

York Environment Forum (YEF) Phase 4 MIQ Response

Matter 13 – Climate Change

Inspector's Question	Our response	References
<p>14.1 Is the suite of Policies CC1 to CC3 (as proposed for modification) a sufficiently comprehensive response to this issue?</p>	<p>No – as we previously argued in our response to Phase 2 Matter 8 on Climate Change we stated that the climate change policies were inadequate for delivering the required reduction in emissions envisaged in both the national target of a 100% carbon reduction by 2050 and likewise the council's aim of being carbon neutral by 2030. We particularly highlighted the complete mismatch on carbon emissions from traffic and congestion increases resulting from the Council's inadequate transport approach, including its failure to adequately analyse what mitigation measures are required and their effectiveness in line with the DfT 2015 guidance on the transport Evidence base in Plan making. According to the Council's draft climate change strategy, transport represents 27.9% of York's scope 1 & 2 carbon emissions and requires a 71% reduction in emissions by 2030 against the 2005 base. Since there has been no meaningful reductions to date, most of that reduction must be achieved in the next 8 years, so transport is an area that cannot be ignored if the strategy's targets are to be achieved, yet there is no transport carbon policy at all in section 11. If you alternately look to the Transport policies section for answers, the draft climate change strategies requirements for shorter journeys, more by active travel modes, switching to electric vehicles, and reducing freight emissions, the transport policies fall far short of delivering what's required, as does the spatial strategy in terms of creating new communities whose basic needs can substantially be met within walking and cycling distance. This all needs to be rectified.</p>	<p>Ex/CYC/104</p> <p>Ex/CYC/104</p>

Turning to buildings, their carbon emissions represent 62% of York's scope 1 & 2 total, almost equally split between commercial and residential buildings, and needing 63% and 56% reductions respectively by 2030 against the 2005 base. We note that at the phase 2 matter 8 hearing, the Council committed to reviewing section 11 and related earlier sections of the plan, and specifically to making amendments to Policy CC2 to align with and bring forward the standards in the Governments proposed Future Homes Standard. In addition, it was also agreed that the council's own Climate Strategy was of such importance that it needed to be directly referenced and included in the Plan. We are still awaiting the revised policy and text amendments and they need to be introduced as a matter of urgency for the enquiry to be able to give them proper consideration.

There are several key areas where the policies in the plan require further significant strengthening. Firstly, as the Local Plan states. 'Research carried out by Carbon Descent on behalf of the Council indicated that, without positive intervention to reduce CO2 emissions, emissions in York will rise by around 31% by 2050.' This anticipated uplift is primarily the result of growth and severely impedes the city's ability to tackle the carbon reduction targets. To achieve a 100% reduction in Scope 1 and 2 emissions, the vast majority of existing homes will already require some level of retrofit which is a hugely challenging burden. The city can therefore ill afford to increase its carbon allowance and retrofit needs by allowing the development of homes which are not carbon neutral ready and this issue underpins many of the concerns we have with the Plan. As stated in the council's draft Climate Change Strategy, by 2030 'all new houses to be built to the highest energy efficiency standards'. The reduction of 28% emissions for new buildings in policy CC1 and the 19% reduction in the residential Dwelling Emission Rate compared to the Target Emission Rate (calculated using Standard Assessment Procedure methodology

as per Part L1A of the Building Regulations 2013) in policy CC2 are completely out of line with the sixth carbon budget pathway reflecting the revised statutory 2050 net zero Climate Change Act target. Therefore these new buildings would almost certainly require further and more expensive to undertake retrofit to enable them to reach carbon neutrality. To reduce the future retrofit burden and to prevent the City's growth contribution to the above mentioned 31% rise in CO2 emissions, all buildings should be required to be built to be carbon neutral or carbon negative.

It is noted that the Plan references that there is a limitation on the Council's requested level of carbon reduction. However, due to reasons outlined above and the overall scale of the challenge we would ask that this is re-considered. If this cannot be re-considered then the council should still implement further wrap around actions to ensure sustainable design which are not currently included in the plan. The plan should provide reference to the Energy Hierarchy to ensure that consideration is given to reducing the required energy load prior to other solutions. The current proposal of the plan provides too little steer on maximising fabric first approaches and encouraging natural heating, cooling and lighting which are all vital to minimising energy usage. Without these approaches the plan will not be able to meet national targets and is not justified. Consideration is needed for implementing a policy which covers energy hierarchy like Plymouth's adopted local plan Policy Dev32.

Alternatively the council could be more specific and follow its own internal design guide for housing which encourages Passivhaus certification. South Downs local plan includes a requirement for a certain level of homes on large sites to achieve Passivhaus certification which should also be considered.

	<p>A secondary issue with the plan is the lack of any policy relating to embodied carbon, particularly carbon from the construction of the homes and buildings themselves. The embodied carbon of UK construction is estimated at 43 MtCO₂e, with 80% from material production and on-site activities. As stated by Drewniok et al, ‘Moving towards net-zero operational energy in buildings and infrastructure, the embodied carbon connected to material extraction, manufacturing and production will approach 100% of total emissions [1,2]. This significant volume of materials used in the construction sector makes it highly carbon intensive [3]. It is essential to minimise the volume and carbon intensity of materials used in construction to achieve net zero UK construction in 2050.’ (Drewniok, et al, 2019). The same paper provides an overview of the significant variation of carbon intensity for different building typologies and materials. The local plan cannot be justified or in line with national targets if there is no plan to reduce embodied carbon during the construction phase of development. The council should introduce an embodied carbon policy like policy SD11 of the adopted Central Lincolnshire Local Plan:</p> <p><i>Policy S11: Embodied Carbon All development should, where practical and viable, take opportunities to reduce the development’s embodied carbon content, through the careful choice, use and sourcing of materials. Presumption against demolition: To avoid the wastage of embodied carbon in existing buildings and avoid the creation of new embodied carbon in replacement buildings, there is a presumption in favour of repairing, refurbishing, re-using and re-purposing existing buildings over their demolition. Proposals that result in the demolition of a building (in whole or a significant part) should be accompanied by a full justification for the demolition. For non-listed buildings demolition will only be acceptable where it is demonstrated to the satisfaction of the local planning authority that: 1. the building proposed for demolition is in a state of such disrepair that it is not practical or viable to be repaired, refurbished, re-used, or re-purposed; or Central Lincolnshire Local Plan Proposed Submission Draft</i></p>	<p>Drewniok, M., Dunant, C., Allwood, J., Ibell, T. and Hawkins, W., Modelling the embodied carbon cost of UK domestic building construction: Today to 2050.</p> <p>https://www.sciencedirect.com/science/article/pii/S0921800922002245</p>
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	<p>almost always more carbon intensive than retrofit, albeit the Lincolnshire policy should still be stronger to tackle the challenge we are facing.</p> <p>We welcome the aims of policy CC1 in encouraging the growth of renewable energy in the city. However, the policy is too cautious and provides unnecessary scope for objections to what is much needed infrastructure. For example the policy requires consideration for the impact of the development on agriculture. Achieving the required 75-90GW of solar power proposed by the government to achieve net zero in 2050, would only require 0.4-0.6% of land use. This is less than is currently occupied by UK golf courses. The impact of new solar generation in York on agricultural production would be negligible in the broader picture, so this inclusion is not justified. On the whole, there is already clear and arguably overly restrictive national planning policy on renewable energy production, so we don't feel these considerations are justified.</p> <p>Overall the policies in the plan lack the required strength and ambition to meet national and local targets on climate reduction. The Government's sixth carbon budget covering the years 2033-7 - i.e. matching the last part of the proposed Local Plan period, but also affecting previous carbon budget strategies - was adopted last year. It is predicated on a much more ambitious 78% reduction in UK carbon emissions by 2035 by just after the end of the plan period (see UK enshrines new target in law to slash emissions by 78% by 2035). Without the above changes, the plan does not support the achievement of this target.</p>	<p>Factcheck: Is solar power a 'threat' to UK farmland? - Carbon Brief</p> <p>GOV.UK (www.gov.uk)</p>
<p>14.2 Does the approach of Policy CC1 to renewable and low-carbon energy generation and storage</p>	<p>See response above.</p>	

appropriately reflect national policy?		
14.3 Is the approach of Policy CC2 to sustainable design and construction justified?	See response in 14.1 above.	
14.4 Will Policy CC3 be effective in its approach to district heating and CHP networks?	See response in 14.1 above.	