationary pressures. The Council may wish to consider transitionary measures in this local plan, or greater flexibility in the wording of the policy to allow for developments to demonstrate where net zero carbon is just not possible, for example due to limited ability to install sufficient solar panels on a sensitive site, or not viable. This will then be a factor in weighing the planning balance.  While the aim to monitor and report on the energy efficiency of	Winchester City Council has declared a climate emergency and has taken the decision that it wants to moves faster that the Building Regulations. Greenfield sites have been phased to come forward no earlier than 2030 which will give the Building industry and developers time to adapt. The additional costs that are associated with this particular policy (7%) have been assessed through the LP Viability Assessment and this has been reflected in the policy on affordable housing which Winchester City Council agrees is also a major priority for the whole of the district. If the proposed development is located on a senstive site the wording in the Policy CN3 would allow for

development is also supported, policies and guidance need to balance these factors to be taken into account. Recommended the ambition for sustainability with pragmatism for what can be achieved Response: No change. without prohibitive costs and disturbance to residents. The requirement for post-occupancy monitoring of major developments is considered excessive and a matter requiring more strategic level assessment before implementation in the local plan. Our concerns lie with how monitoring can be achieved alongside privacy laws as obtaining energy data from suppliers is not possible without explicit permission, and the disruption involved in residential data collection. We suggest that the A requirement for post occupational monitoring has not been Council with other local authority partners conduct a thorough review of included in Policy CN3 for the very reasons and the the ability to require postoccupancy evaluation, perhaps pilot testing complications that have been outlined in this representation. developments first. Recommended Response: No change. Alternatively, to make the existing policy more effective it could be amended to be more proportionate, instead setting an expectation or target figure for monitoring and reporting on a representative number of units on large scale residential developments. This would assist in monitoring the ability to implement such an approach, and perhaps enable staircasing of this requirement through future local plan reviews. The wording of the Reg 18 LP requires applicants/developers to undertake monitoring and reporting strategy to enable them to be able to demonstrate how they are meeting the requirements of Policy CN3. **Recommended Response:** No change. Winchester City Council is extremely keen to support SME The policy as drafted appears to be weighted in favour of BHLF-KSARvolume/National housebuilders who better placed to developers and is keen to work with them to identify any N8BF-Y accommodate/absorb changes to standards by using standard

housetypes. These aspirational targets put unreasonable pressure on SME developers who are unable to build at the same £/sqft without compromising design/build quality and could potentially prevent small sites in sustainable locations from coming forward and being built out quickly. Viability needs to be considered.

Why does the Local Plan policy needs to be in excess of building regulations which manage how the industry evolves and adapts. Whilst we are committed to delivering sustainable homes which include air source heat pumps, PV panels, car charging points and other fabric benefits, we have concerns that trying to achieve a self sufficient development will result in grid-like designs of houses to maximise solar gain (required for energy generation) which shall conflict with the Council's and Government's urban design and build back beautiful agendas. In practical terms, where is the off-site storage of summer energy going to be collected? Who puts in the provision for the wider grid to store energy from this development, and if energy is being received back from the grid, how can it be qualified as 100% renewable when we are not certain of its source? These measures go significantly beyond Part L and the Future Homes Standard which is impractical.

Viability needs to be considered and these requirements are already controlled through Building Regulations. It is not clear why Winchester justifies significantly higher standards than nationally adopted standards. Measurement of energy efficiency is impractical at outline stage. A high-level statement of energy efficiency objectives and opportunities may be appropriate, but not detailed calculations.

additional ways that they can be supported in terms of implementing the requirements of Policy CN3.

The additional costs that are associated with this particular policy (7%) have been assessed through the LP Viability Assessment and this has been reflected in the policy on affordable housing which Winchester City Council agrees is also a major priority for the whole of the district. Winchester City Council has declared a climate emergency and has taken the decision that it wants to moves faster that the Building Regulations. Greenfield sites have been phased to come forward no earlier than 2030 which will give the Building industry and developers time to adapt. **Recommended Response:** No change.

In most cases in the UK, the on-site energy generated is fed back to the grid, in the attempt of decarbonising the UK grid as a whole, rather than the individual development. Therefore any excess summery energy would be fed back to the grid and not required to be stored/collected. Furthermore, the Net Zero Carbon Targets evidence base shows that the Part L 2021 notional building assumes a PV area of 14.4 m² and 22.4 m² for semi-detached and detached house respectively. The LETI scenario in the evidence base assumes a smaller PV area of 11.2m² and 12.8m² for the semi-detached and detached house respectively, to meet 100% of energy consumption on-site, so the proposed measures around renewable energy not going significantly beyond Part L.

		The higher fabric and system standards are recommended to allow Winchester Council to deliver Net Zero Carbon builidngs in operation. The Net Zero Carbon Targets evidence base undertaken by Introba, Etude and Currie&Brown, highlight how nationally adopted standards fail to deliver buildings that comply with the space heating demand and energy use intensity limits recommended in the policy, which are aligned with carbon budgets and limits that have been set to meet our climate crisis and limit global warming to 1.5 °C.  Please refer to Chapter 6 of the Net Zero Carbon Targets evidence base for further information.  (https://www.winchester.gov.uk/assets/attach/33574/WCC-Elementa-Consulting-Etude-and-Currie-and-Brown-Evidence-Base.pdf)  In regards to measurement of energy efficiency at outline stage - Policy CN3 Measurement and Verification has now been amended by clarifying the energy efficiency calculations and modelling requirements at different planning application stages.
BHLF-KSAR- N8BX-H	The Trust is likely to support any renewable and low carbon energy scheme arising. The Trust has an early plan for decarbonisation of the RHCH site based on electrification and renewables. However early investigation suggests that the DNO network is already under huge pressure and sufficient capacity will not materialise until post 2031. Are WCC aware of this and what steps are being taken to mitigate?	As part of the preparation of the Local Plan, engagement has started with all of the utility operators and an integral part of this is developing an Infrastructure Delivery Plan. Policy CN3 also plays an important role in this as this requires the amount of energy required on site to be balanced by installing on-site renewables to meet the energy demands of the building. The implementation of this policy is, therefore, intended to not put

Whilst Wates is supportive of the Council's objectives in relation to energy efficiency and sustainability, we do have a number of concerns with respect to the Council's approach on this matter. The national framework for energy efficiency within buildings is set by the Building Regulations. This is a framework that the development industry is familiar with and sets out the improvements in energy efficiency required, expressed as a percentage reduction measure. Policy CN3, as currently drafted, seeks to introduce a competing standard of measuring energy efficiency which runs in parallel with and, in addition to, the Building Regulations regime. The introduction of a requirement for new residential dwellings to be measured against PHPP/CIBSE TM54 adds an unnecessarily onerous burden, particularly given new homes are already assessed BHLF-KSARthrough the use of approved Standard Assessment Procedure (SAP) N864-1 software. It should also be recognised that the availability of PHPP Certified Assessors is not widespread, which further adds to the burden on the development industry and will likely result in delays at the measurement and verification stage of the

project cycle. The Future Homes Standards are a significant step change

shortages within the industry. The standards proposed within Policy CN3

associated with this should not be under-estimated. It is understood that

the Council anticipate these standards being met through the provision of photo-voltaics, heat pumps and Passivhaus levels of fabric energy efficiency. Whilst the former two are fairly standard approaches to

for the development industry, with a requirement for new homes to

produce 75 to 80% less CO2 emissions. This is already a challenging

target to meet having regard to well documented materials and skills

seek to go beyond this by a significant degree. The challenges

additional strain on the grid network. **Recommended Response:** No change.

The additional costs that are associated with this particular policy (7%) have been assessed through the LP Viability Assessment and this has been reflected in the policy on affordable housing which Winchester City Council agrees is also a major priority for the whole of the district. Winchester City Council has declared a climate emergency and has taken the decision that it wants to moves faster that the Building Regulations. Greenfield sites have been phased to come forward no earlier than 2030 which will give the Building industry and developers time to adapt.

All newly constructed residential properties in the UK require an individual new build to the Standard Assessment Procedure (SAP) calculation which needs to be submitted to the appointed Building Control Body (BCB) before any building work commencing. Policy CN3 refers to predicted energy modelling such as Planning Package Passivhaus (PHPP) standards but it is not requiring residential dwellings to achieve Passivhaus standards. PHPP has been referred to in Policy CN3 as this is more accurate assessment of energy performance than undertaking a SAP calculation. The number of PHPP assesors is increasing and as all of the greenfield sites are phased to come forward after 2039, it is conisdered that there will be enough time for the Building industry and developers to take on board this change. **Recommended Response:** To avoid any confusion, reference to PHPP and CIBSE has been removed from the policy. Add the following to the supporting text:

Add new paragraph underneath paragraph 4.30:

Building Regulation requirements, the latter is not. The type of fabric energy efficiency sought goes well beyond current and future Building Regulations requirements and continue to pursue such an onerous approach is likely to lead to viability implications, delays in delivery and reduced site capacities. These issues will be exacerbated by the proposed requirement for on-site renewables to provide 100% of the energy consumption required.

Our view is that whilst on site renewable energy opportunities should be maximised, the policy should allow for residual emissions to be subject to an offsite payment in the event that 100% of the energy consumption cannot be met on site.

Overall, whilst we consider the aims of the objectives of this policy are laudable, it would be more appropriate for Policy CN3 to be aligned with the Future Homes

Standards, with enhanced energy efficiency standards looked at in the next Local Plan Review period, which would still allow the Council to target carbon neutrality by 2030.

All newly constructed residential properties in the UK require an individual new build to the Standard Assessment Procedure (SAP) calculation which needs to be submitted to the appointed Building Control Body (BCB) before any building work commencing. Predictive modelling tools include Passivhaus Planning Package (PHPP) or CIBSE TM54, (refer to the LETI Operational Modelling Guide for further guidance on choosing the right Predictive energy modelling tool (www.leti.uk/omg). Predictive modelling is also often in industry called performance modelling.

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		By including Policy CN3 in the LP the council has made it very clear the energy efficiency standard that new dwellings need to achieve. The LP covers the period up to 2039 so it is important that the city council acts now rather than delaying the implementation of the LP policy to the next review of the LP.  The cost of implementing Policy CN3 has been assesed through the LP Viability Assessment and Policy CN3 has made it clear that applicants will need to demonstrate that achieving these standards produces a development that is harmful to its setting or the character of an area. Carbon offsets do not work at the core issue of reducing CO <sub>2</sub> emissions which is a fundamental aim of the council's climate emergency.  Recommended Response: No change.
BHLF-KSAR- N86T-1 Hampshire County Council (Transport)	Appendix 4: Climate Change The County Council is pleased to see that the issue of climate change is being addressed via a range of policies to address strategic carbon neutrality and designing for low carbon infrastructure, alongside Policy T1 (Sustainable and Active Transport and Travel) and Policy T3 (Promoting sustainable travel modes of transport and the design and layout of parking for new developments) which consider transport issues. The County Council's Climate Change Framework for Strategic Programmes (2020 – 2025) sets out the mitigation and resilience programmes which the County Council will be pursuing. These strategic programmes have been designed to deliver outcomes to reach the County Council's targets in	Support welcomed and comments noted.

	2050 and are therefore very long term and extensive in nature. The County Council is therefore supportive of the Strategic Policy CN1 (Mitigating and adapting to climate change), Policy CN 2 (Energy Hierarchy), Policy CN 3 (Energy efficiency standards to reduce carbon emissions), Policy CN 4 (Water efficiency standards in new developments), Policy CN 5 (Renewable and low carbon energy schemes), Policy CN 6 (Micro energy generation schemes) and Policy CN 7 (Energy Storage) which are all designed to help mitigate and adapt to climate change and which the County Council considers are all aligned with the key milestones set out in the building and infrastructure theme of the County Council's Climate Change Framework for Strategic Programmes.	
	County Council of Change Framework for Chategor Frogrammes.	Support welcomed and comments noted.
	Policy CN3: Energy Efficiency Standards to Reduce Carbon Emissions In principle, Gladman support the Council's aspirations to achieve carbon neutrality and the associations with energy efficiency standards in new developments.	
BHLF-KSAR- N86X-5	However, it is considered that several elements of Policy CN3 require further testing through the Local Plan Viability Assessment in order to ensure that they are justified and effective. The policy sets out a policy requirement for all new residential dwellings to demonstrate net-zero operational carbon. At present, the viability assessment only accounts for between £72-88 per unit to deliver the 'LETI' standard, however this does not appear to take account of the higher Part L Building Regulation standards which came into effect in June 2022. It is considered that meeting this higher standard will cost significantly more than the aforementioned figures and therefore further consideration of its impact on viability must be undertaken.	The LETI standards explored in the Net Zero Carbon Targets evidence base are better (higher) than the Part L 2021 Building Regualtion standards (which came into effect in June 2022). The cost modelling undertaken compared the cost uplift of the LETI standards compared to Part L 2021 Building Regulations. It is approportate that the cost assessment uses currnet regs as a baseline. Our assessment adopted an appropriate % uplift cost as informed by the Elementa report, taking a blended rate of 7% plus and additional % uplift representing the additional uplift moving from Part L 2013 to Part L 2021. The base build costs in our assessment are based on BCIS 5yr data

sample (as per PPG) and the majority that data sample is based on Part L 2013. On this basis we applied an additional rate of 2% (flats) and 4% (houses) informed by the Government's Impact Assessment for achieving Part L 2021.
Recommended Response: No change.

## Comments which object to policy CN3 - energy efficiency standards to reduce carbon emissions Respondent Respondent number Respondent number number By including Policy CN3 in the LP the council has made it very clear the energy efficiency standard that new dwellings need to achieve. No evidence has been put 'Onsite renewables to provide 100% of the energy consumption that is required by residential buildings' Not feasible now or in the near future ANON-KSARforward to explain why this is not feasible as the whole unless there is a breakthrough in energy storage, particularly with your purpose behind Policy CN3 is that the amount of energy NKBN-T housing densities. required on site should be balanced by installing on-site renewables. Recommended Response: No change. Energy efficiency standards to reduce carbon emissions (Policy CN3) Support welcomed and comments noted. OBPC supports the setting of higher standards including requiring residential development to have a total energy use of <35kWh/m2/year and ANON-KSARto be net-zero carbon and for non-residential development to meet NKHU-7 BREEAM Excellent standard. Oliver's Battery Parish Council However, WCC must ensure that they will only allow lower standards where there are truly exceptionally clear and compelling reasons demonstrated. beyond reasonable doubt. In relation to criterion (v), whilst our client has no comments on the specific Paragraph 4.23 of the Reg 18 LP has identified that ANON-KSAR-BREEAM target, it is recommended that the policy be amended to remove improving energy efficiency standards for conversions and NKZX-V such requirement for minor applications, or those for changes of use. extensions is more problematic than new build and energy

whereby the ability to achieve a BREEAM target can be difficult. The efficiency measures for this type of development should requirement for such small scale applications to submit a BREEAM prebe considered through the design process. Policy CN3 assessment also represents an unnecessary and disproportionate burden in would not cover extensions or conversions as often this relation to such development, which could comprise of minor extensions or type of development would be 'Permitted Development'. the change of use of small premises. It is therefore recommended that the Policy CN3(v) be reworded to apply only to major development for new non-The word 'major development' is defined as the provision residential buildings. of 10 or more dwelling houses. Outline application on a site area of 0.5 hectares or more and where the proposed number of dwellings has not been specified. In view of this, it would not be appropriate to use this terminology in Policy CN3 as it would mean that development of 10 or less would not need to meet the requirements of Policy CN3. Recommended Response: No change. Policy CN3 energy efficiency standards to reduce carbon emissions Support welcomed and comments noted. The Council's commitment to meeting net zero targets is commendable. By including Policy CN3 in the LP the council has made it Currently it appears that the council is going to achieve net zero through having mandatory standards to meet net zero from adoption of the plan that very clear the energy efficiency standard that new go beyond government targets. However, it is our view that any requirement residential development needs to achieve. The LP covers should be 'stepped' in line with Government targets. This is more desirable the period up to 2039 so it is important that the city council as there is considerable momentum from Government in preparing acts now rather than delaying the implementation of the enhanced sustainability standards as it is clear the energy efficiency LP policy to the next review of the LP. requirements for domestic and non-domestic buildings will increase sharply ANON-KSARin the coming years. Aligning the Council's requirement for net zero The cost of implementing Policy CN3 has been assesed NK4R-G development with those of Government would therefore be pragmatic and through the LP Viability Assessment and Policy CN3 has more achievable. made it clear that applicants will need to demonstrate that achieving these standards produces a development that is As such we would like to remind the council of the increased emphasis on not harmful to its setting or the character of an area. Local Plan viability testing as expressed in PPG Paragraph: 002 Reference ID: 10-002-20190509). The introduction of net zero policy must not be so inflexible that it deems sites unviable and the plan ineffective. Any future As above, the Local Plan Viability Assessment is being policy needs to ensure this to make sure it is consistent with NPPF/PPG carried out in accordance with the PPG and appropriate and can be justified by the council.

	The viability of specialist older persons' housing is more finely balanced than 'general needs' housing and this should be recognised as detailed in our response to Policy H6.	assumptions have been made for the policy requirements of CN3.
ANON-KSAR-	Paragraph 2 is not robust enough. The word SHOULD should replace 'seek	Agree. Recommended Response: The policy could be
N8UA-D	to'demonstrate the lowest level of emissions.	strengthened by deleting the words 'seek to'.
	Please see accompanying Representations	
	Policy CN3 – Energy Efficiency Standards to Reduce Carbon Emissions 5.3 Vistry Partnerships agrees and supports the move towards net zero and the development industry has a key role to play to support this agenda. The draft policy sets out a range of standards that (in summary) prohibit the use of fossil fuels for the purposes of heating or cooking. The policy also requires that 100% of the energy requirement for new dwellings is achieved from renewable generating sources. Our primary concern with these	Support welcomed and comments noted.
ANON-KSAR- NKJ4-8	proposed requirements is that of timescales. It is not clear that the housebuilding sector and the supporting supply chain, will be capable of meeting the proposed policy requirements at the point the Local Plan is adopted in Summer 2024 (the dated identified in the most recent Local Development Scheme (July 2021). Many major housebuilders have signed-up to the The House Builder Federation (HBF) 'Future Homes Delivery Plan', which sets out how the industry will transition to net zero carbon. This process of transition requires an interim step, with new homes being expected to be 'net zero carbon ready' in the short-term, and fully net zero carbon in the medium-term. The 'Net Zero Carbon Targets' report (Elementa, September 2022), which forms part of the evidence base and is	By including Policy CN3 in the LP the council has made it very clear the energy efficiency standard that new dwellings need to achieve. The LP covers the period up to 2039 so it is important that the city council acts now rather than delaying the implementation of the LP policy to the next review of the LP. Greenfield sites have been phased to come forward no earlier than 2030 which will give the Building industry and developers time to adapt. <b>Recommended Response:</b> No change.
	citied as a justification of this Draft Policy C3 is silent on this question of timing.	The whole purpose behind Policy CN3 is that the amount of energy required on site should be balanced by installing on-site renewables.
	A related concern is that the draft policy expects 100% of energy	The Net Zero Carbon Targets evidence base shows that
	consumption required by new residential homes to be generated on-site via renewable energy generating schemes. This may be achievable in some	the Part L 2021 notional building assumes a PV area of 14.4 m <sup>2</sup> and 22.4 m <sup>2</sup> for semi-detached and detached
	instances, but it is unlikely that every new dwelling will be able to accord	house respectively. The LETI scenario in the evidence
	with this. The policy allows for some deviation where there are	base assumes a smaller PV area of 11.2m <sup>2</sup> and 12.8m <sup>2</sup> for
	"exceptionally clear and compelling reasons", but it is likely that many if not	the semi-detached and detached house respectively,

most residential developments will be unable to be fully net zero carbon, until the wider power-generation network is free from carbon-based power stations. Again, this matter is not discussed within the Elementa report.

Impacts on viability will also require careful consideration. The Elementa report suggests that applying LETI standards results in a 5.8% increase over Building Regulations (as applicable in 2021), but notes (correctly) at paragraph 7.2 that "...in the 12 months from February 2021 to February 2022 average housing materials costs increased by nearly 8% and will have accelerated further following global events including the war in Ukraine". A sustained period of high inflation is now expected, with the Bank of England forecasting the longest recession since records began.

Appendix III of the Local Plan Viability Assessment Interim Stage 1 Report (2022) highlights that cumulative requirements (including the proposed LETI targets) may not be viable on greenfield sites in parts of the Local Plan area. This situation is likely to be worsened if economic conditions deteriorate further, to the detriment of achievable values. Vistry Partnerships acknowledge that the Viability Assessment will be updated in due course. However, at this stage it appears that the requirements envisaged at Draft Policy CN3 are unviable, with this presenting a risk to the effectiveness of the Plan as a whole (as a key test of soundness).

Notwithstanding the above concerns, Vistry Partnerships are committed to ensuring the delivery of carbon neutrality within their proposed developments as demonstrated by our Zero Carbon Home Roadmap. This sets out how reductions in carbon emissions will be achieved, specifically 75-80% reductions in new development by 2025, net zero carbon (regulated energy) by 2030; net zero carbon (including unregulated energy by 2035). To facilitate the roadmap Vistry are committed to implementation of renewable energy technologies, including a range of options such as additional insulation, solar panel, waste water heat recoveries, air source heat pumps, EVCP and hydrogen boilers. Our road map and targets align with central Government regulation and standard including the new Future

which is less PV than the 2021 notional building to meet 100% of energy consumption on-site

To meet our climate crisis, new buildings should contribute to the increase in renewable energy generation, in the wider attempt of decarbonising the UK electricity grid. New buildings are not considered "net zero carbon" if the electricity supplied to them is coming from a wider power-generation network that is free from carbon based power stations. A building is only considered "Net Zero Operational Carbon" when no fossil fuels are used, all energy uses are minimised, meets the local energy use limits, and all energy use is generated on- or off-site using renewables that demonstrate additionality. Furthermore, generating on-site electricity gives the resident/building users the advantage of saving on energy cost.

The cost of implementing Policy CN3 has been assesed through the LP Viability Assessment and this is an iterative process. Policy CN3 has made it clear that applicants will need to demonstrate that achieving these standards produces a development that is harmful to its setting or the character of an area. **Recommended Response:** No change.

The higher fabric and system standards are recommended to allow Winchester Council to deliver Net Zero Carbon buildings in operation. The Net Zero Carbon Targets evidence base undertaken by Introba, Etude and Currie&Brown, highlight how nationally adopted standards fail to deliver buildings that comply with the space heating

	Homes Standard and Part L of the Building regulations.  We would recommend the proposed policies within the Draft Local Plan also align with the emerging regulations to ensure an appropriate target trajectory which can be realistically achieved. In many ways this policy is too advanced to reflect the current position in housebuilding i.e., until all power generated networks are carbon free, not all houses will be able to be 100% carbon free. It is recommended that the policy should be removed to ensure that all developments rely on the emerging regulations to ensure compliance.	demand and energy use intensity limits recommended in the policy, which are aligned to meet our climate crisis and limit global warming to 1.5 °C.  Please refer to Chapter 6 of the Net Zero Carbon Targets evidence base for further information.  (https://www.winchester.gov.uk/assets/attach/33574/WCC-Elementa-Consulting-Etude-and-Currie-and-Brown-Evidence-Base.pdf)
		The LP covers the period up to 2039 so it is important that the city council acts now rather than delaying the implementation of the LP policy to the next review of the LP. <b>Recommended Response</b> : No change.
ANON-KSAR- N8EY-N	Higher standards need to be accepted for any residential development approvals.	Support welcomed and comments noted.
ANON-KSAR- NKJV-A	Bloor Homes does not support the approach set out in Policy CN3, which it does not consider to be effective. Bloor Homes supports and acknowledges the need to reduce carbon emissions, particularly in the context of the UK's legally binding target of net zero carbon by 2050. However, to achieve this in practice, potentially very challenging local standards are put forward in the draft policy. There is a concern, however, that the scale of step change proposed may be too stretching in practice for the construction industry to adapt to and a phased approach is preferred to ensure that change is deliverable. The policy needs to strike a better balance in terms of ambitions versus affordability and feasibility.	The LP covers the period up to 2039 so it is important that the city council acts now rather than delaying the implementation of the LP policy to the next review of the LP. Greenfield sites have been phased to come forward no earlier than 2030 which will give the Building industry and developers time to adapt. <b>Recommended Response:</b> No change.
	There are also practical issues around whether the local approach will be onerous to assess and apply in practice due to the technical complexities, the scale of development and overall viability considerations. Generally, an approach that links to national standards and regulations is preferred which	The cost of implementing Policy CN3 has been assesed through the LP Viability Assessment and this is an iterative process. Policy CN3 has made it clear that applicants will need to demonstrate that achieving these standards

apply across local authority boundaries and provides for consistency in the market. To ensure that the local plan is both flexible and positively prepared, to support sustainable development opportunities coming forward, it is essential that policy wording reflects this. The policy requirements for new residential dwellings are accordingly considered highly prescriptive, and do not give flexibility for other site-specific considerations, such as achieving other environmental or biodiversity enhancements.

The policy contains on-site renewable energy generation requirements that appear overly prescriptive for certain types of site. The installation of effective solar generation will not be feasible for every site – for example due to shading and site size or due to heritage considerations. In these circumstances it may simply not be possible to achieve net-zero operational carbon on-site and off-site renewable energy generation. The Future Homes standard is to be introduced nationally from 2025, including an uplift in standards in Building Regulations, to ensure that new homes built from this time achieve 75-80% less carbon emissions than homes delivered under the old regulations. Given that the earliest that the Local Plan will be adopted is August 2024, a phased approach which includes standards applicable from 2025 (in line with the Future Homes standard) and then from 2030 (in line with the Council's local approach) should be considered.

Furthermore, the wording on measurement and verification should be reviewed to ensure that such requirements do not represent a barrier to housing delivery. For example, the policy wording currently states: "The energy efficiency calculations should be carried out as part of the outline and detailed planning submissions and be reconfirmed at the precommencement stage". The policy wording as currently drafted does not make a distinction between the two in terms of the level of detail required, and this should be clarified within the policy. In addition, the added precommencement stipulation has the potential to delay housing delivery and thus act as a barrier to development. Information requirements should be proportionate to the type of planning application and should be balanced against the need to support delivery, and not act as a barrier to much

produces a development that is harmful to its setting or the character of an area. **Recommended Response:** No change.

Greenfield sites have been phased to come forward no earlier than 2030 which will give the Building industry and developers time to adapt. **Recommended Response:** No change.

**Recommended Response** Policy CN3 Measurement and Verification has now been amended by clarifying the energy efficiency calculations and modelling requirements at different planning application stages.

needed housing delivery in the district. We suggest that the policy is amended to read:

'Measurement and verification' Applicants should confirm the metering, monitoring, and reporting strategy as part of the detailed planning application. The energy efficiency calculations, proportionate to the development proposed should be carried out as part of the outline and detailed planning submissions and be reconfirmed at the precommencement stage.

An explanation should be given as to how figures have been calculated as part of the planning application.

It is envisaged there will be an electronic form to complete post- completion to monitor. This will be prepared once the Plan is adopted.'

ANON-KSAR-N8M7-U

The Council are proposing that all new residential dwellings must be able to demonstrate net zero operational carbon on site. To achieve this the policy requires new homes to be built to deliver a predicted space heating demand of less than 15kWh/m2/year and an energy consumption of less than 35 kWh/m2/year and energy consumption to be delivered renewable on-site energy generation. As the Council recognise in their evidence base these standards are significantly higher than what is currently required through building regulations and the proposed Future Homes Standard that is expected to be introduced from 2025. Whilst the HBF recognises the need to improve the energy efficiency of new homes we consider that the most effective way of achieving these improvements is through nationally applied standards and not through a variety of different approaches adopted in local plans. The approach being put forward by the Council will in effect require developers to deliver homes to a variety of different standards in different LPAs increasing costs and reducing the economies of scale that come from building homes to consistently applied national regulations.

We are also concerned that in order to achieve the level of energy efficiency set out in this policy will require development to be built using systems and techniques that are currently not widely used within the house building

By including Policy CN3 in the LP the council has made it very clear the energy efficiency standard that new dwellings need to achieve. The LP covers the period up to 2039 so it is important that the city council acts now rather than delaying the implementation of the LP policy to the next review of the LP. Other Local Planning Authorities such as Cornwall and Bath and Somerset local planning authorities have included very similar energy performance standards that are based on kWh/m2/year as this is much clearer to understand than using a comparision to the notional building in the Future Homes standard.

Recommended Response: No change

More assessors are being trained and technology and the way that we do things now is changing raidly and housing industry has a key role in embracing the change that is on the horizon if we are to meet our climate emergency targets. Greenfield sites have been phased to come

industry at present. For example, to achieve these predicted standards seems to require a level of air tightness that the vast majority of builders and contractors do not currently deliver. We recognise that these skills can be developed but it will be more difficult to develop these skills in isolation to specifically to deliver homes in Winchester. This may well slow down the delivery of new homes in Winchester. In contrast the phased approach to improving energy efficiency through building regulations that is being proposed by Government ensures that the industry works as a whole to enable the delivery of zero carbon ready homes whilst maintaining delivery in a way that cannot be achieved through the individual planning authorities using their own standards.

The house building industry is not resistant to improving the energy efficiency of new homes and reducing carbon emissions it merely wants these improvements to be consistent across the country as whole rather than face different standards in each local planning authority. Aside from these broad concerns we do have more specific issue with the evidence base that we consider requires clarification.

## Viability and cost assumptions

It will be necessary for the Council to provide clear and detailed evidence as to the cost assumptions of delivering this policy. At present the evidence set out in Net Zero Carbon Targets is limited and is insufficient on which to base a policy that departs from building regulations so significantly. The HBF considers it necessary for more detailed and evidenced costs with regard to the delivery of the proposed standard in order to provide the necessary justification and ensure that viability considerations are taken into account fully.

The HBF are also concerned that the viability assessment does not appear to take into account the additional cost of delivering the higher part L standard that came into effect in June of 2022. The current viability assessment appears use this as a baseline with £72 to £88 added to take account of the proposed LETI standard. This seems to ignore the additional cost of meeting the higher part L standard or assumes that this is already

forward no earlier than 2030 which will give the Building industry and developers time to adapt. **Recommended Response:** No change

See response above that other Local Planning Authorities Local Plans have now been found to be sound by the Planning Inspectorate that use the same metric (kWh/m2/year) as Policy CN3. **Recommended Response:** No change

Evidence base is robust and based on a full cost analysis of each variation in specification. Costs used were based on current costs at the time of analysis (Q2 2022) and reflected inflation at that point. Detail on rates and sourcing can be provided to support analysis.

The LETI standards are higher than Part L, so the additional cost has been taken into account

reflected in the build cost. The HBF estimates that these could add between £5,335 to £5,580 to the cost of a new build home and must be added to the base build costs.

Further cost likely to be felt by housebuilders and developers as a result of the changes in building regulations is the introduction of the heat metering regulation, as set out in a separate consultation by the Department for Business, Energy, and Industrial Strategy. These new regulations, which go in line with the new Part L regulations, could add an additional £400 - £800 per plot, meaning the total cost per new home for the package of changes to underpin the reformed Part L introduced this year amount to between £5,700 and £6,400 per new home.

The Council also need to provide clarity as to the uplift in costs of meeting the proposed standard in CN3. The Council's evidence sets out the expected increase on costs expected and the broad costs of this policy in section 7 but does not provide a detailed breakdown of the specific costs of each element in relation to the required design assumptions, set out in the appendices to ensure a house or flatted development meets these standards compared to ones that meet current building regulations. The Council's consultants appear to have undertaken a detailed assessment and this should be included as part of the consultation evidence. These cost assumptions will need to reflect the costs faced by larger house builders as well as those by smaller developers across Winchester.

At present the cost assumptions in the viability assessment are based on a medium scale housebuilder delivering 400 to 1,000 homes a year. The costs facing smaller developers in relation to the proposed standards will be much higher than for volume housebuilders. Detailed costs need to be put forward that take account of the higher potential cost of this policy to smaller housebuilders and its potential impact on the delivery of small sites in Winchester given the reliance on windfall development in order to meet housing needs.

As such we are concerned that the Council's evidence potentially

Our understanding is that this relates to heat networks only (Heat Metering and Billing Regulations 2014 (amended 2020) - the solutions for heat networks were not included in the evidence base. Our expectation is that the costs of meeting Part L requirements for heat networked homes will vary from those highlighted in the response given that they are likely to be flats (lower compliance costs for Part L 2021) and may have different technical solutions depending on the nature of the heat network. Whilst the points about heat metering are noted, this policy does not cover heat networks.

A detailed breakdown of the specific costs of each element in relation to the required design assumptions is now being provided in the updated Elementa report.

It is agreed that compliance costs are likely to be higher for smaller housebuilders than volume builders, however the cost base of these developments will also be proportionately higher and in practice it may be easier for a bespoke home to be designed to achieve these requirements if designed in from the outset. From a viability perspective, our assessment is necessary high-level as guided by the PPG and with this in mind it is not appropriate to take into account individual circumstances.

underestimates the costs of this policy in relation to the relative costs of current building regulations and the Future Homes Standard. There is still significant uncertainty as to the costs of meeting these standards and, as the Government's Impact Assessments notes, variations in design location and delivery could see costs vary by 30% or more and it is these uncertainties that the HBF wants to see minimised through the application of consistent nationally agreed standards.

Reference to Passivhaus: The Council indicate within the policy that homes should be monitored against either the Passivhaus or CIBSE TM54. Whilst we recognise that these are to be used as assessment frameworks the mention of these in policy makes no allowance for other appropriate assessment frameworks or evidence that could be used to demonstrate this target is achieved. In particular we are concerned that the mention of Passivhaus in the policy itself could be misinterpreted by decision makers that homes must be built to Passivhaus standards which the Council have indicated is not the case. We would suggest that a broader range of assessment frameworks should be allowed to allow flexibility for developers to apply nationally agreed procedures to calculate regulated energy demand. It is also important that the Council provide detailed the information within the evidence base about the suggested assessment frameworks being "better" or producing "more accurate" predictions of energy use, for Developers to consider when selecting an assessment framework.

In addition, we would recommend that flexibility is included in the policy where this would result in a development becoming unviable. At present flexibility relates solely to the harm to a setting or character of the area and this is insufficient given the uncertainty as to the deliverability of this policy across all development types. Such considerations are important and also reflect the approach set out in paragraph 157 of the NPPF which, in relation to decentralised energy requirements that both feasibility and viability should be considerations when determining planning applications.

Conclusion on CN3: In brief the HBF are concerned that the higher level of

The cost analysis for this study reflects a current cost base for the South of England incl Winchester and so reflects local circumstances. The cost model has been prepared by the team that produced the cost analysis for Part L 2021 and so is consistent with the approach used for national policy development. The specification for the Future Homes Standard is still uncertain and will be consulted on further by Government in Spring 2023, cost assessments of the FHS currently reflect the previously stated specifications in the Governments' statement on new building regulations in 2022.

Agreed **Recommended Response:** The names of the software and methods have been removed from the policy and moved to supporting guidance.

The whole purpose of requirement to undertake a LP Viability as part of the preparation of the LP is this will

	energy efficiency standards being proposed by the Council go well beyond what is being proposed by the Government and we say beyond the intention of its stated position in PPG. The Government have set out its intentions with regard to the Future Homes Standard from 2025 which will provide a significant improvement to the energy efficiency of new homes, a process that allows for the decarbonisation of the grid to transition homes net zero. Given that the Future Homes Standard will be challenging for the industry to deliver nationally there will be difficulties at the same time in achieving the Council's more stringent requirements. As such the HBF consider the policy to be unsound as it is unjustified to push for a more stringent target than that set out by a careful dialogue between Government and a range of stakeholders.	inform the viability of implementing new and revised policies through the Local Plan. <b>Recommended Response:</b> No change
ANON-KSAR- N8YU-5	WCC must ensure that they enforce the higher standards unless there are truly exceptionally clear and compelling reasons demonstrated.	Support welcomed and comments noted.
ANON-KSAR- NKFD-M	The Council should work to allow the installation of double glazing to Grade II listed buildings. This would need to be of an appropriate standard but can be such that the design integrity of the building is maintained. Subject to this, I support the policy	Policy HE14 deals with improvements and alterations to improve the energy efficiency of designated and non designated historic assets. As the supporting text to this particular policy states, when it comes to considering what improvements can be made to these historic assets you need to take a holistic approach as double glazing of Grade II listed buildings is not the answer.  Recommended Response: No change
ANON-KSAR- NK3N-B	South Wonston Sustainability welcomes the ambition to tackle the climate crisis that is shown in this proposed policy and in policies CN4 and CN6. The Winchester Local Plan should demand the highest standards of design and build to support the need to build new properties to achieve net zero carbon output.  The London Energy Transformational Initiative is focussed on London. It does not deal with rural environment matters adequately. Alternative energy standards do not seem to have been considered when preparing this plan, including active involvement in the Oxfordshire Energy Strategy. More	Support welcomed and comments noted.  The LETI energy efficiency standards did originate from work that was undertaken in London. However, the LETI energy efficiency standards are now used more widespread across the whole of the country and as a result of this LETI has now changed its name to Low
	appropriate standards that have been adopted by other local authorities should be considered for Winchester.	Energy Transformational Initiative. Other Local Planning Authorities such as Cornwall and Bath and Somerset have

		included very similar energy performance standards that are based on kWh/m2/year as this is much clearer to understand than using a comparision to the notional building in the Future Homes standard. <b>Recommended Response:</b> Change the name of LETI to Low Energy Transformational Initiative.
	The predicted additional cost of implementing this policy for new homes, particularly on smaller developments (high marginal cost for small sites) is not considered in this policy. Either smaller rural sites need to be made more viable by a more flexible policy or small development sites allocations must be avoided.	While LETI was originally a London focussed initiative, its work is now nationwide and the proposed performance standards do not presuppose a London or urban development type. The viability of the approach for smaller sites would be assessed as part of the site sampling undertaken for the plan viability assessment The next stage of the local plan viability assessment includes the testing of smaller sites <10 units (non-major), however, as above, given the high-level nature of our assessment we cannot take into account the individual developer circumstances - an overview needs to be taken.
ANON-KSAR- N85A-D	Crest Nicholson believes that, in relation to draft Policy CN3, the most effective way for the planning system to address the challenges of climate change is through adherence to the objectives set out at paragraphs 104 and 105 of the Framework, which advocate early consideration of the transport implications of spatial planning, because carbon emissions associated with travel are a significant cause of climate change. The Winchester City Council Carbon Neutrality Action Plan 2020-2030 notes that transport is the main source of the district's CO2 emissions, contributing 287,000 tonnes (46%) of CO2 in 2017. This is significantly higher than CO2 emissions arising from domestic energy use, which amounted to 193,000 tonnes (31%). While both are significant contributors, transport has a significantly greater impact on climate change locally. Ensuring that development is located in places where motorised travel demands can be minimised and opportunities for public transport usage and active travel maximised should be the principal policy consideration in	It is accepted that transport is a major contribution towards CO2 emissions that was identified in the Carbon Neutrality Action Plan (which was undertaken pre-COVID). The city council agrees that development needs to be located in places that support the use of public transport (Policy T3) but it also needs to ensure that new homes are built with higher energy efficiency standards to reduce carbon emissions. <b>Recommended Response:</b> No change.

	responding positively to the climate emergency the Council has declared.	
ANON-KSAR- NKJC-Q	To ensure this policy is effective and not in need of continual review, we would suggest reference is made to adhering to the latest building regulations in force at the time an application for development is made.	Policy CN3 has introduced new energy efficiency standards the new residential and non-residential development will need to conform to. These energy efficiency standards are different to Building Regulations.  Recommended Response: No change.
	As indicated, Croudace support the move towards net zero and the development industry has a key role to play to support this agenda. To this end, the draft Policy CN3 sets out a range of standards that (in summary) prohibit the use of fossil fuels for the purposes of heating or cooking. The policy also requires that the energy requirement for all new dwellings is achieved from only renewable generating sources.	
ANON-KSAR- N85K-Q	Whilst the transition to renewable sources of energy is taking place at a markedly increasing pace, Croudace's primary concern with these proposed requirements is nonetheless that of timescales. Put simply, it is not clear that the housebuilding sector, the supporting supply chain, and workforce, will be capable of meeting the proposed policy requirements at the point the Local Plan is adopted in 2024 or 2025.	More assessors are being trained and technology and the way that we do things now is changing raidly and housing industry has a key role in embracing the change that is on the horizon if we are to meet our climate emergency targets. Greenfield sites have been phased to come forward no earlier than 2030 which will give the Building industry and developers time to adapt. <b>Recommended Response:</b> No change.
	Many major housebuilders have signed-up to the House Builder Federation (HBF) 'Future Homes Delivery Plan', which sets out how the industry will transition to net zero carbon. This process of transition requires an interim step, with new homes being expected to be 'net zero carbon ready' in the short-term, and fully net zero carbon in the medium-term. Given the remit of the HBF, the Future Homes Delivery Plan provides a good indication of what this industry considers to be possible.	The city council want to go higher than the Future Homes Delivery Plan.
	In contrast, the 'Net Zero Carbon Targets' report (Elementa, September 2022), which forms part of the consultation evidence base (and which is citied as the main justification for Draft Policy C3), does not appear to consider whether the development industry can achieve what is proposed	See above response in terms of the timing of Greenfield sites. Recommended Response: No change.

within the timescales envisaged. Indeed, many aspects of the report describe trends to 2030 and beyond, rather than at 2024 when WCC expects the Plan to be adopted. Again, this points to the importance of allowing a transitional period, rather than expecting all newly permitted homes to be net zero carbon from the date of the Plan's adoption.

A related concern is that the draft policy expects 100% of energy consumption (required by new residential homes) to be generated on-site, via renewable energy generating schemes. This may well be achievable in some instances, but it is highly unlikely that every new dwelling will be able to accord with this proposed requirement.

It is recognised that the draft policy allows for some deviation where there are "exceptionally clear and compelling reasons". However, in-practice many if not most residential developments will be unable to become fully net zero carbon, until the wider power-generation network is free from carbon-based power stations. Indeed, because of this, the policy appears to be predicated on the idea that new houses built in the near-term will effectively need to be self-sufficient in terms of energy generation. This expectation does not appear to be realistic and, again, this is another matter that is not fully considered within the Elementa report.

Impacts on viability will also require careful assessment. The Elementa report suggests that applying LETI standards results in a 5.8% increase over Building Regulations (as applicable in 2021), but notes (correctly) at paragraph 7.2 that "...in the 12 months from February 2021 to February 2022 average housing materials costs increased by nearly 8% and will have accelerated further following global events including the war in Ukraine". A sustained period of high inflation is now expected, with the Bank of England forecasting the longest recession in since records began.

Appendix III of the Local Plan Viability Assessment Interim Stage 1 Report (2022) highlights that cumulative requirements (including the proposed LETI targets) may not be viable on greenfield sites in parts of the Local Plan area. This situation is likely to be worsened if economic conditions

The Net Zero Carbon Targets evidence base shows that the Part L 2021 notional building assumes a PV area of 14.4 m² and 22.4 m² for semi-detached and detached house respectively. The LETI scenario in the evidence base assumes a smaller PV area of 11.2m² and 12.8m² for the semi-detached and detached house respectively, to meet 100% of energy consumption on-site.

Policy CN3 has identified that 100% of the energy consumption should be generated on site and it will be up to the applicant to be to demonstrate if there are compelling reasons why this cannot be achieved. This all comes back to the design process and the need to ensure that the site layout of the proposed buildings in undertaken in a way that maximises the opportunity for solar gain. **Recommended Response:** No change.

Whilst the information provided was correct at the time of writing and indeed inflation has sustained at a high level through to April 2023. However, rates are projected to fall during 2023. The cost analysis in the Elementa report makes no comment on the viability of the cost uplifts associated with the higher developemnt standards, these were considered separately by Dixon Searle.

Dixon Searle's assessment to date acknowledges that development in the Itchen catchment area comes with

	deteriorate further, to the detriment of achievable values. Croudace acknowledge that the Viability Assessment will be updated in due course. However, at this stage it appears that the requirements envisaged at Draft Policy CN3 are viable.  Overall, draft Policy CN3 (whilst well-intentioned) does not appear to be justified by the available evidence and presenting a risk to the effectiveness of the Plan as a whole.	greater costs and therefore a potentially more challenging viability scenario in some circumstances. However, this is reflected in our findings to date with the acknowledgement that an AH proportion of <40% (on greenfield land, Itchen catchment) should be considered further moving forward.  Re the point on economic conditions - the viability assessment is a proportionate exercise and inevitably has to be undertaken at a point in time using available information rather than projections as part of using prudent assumptions and making judgements we do have regard to sensitivities. It is acknowledged that a range of influences on the market are changing all the time but it would not be reasonable to assume a consistently downward trajectory over a 15yr plan period with high and low points of the economic cycle.
ANON-KSAR- N8YM-W	BSP both support and acknowledge the need to reduce carbon emissions, particularly in the context of the UK's legally binding target of net zero carbon by 2050. The opportunity, Land at Fairthorne Grange, has been designed to support sustainable energy efficient homes being delivered which are accessible via active travel modes.	Support welcomed and comments noted.
ANON-KSAR- NKAB-D	BSP both support and acknowledge the need to reduce carbon emissions, particularly in the context of the UK's legally binding target of net zero carbon by 2050. The opportunity at Land North of Rareridge Lane will result in the creation of highly sustainable energy efficient homes which will be accessible via active travel modes.	Support welcomed and comments noted.
ANON-KSAR- NKAB-D ANON-KSAR- N8YM-W	In ensuring that the local plan is both flexible and positively prepared to support sustainable development opportunities coming forward, it is essential that policy wording reflects this. The policy requirements for new residential dwellings are accordingly considered highly prescriptive, and do not give flexibility for other site specific considerations, such as achieving other environmental or biodiversity enhancements.	Policy CN3 is very clearly worded that all development, through the design process, should demonstrate the lowest level of carbon emissions unless there are exceptional clear and compelling reasons that achieving these standards produce as a development that would be harmful to its setting or the character of the area.  Recommended Response: No change.

	Furthermore, the wording on measurement and verification should be reviewed to ensure that such requirements do not represent a barrier to housing delivery. For example, the policy wording currently states: 'The energy efficiency calculations should be carried out as part of the outline and detailed planning submissions and be reconfirmed at the precommencement stage.'	Agreed - <b>Recommended Response</b> Policy CN3 Measurement and Verification has now been amended by clarifying the energy efficiency calculations and modelling requirements at different planning application stages.
	It is unrealistic for energy efficient calculations to be of the same level of detail for outline and detailed applications, however the policy wording as currently drafted appears to not make a distinction between the two. In addition, the added pre- commencement stipulation has the potential to delay housing delivery and thus act as a barrier to development. Information requirements should be proportionate to the type of planning application, and similarly should be balanced against the need to support delivery, and not act as a barrier to much needed housing delivery in the district.	
		Support welcomed and comments noted.
ANON-KSAR- NKJ1-5	Winchester College support the principle of the City Council's approach to reduce carbon emissions defined in Policy CN3.  However, for clarification, the College requests that the wording of the policy distinguishes between proposals for new development and those for a change of use in recognition that measures to reduce carbon emissions may not be possible on existing buildings or appropriate on listed buildings.	Policy CN3 is not intended to apply to the change of use and this point has been made clear in the suggested changes to the wording of this policy. <b>Recommended Response:</b> include the words (excluding conversion and change of use) in Policy CN3 in connection with the LETI energy standards.
ANON-KSAR- NKME-V	The commitment of the Council to offer leadership for the district to be carbon neutral by 2030 is noted, ahead of the UK's legally binding target of 2050. To achieve this in practice very challenging local standards are put forward in the draft policy.	Support welcomed and comments noted.
	There is a concern, however, that the scale of step change proposed may be too stretching in practice for the construction industry to adapt to and a	More assessors are being trained and technology and the way that we do things now is changing raidly and housing

phased approach is preferred to ensure that change is deliverable. The industry has a key role in embracing the change that is on policy needs to strike a better balance in terms of ambitions versus the horizon if we are to meet our climate emergency targets. Recommended Response: No change. affordability and feasibility. Policy CN3 is very clearly worded that all development, through the design process, should demonstrate the There are also practical issues around whether the local approach will be onerous to assess and apply in practice due to the technical complexities. lowest level of carbon emissions unless there are Generally an approach that links to national standards and regulations is exceptional clear and compelling reasons that achieving preferred which apply across local authority boundaries and provides for these standards produce as a development that would be consistency in the market. The policy contains on-site renewable energy harmful to its setting or the character of the area. generation requirements that appear overly prescriptive for certain types of Recommended Response: No change. site. The installation of effective solar generation will not be feasible for every site – for example due to shading and site size or due to heritage considerations. In these circumstances it may simply not be possible to achieve net-zero operational carbon on site and off-site renewable energy generation and offsets may be necessary. The policy is currently silent on these aspects but they may need to be considered as part of the phased approach to introducing the local standards so that the policy can be effective. The Future Homes standard is to be introduced nationally from 2025, Greenfield sites have been phased to come forward no including uplift in standards in Building Regulations, to ensure that new earlier than 2030 which will give the Building industry and homes built from this time achieve 75-80% less carbon emissions than developers time to adapt. Recommended Response: No homes delivered under the old regulations. Given that the earliest that the change. Local Plan will be adopted is August 2024, a phased approach which includes standards applicable from 2025 (in line with the Future Homes standard) should be considered. This is to ensure that the policy can be deliverable over its period. Bargate Homes have concerns regarding the available technology to Policy CN3 is very clearly worded that all development, achieve these aims and why the Local Plan policy needs to be in excess of through the design process, should demonstrate the building regulations which manage how the industry evolves and adapts. lowest level of carbon emissions unless there are ANON-KSAR-Whilst Bargate Homes are committed to delivering sustainable homes exceptional clear and compelling reasons that achieving N81F-E which include air source heat pumps, PV panels, car charging points and these standards produce as a development that would be other fabric benefits, we have concerns that trying to achieve a self harmful to its setting or the character of the area.

sufficient development will result in grid-like designs of houses to maximise

Recommended Response: No change.

solar gain (required for energy generation) which shall conflict with the Council's and Government's urban design and build back beautiful In most cases in the UK, the on-site energy generated is agendas. fed back to the grid, in the attempt of decarbonising the In practical terms, where is the off-site storage of summer energy going to UK grid as a whole, rather than the individual be collected? Who puts in the provision for the wider grid to store energy development. Therefore any excess summery energy from this development, and if energy is being received back from the grid, would be fed back to the grid and not required to be how can it be qualified as 100% renewable when we are not certain of its stored/collected. Furthermore, the Net Zero Carbon source? These measures go significantly beyond Part L and the Future Targets evidence base shows that the Part L 2021 Homes Standard which is impractical. notional building assumes a PV area of 14.4 m<sup>2</sup> and 22.4 m<sup>2</sup> for semi-detached and detached house respectively. The LETI scenario in the evidence base assumes a Viability needs to be considered and these requirements are already smaller PV area of 11.2m<sup>2</sup> and 12.8m<sup>2</sup> for the semicontrolled through Building Regulations. It is not clear why Winchester justifies significantly higher standards than nationally adopted standards. detached and detached house respectively, to meet 100% The published viability report already concedes up to 10% reduction of of energy consumption on-site, so the proposed measures affordable houses to meet these climate targets. This coupled with a further around renewable energy not going significantly beyond 5% reduction for nutrient mitigation is a significant reduction in HA before Part L. these technologies have been tested and true build cost ascertained which shall prompt developments to challenge the affordable housing contribution The whole purpose of requirement to undertake a LP further. It is necessary to carefully consider and balance the competing Viability as part of the preparation of the LP is this will demands associated with new housing developments. inform the viability of implementing new and revised policies through the Local Plan. Recommended Response: No change. Measurement of energy efficiency is impractical at outline stage. A highlevel statement of energy efficiency objectives and opportunities may be appropriate, but not detailed calculations. Agreed - Policy CN3 Measurement and Verification has now been amended by clarifying the energy efficiency calculations and modelling requirements at different planning application stages. The whole purpose of requirement to undertake a LP In the past developers have been allowed to build to lower standards of Viability as part of the preparation of the LP is this will

insulation etc than individual residents, this must not be allowed in future or

the purchasers of these properties will be consuming and paying much

ANON-KSAR-

more than others.

N8XP-Y

inform the viability of implementing new and revised

policies through the Local Plan. Recommended

Response: No change.

ANON-KSAR- N83B-C	To make this policy clear and robust, explanatory paragraph 2, lines 2/3 should be amended to read " all new developments SHOULD ( omit " seek to") DEMONSTRATE the lowest leveletc	Agree. Recommended Response: The policy could be strengthened by deleting the word 'seek to'.
		Support welcomed and comments noted.
	All new homes should immediately be built to the highest possible energy efficiency standards and achieve net zero. Every new building in the district should automatically have solar PV and use ground source or air source heat pumps and achieve net zero.  To make this policy clear and robust, explanatory paragraph 2, lines 2/3	Agree. Recommended Response: The policy could be strengthened by deleting the word 'seek to'.
	should be amended to read "all new developments SHOULD (omit "seek to") DEMONSTRATE the lowest leveletc  CN3i I strongly endorse points i to iv which set challenging requirements for	Agree. Recommended Response: Policy CN3: Non-Residential development has now been amended by adding a requirement for all new non-
ANON-KSAR- N8XG-P	all new (residential) dwellings. ( NB all dwellings are residential)	residential developments to maximize on-site renewable energy generation. See Policy Amendments for further
	CN3v Non – residential development. Point v is inadequate because BREEAM is not a tool for driving zero carbon development. The following	details.
	should therefore be added to Point v " Demand for space heating should be met by renewables".	Measurement and verification is currently not a policy requirement, but a recommendation. Applicant are not required to implement in-use energy monitoring, but are
	CN3 Measurement and verification.  Please clarify whether the metering, monitoring and reporting strategy will	recommended to. Applicants are only required to report if a metering, monitoring and reporting strategy will be caried
	be assessed when determining whether to grant permission and if so how will this be carried out? Add a requirement for pre occupation verification.	out or not in the detailed planning application. Policy CN3  – Measurement and Verification wording has been amended to clarify this policy further.
ANON-KSAR- N8VD-H	Anchor Properties fully supports the need to drive towards a more sustainable future and understand that to do so requires a considerable reduction in carbon emissions generated. This is particularly relevant in the	Support welcomed and comments noted.

	face of the UK Government's legally binding target to achieve net zero carbon by 2050. The commitment of the Council to the district becoming carbon neutral by 2030 is noted, especially as this is ahead of the	
	aforementioned UK Government target of 2050.  However, there are very real practical issues around the ability of the proposed requirements to be assessed or applied in practice. For example, it is unrealistic for energy efficiency calculations to be of the same level of detail for outline and detailed applications, yet the policy as currently drafted does not make a distinction between the two.	Agreed - Policy CN3 Measurement and Verification has now been amended by clarifying the energy efficiency calculations and modelling requirements at different planning application stages.
	The Future Homes standard is to be introduced nationally from 2025, including an uplift in standards in Building Regulations to ensure that new homes built from this time achieve 75-80% less carbon emissions than homes delivered under the old regulations. Given that the earliest that the Local Plan will be adopted is August 2024, a phased approach which includes standards applicable from 2025 (in line with the Future Homes standard) and then from 2030 (in line with the Council's local approach) should be considered.	Greenfield sites have been phased to come forward no earlier than 2030 which will give the Building industry and developers time to adapt. <b>Recommended Response:</b> No change.
ANON-KSAR- NKKV-B	In relation to point iv. It would be better to defer to the LETI standards here as there are nuances related to the generation.  Typo: 4.29 'energy hierarchy (Policy CN3)' should surely read 'energy hierarchy (Policy CN2)'	We are unsure about which LETI generation standards are being referred to here. LETI recommends that renewables are maximised so that 100% of annual energy requirement is generated on-site, which is aligned with what CN3 policy is proposing.
BHLF-KSAR- N8ZV-7	Policy CN3 Energy efficiency standards to reduce carbon emissions OBJECT Winchester College support the principle of the City Council's approach to reduce carbon emissions defined in Policy CN3. However, for clarification, the College requests that the wording of the policy distinguishes between proposals for new development and those for a change of use in recognition that measures to reduce carbon emissions may not be possible on existing buildings or appropriate on listed buildings.	Policy CN3 is not intended to apply to the change of use and this point has been made clear in the suggested changes to the wording of this policy. <b>Recommended Response:</b> include the words (excluding conversion and change of use) in Policy CN3 in connection with the LETI energy standards.
BHLF-KSAR- N8B8-H	BDW have focused this representation on draft Policy CN3- Energy Efficiency standards to reduce carbon emissions, contained in the Draft	

Local Plan out for consultation. An extract of the draft policy is contained in Appendix One.

#### BDW sustainability framework

A key aspect of BDW's sustainability framework is driving a reduction in carbon emissions across our homes through innovation and high quality design – including committing to all new house types being zero carbon (regulated energy) by 2030. To enable us to reach this milestone and continue to build zero carbon homes at scale and at a viable cost, we have set out a clear roadmap which includes researching and trialling innovative products and techniques, alongside collaborating in industry

research projects, such as the Zed House and Energy House 2.0 respectively.

Given our industry leading sustainability approach, we would like to highlight concerns with the technical standards set out in Draft Policy CN3 that are to be applied to new residential dwellings upon adoption of the Local Plan. In particular, the space heating target set out in CN3 (i) could prove

problematic to achieve – at the expense of home design and typology. The target of <15kWh/m2/year is equivalent to PassivHaus standard, which in itself is not required to achieve net-zero carbon. Barratt have tested the current space heating demand of our traditional family orientated 3 and 4 bedroom homes and currently achieve an average c. 28 kwh/m2.yr. This c. 28 kwh/m2.yr space heating demand will improve once the Future Homes Standard comes into force, however a space heating demand of <15kWh/m2/year should not be seen as an absolute target to achieve on the roadmap to zero carbon homes in Winchester. Attempting to achieve this standard could:

• Have a negative impact on the typology of housing proposed by developers. Typologies such as bungalows and 'room in roof' dwellings would struggle to achieve this absolute space heating target due to their form factor (form factor is the ratio of a building's total surface area (the walls, roof and ground floor) to its treated floor area. The smaller the form

The Net Zero Carbon Targets evidence base shows that with the recommended fabric specifications, a space heating demand target of <15kWh/m²/year is achievable.

We acknowledge that these typologies are harder to achieve a space heating demand of 15 kWh/m2/year, however some recent schemes with Bungalows have achieved Passivhaus standard. Given that Bungalows have a lower (better) form factor than "room in roof"

typologies, a space heating demand of 15 kWh/m2/year is factor, the more simplified/efficient the shape of the building). technically achievable with a tight building envelope and • Create significant potential supply chain challenges as developers will high performance fabric have to change the way we design and build homes as well as potentially the layout of our development proposals. For example, achieving this standard would mean wet plaster having to be utilised to achieve a lower airtightness of circa 1.0 <sup>3</sup>/h/m<sup>2</sup>@50pa – a skill which is not currently Relating to airtightness, there are many options for readily available in the construction industry. It is also worth noting achieving airtightness of circa 1.0 3/h/m<sup>2</sup>@50pa aside from achieving airtightness as low as 1 has only been achieved on less than 1% wet plaster, this includes airtightness boards or of domestic dwellings in the UK since 2017. membranes. • Present significant potential viability challenges. A recent report by the UK Green Building Council set out that achieving the equivalent of PassivHaus standards would amount to £263/m2 of additional build cost. Meaning that for an average semi-detached home (113m2 - UKGBC, 2022), it would result in a per home build cost increase of c.£30,000 – potentially creating a significant barrier to the entry of SME developers with limited funding. BDW Our understanding of the UKGBC report is that it was just would recommend that an absolute space heating target is removed for the showing an option of achieving Passivhaus, not Regulation 19 consultation as net zero operational carbon (regulated necessarily looking at the most cost effective option. A energy) can still be achieved through building fabric improvements report by the Passivhaus trust on construction costs of alongside efficient services with heat recovery and renewables – albeit with pasivhaus in 2019 stated 'The overall summary of this a higher space heating demand. Removing the <15kWh/m2/year trend is shown in the chart below and demonstrates the requirement under CN3 would facilitate continued design flexibility, current best practice is at 9% extra cost. However, Exeter alongside eliminating a potential skills bottleneck when allocated housing City Council, with nearly 9 years' experience, are now begins to come forward in the district. BDW would again raise concerns with building Passivhaus at a premium of just 8% over baseline the absolute Energy Use Intensity (EUI) target of 35 kwh/m2 set out in CN3 and that the steady-state projection of Passivhaus (ii). BDW's range of homes currently average an EUI of 36 kwh/m2.yr which adoption at scale is around 4%' (This is over 2013 regs will decrease further with the introduction of the Future Homes Standard. rather than 2021 regs.) However, the issue in setting an absolute target is that again, it could impact the typology of homes that come forward due to form factor as It is encouraging to hear that BDW is very close to meeting mentioned in our response to CN3 (i). We would encourage Winchester to 35kWh/m2/yr apply a range of values to the EUI target to allow for flexibility in design and typology. There are concerns regarding the available technology to achieve these Regarding house design - the Net Zero Carbon Targets BHLF-KSARaims and why the Local Plan policy needs to be in excess of building evidence base prepared by Introba, Etude and Currie&Brown show how homes can be designed to meet N86N-U regulations

which manage how the industry evolves and adapts. Whilst Bargate is

committed to delivering sustainable homes which include air source heat pumps, PV panels, car charging points and other fabric benefits, it has concerns that trying to achieve a self sufficient development will result in grid-like designs of houses to maximise solar gain (required for energy generation) which shall conflict with the Council's and Government's urban design and build back beautiful agendas. In practical terms, where is the off-site storage of summer energy going to be collected? Who puts in the provision for the wider grid to store energy from this development, and if energy is being received back from the grid, how can it be qualified as 100% renewable when we are not certain of its source? These measures go significantly beyond Part L and the Future Homes Standard which is impractical. Viability needs to be considered and these requirements are already controlled through Building Regulations. It is not clear why Winchester justifies significantly higher standards than nationally adopted standards.

The published viability report already concedes up to 10% reduction of affordable houses (AH) to meet these climate targets. This coupled with a further 5% reduction for nutrient mitigation will result in a significant reduction in AH yields before these technologies have been tested and true build cost ascertained which shall prompt developments to challenge the affordable housing contribution further. It is necessary to carefully consider and balance the competing demands associated with new housing developments. Measurement of energy efficiency is impractical at outline stage. A high-level statement of energy efficiency objectives and opportunities may be appropriate, but not detailed calculations.

LETI targets with a range of aesthetics. Please refer to Section 5.10 of the report for further information.

Regarding on-site energy generation - in most cases in the UK, the on-site energy generated is fed back to the grid, in the attempt of decarbonising the UK grid as a whole, rather than the individual development. Therefore any excess summer energy would be fed back to the grid and not required to be stored/collected.

Regarding the the higher fabric and system standards - they are recommended to allow Winchester Council to deliver Net Zero Carbon buildings in operation. The Net Zero Carbon Targets evidence base undertaken by Introba, Etude and Currie&Brown, highlight how nationally adopted standards fail to deliver buildings that comply with the space heating demand and energy use intensity limits recommended in the policy, which are aligned with carbon budgets and limits set to meet our climate crisis and limit global warming to 1.5 °C.

Please refer to Chapter 6 of the Net Zero Carbon Targets evidence base for further information.

(https://www.winchester.gov.uk/assets/attach/33574/WCC-Elementa-Consulting-Etude-and-Currie-and-Brown-Evidence-Base.pdf)

	The whole purpose of requirement to undertake a LP Viability as part of the preparation of the LP is this will inform the viability of implementing new and revised policies through the Local Plan. <b>Recommended Response:</b> No change.
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Comments which did not answer to whether they support, object nor netiher support or object to policy CN3 - energy efficiency standards to reduce carbon emissions

industry has a key role to play to support this agenda. To this end, the draft Policy CN3 sets out a range of standards that (in summary) prohibit the use of fossil fuels for the purposes of heating or cooking. The policy also requires that the energy requirement for all new dwellings is achieved from only renewable generating sources. Whilst the transition to renewable sources of energy is taking place at a markedly increasing pace, Catesby's primary concern with these proposed requirements is nonetheless that of timescales. Put simply, it is not clear that the housebuilding sector, the supporting supply chain, and workforce, will be capable of meeting the proposed policy requirements at the point the Local Plan is adopted in 2024 or 2025. Many major housebuilders have signed-up to the House Builder Federation (HBF) 'Future Homes Delivery Plan', which sets out how the industry will transition to net zero carbon. This process of transition requires an interim step, with new homes being expected to be 'net zero carbon ready' in the short-term, and fully	reenfield sites have been phased to come rward no earlier than 2030 which will give the uilding industry and developers time to adapt. ecommended Response: No change.  The Future homes Delivery plan states that a Wh/m2/yr) metric will be introduced which is in the with the policy. (although it does not mention target).  There's no intention to have a transition period. Ince the plan is adopted, Policy CN3 will be inforced.

envisaged. Indeed, many aspects of the report describe trends to 2030 and beyond, rather than at 2024 when WCC expects the Plan to be adopted. Again, this points to the importance of allowing a transitional period, rather than expecting all newly permitted homes to be net zero carbon from the date of the Plan's adoption.

A related concern is that the draft policy expects 100% of energy consumption (required by new residential homes) to be generated on-site, via renewable energy generating schemes. This may well be achievable in some instances, but it is highly unlikely that every new dwelling will be able to accord with this proposed requirement. Indeed, small and medium sized sites are likely to be particularly impacted by this envisaged requirement.

It is recognised that the draft policy allows for some deviation where there are "exceptionally clear and compelling reasons". However, in-practice many if not most residential developments will be unable to become fully net zero carbon, until the wider power-generation network is free from carbon-based power stations. Indeed, because of this, the policy appears to be predicated on the idea that new houses built in the near-term will effectively need to be self-sufficient in terms of energy generation. This expectation does not appear to be realistic and, again, this is another matter that is not fully considered within the Elementa report. Impacts on viability will also require careful assessment. The Elementa report suggests that applying LETI standards results in a 5.8% increase over Building Regulations (as applicable in 2021), but notes (correctly) at paragraph 7.2 that "...in the 12 months from February 2021 to February 2022 average housing materials costs increased by nearly 8% and will have accelerated further following global events including the war in Ukraine". A sustained period of high inflation is now expected, with the Bank of England forecasting the longest recession in since records began. Appendix III of the Local Plan Viability Assessment Interim Stage 1 Report (2022) highlights that cumulative requirements (including the proposed LETI targets) may not be viable on greenfield sites in parts of the Local Plan area. This situation is likely to be worsened if economic conditions deteriorate further, to the detriment of achievable values. Catesby acknowledge that the Viability Assessment will be updated in due course. However, at this stage it appears that the requirements envisaged at Draft

Policy CN3 is very clearly worded that all development, through the design process, should demonstrate the lowest level of carbon emissions unless there are exceptional clear and compelling reasons that achieving these standards produce as a development that would be harmful to its setting or the character of the area.

**Recommended Response:** No change.

To meet our climate crisis, new buildings should contribute to the increase in renewable energy generation, in the wider attempt of decarbonising the UK electricity grid. New buildings are not considered "net zero carbon" if the electricity supplied to them is coming from a wider power-generation network that is free from carbon based power stations. A building is only considered "Net Zero Operational Carbon" when no fossil fuels are used, all energy uses are minimised, meets the local energy use limits, and all energy use is generated on- or off-site using renewables that demonstrate additionality. Furthermore, generating on-site electricity gives the

	Policy CN3 are viable. Overall, draft Policy CN3 (whilst well-intentioned) does not appear to be justified by the available evidence and presenting a risk to the effectiveness of the Plan as a whole.	resident/building users the advantage of saving on energy cost.  Whilst the information provided was correct at the time of writing and indeed inflation has sustained at a high level through to April 2023. However, rates are projected to fall during 2023. The cost analysis in the Elementa report makes no comment on the viability of the cost uplifts associated with the higher developemnt standards, these were considered separately by Dixon Searle. Costs to achieve the standard are expected to fall generally over time as it becomes the 'norm' in the market, bearing in mind the 15yr plan period. Although our assessment has to be taken at a point in time and can't include "projections", the wider context of the direction costs might take is relevant.
BHLF-KSAR- N8ZD-N	As indicated, Croudace support the move towards net zero and the development industry has a key role to play to support this agenda. To this end, the draft Policy CN3 sets out a range of standards that (in summary) prohibit the use of fossil fuels for the purposes of heating or cooking. The policy also requires that the energy requirement for all new dwellings is achieved from only renewable generating sources. Whilst the transition to renewable sources of energy is taking place at a markedly increasing pace, Croudace's primary concern with these proposed requirements is nonetheless that of timescales. Put simply, it is not clear that the housebuilding sector, the supporting supply chain, and workforce, will be capable of meeting the proposed policy requirements at the point the Local Plan is adopted in 2024 or 2025.	See above response.
	Many major housebuilders have signed-up to the House Builder Federation (HBF) 'Future Homes Delivery Plan', which sets out how the industry will transition to net zero carbon. This process of transition requires an interim step, with new homes	Greenfield sites have been phased to come forward no earlier than 2030 which will give the

being expected to be 'net zero carbon ready' in the short-term, and fully net zero carbon in the medium-term. Given the remit of the HBF, the Future Homes Delivery Plan provides a good indication of what this industry considers to be possible.

In contrast, the 'Net Zero Carbon Targets' report (Elementa, September 2022), which forms part of the consultation evidence base (and which is citied as the main justification for Draft Policy C3), does not appear to consider whether the development industry can achieve what is proposed within the timescales envisaged. Indeed, many aspects of the report describe trends to 2030 and beyond, rather than at 2024 when WCC expects the Plan to be adopted. Again, this points to the importance of allowing a transitional period, rather than expecting all newly permitted homes to be net zero carbon from the date of the Plan's adoption.

A related concern is that the draft policy expects 100% of energy consumption (required by new residential homes) to be generated on-site, via renewable energy generating schemes. This may well be achievable in some instances, but it is highly unlikely that every new dwelling will be able to accord with this proposed requirement. It is recognised that the draft policy allows for some deviation where there are "exceptionally clear and compelling reasons". However, in-practice many if not most residential developments will be unable to become fully net zero carbon, until the wider power generation network is free from carbon-based power stations. Indeed, because of this, the policy appears to be predicated on the idea that new houses built in the near-term will effectively need to be self-sufficient in terms of energy generation. This expectation does not appear to be realistic and, again, this is another matter that is not fully considered within the Elementa report. Impacts on viability will also require careful assessment. The Elementa report suggests that applying LETI standards results in a 5.8% increase over Building Regulations (as applicable in 2021), but notes (correctly) at paragraph 7.2 that "...in the 12 months from February 2021 to February 2022 average housing materials costs increased by nearly 8% and will have accelerated further following global events including the war in Ukraine". A sustained period of high inflation is now expected, with the Bank of England forecasting the longest recession in since records began.

Building industry and developers time to adapt. **Recommended Response:** No change.

Appendix III of the Local Plan Viability Assessment Interim Stage 1 Report (2022) highlights that cumulative requirements (including the proposed LETI targets) may not be viable on greenfield sites in parts of the Local Plan area. This situation is likely to be worsened if economic conditions deteriorate further, to the detriment of achievable values. Croudace acknowledge that the Viability Assessment will be updated in due course. However, at this stage it appears that the requirements envisaged at Draft Policy CN3 are viable. Overall, draft Policy CN3 (whilst well-intentioned) does not appear to be justified by the available evidence and presenting a risk to the effectiveness of the Plan as a whole.

A2 Dominion recognise the need to improve energy efficiency and reduce carbon emissions this is not only important in addressing climate change but also fuel poverty. A2 Dominion suggest that further detail is required to explain the 'exceptionally clear and compelling reasons for deviating away from this policy' would scheme viability be one of these reasons? For the avoidance of doubt, the Council should clearly list, by way of example, what they envisage these reasons to be.

BHLF-KSAR-N8ZT-5 At Part iv) Consideration should also be given to the request for 100% renewable energy generation on site and how this requirement sits with the heritage policies in the plan. As always it will be for the decision maker to balance the differing policies in the plan against one another; and it is important that the policies are clear worded for Measurement and Verification: it is not clear why monitoring data is being requested. How would the monitoring be secured? It is not necessary to monitor the energy consumption of a development through the planning system. Energy consumption is already monitored by way of an Energy Performance Certificate which is provided by the seller upon the sale of a property, and any further monitoring would be unnecessary duplication. Once a property has been sold, the developer cannot be responsible for the energy use of that property. Therefore, further consideration should be given to the wording of this part of the policy and what data is being requested and why.

As each planning application would be treated on its own merits, it would not be helpful to list the reasons for deviating from the policy.

Recommended Response: No change.

It is essential that Local Plan needs to be read as a whole. Policy HE14 addresses how applications for improvements or alterations to improve the energy efficiency of designated and nondesignated heritage assets should be addressed.

Monitoring data is not a requirement, but a recommendation for schemes that are able to implement this, to minimize the performance gap and help in understanding the effectiveness of the policy in driving better performing buildings. Policy CN3 – Energy measurement and verification wording has been amended to differntiate between the requirements and recommendations of this policy.

Furthermore, Energy Performance Certificates are undertaken prior occupation, therefore are not an

		accurate representation of the building's energy consumption.
	CN3 requires all new residential dwellings to demonstrate net zero operational carbon on-site. In order to achieve this CN3 requires new homes to be built to deliver a predicted space heating demand of less than 15 kWh/m2/year and an energy consumption of less than 35 kWh/m2/year. The Council itself notes in its evidence base that these standards are significantly higher than that currently required through building regulations and the proposed Future Homes Standard that is expected to be introduced from 2025. The approach is therefore bespoke, and it is imperative that the policy and its requirements can be understood and successfully implemented.	
BHLF-KSAR- N8Z1-2	The policy requires that the requirements are confirmed using the Passivhaus Planning Package (PHPP) methodology. When introducing such terminology, the Reg 18 Local Plan must be very clear on what is being requested by the policy wording. For example, it is important that the distinction is clearly made between providing Passivhaus homes and using the PHPP methodology. The Council must also be clear on the implications of introducing such requirements and the techniques that will need to be used to achieve them. Thakeham would like to see neutral language throughout the policy and evidence base, to limit a bias towards Passivhaus, for example within the Net Zero Energy Target Report (September 2022) paragraph 4.12 is entitled: 'A proven methodology'. It is important that the Council shares the evidence that supports statements about PHPP being 'better' or producing 'more accurate' predictions of energy use, for developers to understand. Notably, this assumption has been used as the foundation for all references to Passivhaus within the Draft Policy and diverting away from the consistency of the Government's Standard Assessment Procedure, will be a major change for all	All newly constructed residential properties in the UK require an individual new build to the Standard Assessment Procedure (SAP) calculation which needs to be submitted to the appointed Building Control Body (BCB) before any building work commencing. Policy CN3 refers to predicted energy modelling such as Planning Package Passivhaus (PHPP) standards but it is not requiring residential dwellings to achieve Passivhaus standards. PHPP has been referred to in Policy CN3 as this is more accurate assessment of energy performance than undertaking a SAP calculation.
	developers. Thakeham is also keen to see additional evidence on the ability for developers to use PHPP whilst still retaining the flexibility to deliver homes that match the skill and technology levels currently available; specifically, a wall U-value above 0.17 and an air-tightness of above 4.	The policy wording has been amended by removing "PHPP" and "TM54" from the text, and now refers to the LETI Operational Modelling Guide instead.  Please refer to section 4.10 of the Net Zero
	Whilst Thakeham is able to exceed performance of these levels, we are keen to ensure that there remains the flexibility for developers to meet standards using the design and technology that they believe is appropriate for each development.	Carbon Targets evidence base for further information on how the PHPP methodology has

Thakeham suggests that a broader range of assessment frameworks should be allowed for, to provide flexibility for developers to apply nationally agreed procedures to calculate regulated energy demand. Part iv of draft Policy CN3 requires on-site renewables to provide 100% of the energy consumption that is required by residential buildings and suggests this can be achieved through the installation of photovoltaic solar panels. Thakeham suggests that the Council are very clear regarding what is required from this section of the draft Policy given the potential implications. Thakeham supports the on-site renewables to provide for regulated energy only (the UK Green Building Council terminology of Net Zero Ready), which takes into consideration the trajectory of the decarbonisation of the grid to play it's part in transition of every home's electricity use to be Net Zero. However, Thakeham believes that the cost and embodied carbon impact of exceeding this, to increase the on-site renewables to account for estimated nonregulated energy consumption, will affect viability for all developers. Thakeham understands that the high-level ambition is to provide affordable access to energy, and we are concerned that the inclusion of non-regulated energy in the provision of on-site renewables, will restrict the Councils ability to deliver on this core ambition. Whilst it is therefore progressive that the draft policy exceeds the Government's 2025 Future Home Standard, it does not adequately support the housebuilding industry's transition towards this, in a way that supports the delivery of new homes to the people who should be prioritised; those that are at risk of fuel poverty.

Given the significant departure from building regulations it is imperative that the cost implications of draft Policy CN3 are understood – by the Council to assess the appropriateness of the policy requirements, and by prospective developers to understand any viability implications. Having reviewed the Net Zero Energy Target Report (September 2022), Thakeham considers that the cost estimations are not clear. Section 7 of the aforementioned report suggests an uplift range of between 5-13%, however it is not clear whether the costs of assessment duplication through PHPP and related training/consultancy support is included in this. Thakeham recommends extending the evidence base beyond two house types to include typical house types that the Council expect to be built, which it is suggested should include both Townhouses and Mid-rise flats, both of which are particularly challenging to practically maximise PV areas on. Thakeham would also like the Council to seek views directly from developers and housebuilders to understand the

been proved to predict energy use much more accurately than SAP.

Homes designed with a U-value of 0.17 and air tightness above 4 will result with a space heating demand higher than 15 kWh/m²/year, therefore will not be able to meet the policy requirements. Furthermore on renewable energy generation, the Net Zero Carbon Targets evidence base shows that the Part L 2021 notional building assumes a PV area of 14.4 m² and 22.4 m² for semi-detached and detached house respectively. The LETI scenario in the evidence base assumes a smaller PV area of 11.2m² and 12.8m² for the semi-detached and detached house respectively, to meet 100% of energy consumption on-site.

The whole purpose of requirement to undertake a LP Viability as part of the preparation of the LP is this will inform the viability of implementing new and revised policies through the Local Plan. **Recommended Response:** No change.

The analysis undertaken by Currie & Brown as part of the financial viability of the Net Zero policy is a high level capital cost analysis, to benchmark the likely build cost for the typologies under different specifications. The cost of assessment through PHPP and related training/consultancy support is not included in the cost uplift percentages listed in the Net Zero Target Policy evidence base.

BHLF-KSAR- N86C-G	accurate build costs for high-quality homes in their area, rather than average values from a wider area.  A wide range of training and support will be needed, both within the Council and for developers to understand the policy requirements and to assess whether house types are capable of achieving them. The policy should therefore provide a sufficient level of clarity and evidence, which it is considered is currently lacking. Moreover, the higher level of energy standards sought by draft Policy CN3, in our view, go beyond national policy and the Government's future intentions. Thakeham would therefore welcome the Council's thoughts as to whether it considers draft Policy CN3 satisfies the tests of soundness, as drafted.  The University consider that Paragraph v. of the policy should be re-worded as follows (additions in red).  "v. Non-Residential development should meet the 'BREEAM Excellent' Standard or the same reduction in carbon within an equivalent assessment. Where BREEAM is used a pre-assessment should be provided at planning submission."	Agree. In order to successfully implement this policy, training and further guidance will need to be made available.  The wording in connection with BREEAM has been amended. Recommended Response: 'or an agreed equivalent industry standard assessment process'.
ANON-KSAR- N819-1	Policy CN3  No because the 'the Vision' needs to take account of the missing links between the interdependent Climate and Biodiversity crises.  Meaning of the term'built to net zero' needs qualification. Does this mean operational carbon or whole life carbon which includes embodied carbon. Suggest it must mean both to ensure a more optimal approach to help to mitigate the climate and biodiversity crises together in order to get to as close to net environmental impacts.  For clarity, please provide web links to each policy in the evidence base on which the Plan is based on and that suggested missing elements/polices and	The Net Zero Carbon Targets evidence base originally just explored net zero operational carbon only. Embodied carbon was not part of the scope of the original study, however is being explored now to address whole life carbon.

	Plans, i.e., - COP15: What Can You Expect from the UN Biodiversity Conference – Bloomberg - Proposal — Part Z (part-z.uk) - 252d09_8ceffcbcafdb43cf8a19ab9af5073b92.pdf (leti.uk) - page 12 LETI Embodied Carbon Primer - House of Lords - Nature-based solutions: rhetoric or reality? - The potential contribution of nature-based solutions to net zero in the UK - Science and Technology Committee (parliament.uk) - Enabling a Natural Capital Approach - data.gov.uk - What nature can do for you - GOV.UK (www.gov.uk) - IGNITION - Greater Manchester Combined Authority (greatermanchester- ca.gov.uk) - Carbon Neutrality Plan - Biodiversity Action Plan	
	Worryingly, this Plan is not sufficiently future proofed to take into account the emerging changes from International environmental agreements (e.g., COP26/COP27 and COP15) and other potential National legislation, e.g., Environment Audit Select Committee (EAC) report need for Net Zero 'Part Z' for Building Regulations which goes further than the LETI Energy standard which does not address Whole Life Carbon. This includes the Government's commitment to domestic targets that will require nature-based solutions (NbS) to be deployed at scale.	
ANON-KSAR- NKZ5-S	No as above. A register is needed for monitoring new build and major refurbishments embodied energy in material and fabrics to ensure an optimal Energy Hierarchy delivery for all energy/carbon and not just operational carbon is being abated for Climate Change and protecting nature.	Once the Local Plan has been adopted, Policy CN3 will be monitored each year through the City Council's Authorities Monitoring Report. It can only report on residential development that involves applying for planning permission.  Recommend Response: No change.
ANON-KSAR- 819-1	A register is needed for monitoring new build and major refurbishments embodied energy in material and fabrics to ensure an optimal Energy	Once the Local Plan has been adopted, Policy CN3 will be monitored each year through the City Council's Authorities Monitoring Report. It can

	Hierarchy delivery for all energy/carbon and not just operational carbon is being abated for Climate Change and protecting nature.	only report on residential development that involves applying for planning permission.  Recommened Response: No change.
ANON-KSAR- NKUB-1	When a New Residential Dwelling is given permission and then in say 2 Years the owner comes back and wishes to make changes to the roof and that removes a Solar Panel or two it should not be allowed as the property was built to a particular standard and the solar Panel has to be placed elsewhere on the roof for example!	The optimun position of the solar panels (in terms of achieving the maximum amount of solar gain) will be determined through the design process it is therefore conisdered unlikely that a future homeowner will wish to 1) change the location of the solar panel and 2) go through the expense of moving a solar panel. <b>Recommend Response:</b> No change.

	Recommendations	Officer response
Comments from SA/HRA	No recommendations provided.	N/A

# Amendments to Policy CN3

# Changes to the supporting text

Global change – change 'London Energy Transformational Initiative' to 'Low Energy Transformational Initiative'.

4.20 Since the Code for Sustainable Homes was withdrawn by the Government, higher energy efficiency standards for residential buildings have been introduced by making changes to the Building Regulations which are intended to deliver a reduction in carbon emissions, while ensuring the delivery of high-quality homes. New homes in England currently need to be constructed to meet Part L (2021) of the Building Regulations which covers the conservation of fuel and power in the building of new homes and establishes the national standard for energy efficiency levels.

# Add additional supporting text after paragraph 4.26:

In order to calculate energy performance predictive modelling tools can be used which include Passivhaus Planning Package (PHPP) or CIBSE TM54, (refer to the LETI Operational Modelling Guide for further guidance on choosing the right Predictive energy modelling tool (www.leti.uk/omg). Predictive modelling is also often in industry called performance modelling.

## Post occupancy monitoring:

Although there are no mandatory requirements for monitoring energy use, the council recommends post occupancy monitoring as this provides feedback on how the development is performing in-use. It is envisaged there will be an electronic form provided by the council, to complete by the applicant post completion. This will be prepared once the Plan is adopted. The requirement is for applicants to confirm if monitoring and reporting will be carried out, and the nature of the strategy. For example, whether there is a commitment to report monitored data to the council, or disclose the information publicly, or if no monitoring will be carried out.

#### Amendments to policy

The Council has declared a climate emergency and has committed to providing the leadership for the district to be carbon neutral by 2030. This will contribute to the UK's legally binding target of net zero carbon by 2050.

In order to achieve this All new developments should seek to demonstrate the lowest **possible** level of carbon emissions. **These should be** in line with the requirements set out below unless there are exceptionally clear and compelling reasons. **These reasons should be** that have been established through the design process that and demonstrate that achieving these standards produces a development that would be to harmful to its setting or the character of the wider **area or it is demonstrated that is not practical.** 

### All new residential dwellings development

All new residential dwellings development (excluding conversion and change of use) should not burn any fossil fuels on site for space heating, hot water or used for cooking. New residential development dwellings will need to be able to demonstrate net-zero operational carbon on site by ensuring:

- i. The predicted space heating demand of the homes based on predicted energy modelling such as Passivhaus Planning Package (PHPP) or CIBSE TM54, showing that the target of <15 kWh/m2/year is met.
- ii. The total kWh/yr of energy consumption of the building based on predicted energy modelling tools such as Passivhaus Planning Package (PHPP) or CIBSE TM54, showing that the target of <35 kWh/m2/year is met.

- iii. The total kWh/yr of energy consumption of the buildings on the site and the total kWh/yr of energy generation by renewables to show that the balance is met.
- iv. Onsite renewables to provide 100% of the energy consumption that is required by residential buildings, for example through the installation of photovoltaic solar panels or other suitable forms of renewable energy generating schemes that are appropriate for the location or the setting.

# Non-residential development

v. Non-residential development should meet the 'BREEAM Excellent' standard. A pre-assessment should be provided at planning submission. or an agreed equivalent industry standard assessment process. Demand for space heating should be met by renewables. Developers that propose a scheme to meet BREEAM standards should submit a post construction assessment and BREEAM certificate to the local planning authority to demonstrate compliance'. At outline planning application stage a commitment to BREEAM Excellent should be made, and at full planning application a BREEAM pre-assessment should be provided.

All new non-residential developments should maximize on-site renewable energy generation. As a minimum, applicants will be expected to submit the following information as part of their planning application.

- i. Total installed capacity on-site in (kWp) and total generation (kWh/year)
- ii. The Photovoltaic area (m<sup>2</sup>)
- iii. A roof plan marked-up with the Photovoltaic area.

### Meeting the policy:

• Energy strategy should outline compliance with the policy requirements. The following table indicates the energy modelling and calculation requirements at different planning application stages.

Requirements	Pre-App	Outline	Full Planning & Reserved Matters
Energy Modelling/ Energy Use Intensity (EUI) calculations	Modelling not required, but confirmation of how	Typical dwellings/buildings	Representative sample of exact dwelling/building design

Police	cy CN3 will be met.	

#### **Measurement and verification**

Applicants should confirm the metering, monitoring and reporting strategy as part of the detailed planning application. The energy efficiency calculations should be carried out as part of the outline and detailed planning submissions and be reconfirmed at the pre-commencement stage.

An explanation should be given as to how figures have been calculated as part of the planning application.

It is envisaged there will be an electronic form to complete post completion to monitor. This will be prepared once the Plan is adopted.