Consultation Statement: Net Zero Carbon Supplementary Planning Document (SPD)

May 2024

Introduction

1. The Net Zero Carbon SPD was subject to a statutory public consultation between 18th October 2023 - 29th November 2023. This statement details the consultation on this document and lists the responses received during the consultation.

2. This statement has been prepared in accordance with regulation 12(a) of the Town and Country Planning (Local Planning) (England) Regulations 2012.

Background to the Supplementary Planning Document (SPD)

3. The SPD provides detailed guidance on the policies and requirements set out in the Net Zero Carbon Development Plan Document that been subject to public examination and various rounds of public consultation. The need for the SPD was identified in the Cabinet report dated 10th August 2022.

4. The details of the DPD can be found at Warwick Net Zero Carbon DPD Examination - Net zero carbon development plan document - Warwick District Council (warwickdc.gov.uk).

5. The scope of the SPD was agreed and shared with the Inspector during the examination of the DPD.

Public consultation on the draft SPD

6. The Council published the Net Zero Carbon SPD for six weeks public consultation from between 18th October 2023 - 29th November 2023 as per the requirements set out in the Council's Statement of Community Involvement (SCI).

7. Notification of this consultation was sent to everyone who had signed up to the Council's Local Plan email updates and individuals and organisations on the Local Plan consultation database. This included statutory consultees, residents and developers.

8. The documents were available online via links on the Council webpage. Paper copies were also available to view at Leamington Town Hall, Warwick District Council Offices at that time which were at Riverside House in Leamington, Brunswick Healthy Living Centre and the main libraries including Kenilworth, Leamington Spa, Warwick, Lillington and Whitnash.

9. The Council encouraged people to respond electronically using the consultation portal Warwick District Council - Net Zero Carbon Supplementary Planning Document (oc2.uk). Representations were also accepted via email and by letter.

Responses to the Net Zero Carbon SPD

10. A total of 26 responses were received from a range of stakeholders including agents, house builders, individuals and statutory bodies. The breakdown of the responses is as follows:

- 8 Individuals
- 5 Statutory Bodies: Coal Authority, Environment Agency Historic England, and the National Highways and South Warwickshire University NHS Foundation Trust
- 5 Parish/Town Council's - Burton Green Parish Council, Bishop's Itchington Parish Council, Kenilworth Town Council, Royal Leamington Spa Town Council and Warwick Town Council.
- Warwickshire County Council
- Nuneaton and Bedworth Borough Council
- 4 planning agents representing various landowner's/home builders namely: Elanor Wright (Oxalis Planning) - on behalf of Pristine Holdings ,Jacob Bonehill - on behalf of Taylor Wimpey, , Michael Burrow (Savills) - on behalf of Crest Nicholson Partnerships and Strategic Land and Barratt David Wilson Homes (Mercia), Paul White - Representation on behalf of Hill Residential Development Ltd in respect of their land interests within the Warwick DC
- 1 planning agent- Emma Rawson - Planning Prospectus

Table 1: Brief summary of comment by organisation type

Organisation Type	**Comments**
Individuals	Mainly general comments apart from one response that has undertaken a detailed examination of the SPD.
Statutory bodies	Mostly positive comments, with some minor suggestions and signposts to some other internal and national documents.
Parish and Town Councils	Supportive of the additional guidance provided by the SPD.

Warwickshire County Council	Mostly positive comments with some general observations.
Nuneaton and Bedworth Borough Council	No comments.
Planning agents representing landowner's/housebuilders	There was mix of some technical and general queries. Some additional suggestions were made to the SPD content.
Planning Agent	There were few issues were raised for various Net Zero carbon DPD policies.
South Warwickshire University NHS Foundation Trust	Some queries about biodiversity issues, air and combined heat and power heat pumps. Some issues around air quality and Council's carbon offsetting scheme were raised.

Changes to the SPD

11. Please find the attached appendix to this report detailing the changes proposed to the SPD following this consultation. This report outlines where a response has resulted in a change.

12**.** The Final SPD will be published on the Council's website after Cabinet approval.

Summary of Responses to the Net Zero Carbon SPD Consultation

Respondent Name (Organisation)	SPD Para Number	Representation	Council Response
Steve Russell (Individual)	Whole document	I'd rather see money spent on affordable accommodation for the young people that don't afford to be able to fund the increased costs associated with such initiatives. Do for me I don't support this policy.	Comments noted. This issue is not relevant to the SPD.
Graham Ball (Individual)	Whole document	The document refers to achieving net zero development, which sounded great. However, reading in more detail, what the document actually requires has nothing to do with net zero emissions from development (i.e. from the construction of buildings). Instead, the document only asks for net zero emissions during the "operational" (use) phase of the building. To have a headline that talks about net zero development implies the policy will reasonably result in net zero development. But this claim is unreasonable because the policy does not stop new development emissions during the construction phase. Therefore, if you publish this document, I think you are committing fraud by false representation, which is illegal. To ensure you remain compliant with the law, please could you rename the document "Reducing carbon emissions for new developments", or similar, and use this phrase throughout the document instead? This phrase is a fairer reflection of what the policy seeks to do.	The matter of the title, objectives, and purpose of the NZC DPD was raised during examination. It was agreed that the DPD does make it clear that it only relates to regulated operational energy as set out below. Paragraph 4.1.1 of the DPD states "*For the purposes of this DPD net zero carbon relates to regulated operational energy, which results from fixed building services and fittings (space heating, cooling, hot water, ventilation and lighting).*" This is reiterated in paragraph 1.3 of the SPD where it clearly

		Reducing carbon emissions is still an achievement that the council should be proud of. If you had a child who won a race at school, you wouldn't claim your child was Usain Bolt, instead you would be proud of and talk about what your child actually achieved. I am aware that achieving net zero in construction is not easy to do or to measure. So alternatively, if you want to use the "Net zero development" claim, then for that claim to still be reasonable, you could stop new building in the district. This solution would be simple and sustainable.	states that the DPD aims to ensure that new development is net zero carbon in operation.
Liz Rochford	Whole document	I hope you can help me understand how the disruption to the Birmingham Road for 11 months and probably longer will not affect the carbon output when cars are idling, this is totally at odds with any carbon reduction plans. Why can't the Warwick DC be joined up and ensure that if we really want a Net Zero we have to stop adding to the problem.	Comments noted but this issue is beyond the remits of this SPD.
Jacqui Padbury (Nuneaton and Bedworth Council)	Whole document	No Comments.	Noted.
Steven Barnett (Individual)	Whole document	I do not agree with net zero fraud, please add a no from me a rejection for planning.	Comments noted.
Nadia Lycett	Whole document	There didn't seem to be any mention of increased **fire risks**. With battery storage and the push for most things electric how will fire risks be mitigated?	The SPD is not putting forward any new policies and is simply providing more guidance on the policies set out in the DPD. We do not consider that fire risk is a planning matter as it is

			covered by other building regulations.
	Whole Document	**How many of the green technologies are easily available and affordable**?? What if the UK doesn't have the resources/manpower to deliver these?	The feasibility and viability of employing zero or low carbon energy sources was considered during the examination of the NZC DPD. The issues of availability and affordability of such technologies has therefore already been considered in the formation of the NZC DPD policies.
	Whole document	**How often will the policy be reviewed and updated**? We don't know what we don't know. These are new technologies and there will be unintended consequences from the proposed activities.	The SPD is only providing guidance on the policies contained within the NZC DPD. The DPD can be reviewed at regular intervals if the Council considers that there is a need to review the DPD considering new guidance.
	Whole document	As an example, with more electric cars on our roads their weight is ploughing up the road infrastructure. They are liable to fires and the costs of running one (including insurance premiums) have increased significantly.	These issues are beyond the scope of this SPD.
Trudi Wheat		The idea of south facing properties seems sensible …my point is that tenants and owners need to be educated in how to keep the building cool. We need to study how Mediterranean countries adapt . For example having the properties painted white to protect from the sun. With the summer	Comments noted, We agree that behaviour change can support the transition to net zero and manage the way in which people occupy

		temperatures getting hotter, shutters, drawn curtains, keeping windows closed so hot air doesn't get into the building will be needed. Looking around towns in Warwickshire in recent hot spells this isn't happening. It is easier to go and buy an air conditioning system.	buildings. Paragraph 3.31 of the SPD outlines that by way of conditions associated with planning permission, a developer would need to produce a home user guide for occupants.
		The siting of ASHP was mentioned in relation to noise and visual concerns. It also needs to be mentioned about the Cold air outflow. This could be a problem if it is continually flowing against another external wall. By reducing the heat in the external wall you are lowering the internal temperature.	Comments noted.
		The way technology is progressing at the moment I think it is important not to consider hybrid gas hydrogen boilers in existing housing stock. We now have hydrogen buses and JCB's. At this stage of development all options should be considered.	Hydrogen boilers are not being considered due to lack of credible evidence to support this technology and amount of electricity that is required to produce hydrogen energy.
		Biomass/ wood burning stoves. Do WCC or WDC still enforce the no smoke or clean air zones? Once winter comes the number of wood burning stove polluting the air is noticeable. Why continue with these high building conditions it the present laws are not being enforced?	Comments noted. Warwick District Air Quality Management Area (AQMA) has set limit for annual and hourly nitrogen dioxide limits.
Adrian Chadha (Highways Agency)		National Highways has been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the strategic road network (SRN). The SRN is a critical national asset and as such National Highways works to ensure that it	Comments noted.

		operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity. National Highways are committed to reduce the environmental impact of our network to complement our ambition for Net Zero Carbon and we welcome policies focused on reducing carbon from development, and reaching net zero. The Climate Change Committee's 2022 Report to Parliament notes that for the UK to achieve net zero carbon status by 2050, action is needed to support a modal shift away from car travel. The NPPF supports this position, with paragraphs 73 and 105 prescribing that significant development should offer a genuine choice of transport modes, while paragraphs 104 and 110 advise that appropriate opportunities to promote walking, cycling and public transport should be taken up. Moreover, the build clever and build efficiently criteria as set out in clause 6.1.4 of PAS2080 promote the use of low carbon materials and products, innovative design solutions and construction methods to minimise resource consumption. These considerations should be weighed alongside any relevant Local Plan policies to ensure that planning decisions are in line with the necessary transition to net zero carbon. National Highways have undertaken a review of the Draft Net Zero Carbon Supplementary Planning Document and raise no objections. Further information on our Net Zero Plan can be found here https://nationalhighways.co.uk/netzerohighways/	
Eleanor Jeffery (Historic England)		Historic England was previously consulted on the Warwick District Council Net Zero Carbon DPD Main Modifications Draft in July 2023, the Warwick District Council Net Zero Carbon DPD Consultation Draft and on the SA/SEA/HRA	Comments noted.

		Screening and Scoping Report for the DPD in 2021. Our comments in relation to these consultations are attached for your reference. We understand that the purpose of this SPD is to is to assist applicants in implementing the policies of the NZC DPD by providing technical guidance to inform the design of developments, and to illustrate what measures applicants need to consider in the preparation of an Energy Statement. Whilst the purpose of an SPD also is to provide guidance on the application of adopted policy, it is important to ensure that the implication of this important policy document does not adversely affect or undermine the historic, physical and social value of the historic environment. Historic England is pleased to note the continued inclusion of Policy NZC4 from the Main Modifications of the NZC DPD, particularly clauses 8.26 and 8.27 on the sensitive retrofitting of energy efficiency measures and appropriate use of micro-renewables in historic buildings. We also note the inclusion of Policy NZC3 on Embodied Carbon in the SPD and the detailed requirement for whole-life assessment of materials on developments above certain thresholds. Historic England recognises the urgent need for positive action in response to the climate crisis and is committed to achieving net zero carbon emissions. Therefore, Historic England is fully supportive of Warwick District Council's commitment to becoming a net zero organisation by 2025.	

		Please follow the link below for Historic England's response to the climate, energy and biodiversity crisis: https://historicengland.org.uk/advice/climate-change/our-strategy/	
	Section Five: Policy NZC2(B) – Zero or Low Carbon Energy Sources **Table 13/14: Solar photovoltaic panels/Solar thermal:**	Historic England notes the comments on potential heritage or conservation designations that may affect the implementation of these energy sources. We note that in relation to wind power, the SPD stipulates that "*historic environment and heritage views will need to be considered*", however these are not included as considerations for solar photovoltaic panels or solar thermal power, and we suggest that the document is amended to make it consistent for all sources of energy. Although often of a lower and shorter scale than onshore or offshore wind farms, solar panels still have a significant impact on the landscape, and therefore may have a knock-on impact to the views and experience of heritage assets. For solar photovoltaic and solar thermal panels to be efficient they must be placed in an area with high exposure to sunlight, meaning that these features are likely to be highly visible in the landscape, and may be in open spaces that may provide key or protected views to and from assets. Considering the historic environment when implementing solar photovoltaic and solar thermal panels will ensure that the views and setting of heritage assets is preserved, alongside the assets themselves.	Comments noted. Table 13 and 14 both state 'heritage and conservation designations must be considered' but we can appreciate this is read in the context of building mounted PV or solar heating. Please see proposed modifications.
	Section Eight: Policy NCZ4 – Existing Buildings:	Historic England welcomes the inclusion of subsections 8.26 and 8.27, pertaining directly to heritage assets and the historic environment. However, we note that it is positioned	Comments noted.

		as an alternative form of development, rather than as a preferred and more effective solution to achieving net zero. Recent high-profile planning decisions have indicated that the embodied carbon of heritage buildings is becoming a key focus for planning policy, and the preservation and retention of historic fabric is preferred to demolition. Considering this, Historic England consider that the SPD should reflect this preference, and specifically reflect on the positive contributions to net zero that retrofitting and redevelopment can have. The SPD states that the Council "*will apply significant weight to proposals that deliver energy and carbon savings in existing buildings*" and that "[it] *recognises the significant opportunity to reduce the district's carbon burden by retrofitting existing building stock*". However, no connection has been made between embodied carbon in heritage buildings, and how these can be part of a solution to meeting net zero targets. Historic buildings represent an investment of embodied carbon and other resources and demolishing and replacing them requires a significant reinvestment of both energy and the resources required. Retrofitting and restoring existing building stock has a much lower carbon output and will also contribute to lower carbon emissions over the course of the building's lifespan. In addition to the advice above, policy CP1 in Bath and Northeast Somerset's adopted Districtwide composite plan, dated January 2023, is a good example of how the priority to retrofitting existing buildings could be included in a policy. The link below is to the composite plan:	The Council consider that embodied carbon in all existing buildings is valuable, not solely in historic buildings. Please see proposed modifications.

		https://beta.bathnes.gov.uk/policy-and-documents-library/development-plan-core-strategy-placemaking-plan-and-local-plan-partial Historic England would be happy to provide further comments as the Net Zero Carbon SPD is progressed over the coming months. We would like to stress that the above opinion is based on the information provided by the Council in its consultation. To avoid any doubt, this does not affect our obligation to provide further advice and, potentially, object to specific proposals, which may subsequently arise (either as a result of this consultation, or in later versions of the plan/guidance) where we consider that these would have an adverse impact upon the historic environment.	
Katherine Geddes (Warwick Town Council)	Whole document	This is very detailed, technical and comprehensive guidance supporting the Net Zero Carbon DPD, including useful timescales, clear targets and achievable expectations. The glossary of terms is particularly helpful and our members are glad to see robust reference to development viability, specific carbon offsetting requirements, retrofitting and historic building inclusion. This reference document would be very welcome should it be adopted when the Town Council Plans Committee discusses relevant planning applications in future	Positive comments noted.
Kay Sheriston (Royal Leamington Spa Town Council)	Whole document	The Planning Meeting of the Leamington Spa Town Council has reviewed and considered the Draft Net Zero Carbon SPD (Oct 23) and have no comments to make.	Comments noted
Emma Rawson (Planningprospectus PPL)	**Validation Checklist**	We consider that the Embodied Carbon Assessment should be conditioned rather than a validation requirement.	This needs to be a validation requirement as it is one of the requirements of Policy NZC3.

Emma Rawson (Planningprospectus PPL)	**Policy NZC1: Achieving Net Zero Carbon Development**	We consider that the policy aligns with the baseline regulations as set out in part L of the building regulations. We are supportive of the policy and associated energy hierarchy (as set out in figure 1). Point 3.13 states "The required minimum on-site reduction is a 35% reduction in regulated carbon emissions compared to the baseline compliant development under Part L 2013". Whilst we are supportive of the need to reduce carbon emissions in non-domestic premises and footnote 6 indicates that the reduction is ambiguous. We consider that the level of reduction required might be too high and prevent employment development from coming forward in alignment with the Local Plan. It is considered that more robust reasoning and justification for the 35% figure is required. It is noted that footnote 6 refers to it being required in the latest London Plan. There needs to be a recognition that there are notable differences between London and Warwick. The approach cannot be to reflect the London approach onto Warwick.	We note the comments and support for policies included in the NZC DPD. However, this consultation is seeking views on the NZC SPD. The NZC DPD has been subject to two rounds of statutory consultation, and the Council has undertaken a main modifications consultation as part of the examination
Emma Rawson (Planningprospectus PPL)	**Policy NZC2(A): Making buildings energy efficient**	No comments to make.	Noted
Emma Rawson (Planningprospectus PPL)	**Policy NZC2(B): Zero or Low Carbon Energy Sources and Zero Carbon Ready Technology**	We support the concept that proposals must demonstrate that carbon reductions to the greatest extent feasible have been pursued. We also support the use of an Energy Statement to present this. More clarification and justification as to the appropriateness and achievability of the 35% figure would be useful.	Please note comments above.

Emma Rawson (Planningprospectus PPL)	**Policy NZC2(C): Carbon Offsetting**	The flexibility of allowing for applicants to either contribute toward the offset fund or provide carbon offsets directly is welcomed.	Noted
Emma Rawson (Planningprospectus PPL)	**Policy NZC3: Embodied Carbon**	It would be preferable for the Embodied Carbon Assessment to be conditioned and discharged accordingly to avoid delays for the full submission of development for employment applications.	Please note comments above.
Emma Rawson (Planningprospectus PPL)	**Policy NZC4: Existing Buildings**	The information provided is useful. No further comments.	Noted
George Martin	Introduction	Needs to have a clear understanding of exactly what a 63% reduction in regulated carbon emissions compared to a baseline of Part L of Building Regulations 2021. What is this in terms of net zero be 2030 and 2050.	Comments noted.
George Martin	Para 1.2	Note that 'Net Zero Carbon' DPD is incorrectly named and misleading. If this definition is approved (found sound) what will the new definition be for truly net zero regulated and unregulated carbon? It is wrong and misleading to refer to NZC throughout the document. At the very least it should be NCRC – R for Regulated.	Comments noted; however, this consultation is not for the NZC-DPD but is seeking comments on NZC-SPD.
George Martin	Para 1.3	The NZC DPD will not as stated quote "the DPD will aim to ensure new development should be net zero carbon in operation". This paragraph does go on to say that the DPD net zero carbon relates to operational energy…….. While this is correct it does not state that unregulated energy is not included.	Paragraph 4.1.1 of the DPD states ***"For the purposes of this DPD net zero carbon relates to regulated operational energy, which results from fixed building services and fittings (space heating, cooling, hot water, ventilation and lighting)."*** We do not feel this paragraph is

			unclear to the scope of the DPD's policies. This is reiterated in paragraph 1.3 of the SPD.
George Martin	Para 1.4	Will the District's carbon deficit be minimised? On the basis that design is based on SAP what is the estimated 'performance gap'? What is the estimated cost of retrofit of these homes to get to truly net zero carbon.	Comments noted.
George Martin	Para 2.1- **Validation Checklist**	Who is going to assess compliance with the DPD policies?	In line with the DPD's adoption, the Council is investing resources in training existing officers and members, and recruitment of specialists who can assess material submitted with planning applications. .
George Martin	Para 2.1- **Energy Statement**	The statement must stat what method of assessment is being used – SAP. SBEM, PHPP etc The statement should assess what measures are in place to reduce the 'performance gap'.	The energy pro-forma is sufficiently detailed to demonstrate what information is to be submitted. The performance gap is covered in paragraphs 3.28 - 3.32, this is a post construction test and such would not be submitted before planning permissions is issued.
George Martin	Para 2.1- **Embodied Carbon Assessment.**	Define 'major development'. Reduced quote 'where possible' – remove this.	The DPD defines major development as set out in The Town and Country Planning

			(Development Management Procedure) (England) Order 2015 (as amended).
George Martin	Policy NZC1- Bullet point 1	SAP 10.2 is stated. This is a mistake – SAP 11 (probably to be renamed will be part of the new building regs hopefully in 2025. State therefore the current version of SAP.	These comments relate to NZC DPD policy which is not subject of this consultation.
George Martin	Policy NZC1-bullet point ii	Non-Residential Buildings – 35% reduction in relation to the 2013 Building Regulations or equivalent for the 2021 regulations. I do not understand this – surely take out the 2013 reference and add in an appropriate reduction in relation to the 2021 regs.	As above
George Martin	Policy NZC1-bullet point iv	Who is going to assess if offsetting is unviable? Need to appreciate that SAP and SBEM prior to occupation will only show compliance with a design standard and NOT operational in use!!! Good that Passivhaus will satisfy the DPD and that this will be certified. Developers should be encouraged to adopt Passivhaus and the use of PHPP. What can WDC do to encourage this? A fast-track process through planning?	As above
George Martin	Table 1- Residential	The Future Homes Standard has not come to consultation, so it is Wrong to state that this is "Equivalent to the carbon reduction anticipated to be achieved by the Future Homes Standard". This cannot be decided until the FHS has been publicised and the Future Homes Hub (basically the major Developers) continually want to dumb this down.	The Government started a consultation on the Future Homes Standard in December 2023. The Council consider the carbon reduction anticipated by the Future Homes Standard remains equivalent to the minimum on-site improvement on baseline required by Policy NZC1.

George Martin	Table 1- General	Are those developing this SPG document fully aware of the proposals made by the Future Homes Hub and the contents of their 'Contender Specifications'? (CS1 to CS5) Is a 63% reduction what WDC think can be achieved with a heat pump? This probably equates to CS1 in the Future Homes Hub (FHH) report. I would reasonably argue that the document should instead ask for CS2 in the FHH report i.e. including a heat pump & PVs – I would also reasonably argue that the Future Homes Standard hasn't been set yet, but that major housebuilders seem to be arguing for CS1 and environmental bodies arguing for CS3 or above, so CS2 looks like it might be a reasonable compromise. If the SPG is just defaulting to CS1, then the aim is too low	New development in the district would be expected to meet the requirements of the NZC policies and building regulations applicable to development at the time. This may result in a situation where the DPD's policies are superseded and such development will be built to a higher standard to comply with Building Regulations, or in the event that building regulations have a lower standard, the DPD's policies will require that buildings meet a higher standard and reduce carbon emissions against the baseline of current building regulations.
George Martin	Table 1- Non domestic	Why is there a reference to the 2013 regulations. The buildings other than dwellings Part L is currently 2021 edition incorporating the 2023 amendments. I can see no technical reason why the reference is not to the non-domestic current 2021 Part L. It would appear to me that this has been worded as the previous GLA policy. In the meantime, the GLA has now updated its advice supporting its policy to now apply the policy improvement (35%) to the new 2021 regs for non-dom.	The reference to 2013 is within the parent policy NZC1 in the DPD and something the SPD cannot change.

		A comment on GLA Policy: It should be noted that the GLA have now gone further, lifting their previous 35% improvement to 50% beyond the new 2021 regulations. The GLA has evidence of submitted schemes that already achieve their policy levels. This is useful to note if there is a challenge from any Planning Inspector.	
George Martin	General	With Passivhaus deemed to satisfy, WDC will need to ensure that they have the Passivhaus skills to assess these designs. In addition and vitally important, whoever is doing the Building Control will need to be appropriately trained to assess Passivhaus certification.	This goes beyond the remit of this document as the SPD is not the place to consider training needs.
George Martin	General	Under the section ALL…….who is going to assess the 'where it is not possible'? Developers are going to fight this BIG time. The easiest route for a developer is to make a contribution to carbon offsetting. Under the heading of 'Further Information' add a sentence- It is unlikely that offsetting off site will be appropriate for low rise housing developments	As above. In line with the DPD's adoption, the Council is investing resources in training existing officers and members, and recruitment of specialists who can assess material submitted with planning applications.
George Martin	Para 3.5	Needs to have a clear understanding of exactly what a 63% reduction in regulated carbon emissions compared to a baseline of Part L of Building Regulations 2021 means in terms of net zero by 2030 and 2050. This is why there is lobbying for Energy Use intensity (EUI) targets in kWh/m2/yr instead of % reductions which to many are meaningless. kWh/m2/yr targets can also be measured **'in use'** unlike % reductions. It's just bonkers.	Comments noted
George Martin	Para 3.6	The SPD should not be promoting gas boilers.	The SPD is not promoting gas boilers, paragraph 3.12

			identifies this. Paragraph 3.6 is simply making reference to a gas boiler in a notional building.
George Martin	Para 3.7	63% for 2013 and 75% for 2021 sounds good…….but in reality, it is not.	Comment noted.
George Martin	Para 3.8	Anticipated' is just not good enough and should not be allowed.	Comment noted.
George Martin	Para 3.9	It is correct to say that the FHS will have a Heat Pump as the primary source……..so why are WDC going to allow a gas boiler? Also need to ensure that there is not gas for cooking.	The SPD or WDC are not promoting gas boilers. In fact, Para 3.9 second bullet point encourages heat pump to be used a primary heat source.
George Martin	Para 3.10	What does this mean. Weasel words for Developers to opt out. The SPD needs to be unambiguous. Why does the DPD not require new homes to be built as a minimum to the FHS	The DPD does encourage new builds to be built to the FHS but also recognises that in some case it may not be possible due to viability/locational issues. The policy, and paragraph 3.10 of the SPD identifies that there are other compensatory improvements to achieve the required DER
George Martin	Para 3.11	Well, that is some case study – absolutely meaningless. The buildings are designed to meet a 77% reduction on the 2013 building regulations but what in relation to the 2021 regulations. Also, and importantly what about the operational performance. Was there any evaluation carried out (POE) and what did it show? Good that ASHPs were used and solar panels though.	This case study has been included to demonstrate that development which complies with NZC1 is feasible and viable. It includes reference to the % reduction against both 2013 and 2021 Building Regulations.

George Martin	Para 3.12	WOW – Proposals with gas boilers will not be considered as acceptable. Excellent. So whey does Table 1 use a baseline with a gas boiler.	Table 1 is citing gas boiler as an example of being in a notional building. It is not encouraging gas boilers.
George Martin	Case study	The Case Study in just 4 paragraphs states quote: " New homes are being constructed by Vistry partnership to meet a highly energy efficient specification with air source heat pumps, cavity walls and PV solar panels delivering a 77 - 80% reduction in carbon emissions." What it should say is that it is designed to deliver……but where is the in use information to find out what exactly was delivered. What was the complete specification? What Air Tightness was designed and what was achieved ?…….so many questions NOT answered by the case study. Reference is made in the 'green box' to a link on the Developers web page: The 'Sustainability in Action' document correctly states all the design factors included in the development and states " The project included ambitious reductions in all possible areas, looking to reduce embodied carbon and aiming for a 100% reduction in regulated energy use and carbon emissions". This is what the development set out to do at the design stage but what did it achieve in reality? Where is this information? The 'green box' also has a link to the Developer's case study. Case study by Darren Evans "Housing development shows how to achieve net zero carbon in construction today"	Comments noted. Please see proposed modifications to clarify that the homes were designed to achieve a 100% reduction in carbon emissions compared to the target set by Part L 2013

		Results: "100% reduction in regulated carbon against Part L 2013…….. The more detailed part of the report shows in a bit more detail how they achieved what they are calling net zero regulated carbon using SAP at the design stage. Two questions here: 1. What would the specification have shown if the design was based on PHPP rather than SAP 2. What was the in-use performance of the new homes.	
George Martin	Para 3.13	I do not understand why there is reference to the 2013 regulations. The buildings other than dwellings Part L is currently the 2021 edition incorporating the 2023 amendments.	The reference to 2013 is within the parent policy NZC1 in the DPD and something the SPD cannot change.
George Martin	Para 3.14	The 2021 Regs are correctly stated here. The DPD is a small improvement on the 2021 Regs. 27% required in the Regs and 35% in the DPD. Is this measurable but what about the performance gap?	The performance gap is covered in paragraphs 3.28 - 3.32.
George Martin	Para 3.15	What does 'weight in favour' mean? Of course the Council would support that the 21 Regs are lower carbon that the 2013 regs.	This is a commonly used phrase to indicate that something is more likely to be beneficial that the alternatives provided.
George Martin	Para 3.17	I do not understand this. Why firstly to pursue a 19% improvement on the 2013 regs……..this is confusing.	The reference to 2013 is within the parent policy NZC1 in the DPD and something the SPD cannot change.
George Martin	Para 3.18	It is not sufficient to say – just put in a Heat Pump……but what heat pump	Heat pump is used as an example, later in the paragraph it does provide values for different types of

			heat pumps. To allow flexibility the SPD is not stipulating a particular type of heat pump to be used/prioritised.
George Martin	Para 3.19	Modern heating systems such as heat pumps. What other modern heating systems are there? Is gas definitely not going to be allowed? Confirmation required. One thing missing from all of this is that there is a lot of effort going into ways to hit the 35% emissions reduction……but little to show how easily a higher % could be achieved with Passivhaus?	Table 2 provides known sources of technologies which would contribute to lowering carbon emissions in non-domestic buildings. This provides flexibility in how carbon reductions are achieved.
George Martin	Table 2	This needs to be clearer. Still reference to the 2013 TER. Why is this not 2021Part L? I think what is being implied is that there is a target of 35% overall emissions improvement target of which 19% must come from energy efficiency measures, not renewable generation. What is being implied is that heat pumps and heat networks count as energy efficiency and not renewables. If this is correct it should be made clear. Not Biomass – just should not be allowed in the district due to air quality. Not wind Not hydro Solar thermal is now not recommended. PV is by far more appropriate. No mention of triple glazing? No specific mention of MVHR…..does mention exhaust air heat recovery. Direct electric heating is not cost effective in operation and not appropriate if it requires gas.	The reference to 2013 is within the parent policy NZC1 in the DPD and something the SPD cannot change. The table heading can be amended to make it clear it relates to carbon reductions sought to non-domestic buildings under NZC1. Please see the proposed modifications. Table 2 provides known sources of technologies which would contribute to lowering carbon emissions in non-domestic buildings. This provides flexibility in how

			carbon reductions are achieved.
George Martin	Para 3.22- first bullet point	I do not understand that for non domestic buildings applicants can use Part L 2013 or 2021. This needs to be clarified. The rest is OK except question of 'heating fuel'. If no gas and no biofuel it must be electricity? So state this. Bullet point also on 'Commentary of proposed zero or low caron energy sources……. Electricity is not zero carbon yet but will be. What other energy source is possible? Check out the Offsetting policy.	The reference to 2013 is within the parent policy NZC1 in the DPD and something the SPD cannot change. Under the bullet point starting 'commentary on proposed zero or low carbon energy sources' this references Section 5 of the SPD which outlines the types of technologies to be considered.
George Martin	Para 3.28	IMPORTANT – this is for as built. Mention should be made here of use of BS 40101. • This would include in-use measurement of energy? • Measuring indoor air quality including CO2? The Scottish Government require CO2 monitoring in all new homes.	In addition to the measures outlined in 3.28, BS40101 is referenced in the following sub-section and paragraph 3.30
George Martin	Para 3.30	Needs to be stronger. Building Performance following occupancy is a must in order to hole Developers to account. BS 40101 – The Building Performance Evaluation standard must be mandated.	The SPD cannot mandate this requirement as it is beyond the remit of this SPD to include new requirements.
George Martin	Para 3.32	Yes good.- but what if the Developer does not do this. The Developer doing there own method of POE cannot be trusted……marking their own homework! This is where a bespoke QA process as in 3.29 and BS 40101 as in 3.30 is essential.	The as-built calculations will be required as a condition of planning permission. This would align with methodology used pre-permission, e.g. SAP,

			SBEM or alternatively through PHPP calculations. This is to be supplemented by those measures included in 3.28. The developer is encouraged and recommended to use quality assurance process as outlined in paragraphs 3.29-3.30.
George Martin	Para 3.33	Excellent – Passivhaus certification. Not sure why a developers would build some to Passivhaus and some not? Bad for marketing.	Comments noted
George Martin	Para 3.34	All good for the Classic' Passivhaus targets for housing. Need to have the criteria for non domestic buildings Need to have the criteria for retrofit which is called EnerPHit.	Passivhaus certification is an alternative route to comply with NZC1. Passivhaus certification is referred to 'Passivhaus buildings' and therefore applies to dwellings and non-domestic development. EnerPHit is recommended in Section 8 for retrofit for existing buildings. This cannot be made mandatory as the SPD cannot add new requirements. This is not a requirement in the DPD policies.
George Martin	Para 3.35	The criteria for both Plus and Premium should also be stated so as to demonstrate just how much better these are.	Comments noted.
George Martin	Para 3.36	Correct. It is correct to state the robustness of the PHPP calculation methods. However, no where in the document	Comment noted. SAP and SBEM however remain the calculation methods under

		does it state the complete inadequacy of the SAP and SBEM methods of calculation.	building regulations and are referred to in the DPD.
George Martin	Figure 2	Absolutely excellent. A similar bar chart is need to demonstrate the difference in 'performance gap' between the Building Regs and Passivhaus.	Comments noted.
George Martin	Para 3.37	Correct……but potential home owners need to understand this and have PV panels and a battery installed	Comments noted.
George Martin	Para 3.38	Correct. IMPORTANT. How can WDC incentivise developers to go Passivhaus Classic or Plus. Developers will not want to go down the Passivhaus route voluntarily – they will need to have some sort of incentive. Not one of the top 10 developers have built a Passivhaus building so there is no information yet available to understand if a certified Passivhaus achieves a premium in the market. The Passivhaus Trust are working on this. Some kind of incentive will be required such as: Additional footprint? • Higher density ? (they do this in Vancouver) • A grant from somewhere ? (they do this in Wales) • A lower section 6 payment? • A fast track process for planning approval?	Comments noted. Significant weight will be afforded to schemes which achieve Passivhaus Plus or Premium. The weight within the planning balance this is given, depending on other matters and material considerations, would be down to the decision maker.
George Martin	Policy NZC2(A)-Making Buildings energy efficient-Para 4.1	Policy NZC2(A). Table in green……– IMPORTANT. I do not understand why there is reference to the 2013 regulations for non-residential buildings. The Buildings other than dwellings Part L is currently the 2021 edition incorporating the 2023 amendments. Perhaps there is a reason for this that I do not know about. It would need someone with more expertise to say if this fabric improvement for domestic and non-domestic buildings goes far enough.	The reference to 2013 is within the parent policy NZC1 in the DPD and something the SPD cannot change.
George Martin	Para 4.2	Agreed that high fabric efficiency is important, however is what is proposed high enough?	As above

George Martin	Para 4.3	Table 3. – needs a review with someone with more expertise. IMPORTANT. I do not understand why there is reference to the 2013 regulations for non-residential buildings. The Buildings other than dwellings Part L is currently the 2021 edition incorporating the 2023 amendments.	As above
George Martin	Figure 3	Correct and from LETI Overheating is an increasing problem. Look to see if reference to the Good Homes Alliance Note that the Good Homes Alliance has launched a ***"Shading for housing: Design guide for a changing climate"*** on the 9th November 2023.	We welcome this useful suggestion and will add the reference into the text in Figure 3 – please see the proposed modifications.
George Martin	Para 4.5	In addition to the energy efficiency benefits – need to look specifically at overheating.	Comment noted
George Martin	Para 4.6	Correct No specific mention of having an appropriately sized heat store (hot water cylinder. This should also be linked to the PV panels.	Comments noted.
George Martin	Para 4.7	Basically, solar panels reduce the carbon emissions for a building.	Comments noted
George Martin	Para 4.8	Flawed. It would appear that Policy NZC2(A). is based on the anticipation of the Future Homes Standard which has not been finalised. Rumour has it that there will be a new SAP. SAP 10.2 will be replaced. Possibly not at SAP 11 but as something new…….possibly closer to PHPP! The consultation on this was due in the summer – not yet published.	Policy NZC2(A) has been subject to various rounds of consultation and amends have been suggested at main modifications consultations. The policy wording of the DPD including NZC2(A) policy is not subject to this round of consultation.
George Martin	Table 4	This is based on an early consultation of the FHS.	The figures in this table identify the baseline notional

		Which column is the SPD being based on – the 2021 regs or the FHS 2025? 4.12 states that applicants are not required to build precisely to the FHS specification.	building under 2021 Building Regulations and provides the notional specification of the FHS – references are provided for the source of this information. The table and paragraph 4.8 demonstrate that the FHS specification would achieve the 10% improvement on TFEE. This is an illustration of how the policy can be achieved but does not dictate that this is how 10% is achieved. Please see the proposed modifications to the titling of this table.
George Martin	Para 4.12	This is not clear. The wording needs to be improved so that the intention is clear.	Comments noted. We do not feel that this paragraph needs rewording when read in connection with 4.11-4.13.
George Martin	Para 4.14	Correct – but reference should be made to specific overheating guides. E.g. the following guidance and tool is produced by the Good Homes alliance. https://goodhomes.org.uk/overheating-in-new-homes	Comments noted, please see comment and proposed modifications.
George Martin	Para 4.15	I do not understand why there is reference to the 2013 regulations for non-residential buildings. The Buildings other than dwellings Part L is currently the 2021 edition incorporating the 2023 amendments. My opinion is that a 19% improvement on 2013 is just not good enough.	The reference to 2013 is within the parent policy NZC1 in the DPD and something the SPD cannot change.

George Martin	Table 5	I would need someone with more expertise to go through this. Interesting that when non-domestic buildings are mentioned it is with the 2021 Part L and not the 2013 part L. When looking at this portion of Table 5 where it says "greater improvement to these fabric and airtightness values is encouraged" developers are not going to do this on their own…so whey have this meaningless statement. Why not increase the fabric and airtightness requirements NOW?	The policy requires a 19% improvement and the policy provides flexibility to how this achieved through a range of measures. The fabric, or air tightness requirement cannot be altered in the SPD as the SPD cannot change or go beyond the DPD policies.
George Martin	Para 5.1	The Policy is good but needs careful management when developers come back to say that 'compliance is not feasible or viable' Who in WDC has the skills and expertise to assess this. 'Zero carbon ready' can be a cop out for developers. The electricity grid will eventually be zero carbon……..that said if there is insufficient fabric, a high airtightness and a large performance gap a lot more electricity will be used…….so here it would be zero carbon but would cost a fortune in electricity bills.	Comments noted. Please refer to previous response.
George Martin	Para 5.2- Table 6	For dwellings – 63% minimum or 100% where feasible. How has the skills to assess this? For non-residential – uses part L 2013 TER……why not 2021	Please refer to previous response.

George Martin	Para 5.3	**Direct electric heating**……basically too expensive with current electricity costs and when stated with solar panels…….these need to have a minimum of kWp. Having 4 or 5 will not cut the mustard! **Biomass** – I really do not thin this should be encouraged. It is one thing to have the timber sustainably managed it is another to have it transported from the other side of the world. Just remove it. **Biogas**……I think probably not.	This is covered in tables 7-18.
George Martin	Table 7	ASHP – mostly good however aa bit more information is required most especially for retrofitting. Terraced homes and flats can be difficult and planning discussion for homes in a conservation area of for Grade I and Grade II homes	Comments noted.
George Martin	Table 9	Quite good but needs some revision. Solar thermal is stated and I believe that now it is best to have solar PV and to use some of the PV energy to heat the water storage devise using an App through an immerser. Also the bigger the cylinder the better when heated with PV	Comment noted
George Martin	Table 10	Good but in the first paragraph separate out MVHR from heat recovery from waste hot water. The latter is very cheap to install and should be in all properties now.	Comment noted
George Martin	Table 11	Need to reword the second paragraph as this is confusing. First it states that it is 100% efficient and then states that it is three times less efficient……..I know what they are trying to say….but confusing. Wording…..MUST not should be avoided for occupants vulnerable to energy costs…….. Mention should be made of the benefits of underfloor heating which runs at lower temperatures to radiators.	Comments noted. Please see proposed modification.

George Martin	Table 12	Energy storage – Location. If installed internally, batteries have in addition, specific clearance requirements on each side and to the front. Correct stating the inclusion benefits when having PV…..however needs to has sufficient PV just 4 or 5 panels.	Comments noted.
George Martin	Table 13	Solar photovoltaic panels – Statement Solar PV should be considered standard for new developments……..MUST? Two points to add: Roof design is important so dormer windows and velux type windows on south, west and east elevations will reduce the available roof space and/or have unwanted shade. Sufficient panels should be provided to have at least 3.5kWp preferably more especially if combined with a battery.	Comments noted. The NZC2B refers to zero or low carbon technologies and such does not dictate the use of PV, applicants are expected to employ a technology, or a mix of technologies, which meets the requirements of the policy. Clarification of roof structure added to Table 13 – please see proposed modifications.
George Martin	Table 14	Solar thermal – Should have an added paragraph to look at the efficiency by comparison with PV. For the majority of homes I believe it is best to have max Solar PV and NOT have solar thermal. It also needs maintenance whereas PV does not.	Comments noted.
George Martin	Table 15	Combined Heat and Power – It states that quote “CHP systems with fossil fuel use should be avoided” ……..so why have this as an option?	It may still be a feasible and viable option in some instances.
George Martin	Table 16	Biomass – Quote “ Unlikely to be suitable for schemes in urban areas due to air quality” Agreed. Just make this explicit – it is a non starter for Warwick District.	It may still be a feasible and viable option in some instances, for example in rural areas with ready access to onsite/nearsite biomass.
George Martin	Table 17	Wind – make it clear that micro wind turbines on individual homes are a complete waste of time. See the Encraft report on the Warwick trials.	Comments noted.

George Martin	Para 5.9	But who is going to assess the viability of such a scheme when developers come back to say it is not viable as has happened many times in the past few years.	Please refer to previous response.
George Martin	Para 5.13	A few things to add: • Heat networks can contribute to overheating in flats and care homes due to the amount of hot water in pipes in communal areas • Heat pumps are widely used in mainland Europe but not so much in the UK. Primarily this is due to a lack of maintenance of systems in the UK. • Community benefits are not alwau=ys deliverable as there is just one energy supplier and that organisation has the community over a barrel for costs. • Must make it clear that this is no fossil fuels.	Comments noted. Modifications proposed to note consideration to the risk and mitigation of overheating is also required.
George Martin	Policy NZC(C)	The paragraph in the green box that states quote: *"Where assessment undertaken at completion shows that there is a performance gap between the design and the performance of the completed building , carbon offsetting contributions will be required to reflect any associated additional carbon emissions not accounted for……"* Who in WDC is going to manage this. Every building that is designed using SAP will have a performance gap. Who is going to be measuring the operational performance of the buildings. This will be a full time job?	The green box is a policy wording from the DPD and cannot be changed. This is covered by paragraph 3.28
George Martin	Para 6.1	Who is going to check the viability statements?	The Council already review the financial viability of developments and would seek

			external consultants support if this was required.
George Martin	Para 6.2	But who is going to provide the argument with the developer? Does the Council have a verified local offsetting scheme? It will need one. See the green box.	This is currently proposed to be via the WESTP being led by the County Council.
George Martin	Para 6.3	OK but who is going to fight this.	Please see the response above in relation to development viability.
George Martin	Para 6.4	OK if offsetting is allowed.	
George Martin	Para 6.5	It would be good to check the Councils formula with someone that knows.	
George Martin	Para 6.6	OK – do we understand what Warwick's Carbon Offsetting Fund is. Who developed it? Is it robust?	This is currently proposed to be via the WESTP being led by the County Council.
George Martin	Para 6.7	Who developed the WESTP and is it robust?	It is developed by Warwickshire County Council and will be subject to public consultation.
George Martin	Para 6.8	Statement says…."The Council's prioritised method of offsetting is through tree planting" This is just nonsense and must be scrapped from the policy. Perhaps…….just perhaps as a very last resort……..but not prioritised. Need to have a specific offsetting hierarchy……with trees in Warwick District as near to the last resort. Trees elsewhere geographically to be even lower.	Other methods of offsetting are covered in paragraph 6.9
George Martin	Para 6.9	I think not. **Can applicants provide carbon offsets directly rather than contributing to the Council's Offsetting Fund?**	NZC2C provides the alternate provision for offsetting outside of the Council's Offsetting scheme and the criteria for this. It is clear however that

			this is at the discretion of the Council.
George Martin	Para 6.10	This is opening up a whole bag of worms. The previous section is bad enough but allowing developers to set up their own schemes is asking for trouble. I would recommend that this is not allowed. Who for example would administer this on behalf of the Council. Can developers be trusted?	Paragraph 6.10 expands on the point raised above and sets the criteria for alternatives.
George Martin	Table 19	WDC need to develop an embodied target for the different types on Development. Just saying reduce where possible does not cut the mustard. Need also to have an assessment at the design stage and a follow up on completion of construction. Has the construction process improved the embodied carbon saved – and if not why nowt and what are the lessons learned…for the contractor and for WDC.	An embodied carbon target is not set in NZC3, and such the SPD cannot change the policy. Table 21 provides suggested targets for whole life embodied carbon.
George Martin	Para 7.5	Define major and super major developments? Otherwise good. There are many assessment methods in the marketplace. Here is a selection: • Greater London Authority • LETI • UK GBC • Passivhaus Trust • AECB • CIBSE • Consultants such as Arup The best example that I know of is the WWF HQ building in Woking where a carbon budget was set at the beginning of the project at design stage. The embodied carbon work that was carried out was by Sturgis.	Comments noted.
George Martin	Para 7.6	OK – but depends on what assessment tool is used.	Comments noted

George Martin	Para 7.7	Applicants need to submit what assessment tool that they are using and what organisation (consultant) will be managing the process. This is not easy and is very time consuming.	Comments noted
George Martin	Para 7.8	Not as simple as that. There are new types of concrete in the market. Aluminium manufactured using Hydro electricity have low embodied carbon. There are also other environmental benefits to take into account – but how e.g. recycled content of steel, glass and plastic.	Comments noted
George Martin	Para 7.9	OK ish – but at the top is Aluminium and if produced by Hydro power the embodied carbon is low. Can also have a very high recycled content.	Comments noted
George Martin	Para 7.11	Define major development Why would a development not be required to complete a whole-life embodied carbon assessment?	This is a common definition for development.
George Martin	Para 7.12	BREEAM – there are other LCA tools. BREEAM I do not understand this paragraph. Needs to be more explicit. There is also a need to highlight in the document (not found yet) the many and various BREEAM levels with a description of what they cover and what they do not. For example it should be explicit that for an application using BREEAM that the maximum credits for energy and carbon saving are mandated. This rules out BREEAM very good. For BREEAM Mat 02 which is an optional credit – this should be mandated. BRE Green guide – please note the following: “From 2021 BREEAM will no longer recognise The Green Guide to Specification. Current Ratings will remain valid, but new EPD will need to comply with EN 15804. Digital is the future: LCA tools and whole building assessments.”	Comments noted. BREEAM rating is not set by the policies in the NZC DPD and instead is set by Local Plan policy CC3. The SPD cannot set new policy.

George Martin	Para 7.13	More to be considered including: • WLC One Page by LETI • LETI Embodied Carbon Primer • Climate Change and Energy • Circular Economy • RICS Whole Life Carbon Assessment • The WLC Methodology: BS EN 15978:2011 • RICS Whole Life Carbon Assessment for the Built Environment	Paragraph 7.17 sets out the route for using an alternative methodology.
George Martin	Para 7.19	Other sources may be available	Comment noted.
George Martin	Para 7.20	See response to Para 7.13	Comments noted
George Martin	Para 7.21	Do not forget that the FHS is not yet finalised. I suspect that the FHS is NOT ambitious	Comments noted
George Martin	Policy NZC 4- Existing Buildings	Why is this section not divided into Domestic and non-Domestic?	The policy is worded "all developments" which would indicate both domestic and non-domestic buildings. Policy NZC4 cannot be amended as it is a DPD policy.
George Martin	Para 8.1	Look at Local Plan CC1 – look to see if this is fit for purpose GM Surely the energy source of choice should be with no fossil fuels and an assessment is required if this is not deemed possible.	Policy CC1 is an adopted policy in the adopted Local Plan which will be reviewed as a part of the South Warwickshire Local Plan (SWPL), it cannot be amended by this SPD.
George Martin	Para 8.2	Applicants are encouraged'……encouraged how? …and "will apply significant weight to proposals"……how? What is this in reality?	The weight within the planning balance this is given, depending on other matters and material considerations,

			would be down to the decision maker.
George Martin	Para 8.4	No mention yet for the following standards: • PAS 2035 for domestic • PAS 2038 for non-domestic • AECB retrofit standard • EnerPHit • Energiesprong • NABERS • And others…….??	A selection of these methodologies has been included in this section.
George Martin	Fabric First Approach	Yes…but not always……especially for those that can afford to pay?? Think about PV battery and ASHP where appropriate.	Comments noted.
George Martin	Para 8.5	Not adequate – need to include the detailed methodologies as laid out in PAS 2035 and PAS 2038	NZC4 does not require the applicant to submit an assessment in accordance with a recognised methodology. Paragraph 8.5, alongside 8.6 outlines what measures can be considered under the fabric first approach.
George Martin	Para 8.7	Not sure that this is not correct. For those that can pay – PV – battery and ASHP might be all that is needed and is almost no inconvenience to the occupier. Thai is why a 'Whole House Plan' is needed in accordance with PAS 2035. Employing low or zero carbon technologies:	The energy hierarchy remains important for retrofitting as improving the fabric of a building will lower the overall energy demand – whether than be demand on the grid, or demand through zero or low carbon technologies.
George Martin	Para 8.8	but the presumption should be in favour of no gas in the first instance. The paragraph needs to change the emphasis.	The wording of paragraph 8.8 aligns with the wording of NZC4.

George Martin	Para 8.9	Need to categorise practically: Not biomass…….air quality – remove this as an option Wind generation and Hydro not appropriate for urban situations	Paragraph 8.9 refers back to the technologies included in Section 5, which may be applicable for buildings in different contexts and localities and such is not overly prescriptive.
George Martin	Para 8.10	Is gas going to be allowed in this SPD? Surely this SPD bans gas boilers now! Developers should not be putting gas on development sites NOW.	This paragraph expands on NZC4 and outlines what is expected from applications to align with the policy.
George Martin	Para 8.13	Good that PAS 2035 is mentioned at last. More detail needed and especially the need for a whole house plan. **Question** – is this SPD for homeowners? IS this SPD for designers and contractors working for WDC to retrofit council homes? If so the supply chain needs to be suitably accredited – PAS 2035 and 2038 and MCS, Trust mark etc. This is all a bit confused. This paragraph needs to be improved so that a home owner should they be reading this……..is more fully provided with information. Just saying PAS 2035 and then look for an experienced MCS installer…….do WDC know how difficult this is?	The SPD is for everyone including homeowners, developers and any other relevant stakeholders. On this topic it is providing general guidance to support applicants in considering and planning retrofitting in existing buildings.
George Martin	Para 8.14	Recommended retrofit targets and quality assurance standards.	See paragraph 8.15
George Martin	Para 8.15	Who are these applicants? Presumably not individual home owners? Applicants 'could ' pursue? Surely WDC should be setting retrofit targets. Rest OK ish but should add in AECB retrofit standard.	NZC4 is for existing buildings, and so would cover any applicant would was submitting an application involving an existing building. The guidance has been written

			to apply to different forms of developments.
George Martin	Para 8.16	Are the targets above 'recommended'? that is not what 8.15 says. Paragraph is wishy washy.	Comments noted.
George Martin	Para 8.17	Well – at long long last we have statement that SAP and SBEM are not well suited for this…….absolutely agreed……..as indeed they are not suited for new build either.	Comments noted.
George Martin	Para 8.18	Energy monitoring. Here the use of BS 40101 should be mandated.	It is not within the remit of the SPD to mandate it. The SPD can only encourage this.
George Martin	Para 8.21	PAS 3035 – correct – this is for domestic. Need also to include PAS 2038 for non-domestic buildings.	Comments noted. Modification proposed to reference PAS 2038
George Martin	Para 8.23	Add in AECB and National Retrofit Hub	This is an organisation, but not a toolkit or guide as the other three examples are.
George Martin	Glossary	1. Performance Gap is important and only mentioned twice in the document. 2. In relation to offsetting Where assessment undertaken at completion shows that there is a performance gap between the design and the performance of the completed building……" Please note that this will be for absolutely every building that is designed using SAP and SBEM. 3. Include Good Homes Alliance, PAS 3038, NABERS, AECB, UK GBC, Energisprong.	Comments noted. Modifications proposed include definition of the performance gap and inclusion of PAS 2038. Remaining terms have hyperlinks in the text and so referenced clearly.
George Martin	Annex	1. All of the forms in the annex relate to compliance with the design. There are no forms relating to operational carbon……performance in use?	1. The forms set out what information is needed within a planning application –

		2. The forms are for completion for submission as part of planning. The forms take no account should Passivhaus methodology using PHPP be but forward. 3. The DPD is all about operational carbon. There are no forms to deal with building performance evaluation – POE? Why have these not been included.	this is a building as designed. 2. Passivhaus is put forward as an alternative route. Modifications proposed to introduction of Energy Pro Forma 3. The Pro-Forma's set out what is required at the point of making a planning application (designed and not built).
George Martin	Not in the SPD	1. The use of sophisticated controls with Apps and zoning of heating in buildings 2. There should be a retrofit section specifically for non-domestic buildings with the inclusion of PAS 3028 3. Energiesprong should be highlighted for retrofit of homes. 4. Underfloor heating is not mentioned – this is beneficial in all cases and particularly for ASHP . 5. Should have a section on the use of NABERS for new non domestic buildings.	1. The scope of the SPD covers measures which contribute to achieving the NZC policies. We accept there are numerous tools which can support operational reductions in carbon however this is beyond the scope of the SPD. 2. PAS 2028 has been added through modifications. 3. Paragraph 8.23 provides a range of

			tools, applicants may choose to use others. 4. As per response to point 1. 5. NABERS only for offices. .
Janet Neale (Warwickshire County	Whole SPD-general comments	• The SPD is well thought out and upon compliance will give us the buildings I suggest we want to see being built. • True to the title the standard will deliver NZC in most cases (excluding some versions of Passivhouse - see below and where allowable exclusions are granted). • We believe it is important that this happens rapidly given that this will effectively introduce the future homes standard when adopted for dwellings. It has often been the case that future national building regulations have been significantly watered down, so this is an opportunity for WDC to incorporate this desire now before any potential U-turns. • Flood risk commented at DPD stage and feel that there are no further comments to make.	Comments noted.
Janet Neale (Warwickshire County	Whole SPD-specific comments	1. For dwellings, target emissions rate set at an equivalent to the future homes standard (c. 75% reduction on Part L 2013). 2. For comparison, non-domestic standard is just 35% uplift from Part L 2021. Perhaps lacking ambition on first glance but Part L 2021 already introduced a 27% improvement v 2013. 3. Good to see that the standards are achievable by refering to a case study completed by Countywide / Vistry.	Positive comments noted and we welcome WCC's offer to work collaboratively with the Council. In response to point 7: compliance with the various Passivhaus packages is explored in paragraphs 3.37-3.39 and even Passivhaus Classic represents a significant

		4. Heating technologies: gas boilers not permitted; direct electric considered unlikely (WCC agree). 5. District heating suggested as a solution but to avoid gas fired CHP. 6. No consideration about grid capacity although this is perhaps not the doc for it. Perhaps this should be referred to even if only to say how grid capacity is being dealt with. 7. Passivhouse considered an allowable route to compliance despite it not being net zero carbon. Why? 8. Post occupancy evaluation recommended but not required. 9. Adaptation dealt with by reference to overheating and to a separate planning document that WDC have produced: Local Plan Policy CC1 'Planning for Climate Change Adaptation'. 10. Requirement to offset where cannot demonstrate that it is net zero carbon. a. Option a. a cash in lieu contribution to the District Council's carbon offsetting fund (via S106); b. A verified local off-site offsetting scheme. The delivery of any such scheme must be within Warwickshire or Coventry, guaranteed and meet relevant national and industry standards. If it is a nature-based carbon sequestration scheme, then it must be backed by the national government's Woodland Carbon Code initiative (or future replacement/equivalent national scheme) and meet the Warwickshire ecosystem service market trading protocol.	improvement in fabric efficiency to comply with NZC1. Point 8 – paragraph 3.28 outlines the post construction checks required, and paragraphs 3.29 and 3.30 recommend quality assurance and post occupancy monitoring that is recommended. Positive weight it given to those who would use such processes. -

		c. The cost of £/tCO2e is based on the green book non-traded valuations which interestingly place a central estimate of £124 tCO2e today - pretty much the same as the valuation from the work commissioned by David Lowe to assess the value that we should place on C for a scheme developed by us. Note by 2030 this is set to rise to £140. I'm not sure if this is discounted. 11. Within embodied carbon the doc advises seeking alternatives to metals, concrete amongst others. Reuse is recommended. No mandatory requirements in this area though. Perhaps this is an area for WDC and WCC to work together. Our comments are quite generic but Warwickshire County Council is wholly supportive of the document and look forward to continuing the good on-going working relationship we have.	
Coal Authority	Whole SPD	The Coal Authority is a non-departmental public body sponsored by the Department for Energy Security and Net Zero. As a statutory consultee, The Coal Authority has a duty to respond to planning applications and development plans in order to protect the public and the environment in mining areas. Our records do not indicate the presence of any recorded coal mining features at surface or shallow depth within the Warwick District area. On this basis we have no comments to make on the draft SPD to which this current consultation relates.	Comments noted

Helen du Bois (Burton Green Parish Council)	Burton Green Parish Council	It was noted that the document appears to be aimed primarily at developers and their agents, rather than the public. Councillors applaud the intention behind the document to reduce the carbon footprint of new and existing buildings. The Council noted the expectation that this will result in new buildings being “net zero carbon in use”, although there is still more to do if the intention is to specify genuinely net zero carbon buildings, as “in use” does not cover the carbon footprint of constructing a building in the first place (i.e. “embodied carbon”); Councillors hope that WDC will lead the way by ensuring that its own new buildings comply with the standards set out in the DPD/SPD.	Comments noted. We acknowledge that this subject is technical, and care has been taken to present information in a manner which is applicable to all.
Mrs Sidney Syson	Policy NZC4- Existing Buildings	i am releived to see that alterations to existing buildings are included in the scope of this document.	Support noted.
Mrs Sidney Syson	Policy NZC1	Ver glad to see the inclusion of the following 3.31 Developers will also be required, by way of a condition, to produce a home user guide for occupiers. I trust it will be easy to understand.	Support noted and the user guide will be aimed at providing occupants information about various measures that would have been incorporated in the building and how to make best use of them.
Mrs Sidney Syson	Section 1- Introduction	A welcome step forward in WDC's climate change objectives	Support noted.
Karen Stevens on behalf of Bishop’s	Whole SPD	As stated in the document, the Net Zero SPD does not contain any new policies but provides further advice and guidance to applicants and relevant stakeholders on how to comply with	Comments noted.

Itchington Parish Council		the DPD policies. The complexity of the requirements mean that Parish Councils would rely heavily on the competency of the planning officers to ensure compliance. The document is well devised and refers to national and international standards to achieve low carbon improvements to our planning system. The use of these standards is not necessarily mandated in the document and the reality for larger building schemes must be that developers will wish to reduce costs to a minimum, whilst showing conformity using minimum cost & effort. It may be useful for individual Parishes to have an understanding of their current Net Zero status when considering new planning applications, if only to confirm that the development will contribute to the Parish Net Zero. Some understanding would be needed of the extent to which the new housing already build within the Parish currently meets the net zero requirements as well as older housing. This may be pertinent to the consideration in the local neighbourhood plan and the consideration of any new developments and any further improvements. The above is also important should the Parish find it needs to consider community based schemes, which might make a contribution to net zero, such as offsetting energy use in older buildings. However, community schemes have not been recognised in the document. Also not considered is the implication of the requirements on "Affordable homes" and Social Housing, where improvements could help to increase comfort and affordability in use. If the building of Affordable homes and Social Housing under the net zero requirements is not cost effective for developers will there be a reduction in the availability of such housing, which is desperately required in some areas?	We appreciate that technology develops quickly, and the SPD seeks to outline those current technologies which may be feasible and viable for a range of developments, contexts, and localities. While the policies are directed to align with the FHS, the policy requirement, i.e. net zero operational regulation carbon emissions remains the absolute target of the policy. The policy requirements set out in NZC1-NZC2B can be achieved through the application of different fabric efficiencies, and technologies and such provides flexibility in how an applicant employs measures to reduce carbon emissions in new buildings. The validation requirements for applicants include the energy statement alongside the detailed calculations. Where the reader does not have technical knowledge, the energy statement is there to support the development in what measures have or

		Many of the older houses still use gas to heat and cook with, which to date remains about three times cheaper than grid supplied electricity. Without significant investment in an older building it is difficult to see how the immediate move to electric heating would be cost effective for many, placing a burden on owners. However, new technology developments and new approved products in Europe suggest, home fuel cell use or even home hydrogen generation from solar cells is now possible. The document currently aligns itself with the current government strategy to decouple the national gas network from heating homes. However, by aligning the SPD to such strategy, which may change under another government, it is short sighted. By doing so it does not recognise or accommodate the use of newer technologies or continued developments, such as in the hydrogen / fuel cell market, continued possibility of a green hydrogen grid and hydrogen gas boilers for existing homes. It would be better if the document remained open to the approval of new technologies and included the support of innovation and new ideas, such as community based local energy generation and supply / off grid, especially in the rural environment. Given the complex nature of net zero planning requirements, will there be any additional support to Parish Councils, such as training?	haven't been included with explanations around this – hopefully this will guide Parish Councils or members of the public to make an informed perspective of an application. Regrettably there is no provision for any additional training to be provided to Parish Councils.
Tessa Jones (Environment Agency)		We have reviewed the draft SPD (dated October 2023) and whilst we currently have no statutory remit to advise on carbon reduction in this regard, we would seek to ensure climate change is taken into account through our existing functions. As such, we wish to sign post your Council to	Comments noted. The SPD provides guidance on the NZC DPD and such is narrow in scope and relates to these policies only. The

		mitigation advice and encourage all development plan documents to closely align with national net zero targets. As you are aware the UK has set out in law the target of achieving net zero by 2050. The Climate Change Act (2008) states that 'it is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline.' To achieve this, the annual rate of GHG emissions will need to be cut by over 260 million tonnes (Mt) CO2e (carbon dioxide equivalent) from 2019 levels to less than 90 Mt CO2e in 2050 (CCC, 2019a). There is a statutory duty on Local Planning Authorities (LPAs) to include policies in their Local Plans designed to tackle climate change and its impacts. Section 19 of the Planning and Compulsory Purchase Act 2004 states that 'Local development plans must include policies designed to secure that the development of and use of land contribute to mitigation of and adaptation to climate change'. Revisions to the National Planning Policy Framework (NPPF) in 2021 include a requirement to promote a sustainable pattern of development, by mitigating climate change and adapting to its effects (para 11a). The NPPF also states (para 134) that enhanced local policies and government guidance on design should be given 'significant weight'. The Environmental Assessment of Plans and Programmes Regulations 2004 creates a legal duty and requirement that a plan's cumulative climate impacts are assessed and taken into account. This includes assessing the consistency of proposed policies with all relevant climate objectives and targets.	Council acknowledge that there are other ways to mitigate and adapt to climate change which can be developed through policy and supporting guidance. The South Warwickshire Local Plan will continue to develop climate change policies and guidance in line with their statutory duty and in relation to carbon budgets set nationally and at a local level.

		To assist in the delivery of robust climate change options we encourage you to review the RTPI /TCPA Guide : The Climate Crisis – A Guide for Local Authorities on Planning for Climate Change RTPI | The Climate Crisis You may also wish to refer to the Tyndall Carbon Budget Tool Tyndall Carbon Budget Reports (manchester.ac.uk)	
Paul White (Turley)- Representation on behalf of Hill Residential Development Ltd in respect of their land interests within the Warwick DC		Hill Residential Ltd supports low carbon development, however, have concerns over bringing forward policies ahead of national regulations which may impact on viability and deliverability of new development. Hill Residential Ltd notes that the recent Royal Assent of the Levelling Up Bill1 includes plans to ensure Local Plans are limited to 'locally specific' 'matters with 'issues that apply in most areas' to be covered by a suit of new National Development Management Policies. It is anticipated this could include further energy and carbon guidance on requirements for new development. At a national level the Government has committed to the introduction of the Future Homes Standard from 2025 that ensures homes are Net Zero Ready and will not require any further retrofit to achieve Net Zero, '*As we move towards a decarbonised electricity grid, homes built to the Future Homes Standard will become net zero carbon over time with no need for further adaptations or changes, as they will not be reliant on fossil fuels for their heating.'2*	We appreciate the comments about the intent of the Levelling Up Bill. Carbon emissions are a local issue, and the Council have committed to reducing carbon emissions to as close to net zero by 2030 - the DPD and this SPD are an important part of reducing the emissions within the district in line with its own targets and those set by the Government as part of the Climate Change Act. The Council provided robust viability evidence at examination and this SPD does not impact the conclusions of this evidence as it does not change or amend the DPD's policies.

Paul White (Turley)- Representation on behalf of Hill Residential Development Ltd in respect of their land interests within the Warwick DC	Validation Checklist	Hill Residential Ltd supports the provision of information at the application stage to set out how development will approach the requirements of the Council's net zero policies. It is noted that there is likely to be a different level of information available as part of outline and detailed applications. For example energy modelling may not be carried out at the outline stage, instead it is considered more proportionate to allow the use of benchmark data at an outline planning stage. Similarly at the outline stage there is likely to be insufficient information to prepare a detailed Whole Life Carbon Assessment. To improve the soundness and deliverability it is recommend that consideration is given to the availability of information at the outline stage and this should be recognised and applied proportionally in the validation requirements, and Energy Proforma. Within the SPD, Hill Residential Ltd recommend that the following text be included: *It is understood that at the outline planning stage full development details, material specification or the final energy strategy may not be available. For outline applications, it is recognised that a detailed response to these policies will be challenging and so a proportionate response is acceptable.*	We welcome the support of the Council's net zero policies and agree that different levels of information will be required to provide different level of information. The SPD at paragraph 3.27 details that an applicant would need to identify the expected building specification in their energy statement and pro forma. This information is required to demonstrate that the development has been planned to be net zero carbon in operation (regulated energy). The Council believe that this should be considered at the earliest stage of design development to ensure that any resulting development can meet the requirements of the net zero carbon policies. At paragraph 7.7 it outlines that the design principles to lower embodied carbon are demonstrated. Therefore, the Council feel that a proportionate response has been taken in the

			information requested for outline applications which ensures that developments are planned from the outset to meet the requirements of the NZC policies.
Paul White (Turley)- Representation on behalf of Hill Residential Development Ltd in respect of their land interests within the Warwick DC	Policy NZC1; Achieving Net Zero Carbon Development	It should be noted that the Government is due to consult on the 2025 FHS in 2023, the contents of which could alter the approach to carbon reduction and the minimum targets proposed. Development is then required to maximising carbon reductions through the application of the energy hierarchy as set out in Policies NZC2(A) and (B), before offsetting any residual regulated emissions. It is noted that Policy NZC1 applies to operational, regulated carbon only. Hill Residential Ltd support this approach, unregulated carbon emissions are generally out of the control of the developer and are subject to how occupants use energy, it is not providing occupants with energy efficient buildings in line with national and local policy. While Hill Residential Ltd agree with the expected FHS minimum carbon reduction target for residential development, noting this aligns with the anticipated requirements of the 2025 FHS, it is noted that in being adopted ahead of 2025 the Policy pre-empts the requirements of national guidance.	Comments noted. The viability of the NZC DPD has been robustly examined by the Inspector during the plans' examination, and such is not the focus of this SPD consultation as the SPD's guidance does not change or amend the NZC DPD's policies. The SPD's guidance, for example in Table 4 on page 25, uses the FHS specification as a guide to demonstrate how an applicant can meet the requirements of NZC1 in domestic dwellings, however at paragraph 4.12 the SPD makes it clear that flexibility is possible to how measures are implemented in the development. The SPD does not change the wording of the NZC DPD's policies which require new development to be net zero in operation (regulated energy)

		It is noted that the updated DPD Viability assessment (Document SUB6) includes a 6% uplift allowance for the costs of the DPD policies, however, since this was prepared in 2022 there have been significant changes in the housing market driven by significantly increased interest rates, combined with inflationary costs on materials and construction it is likely the viability of these policies has been reduced. The Future Home Hub Ready for Zero publication (2023) notes cost uplift ranging between 2% - 19% for homes meeting the FHS to Net Zero homes (regulated), this is substantially different to the sources used in the preparation of the DPD. Furthermore, the evidence base justifying the policies within the draft DPD does not include a recent, locally specific viability assessment of the impact of the draft DPD, instead relying on a 2021 study 'Etude and Currie and Brown Energy Review and Modelling for the Cornwall Council Climate Emergency DPD'. This document is now over 24 months old (and therefore does not reflect the recent increases in build costs). The lack of up-to-date evidence highlights the importance of the FHS consultation providing clarity on the associated costs in achieving the minimum targets, and helping clarify additional costs beyond this point. While an updated viability assessment has been provided as part of the ongoing examination of the DPD Hill Residential Ltd consider that care needs to be taken in the application of policies which come ahead of national policy.	and so there remains flexibility to how applicants employ the energy hierarchy to achieve this, providing they meet the % reductions set against current buildings regulations. New development in the district would be expected to meet the requirements of the NZC policies and building regulations applicable to development at the time. This may result in a situation where the DPD's policies are superseded and such development will be built to a higher standard to comply with Building Regulations, or in the event that building regulations have a lower standard, the DPD's policies will require that buildings meet a higher standard and reduce carbon emissions against the baseline of current building regulations. Passivhaus remains an alternate route to compliance, the SPD makes this clear in pages 18 & 19. We appreciate the comments that large new settlements can be planned holistically where carbon

		Furthermore this requirement needs to be considered in the context of other forthcoming changes to the Building Regulations and ongoing Government consultation. For example the potential introduction of Part Z to the Building Regulations will set requirements around embodied carbon and Whole Life Carbon Assessment impacting on development GHG emissions. Other consultation points such as changes to Schedule 3 and Sustainable Drainage (SuDS) may also impact on development requirements. In this context, care needs to be taken in setting requirements which go beyond changing national standards. The SPD needs to be flexible, and allow for future regulation. To ensure this Policy is sound, and does not conflict with anticipated future national requirements Hill Residential Ltd recommend that the following text be inserted into Paragraph 3.1, *'To ensure the requirements of Policy NCZ1 do not conflict with national requirements Policy NZC1 will only apply from 2025 or at the point of adoption of the National Future Homes Standard.'* With regards to non-residential development Hill Residential Ltd do not believe it is appropriate to set a target for non-residential development which goes beyond the requirements of Part L 2021. The Future Buildings Standard set out the rationale for the c.27% carbon improvement beyond Part L 2013, noting there are a wide range of non-residential building types and some are better able to make reductions than others. It is noted in the Net Zero DPD that some building types such as schools may struggle to meet extended energy performance targets. Hill Residential Ltd notes that some flexibility is provided in Policy NZC2(B) which allows the use of some low carbon	savings can be made alongside reducing carbon emissions from transport, land use, and include climate adaptation. The NZC DPD and this SPD focuses only on carbon emissions from buildings, and such contains guidance only on this element only, but the Council would expect a developer to demonstrate compliance with other policies of the adopted local plan, for example CC1.

		heating systems to be classified as efficiency measures, and it is appreciated that the role of the SPD is to provide guidance on this policy requirement. As above, to ensure this policy is sound, Hill Residential Ltd consider that it should be clear within the Policy text that it will apply from the adoption of the national Future Buildings Standard (FBS). Hill Residential Ltd would note that the Net Zero DPD viability assessment does include an uplift cost for this element of the policy, however reference is included in the Net Zero SPD to the requirements of the London Plan on Page 13, which as stated requires non-residential development to achieve a 35% carbon reduction beyond Part L 2021. Hill Residential Ltd would point out that the viability of development in London is very different to other areas of the Country and would question as to whether this is a suitable assessment and meets the requirements of the Planning Practice Guidance (PPG) with respect to Viability. **Alternative route to compliance: Passivhaus certification –** Hill Residential Ltd note that the SPD provides an options for the use of an alternative route to compliance with the Net Zero Policy in the form of certification to the Passivhaus. Hill Residential Ltd would note that achieving Passivhaus certification is technically difficult and increases development costs and to date not been widely delivered at a large scale. This particular route to net zero does not appear to have been tested through the viability of the DPD, it should therefore not be a requirement for development. The Future Homes Hub Ready for Zero report identifies a potential uplift cost of 17%-19% for PassivHaus levels of performance, given the	

		significant cost of this requirement it needs to be considered in the viability assessment. The baseline route to compliance should be via the FHS. The assessment requires the collation of information and data once the building is complete, there is then a period of time required to validation to certify a building4. Hill Residential Ltd would recommend that Section 3.33 is updated where it requires the provision of a certificate prior to occupation, to give some flexibility. For example: *'Applications would also then be required to submit the finished Passivhaus certification to the Council for discharge of conditions prior to within 3 months of occupation.'* This is more in line with developments which undergo a BREEAM assessment and certification where a similar verification and certification process is required and is completed post construction, with flexibility given to not hold up the occupation of the building. **New Settlements –** Currently the SPD includes reference to requirements for one or more homes, and non-residential development over 1,000m2. Hill Residential Ltd would note that 'super major' development such as the Hatton New Settlement will face a number of challenges and opportunities due to its scale which differ significantly from smaller settlement extensions or infill development. For example the provision of new transport links, and community infrastructure to support new settlements adds cost to development which is not necessarily a requirement of smaller development. Super major development offers other socio-economic benefits which should be reviewed in the context of other development requirements, such as the Net Zero requirements, to ensure a wide range of benefits are derived from development and not restricted.	

		New settlements require significant infrastructure for their delivery, this is an important consideration in terms of viability which may not have been appropriately considered in the DPD viability assessment, this may impact on detailed requirements for development. There are also however opportunities within new settlements for measures to support carbon reduction, for example large scale on-site energy generation, carbon sequestration through green, blue and grey infrastructure, and carbon savings through internalisation of jobs and creating a walkable community reducing the need to travel and associated transport emissions. These measures have wider social and economic benefits around air quality, community spaces and supporting local services. Hill Residential Ltd would recommend that guidance is included in the SPD which relates to super major development of significant scale such as the proposed Hatton New Settlement which recognises the challenges and opportunities these present in supporting the Net Zero policies.	
Paul White (Turley)- Representation on behalf of Hill Residential Development Ltd in respect of their land interests within the Warwick DC	Policy NZC2(A): Making buildings energy efficient	This section sets out the contribution that the building form factor can have to efficiency. While this is noted care needs to be taken when balancing form factor against housing requirements and design. Homes are also expected to achieve a 10% improvement beyond the Part L Target for Fabric Energy Efficiency (TFEE). It is expected that the FHS will require homes to make improvements to the TFEE beyond Part L 2021, for example making use of high efficiency windows, doors and fenestration elements.	New development in the district would be expected to meet the requirements of the NZC policies and building regulations applicable to development at the time. This may result in a situation where the DPD's policies are superseded and such development will be built to a higher standard to comply

		In this context Hill Residential Ltd broadly agrees with the requirement, however, it is recommended that a paragraph is included to make reference to the FHS and anticipated consultation to ensure any requirements set out through that process are incorporated, or supersede the requirements of the policy where *appropriate*. *Paragraph insert – The requirements of Policy NZC2(A) will be subject to further updates and guidance with respect of the Future Homes Standard, applicants will be required to meet any future superseding requirements set through the Building Regulations.* Non-residential development is required to achieve a 19% carbon reduction beyond Part L 2013 through energy efficiency measures. The FBS set an aggregated 27% carbon reduction for non-residential development beyond Part L 2013, noting that there is a range of building uses and some will find it harder than others to meet this requirement. It is noted that for the purposes of this policy a range of hybrid 'efficiency/energy supply' measures can be classed as efficiency measures, including heat pumps and heat networks. As noted in Paragraph 4.21 it should be possible for the majority of non-residential buildings to meet this standard as part of meeting Part L 2021, however Hill Residential Ltd would recommend that a paragraph is inserted to allow for justification to be made through the Energy Statement as to why it may not be feasible to achieve this target given the nature of the building use.	with Building Regulations, or in the event that building regulations have a lower standard, the DPD's policies will require that buildings meet a higher standard and reduce carbon emissions or make improvements against the baseline of current building regulations. The SPD does not and cannot change the wording of the NZC policies. In regards to flexibility on how non-residential developments achieve the requirements of NZC2A, amendments to paragraph 4.23 are proposed to reiterate that where full compliance is not feasible or viable having regard to the type of development involved, proposals must demonstrate through the energy statement that carbon reductions to the greatest extent feasible through energy efficiency measures have been considered and incorporated

		Paragraph insert – Where non-residential development is unable to meet the requirements of Policy NZC2(A) due to the nature of the building use justification *will need to be provided as part of the Energy Statement accompanying the application.* Similar to above it is recommended that consideration is given to the requirements of any superseding Future Buildings Standard and updates to the Building Regulations. *Paragraph insert – The requirements of Policy NZC2(A) will be* subject *to further updates and guidance with respect of the Future Homes Standard, applicants will be required to meet any future superseding requirements set through the Building Regulations.*	
Paul White (Turley)- Representation on behalf of Hill Residential Development Ltd in respect of their land interests within the Warwick DC	Policy NZC2(B): Zero or Low Carbon Energy Source and Zero Carbon Ready Technology	Hill Residential Ltd has concerns over the viability of the Council's DPD policies, when considering the feasibility and viability of this requirement on applications this needs to be taken into account, so development is judged fairly. Hill Residential Ltd would therefore recommend that the requirement of NZC2(B) is seen as an aspiration, rather than a direct requirement.	Comments noted. The viability of the NZC DPD has been robustly examined by the Inspector during the plans' examination, and such is not the focus of this SPD consultation as the SPD's guidance does not change or amend the NZC DPD's policies.

		As noted in the policy, beyond feasibility and viability there are other reasons that additional carbon reductions may not be achievable, for example the design of homes which may need to be in keeping with the local area may not allow for the installation of further low carbon renewable energy technologies. Delivering development which references the local vernacular is a key design philosophy, particularly where there may be buildings or areas which provide a historic context. This may mean the design of buildings with façade fenestration, bay windows, corner turns etc which are dwelling characteristics which need to be sensitively designed to create firmness, commodity & delight as noted in the original Building Beautiful Commission. Care needs to be taken that a pursuit of low form factors and low carbon design foes not create grid-type masterplans. Hill Residential Ltd would support this statement and believe that the policy should allow for this flexibility provided that suitable evidence is provided with the application. This is particularly true in the case of non-residential development. The range of non-residential use classes results in different energy demand profiles, differences in applicable energy efficiency, as well as different viability cases for reducing emissions. Table 6 (Summary of NZC2(B) requirements), sets out the requirements of this policy for residential and non-residential development. However, currently the required improvement on the baseline only makes reference to feasibility. To ensure there is clarity with respect to flexibility with respect of both residential and non-residential development, Hill Residential	

		Ltd request that a paragraph is included to be clearer around there being potential restrictions to going beyond the minimum requirements which may relate to the nature of the development and design. *Paragraph insert (5.2) – In addition to the feasibility and viability of providing additional renewable, zero and low carbon energy technologies there may be instances where the nature of the development and design restrictions may limit the installation of additional technologies. For example, development of housing in heritage areas, or where they need to respect local heritage may be limited in the provision of additional Solar PV due to their visual impact. Similarly, the nature of some development gives rise to unique energy and occupation profiles (such as schools) which may impact on their ability to deploy more renewable energy technologies. Where it is not feasible to meet the applicable targets, proposals must demonstrate that carbon reductions have been pursued where viable and subject to the nature of development and design.* As per the text in the Policy Table 6 should also be updated to make reference to feasibility, viability type of development and design. The following text is recommended – *100% where feasible and viable, having regard to the type of development and design.* Pages 35 to 49 provide guidance on the potential suitability and applicability of various low carbon renewable energy technologies. While Hill Residential Ltd broadly agree with the technologies set out and applicability noted there are some comments below.	Comments noted. We believe that this chapter makes it clear to the considerations in employing low or zero carbon technologies in development and paragraph 3.22 makes it clear what information should be included in an Energy Statement. Notwithstanding this, proposed modifications have been made in the introductory paragraph and to some specific tables where the changes were deemed necessary in response to these comments – please see table of modifications in the appendix.

		Air Source Heat Pumps – The Governments 2019 FHS notes that ASHPs are likely to be key in achieving significant reductions in carbon emissions. Hill Residential Ltd agrees with the guidance on ASHPs, however it is noted that where hot water is being provided by the heat pump there will be a requirement for the installation of a hot water tank to store hot water. This needs to be included in the 'Location and Space Requirements' section, as well as cross referenced in the Domestic hot water storage section. **Ground Source Heat Pumps –** It is noted that the guidance states the suitability and applicability of GSHPs and WSHPs is not as widespread as ASHPs due to specific requirements of those technologies. It is very likely that these technologies are not suitable for low residential development for this reason, indeed opportunities are likely to be limited to high density mixed use buildings, or non-residential development where there is sufficient heat demand to justify additional space requirements and costs. Hill Residential Ltd request that the suitability/applicability section is updated to reflect this. *Proposed text - The suitability and applicability of GSHPs and WSHPs is not as widespread as of ASHPs because they both require specific settings to be feasible. Their use is likely to be restricted to, high density mixed use buildings, or non-residential uses where there is sufficient heat demand to justify additional space requirements and costs.* **Domestic hot water storage –** As above this section needs to be updated to include reference to the use of hot water storage in conjunction with heat pumps.	

		Solar photovoltaic panels – Solar PV is anticipated to be a key technology in meeting the requirements of the FHS, and will also likely be key to non-residential development reducing emissions. As noted in the guidance there are visual impacts to consider from Solar PV, for example in heritage and conservation areas, this may impact on the provision of this type of system as required by NZC2(B). **Combined Heat and Power (CHP) engines –** Hill Residential Ltd believe great care should be taken when considering the use of CHP systems. As noted typically these systems use gas, biomass or biogas to generate electricity which heat as a by product which can be captured, and used potentially in a heat network. As noted in the SPD the ultimate aim for development is to move away from fossil fuel energy sources, CHP engines are not likely to fit with this ambition. This type of system is best suited to development where there is a significant heat demand. Hill Residential Ltd note that the guidance states that developments over 50 homes are considered efficient. Hill Residential Ltd has significant concerns with this requirement as it is our experience that these systems are not viable on residential led developments, of a suburban density - regardless of size – although phase-by-phase mini-grids may provide a suitable utility infrastructure. The delivery of homes which meet the FHS will have significantly reduced heat demand, homes which meet the PassivHaus requirements may have almost no heat demand. Going forward it is likely that new homes will not have sufficient heat demand to justify the cost of installing infrastructure to support this type of CHP technology.	

		Furthermore, the guidance notes that CHP systems supplied with gas should be avoided, from 2025 in line with the FHS Hill Residential Ltd believe that no gas fired CHP systems should be brought forward. Hill Residential Ltd consider that the suitability and applicability of CHP systems is likely to be restricted to non-residential development where there is a large heat and electricity demand. Homes and buildings built out in accordance with Policy NZC1 will not have sufficient heat demand to warrant the infrastructure costs associated with this type of system. In this context the Suitability/applicability text should be updated to include – *Best suited to non-residential development where there is a high heat and electricity demand.* **Biomass –** The guidance sets out that biomass systems can be retrofitted to existing buildings, installed in centralised energy centres or part of a district wide system. While it is noted this type of technology is unlikely to be suitable for schemes in urban areas, Hill Residential Ltd would add that this technology is not going to be suitable for homes, or development with low heating demand due to increased costs, space requirements, as well as air quality issues. Furthermore there are concerns with regards to the sustainability of using biomass at a time when we are aiming to protect and increase forest areas to improve biodiversity and reduce atmospheric carbon dioxide. **Wind –** While wind energy systems may be applicable in some specific circumstances it is unlikely it would be suitable in new residential or non-residential developments. A range of planning, visual impact and environmental barriers to wind	

		development pose significant feasibility and viability issues. While the guidance notes that building-integrated turbines can be used evidence, including the Warwick Wind Trials in 2009 noted that building-integrated systems are generally not suitable. It is likely that wind turbines will only be feasible in specific scenarios, for example built alongside development and connected via a private wire connection. Hill Residential Ltd would recommend that the suitability/applicability text is updated to remove reference to building integrated turbines. **District Heating and Cooling Networks – There** are a number of challenges with delivering heat networks which affect the feasibility and viability of these systems, including how they could impact on energy bills. Paragraph 5.6 states that district heating is 'energy source agnostic'. While there are a number of options for heat sources for heat networks they are not energy source agnostic. Different heat generators generate heat at different temperatures, for example heat pumps would operate at a lower temperature than a biomass system, this is important as buildings which plug into the system may have different requirements, this is noted in Paragraph 5.7. Paragraph 5.9 notes that new development should, 'maximise appropriate opportunities to address the energy needs of neighbouring uses and should link to existing or planned local networks.' It is agreed that new development should, where possible, support the decarbonisation of energy networks, however, it is not the role of new development to address the energy needs of neighbouring development. Furthermore, connection to existing or planned networks should be subject	

		to the feasibility, suitability and viability of doing so. For example, networks should only be connected to if: • It would provide a lower carbon solution that those available; • It would not impact on fuel security, and it would reduce energy costs; In this context this part of the guidance does not take sufficient consideration of the constraints to connecting to a network. Hill Residential Ltd request that Paragraph 5.9 is re-worded: *2.59 Para 5.9 re worded - As per Warwick Local Plan Policy CC2-Planning for Renewable Energy and Low Carbon Generation (point 'e') where possible, homes and buildings should consider connecting to existing or planned local car bon district heat network, where this would provide a lower carbon solution that those available, and would not impact on fuel security and it would reduce energy and running costs.* Paragraph 5.10 notes that town centres or larger new-build masterplans are ideal locations due to the range of use classes and high energy density. As the FHS is implemented, and standards for non-residential development also progress energy density will reduce significantly, this will likely impact on the feasibility and viability of heat networks. In addition, Paragraph 5.10 states, 'Heat networks can be beneficial in rural, off gas areas where homes are reliant on more volatile energy sources'. However, there are significant costs associated with installing heat networks and it is unlikely that in both suburban and rural areas where longer pipe runs are required, a heat network would ultimately be viable.	

		Finally, Paragraph 5.10 makes reference to the Swaffham Prior network which provides heat via heat pumps, providing low carbon energy, referencing benefits such as reducing instances of fuel poverty. Hill Residential Ltd would note that in this example the counterfactual baseline of oil-fired systems against which the carbon benefits are measured, and costs are based. This is therefore an inappropriate comparison to use and a relevant example needs to consider homes which are built out in accordance with the minimum requirements of Policy NZC1, i.e. meet the 2025 FHS requirements. In this scenario a heat network is less likely to be feasible and viable. While Hill Residential Ltd support the delivery of low carbon heat, there are significant concerns over the potential costs for residents associated with decentralised energy. To date district heating systems have traditionally been powered by gas CHP systems generating electricity and utilising the waste heat in a network, with the cost and carbon benefits derived from the electricity generation. As these systems are replaced by low carbon systems, such as heat pumps, while reducing carbon they also remove the financial benefits of gas CHP. As heat networks require large capital investment this therefore poses challenges in delivering a viable project, and low-cost heat for residents. Another key issue of heat networks is the lack of regulation, and potential for residents to make decisions about supply and cost. A consultation is proposed in 2024 to resolve this potential issue and provide increased consumer protection, the SPD will need to be amended or make reference to these changes in the future. In our view currently this option this poses a significant risk for residents, particularly with the current cost of living crisis. In the case of the Swaffam Prior network, while this is measured against an oil-based system future decisions on	

		networks need to be compared against the requirements of the FHS which will likely already include the provision of a heat pump and solar PV. This will reduce heat demand and also limit potential efficiency and carbon improvements from a district system which utilises direct electric systems as a backup and requires significant energy demand to pump fluid through the system. In this context Hill Residential Ltd consider that the provision of heat networks in new development is unlikely to be feasible and viable or offer significant carbon benefits which out way the capital cost of the system compared to alternative options for homes which meet the FHS. In addition, potential restrictions placed on residents by the nature of heat networks and lack of current sector regulation poses cost risks for residents. Hill Residential Ltd request that Paragraph 5.13 is amended as below. *As per NZC2(B) of the Net Zero Carbon DPD, where DH networks are proposed, applications should be accompanied by an energy statement that includes an assessment of the advantages of a network system vs individual systems, an accurate assessment of distribution heat losses, a long term strategy for the sustainable supply of low carbon fuel and that the network has a credible route towards achieving zero carbon status. The provision of heat networks should provide a lower carbon solution than alternative options available; and should not impact on fuel security and reduce energy costs for residents or building operators.*	
Paul White (Turley)- Representation on behalf of Hill	Policy NZC2(C): Carbon Offsetting	Hill Residential Ltd believe that the district should utilise the Governments FHS 2025 as the principal metric to implement net zero ready carbon dwellings. Notwithstanding the fact	General comments note.

Residential Development Ltd in respect of their land interests within the Warwick DC		that a local carbon offsetting policy must be fully viability tested, carbon savings must also be independently verified and audited to ensure they meet the technical requirements of carbon offsets. The UKGBC Carbon Offsetting and Pricing Guidance provide guidance on how to disclose carbon offsetting, Hill Residential Ltd would recommend this is used to ensure the carbon offsetting carried out by the Council is transparent and verifiable. Hill Residential Ltd would note that the suite of net zero policies make allowance for the consideration of feasibility and viability when minimising emissions through the use of the energy hierarchy. As set out this also needs to consider the nature of development and design. In that context it is recommended that Paragraph 6.2 is updated to take this into account. ***Paragraph 6.2 amendment*** **-** *Carbon offsetting should only be used as a last resort, and only when an applicant has maximised on site carbon reductions through stages 1 and 2 of the energy hierarchy. The Council will only accept offsetting where it is demonstrated that measures under NZC2(A) and NZC2(B) are not feasible, or viable, having regard to the design, and type of development involved. This should be demonstrated within the Energy Statement and justification provided where Policies NZC2(A), NZC2(B) and on-site net zero regulated carbon is not achieved.* Hill Residential Ltd support the Council's methodology set out in Policy NZC2(C) which allows the calculation of offsetting to take into account future carbon factors, this allows an accurate estimate of residual emissions which will change over time as the electricity network decarbonises. However,	The viability of the NZC DPD, including offsetting payments, has been robustly examined by the Inspector during the plans' examination, and such is not the focus of this SPD consultation as the SPD's guidance does not change or amend the NZC DPD's policies. See proposed modifications.

		Hill Residential Ltd believe further clarity is needed in this section to link to the assessment Energy Proforma included in Annex 1. In the Proforma two calculation methodologies for 'static' and 'dynamic' offsetting. The difference appears to be that the dynamic offsetting methodology is used in the case of an all-electric development. These two routes to compliance are not included in this section of the SPD, it is recommended that a paragraph is added in to set out the difference between these routes. Hill Residential Ltd would also note that in meeting the requirements of the Net Zero policies it is likely that most development will be all-electric, in this context it would be better to set out the dynamic methodology as the primary route to compliance in the Proforma, rather than the secondary option. In addition, it is recommended that consideration is given to the potential opportunities associated with developments such as Hatton New Settlement which could include large scale on-site renewable energy generation, linked to buildings or as part of the sites infrastructure, for example Solar PV, mini-grids. The development could also include carbon sequestration. It is recommended that the SPD makes an allowance for this to be included as part of the carbon reduction strategy for the development. These alternative opportunities could be part of wider design initiatives which provide other social, environmental and economic benefits. These could be an extension of the alternative offsetting solutions allowed, with greater flexibility allowed where measures are put in place within the development boundary. ***Paragraph insert -*** *Where carbon reduction measures are incorporated into the development, and are within the boundary of the site, the Council will give consideration to the*	Comments Noted. Whilst the Council hopes that development is planned holistically and other measures to reduce carbon are employed in developments, e.g. woodland creation, biodiversity improvements or habitat restoration, it is not possible to demonstrate these within the policy requirements. Please note that any offsetting not delivered through the cash in lieu contribution should be agreed with the council, we therefore welcome engagement with developers on this matter in the future.

		contribution this makes to meeting the requirements of Policy NZC1. For example this could include the contribution delivered through additional on-site renewable energy generation or carbon sequestration delivered through green infrastructure.	
Paul White (Turley)- Representation on behalf of Hill Residential Development Ltd in respect of their land interests within the Warwick DC	Policy NZC3 – Embodied Carbon	Hill Residential Ltd supports the consideration of embodied carbon as part of the design process. Embodied carbon is likely to be a significant proportion of a developments lifetime emissions, particularly as operational emissions reduce as a result of Policy NZC1. Table 19 sets out the requirements for new major development and development of over 50homes or 5,000sqm. This includes demonstrating how embodied carbon has been considered and reduced where possible, via an Energy Statement for major development and Whole Life Cycle Assessment for super major development. Hill Residential Ltd supports the difference in requirements for major and super major development, however consideration also needs to be given to the availability of information for both outline and reserved matters / detailed applications. It is likely that for outline applications limited information will be available on the detailed design of development. In this context development proposals may only be able to reflect back the principles of low carbon design noted in the guidance document. It is noted that larger scale developments which are built out over a number of years should consider potential industry benchmarks, such as the RIBA 2030 Climate Challenge to guide future reductions in embodied carbon.	Support noted. Please see proposed modifications to Table 19

In this context it is recommend that Table 19 is updated to include consideration of the nature of applications.

Table 19 – Recommended update

Threshold	Requirement – Outline applications	Requirement – Reserved Matters / Detailed applications	To be submitted
New major development	Set out the embodied carbon strategy for the development, where relevant setting out methodology and targets to be considered at the detailed design stage.	Demonstration of how embodied carbon has been considered and reduced where possible	Energy Statement
Proposals for development of ≥50 new dwellings and/or ≥5,000sqm	Set out the embodied carbon strategy for the development, setting out methodology	Demonstration of how embodied carbon has been accounted for and reduced	Whole-life embodied

			and targets to be considered at the detailed design stage. Provide an estimate of the embodied carbon of the proposed development utilising the RICS Whole Life Carbon Assessment methodology.	where possible.		
Michael Burrow (Savills) on behalf of Crest Nicholson Partnerships and strategic Land	Section 3	Section 3 of the draft WNZC SPD includes several references to the requirements being equivalent to the carbon reduction anticipated to be achieved by the Future Homes Standard. The draft WNZC SPD does not however state what would happen to the provisions within the WNZC DPD and WNZC SPD when the Future Homes Standard is introduced in the future. In order to future-proof the application of the WNZC SPD, Crest Nicholson is therefore seeking for the WNZC SPD to clearly state that which aspects of the WNZC DPD and WNZC SPD are anticipated to be superseded or amended by the introduction of the Future Homes Standard, or alternative national equivalent, and the implications of such changes. Crest Nicholson notes that an example case study is included in the draft WNZC SPD Page 12- Para 3.11) of a social housing				General comments noted. The carbon emission reductions sought by NZC1 for residential dwellings were set to reflect the FHS, but are not dependant on this being implemented as the policies require a % reduction of carbon emissions against 2021 building regulations. New development in the district would be expected to meet the requirements of the NZC policies, and building

		project comprising 54 dwellings on Europa Way/North of Gallows Hill, Warwick which achieved a reduction on Part L 2013 of a magnitude which exceeds the minimum on-site requirement being sought by WNZC DPD Policy NZC1 through the use of air-source heat pumps, fabric improvements and solar panels. This example demonstrates that such a reduction is achievable. However the information made available is insufficient to explain how the site-specific and proposal-specific circumstances enabled such a scheme to be delivered viably in this instance. The demonstration of viability (including land value, profit, grant funding etc) through the information supporting the draft WNZC SPD is of fundamental importance in enabling housebuilders such as Crest Nicholson to understand the application and relevance of the case study to the deliverability of proposals for additional housing development on other sites in the District. In terms of assisting with the implementation of WNZC DPD Policy NZC1, Crest Nicholson requests that the explanatory text for the as-built calculations included within the draft WNZC SPD (Page 16, Para 3.28) sets out what the process would be for addressing any differences between the as-built calculations and the calculations submitted with the planning application. The suggestion given later in the draft WNZC SPD3 is that any such difference will be addressed through carbon offsetting contributions, but further clarification is required in relation to this point. Crest Nicholson will be introducing heat pumps in its *new* (Developments which do not benefit from, and are not being constructed by Crest Nicholson under, planning permissions granted prior to the Warwick Net Zero Carbon DPD being adopted) developments in Warwick District going forward.	regulations applicable to development at the time. This may result in a situation where the DPD's policies are superseded and such development will be built to a higher standard to comply with Building Regulations, or in the event that building regulations have a lower standard, the DPD's policies will require that buildings meet a higher standard and reduce carbon emissions against the baseline of current building regulations.

		Crest Nicholson welcomes the fact that the draft WNZC SPD includes details on a range of technologies which might be applied in new developments, if deemed to be suitable, viable and necessary to meet the required targets. However to avoid ambiguity in the application of the WNZC SPD Crest Nicholson requests that the WNZC SPD makes it explicitly clear that connecting into District Heating and Cooling systems is only one of a range of available options for consideration in the energy reporting work submitted with planning application proposals and is not an absolute requirement, even where heat pumps are fitted to homes which are being constructed in new developments.	
Michael Burrow (Savills) on behalf of Crest Nicholson Partnerships and strategic Land	Section 6	It is noted that Policy NZC2(C) specifies that the carbon offset price applied to any offsetting fund contribution is *"the central figure from the nationally recognised non-traded valuation of carbon, updated annually as part of the Treasury Green Book data by BEIS".(Page 51)* A hyperlink is provided within the draft WNZC SPD to current BEIS Green Book pricing. However, Treasury Gren Book data provided by BEIS is central government guidance on cost-benefit analysis for use in national policymaking. The carbon valuations have neither been developed to provide a market price for carbon, nor to indicate the cost of any particular offsetting approach. Crucially, they represent a predicted marginal abatement cost of carbon reduction measures (of the type already required of developments by the hierarchy approach described in the draft WNZC SPD), ***and not*** the cost of carbon offsetting through measures such as tree planting. The mitigation scheme specifically mentioned in the WNZC SPD is the Warwick Carbon Offsetting Fund. The draft WNZC SPD states that the Warwick District Council (WDC) prioritised	Comments noted. NZC2C outlines that the carbon offsetting fund will be administered against a range of projects at the same average cost and this is repeated in paragraph 6.9.

		method of carbon offsetting is through tree planting (Page 52, Para 6.8), albeit the draft WNZC SPD does not state where the monies received will be spent or whether the monies will be spent on projects other than tree planting as well. Crest Nicholson requests that this clarification is provided. Notwithstanding this, and broadly speaking, it should be recognised that the market cost of tree-planting carbon offsets in the UK is an order of magnitude lower than the Green Book values for the marginal cost of carbon reduction. The 2022 GLA guidance on carbon offset pricing for development projects specifies a sum of £95/tonne fixed for 30 years, which is less than half of the 2023 Green Book marginal abatement cost values proposed to be used by the WNZC SPD, and which does not increase year on year. The GLA guidance was developed after extensive advice was received and research was undertaken both on the cost of offsets and the impacts on development viability. It should be noted that it has not been demonstrated through either the draft WNZC SPD or in any supporting documentation to the draft WNZC SPD that the GLA guidance is applicable to Warwick District. However the GLA guidance does demonstrate that an equivalent approach adopted elsewhere for addressing this issue has resulted in a significantly lower cost than would result from the application of the 2023 Green Book approach being deemed to be suitable and deliverable. Nevertheless the property London market is not the same as the property market in Warwick District and land and property values will therefore be very different. The National Planning Policy Framework (NPPF) (September 2023-Page 11 Para 34, makes it clear that Local Plans should set out the contributions expected from development and that such	

		policies should not undermine the deliverability of the Local Plan. There is therefore still a need for robust testing through viability appraisal work for any offsetting contribution costs applied to Warwick District through this WNZC SPD, whether these costs are BEIS costs, GLA costs, or an alternative cost identified, in order to ensure that these costs do not ultimately prevent the delivery of development on viability grounds. This is particularly relevant for development coming forward on sites which were allocated in the current Warwick Local Plan prior to the Warwick Net Zero Carbon DPD (WNZC DPD) being produced and therefore without the opportunity for the implications of the WNZC DPD to be taken into account as part of the viability testing at that time. The draft WNZC SPD is not accompanied by further viability testing work. A further consideration is that the Green Book values are projected year by year, rather than offering a fixed value. It is not clear in the WNZC SPD whether a particular single year's value should be applied for a development project, or changing values over a thirty year time period. In the latter case, as the values are regularly updated by BEIS, it is not clear that it would be appropriate to use speculative future-year values at a single point in time when an offsetting fund contribution is required. In any case, the Green Book values (ending at 2050) do not actually provide thirty years' worth of figures as required by the policy in the WNZC SPD. As set out above, Crest Nicholson therefore does not consider that the Green Book values are suitable for calculating carbon offset fund contributions. However if these figures are ultimately applied in this way, as a result of robust demonstration that they are suitable, appropriate and viable in a Warwick District context, then	

		the WNZC SPD should clarify (in Annex 1) that a single-year value should be applied to the total offset sum, for the present year at the time of making the offset contribution. It is also noted from the draft SPD that the use of a verified local off-site offsetting scheme, in addition to or instead of the Warwick Carbon Offsetting Fund, will need to meet the Warwickshire ecosystem service market trading protocol. Whilst reference is made in the draft WNZC SPD (Page 52-Para 6.7) to the existence of the Warwickshire Environmental Services Trading Protocol (WESTP), very little information is presented in the draft WNZC SPD in relation to WESTP, no hyperlinks are provided to WESTP and there is no obvious website setting out details for how WESTP operates. Crest Nicholson is therefore seeking clarification on WESTP because this information is required in order for the provisions within the WNZC SPD to be demonstrated to be deliverable.	
Michael Burrow (Savills) on behalf of Crest Nicholson Partnerships and strategic Land	Section 7	It is also noted that the WNZC SPD introduces further guidance to support the introduction of the submission of Embodied Carbon Assessments, further to requirements set out in Policy NZC3 of the emerging Warwick Net Zero Carbon DPD (WNZC DPD). Embodied Carbon Assessments are still an emerging area of practice. There is therefore a need to ensure that the Embodied Carbon Assessment requirement is clear, deliverable and implementable. There is no standard definition of "embodied carbon" in planning legislation or policy. However, it is generally understood to mean the greenhouse gas emissions associated with the supply chain for producing and transporting materials used. This is in line with the definition used in the RICS and other guidance cited. Embodied carbon is, however, only one aspect of a whole-life carbon assessment, which also includes the on-site works to construct a building (and	General comments noted. We believe that the distinction between embodied carbon and whole life assessments between major and super major developments is clear in this chapter. The SPD cannot change NZC DPD policies - these have been subject to various rounds of consultation and public examination by the Inspectorate.

		depending on the scope of the assessment, also demolishing a building at the end of its life), maintenance/refurbishment, and operational performance. Crest Nicholson considers that the policy title and wording should be amended to be clear that the scope of "embodied carbon" assessment is differentiated from a "whole life carbon assessment", to avoid confusion over these terms (and hence the scope of assessments) and to avoid any seeming contradiction of the guidance cited. Similarly, to avoid any confusion of terms and the scope of documents to support planning applications, Crest Nicholson suggests that the wording and associated guidance for Policy NZC3 on page 55 should make it clear that a "whole life carbon" statement is required, to avoid confusion over the use of "energy statement" with the operational energy assessment required under policy NZC2. At a national level, there is no specific requirement for embodied carbon to be addressed in planning policies or planning decision-making. Embodied carbon does not feature within either the Planning Practice Guidance (PPG) or the NPPF. Any local requirements for the sustainability of buildings are required to reflect Government policy and the requirements of the NPPF. The SPD notes that there is Greater London Authority Whole Life-Cycle Carbon Assessment guidance, UKGBC guidance, a RICS Whole Life Carbon Assessment for the Built Environment methodology, BS15978, Environmental Product Declarations, University of Bath ICE database, Built Environment Carbon Database, Institution of Structural Engineers 'How to Calculate Embodied Carbon for Construction Materials' guidance, RICS	Flexibility on the methodology for whole life embodied carbon is provided in paragraph 7.17.

		methodology to calculate embodied carbon of materials, LETI Climate Emergency Design Guidance and RIBA 2030 Climate Challenge voluntary targets. There is however no single accepted national standard for assessing whole-life embodied carbon as part of the planning process. The application of the above mentioned guidance and methodologies in a Warwick District context has also not been tested through the WNZC DPD consultation process and is not set out within any supporting evidence base documentation for either the WNZC DPD or the WNZC SPD. Recognition should also be given to the fact that guidance and methodologies change over time and get updated. In this regard the WNZC SPD should not be requiring new developments to achieve particular standards set out within guidance documents which have not been produced for, or tested in the context of, Warwick District. The statement within paragraph 7.22 of the SPD which states that applications subject to Policy NZC3 are not required to meet specific embodied carbon emissions targets is therefore considered to be appropriate. In this regard it is important that the suggested targets set out within Table 21 of the WNZC SPD consultation document, based on the RIBA Climate Challenge targets, are only treated as a reference point rather than as a requirement. The WNZC SPD should accordingly make it clear that in advance of a nationally accepted standard enshrined in national or local planning policy planning applications will not be deemed to be unacceptable if these suggested targets are not met. Whilst the WNZC SPD references a raft of different documentation and guidance (as identified above) it is not	

		explicitly clear on the structure and methodology to be applied to the production of whole life embodied carbon assessments for submission with major or 'super major' planning applications in Warwick District, including where specific carbon factors are not available for materials and products (as mentioned within WNZC SPD paragraph 7.19) and how the use of 'life cycle assessment' calculations and other industry certifications / approaches (as mentioned within WNZC SPD paragraph 7.12) fit into the process. The requirements of Policy NZC3 would therefore be more straight forward to implement if the WNZC SPD sets out a single clear and concise methodology to follow. It therefore requested that this is included within the WNZC SPD. This could potentially be the GLA guidance/methodology, on the basis that this is a tested approach, if it is demonstrated that this is applicable to Warwick District. This should also recognise that it is not always appropriate or possible to replace materials with high embodied carbon, such as concrete / cement, steel and glass, as listed within WNZC SPD paragraph 7.8, with lower impact alternatives in constructing new housing developments whilst also meeting the aspirations of the design agenda to create high quality and attractive places and addressing the preferences / demands of consumers. There is still a need to educate consumers on the properties and performance of materials and the wider whole life-cycle assessment process. The "materials pyramid" included in WNZC SPD Figure 8 is a helpful reference diagram in this regard. The LETI Embodied Carbon Primer adds more context to the materials pyramid. Nevertheless Crest Nicholson considers that the WNZC SPD	

		should embrace a flexible approach to: enable the design of developments and use of materials to be appropriate to the context; and reflect the cost, availability or practicality of substituting these materials, whilst also encouraging innovation in the approach taken.	
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	General Comment	Fundamentally, RPS considers the consultation on the Supplementary Planning Document ('SPD') is premature for several reasons. Firstly, the consultation on the main modifications to the Net Zero Carbon Development Plan Document (DPD) has already taken place, but the Inspector's report has not yet been received, and the DPD has not yet been adopted. This means that the Council is consulting on the SPD without the full knowledge of the implications of the DPD and the Council has assumed that the outcomes of the Inspector's Report will remain unchanged to the Main Modifications consultation. At this time this cannot be guaranteed. The SPD relies on the Warwickshire Ecosystem Trading Protocol (WESTP) and the Warwickshire, Coventry, and Solihull Green Infrastructure Strategy for carbon offsetting. However, neither of these documents has been finalised or adopted. The Council's response to the main modifications' consultation responses indicated that both documents would be consulted on in August/September 2023. However, to date, this consultation has not taken place. This suggests that the consultation on the SPD is premature and that the Council is seeking to implement carbon offsetting measures without adequate consideration of the relevant policies and strategies. In light of these concerns, it is recommended that the consultation on this SPD be postponed or rescheduled, until the Inspector's report on the DPD has been received and the	General comments noted. We acknowledge that the Council has not yet received the Inspector's report however throughout the examination process the Inspector expressed the need for a SPD to support the DPD's polices and the Council has implemented this request without delay. The Council feels that having the SPD ready to adopt at the same time as the DPD (pending the examination from Inspector) would be the most sensible approach to ensuring applicants and decision makers have detailed guidance on this technical topic. As noted previously, paragraph 6.9 provides flexibility on how the offsetting fund will be spent in the event that the measures under the WESTP be delayed or amended.

		WESTP and Green Infrastructure Strategy have been finalised and adopted. This will ensure that the consultation is conducted on an informed basis. Indeed, Planning Practice Guidance [Paragraph: 008 Reference ID: 61-008-20190315] confirms SPDs should build upon and provide more detailed advice or guidance on policies in an **adopted** local plan. (Emphasis added)	
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Policy NZC1- Achieving Net Zero Carbon Development	Policy NZC1 remains largely the same following the DPD examination, despite representations submitted on behalf of TW to the Regulation 19 consultation, the Council is persisting with the intention to interpret an enhanced standard (63% reduction from now) in advance of the Government's current proposals to introduce the Future Homes Standard, which seeks to achieve the same 63% betterment from 2025 onwards. RPS maintains the view that no evidence has been provided that clearly sets out the local circumstances that justify an enhanced standard being the interpreted justification within the District prior to the implementation of changes to Building Regulations expected in 2025. In the Regulation 19 response, RPS presented a number of concerns that highlighted the potential risks to housing delivery as a result of a faster implementation of the national standards. The issues RPS highlighted were: • an inadequate supply of such technologies that will be required to achieve the proposed 63% reduction due to immaturity of the supply chain for systems, such as air and ground source heat pumps. • the need to reinforce the electricity networks to accommodate the additional loads that the usage of such technologies require.	This SPD cannot make changes to Policy NZC1 as it is not within the remit of the consultation of this SPD to do so. The DPD policies have been subject to various rounds of consultations and a public examination.

		• increased demand for electricity arising from the installation of electric vehicle charging points, which are already required under policy TR1 of the Council's adopted Local Plan. To reiterate what RPS has stated previously, there is no clear timetable at a national level for when the infrastructure improvements needed to increase capacity in the electricity network will be secured, or when the supply chain will be developed to a sufficient scale to support the transition to a zero-carbon economy. This will take time to deliver, and until these changes occur the proposed policy risks delaying the delivery of much needed new homes.	
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Section 3.26	RPS considers the 20% sample size to be unnecessarily high. Instead, it would be appropriate to test the range of house types proposed. Additionally, the current approach of testing every possible orientation is not practical or necessary. RPS suggests considering alternative methods, such as testing orientations on a 4-compass point basis (North, East, etc.) to capture the impact of solar gain without being overly burdensome. RPS's proposed alternative approach has several advantages: • Reduced testing requirements: By testing on a 4-compass point basis, the number of homes that need to be assessed is significantly reduced, making the process more efficient and cost-effective. • Representation of a wider range of orientations: While not testing every possible orientation, the 4-compass point approach still captures the variability in solar gain across different directions, ensuring that the results are representative of the entire development. • Flexibility to adjust testing based on site-specific conditions: The proposed approach allows for flexibility in adjusting the number of orientations tested depending on the size and complexity of the site.	The 20% sample size relates to the type of dwellings or buildings being provided in a development as clarified in footnote 12, not specifically the orientation of the building.

		Overall, RPS recommends adopting a more flexible and efficient approach to testing orientations for carbon emissions calculations. The 4-compass point method offers a practical solution that balances the need for accurate representation with reduced testing requirements.	
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Section 3.28	We acknowledge the importance of ensuring that new developments meet the energy efficiency standards set out in the Net Zero Carbon Development Plan Document (DPD). However, we have concerns about the practicality and reasonableness of requiring an as-built recalculation pre-occupation, particularly given the onerous nature of the specified requirements. The requirement for an as-built recalculation, as outlined in the consultation document, appears to be duplicative of the information already collected for building regulations compliance. We would recommend an alternative approach that would streamline the process and avoid unnecessary delays in occupation. Instead of mandating a full as-built recalculation, we suggest requiring the submission of a formal confirmation from the building surveyor that the building complies with the energy efficiency standards set out in the DPD.	General comments noted. The DPD and SPD outline the calculations needed prior to occupation, this is to ensure that the performance gap between the buildings design and as constructed in minimised, and where there is a difference, this is reflected in offsetting payments. This is needed to ensure the policy is effective in lowering carbon emissions from development in line with the requirements of the NZC1.
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Policy NZC2 (C)-Carbon Offsetting-1st bullet point	The policy retains the reference to payment of 'cash in lieu' contribution to the District Council's carbon offsetting fund. Contributions would be secured via a Section 106 agreement to be paid prior to occupation of the development. However, as before through the DPD, the policy makes no reference to circumstances that might transpire that may result in contributions remaining unspent over a considerable number of years. It is normal practice for legal agreements to specify	This would be covered by the S106 agreement in place for that development.

		time limits or other clauses that can lead to repayment of contributions back to applicants (or successors) if not spent within a certain time period and / or by a certain date. No reference to time limits for the utilisation of financial contributions is included in the policy as drafted. Without clarification, the contribution could be held indefinitely for no good reason, this risks contributions being no longer directly related to the development for which they were collected, which would be a breach of Regulation 122 (2)(b) of the Community Infrastructure Levy Regulations 2010 (as amended).	
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Section 6.7	The SPD in section 6.7 states that Warwickshire County Council has prepared the Warwickshire Environmental Services Trading Protocol (WESTP). The WESTP will outline the nature-based solutions available to compensate for development and establishes the principles and rules for the creation, enhancement, and maintenance of habitats by landowners to be traded as compensation units. However, the WESTP has not yet been formally consulted on by Warwickshire County Council (WCC), despite an initial target of consultation in the summer of 2023. This reliance on the WESTP in advance of public engagement is concerning, as the SPD is relying on the WESTP prior to it being subject to public scrutiny.	Paragraph 6.9 provides flexibility on how the offsetting fund will be spent in the event that the measures under the WESTP be delayed or amended
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Section 6.9	While the Council's intention to expand the scope of its carbon offset fund to include other forms of carbon offsetting, such as habitat creation/restoration, retrofitting of council owned buildings, and renewable energy provision, is commendable, it is crucial to carefully consider the challenges associated with demonstrating the effectiveness of these offsetting measures.	General comments noted. NZC2C outlines that the funds performance will be reported in the Annual Monitoring Report with information on the funds spent, projects funded, and the amount of CO2 saved. The Council

		One of the primary challenges lies in establishing a clear causal link between the carbon emissions being offset and the carbon savings achieved through the funded projects. This is particularly true for projects like habitat creation/restoration and retrofitting, where the environmental benefits may not be immediately quantifiable or may take years to fully materialise. In the case of habitat creation/restoration, for instance, accurately measuring the carbon sequestration capacity of newly created or restored habitats requires long-term monitoring and assessment. Similarly, evaluating the energy savings and carbon emission reductions from retrofitting projects necessitates ongoing data collection and analysis. The difficulty in establishing a direct correlation between offsetting funds and carbon savings poses a significant hurdle in demonstrating that the carbon emissions saved relate exactly to those which are being offset. We suggest that instead of 'exactly' the requirement should be "that there is reasonable evidence to assume that the carbon emissions relate to those which are being offset". In addition, there are significant difficulties with demonstrating that funding cannot be secured from other sources or grants, particularly given the growing importance of such projects and regular announcements of new funding sources. We suggest that the Council should maintain a list of potential funding sources to direct the promoters of projects to. Furthermore, the Council should set out clearly what is suitable evidence that funding cannot be secured from other sources to assist the promoters of such projects.	appreciate that its vital that this information be transparent to ensure the fund is spent correctly.
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Section 6.10	While the inclusion of a mechanism for applicants to offset residual carbon emissions through a verified offsetting scheme in NZC2(C) is a welcome step, the requirement for	The securitisation of nature-based solutions for 100 years is a rule outlined in the WESTP.

		offsetting schemes to comply with the Warwickshire Ecosystem Trading Protocol (WESTP) raises concerns given the lack of public consultation on this protocol. The WESTP, which outlines the principles and rules for the creation, enhancement, and maintenance of habitats to be traded as compensation units, has not yet undergone a formal consultation process. Furthermore, it is indicated that for nature based solutions there is an expectation that offset schemes should be created and maintained for a period of 100 years. No justification is given for this. It is noted that at paragraph 8.2 of the emerging DPD that carbon offsetting funds are, when required, to be collected on the basis of a 30 year building life span. Similarly, Biodiversity Net Gain is expected to be secured for a 30 year period as set out in the Environment Act 2021. On this basis there is no apparent justification for requesting a minimum 100 year period. Doing so would be in conflict with the Community Infrastructure Levy Regulations 2010 (as amended), specifically Regulation 122 which requires planning obligations to be directly necessary, directly related, and fair and reasonable in scale. To ensure this it is recommended that a 30 year period is utilised, as this is clearly linked to the building life span that is being offset.	
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Section 6.11	While the intention behind NZC2(C) to promote the use of a verified offsetting scheme, such as the Warwickshire Ecosystem Trading Protocol (WESTP), is understandable, the policy's use of the word "expected" to describe the use of the WESTP could be misinterpreted as a mandatory requirement. This could place unnecessary pressure on applicants and potentially discourage them from pursuing development proposals.	This SPD cannot make changes to Policy NZC2C as it is not within the remit of the consultation of this SPD to do so.

		To align with the more encouraging tone of paragraph 6.10 of the SPD, which emphasises the Council's support for applicants who choose to utilise the WESTP, it is recommended that the language in NZC2(C) be revised to state that applicants are "encouraged" to use the WESTP. This shift in language would better reflect the Council's intention to provide guidance and support for applicants while still allowing them the flexibility to explore alternative offsetting options.	
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Policy NZC3- Embodies Carbon	Table 19 of Policy NZC3 provides an overview of the development thresholds, respective requirement and how the Council expect this to be submitted. As RPS have suggested previously, the inclusion of an additional policy requesting a separate assessment specifically dealing with embodied carbon is lamentable. The Council already highlights on its validation checklist (for outline, full, and reserved matters applications) the potential for 30 separate reports needed to accompany each application. The need for yet another statement or assessment dealing with embodied carbon is not necessary as this can be dealt with through the Sustainability Statement which is already included on the list of 'additional supporting information' required to accompany residential applications. On this basis, RPS considers that this Table 19 summary could be amended to reflect the possibility of submissions via Sustainability Statements.	Modifications are proposed to Table 19 to clarify what is required at outline and reserved matters stages on major and super major applications – see appendix for proposed modifications.
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Section 7.22	While the intention behind NZC3 to encourage the consideration of embodied carbon in new developments is commendable, the policy's use of the phrase "should aim to achieve" could be misconstrued as a mandatory requirement.	Policy NZC3 does not include the phrase "should aim to achieve". The policy wording states:

		This could create confusion for applicants and decision makers and potentially discourage applicants from pursuing development proposals. To maintain the policy's encouraging tone, it is recommended that the phrase "should aim to achieve" be revised to "are encouraged to achieve" or "are encouraged to use as a benchmark". This shift in language would better reflect the Council's intention to promote responsible development practices without imposing unrealistic or inflexible targets. Moreover, it is important to recognise that embodied carbon reduction is an evolving field, and best practices are continuously being refined. Therefore, mandating specific targets for embodied carbon emissions could limit the adoption of emerging technologies or methodologies.	***"New major development should demonstrate in the energy statement or design statement how the embodied carbon of the proposed materials to be used in the development has been considered and reduced where possible, including with regard to the type, life cycle and source of materials to be used.*** ***Proposals for development of 50 or more new dwellings and/or 5,000sqm or more of new non-residential floorspace should be accompanied by a whole-life assessment of the materials used."***
Jacob Bonehill (RPS) on behalf of Taylor Wimpey	Annex Part 1A-Residential Dwellings	RPS appreciate the council's efforts to promote energy efficiency and reduce carbon emissions in new developments. However, RPS have concerns about the feasibility and practicality of measuring energy efficiency and carbon offsets at the outline planning stage, particularly given the potential for changes to the development's design, layout, and specifications throughout the planning process. **Challenges with Measuring Energy Efficiency at Outline Stage**	Paragraph 3.26 & 3.27 outlines what is required for each type of application. We do not consider that including the glazing ratio is excessive in determining what the specification of dwellings would be at outline stage. As detailed in paragraph 3.27, subsequent applications e.g. reserved matters or S73 would

		The proformas provided in Annex Part 1A of the consultation document require detailed information on glazing ratios and other building fabric elements to assess energy efficiency against Building Regulations. However, at the outline planning stage, these details are often unavailable or subject to change as the design evolves. Requiring such specific information at this early stage could lead to inaccurate assessments and unnecessary revisions as the development progresses. To address this issue, we propose a more flexible approach for outline applications. Instead of mandating a comprehensive assessment of energy efficiency at this stage, we suggest focusing on standard housetypes and leaving the calculation of glazing ratios and other detailed elements to the reserved matters stage. This would allow for more accurate assessments based on finalised design details and avoid the need for repeated revisions. **Practical Considerations for Carbon Offsetting** The consultation document also outlines requirements for offsetting residual carbon emissions. While RPS support the concept of carbon offsetting, we have concerns about the practicality of calculating and committing to offsets at the outline planning stage. At this early stage, the development's final design and energy efficiency measures may not be fully determined, making it challenging to accurately estimate residual emissions and determine the appropriate offsetting requirements. To address these concerns, RPS propose a more flexible approach to carbon offsetting.	need this information to be updated in any event. As per above, carbon offsetting would be calculated again at the reserved matters stage. The S106 that would apply to outline and reserved matters would reflect this. General comments against council resources noted.

		Instead of requiring upfront commitments to offsetting at the outline stage, RPS suggest allowing developers to finale the offsetting plan once the development's final design and energy efficiency measures are determined. This would ensure that offsetting calculations are based on accurate information and avoid potential delays in the development process. To achieve this RPS recommend that Section 106 agreements include an either / or clause that sets the proposed target performance, how this will be measured, and sets out the alternative option of how any offsetting contributions that may be required will be collected if required in due course. **Leveraging Expertise of Accredited Assessors** RPS also recognise the importance of involving qualified professionals in assessing energy efficiency and carbon offsetting requirements. Planning officers may not have the necessary expertise to fully interpret and understand the complex technical data involved in these calculations. Therefore, RPS recommend relying on the expertise of accredited assessors employed by developers. These assessors possess the necessary qualifications and experience to accurately assess energy efficiency and carbon offsetting requirements, ensuring that the information provided is reliable and fit for purpose. In conclusion, RPS urge the council to consider our proposed modifications to the measurement of energy efficiency and carbon offsetting requirements. By adopting a more flexible and practical approach, we can ensure that these requirements are achievable and contribute effectively to the council's Net Zero Carbon goals without causing unnecessary delays or burdens on developers.	

Gemma Honey (Deputy Town Clerk)- Kenilworth Town Council	General comments	Kenilworth Town Council welcomes this document which sits underneath the Net Zero DPD and provides technical guidance on sustainability standards. We urge its rapid adoption and look forward to using it in our assessment of planning applications. However, we believe that to be properly enforceable, measurable standards are needed to be set before developers, rather than hopeful guidance, and we trust the document can be strengthened in this way.	Comments noted.
Gemma Honey (Deputy Town Clerk)- Kenilworth Town Council	Standard of buildings	The purpose of the document is to provide legally enforceable planning guidelines for developers to work within. KTC members do have views on Passivhaus standard for new buildings and these are included here – most feel WDC should positively identify an ambition to trial the Passivhaus standard for new buildings under their control. Many developers will argue this is unachievable using viability assessments, but we need to show even high-end measures are economically feasible. It may in some cases be too rigid a standard and architectural options are restricted, but we must aspire to a target. Fabric First is referenced in the existing buildings section and offers greater flexibility as standards and regulations evolve. Members urge WDC to enforce this for developers to follow. This would raise our standards most rapidly to net zero and in the most cost-effective way. Consumers want homes that in broad terms are highly energy efficient in use with minute energy bills. Solar gain by PVs are essential in the build stage, and everyday equipment in the home should be the only other inputs involved in heating it. We should expect power sockets for electric vehicles and bikes, in-house power storage, such as Tesla Powerwall, solar roof tiles where PV panels are opposed on aesthetic grounds and the reuse of heat from computers.	Comments noted.

Gemma Honey (Deputy Town Clerk)- Kenilworth Town Council	Carbon Offsetting	It is felt that the carbon offsetting section should be reduced in importance. Planting trees has been definitively shown to fall seriously short in reducing carbon emissions. There is a temptation that offsetting can lead to greenwashing when developers use it to appear environmentally responsible without genuinely reducing their emissions. It could be seen as a superficial solution that distracts from making substantive changes in design and construction practices.	Comments noted. The council believe the language used for offsetting is appropriate. NZC3 and paragraph 6.9 of the SPD outline that the offsetting fund can be spent on carbon saving measures, and this will be reported against in the AMR. .
Gemma Honey (Deputy Town Clerk)- Kenilworth Town Council	Investment and Management	All members consider it vital that WDC invests the right human resources in enforcing these standards which means officers with the right technical expertise can engage professionally with developers to monitor standards and ensure compliance.	In line with the DPD's adoption, the Council is investing resources in training existing officers and members, and recruitment of specialists who can assess material submitted with planning applications.
Gemma Honey (Deputy Town Clerk)- Kenilworth Town Council	Key points	• The need to lower the performance gap between house design and house function – i.e. what a house is supposed to deliver and what it actually does deliver. • the need for the SPD to be agile in respect to the coming Future Homes Standard and not to be time limited and outdated by the time of print. • the need to use actual values of energy usage instead of some relative percentage from a baseline, i.e (EUI) targets in kWh/m2/yr instead of % reductions, which to many are meaningless.	Comments noted.
Gemma Honey (Deputy Town	Typos/ suggestions	In 3.28 there needs to be a space between "confirm" and "any"	Comment noted. .

Clerk)- Kenilworth Town Council		Paragraph 4.7 does not appear to make sense. Renewable energy technology either does or does not contribute to energy efficiency requirement, and perhaps the second sentence in this paragraph should be deleted.	Comments noted. The SPD has considered the compliance with policies for domestic dwellings and non domestic buildings. We accept that this adds complexity to the SPD but it reflects how the calculation methodologies SAP & SBEM differ.
Elanor Wright (Oxalis Planning) on behalf of Pristine Holdings		It is encouraging that the SPD aligns with the adopted DPD's approach in seeking to ensure that best practice is followed and that development is committed to achieving net zero targets, whilst maintaining a general level of flexibility within these requirements. As per our previous comments, it is important that a strong and clear policy framework is established so that developers can understand the requirements with regard to reducing carbon emissions during the construction and operation of new development schemes. This SPD assists through providing a useful framework of reference for applicants and developers looking to deliver schemes within Warwick District. It is important for the SPD to recognise that large developments will often be brought forward through an outline planning application, which necessarily means that the final design details are unknown at application stage and the Energy Statement requirements for major developments should reflect this.	Comments noted. The SPD at paragraph 3.27 details that an applicant would need to identify the expected building specification in their energy statement and pro forma. This information is required to demonstrate that the development has been planned to be net zero carbon in operation (regulated energy). The Council believe that this should be considered at the earliest stage of design development to ensure that any resulting development can meet the requirements of the net zero carbon policies.

		The SPD should also recognise that larger developments will be delivered over a number of years, meaning that regulation and practice might change from the point of application to the delivery of the final phase of the development. The SPD should address this through giving more flexibility in the prescribed application equirements, enabling major schemes to adapt to changes and the evolution of the everchanging net zero environment. Whilst the SPD does acknowledge the difference between full and outline planning applications, we believe that greater allowances should be made in the level of detail required at the outline application stage. It is positive that the SPD aligns with the adopted DPD and is not prescriptive as to the standards and schemes used in preparing Energy Statements, as this enables the DPD and SPD to remain current throughout their lifetimes, during which it is probable that new standards and methodologies for calculating efficiencies will be introduced.	
Elanor Wright (Oxalis Planning) on behalf of Pristine Holdings	Para 7.7	Whilst design principles can be established at this stage, it is important to retain a level of flexibility for larger schemes, which may be delivered over a number of years, to ensure that new innovations can be accommodated, where appropriate.	As above, paragraph 3.27 outlines what information is expected for each type of application.
Elanor Wright (Oxalis Planning) on behalf of Pristine Holdings	Annex A	The pro-forma at Annex A appears too prescriptive to accommodate outline planning applications, for which many of the requested details will be unknown. The pro-forma should instead be put back to the Reserved Matters submission stage, with targets established at the outline application stage.	Paragraph 3.26 & 3.27 outlines what is required for each type of application. For outline applications the applicant should demonstrate the expected building specification.

			As detailed in paragraph 3.27, subsequent applications e.g. reserved matters or S73 would need this information to be updated in any event.
Elanor Wright (Oxalis Planning) on behalf of Pristine Holdings	General comments	Overall, we agree with the Council's approach to addressing the climate emergency. The policies and requirements generally incorporate flexibility and acknowledge its importance in delivering sustainable development.	Comments noted.
Chris Waldron (Ministry of Defence)	General Comments	The MOD may have an interest where development is of a type likely to have any impact on operational capability. Usually this will be by virtue of the scale, height, or other physical property of a development. Examples these types of development include, but are not limited to: • Wind turbines may impact on the operation of surveillance systems such as radar where the rotating motion of their blades can degrade and cause interference to the effective operation of these types of installations, potentially resulting in detriment to aviation safety and operational capability. This potential is recognised in the Government's online Planning Practice Guidance which contains, within the Renewable and Low Carbon Energy section, specific guidance that both developers and Local Planning Authorities should consult the MOD where a proposed turbine has a tip height of, or exceeding 11m, and/or has a rotor diameter of 2m or more; and, • Any development that would exceed a height of 50m above ground level. Both tall (of or exceeding a height of 50m above ground level) structures and wind turbine development introduce physical obstacles to low flying aircraft	Comments noted. The planning applications that will have such implications will be discussed with the MOD as a part of the consultation process.

		• Development, regardless of height, outside MOD safeguarding zones but in the vicinity of military training estate or property.	
Tom Day- South Warwickshire University NHS Foundation Trust	General Comments	1. Whereas we appreciate the SPD focuses on net zero, should there also be a reference to green spaces and the importance of biodiversity, which are currently, often left out of sustainability conversations which measure everything in carbon metrics. Consideration should be given to at least making reference to these? 2. The SPD quotes efficiencies of circa 300% for air source heat pumps, but our understanding is that this is typically with outdoor temperatures in mid-10s, not the colder temperatures of the winter months. Does it need to be acknowledged that during winter, efficiencies are lower and it may cost more to run a heat pump than a gas boiler during this period? 3. The inclusion of Combined Heat and Power (CHPs) as a potential solution is surprising. We would not have thought these would not be recommended unless run by biogas or hydrogen, but it does mention gas (high carbon impact) and biomass (caution with fuel sources)? 4. Should the potential impact on air quality be noted in relation to the inclusion of biomass? 5. We would be interested to hear more about the details of the council's carbon offsetting scheme.	The NZC DPD and this SPD focuses only on carbon emissions from buildings, and such contains guidance only on this element only. The Council would expect a developer to demonstrate compliance with other policies of the adopted local plan, for example CC1. Furthermore, the South Warwickshire Local Plan will continue to develop climate change policies and guidance in line with their statutory duty and in relation to carbon budgets set nationally and at a local level. 2. The SPD in section 5 provides an overview of low and zero carbon technologies, the level of information is deemed to be proportionate to applicants consideration of these technologies through the energy statement.