



CLIMATE CHANGE RELATED

RESPONSE TO LOCAL PLAN CONSULTATION 2020-40

Section 1. Context and Scope

ACT has already submitted comments to the initial consultation of the Teignbridge Local Plan 2020-40.

In these responses we highlighted the fact that greenhouse gas emissions, the only driver of Climate Change, need to be kept within the government's 6 Carbon Budgets. We are pleased to see that the plan does refer to these Carbon Budgets and the need to remain within these limits.

Here we are responding on grounds of 'Soundness', specifically with regard to policy CC2 and how this should be reworded to reflect the legal Climate Change mitigation objectives outlined in the plan and legally required by government. Our submission takes account of a number of constraints the plan is legally required to adhere to, namely:

1. Number of new developments
2. Financial viability
3. Prevailing building regulations and prevailing Standard Assessment Procedure
4. Balancing other objectives as outlined in the [current NPPF](#)

Clearly there is a conflict since the building sector is not yet fully decarbonised, so will have emissions associated with new development. We believe that the best approach is to be honest and highlight where these conflicts lie and what options are available to resolve them. This helps focus efforts on where the greatest reduction in greenhouse gas emissions can be achieved with minimal impact on other objectives.

The plan's section on Climate Change sets out the government's legal Carbon Budgets. We have allocated these national budgets to Teignbridge on a fair basis, taking account of actual emissions as a proportion of the total. See Section 2 outlining the government's legally binding emission reduction targets (this is based on our analysis which can be downloaded [from the ACT website](#)).

Since the only driver of Climate Change are greenhouse gas emissions, it would be logical to calculate these so they can be mitigated, i.e. kept within the legally binding Carbon Budgets. Emission reductions are best achieved in accordance with well-established Energy Hierarchy models. That is, in order of effectiveness in mitigating Climate Change:

1. Reducing energy consumption
2. Increasing efficiency in energy use
3. Generating low-Carbon energy
4. Sequestering Carbon
5. Offsetting greenhouse gas emissions

Where the Climate Change objective violates a constraint, it would be helpful to know which and by how much. For example, knowing the financial viability headroom to achieve a net-zero development.

This conflict is unlikely to be resolved if the plan is adopted as it is currently set out. Therefore, the Plan needs to set out clear and implementable options on how this can be achieved as quickly as possible, without violating legal constraints.

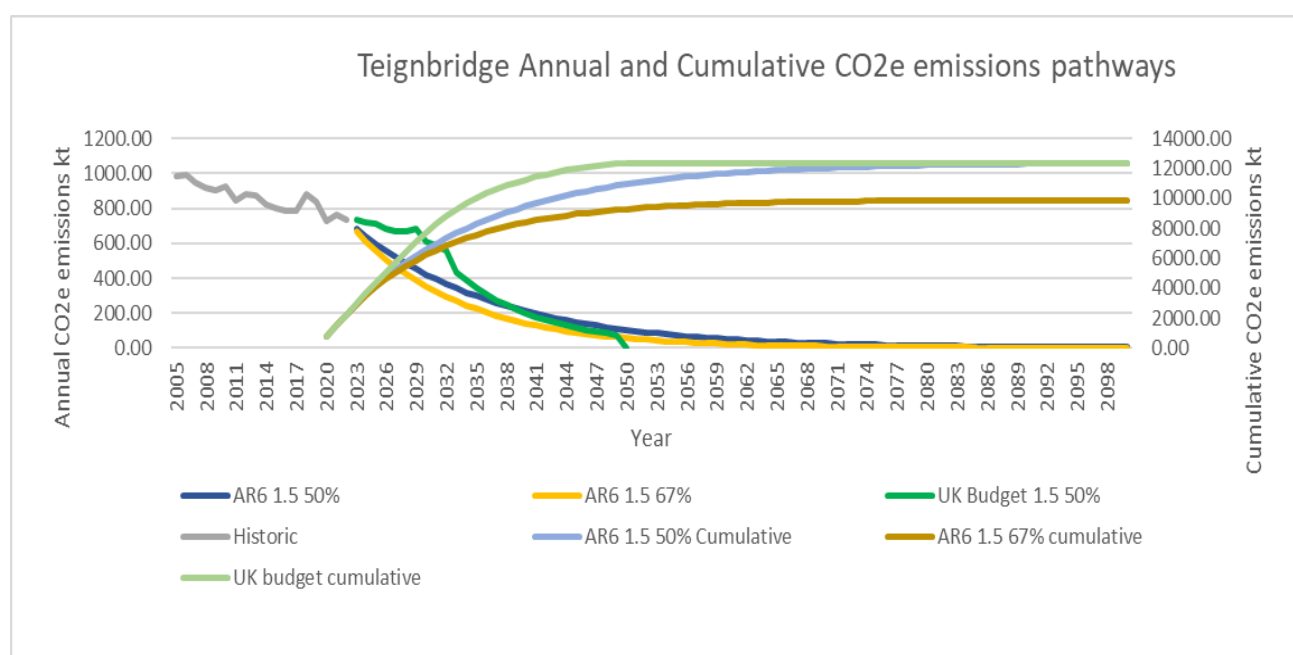


Section 2. Emission targets and contributions

The following graph outlines a number of territorial carbon budgets allocated to Teignbridge.

- UK Carbon Budget represents the UK's legally binding budgets for a 50% chance of avoiding the Climate Tipping Point. These are the ones set out in the plan.
- AR6 represents the IPCC's 2021 report for a 67% and 50% chance of avoiding the Climate Tipping Point. It is the budgets with a 67% likelihood that aligns with the Paris Agreement. We are only including this to compare legal emission budgets against the more important ambition of policy CC2, namely:

"The Council will by all possible means work towards meeting national and local carbon budgets aligning with the Paris Agreement and minimise our contribution towards further global warming."



We have calculated budgets for Teignbridge based on a proportion of 0.1807% of national emissions for 2008-2010 as follows (see [detailed analysis](#) of UK's legally binding budgets which are outlined in the plan):

Budget#	From	To	National Budgets (MtCO2e)	Teignbridge Budget (ktCO2e)
4	2023	2027	1950	3523
5	2028	2032	1725	3116
6	2033	2037	965	1743

Annual allocations to Teignbridge:

Year	CCC Balanced-path based budget (ktCO2e)	Steady reduction 3.54%
2020	726.21 (Actual)	
2021	762.35 (Provisional)	
2022	736.41 (Estimated)	



2023	736.84	710.34
2024	719.74	685.20
2025	715.42	660.94
2026	683.03	637.55
2027	667.86	614.98
2028	666.39	593.21
2029	686.39	572.21
2030	612.44	551.95
2031	590.89	532.41
2032	560.30	513.56
2033	431.06	495.38
2034	387.70	477.85
2035	344.34	460.93
2036	306.40	444.61
2037	273.88	428.88

CCC balanced-path budget is based on the climate change committee's recommendations, adjusted so these are equal to the UK legal 5-year budgets. This is plotted in the graph.

Steady 3.54% reduction applies an equal reduction each year such that the total is equal to the UK 3 remaining 5-year budgets. This is to establish the average annual reduction for the national UK budgets as applied to Teignbridge over the plan period.

To put this into context, based on indicative numbers, [for EPC C rated residential dwellings](#), the annual territorial greenhouse gas emission impact of the plan would be (these can be adjusted to reflect more accurate numbers if available):

Embodied emissions = $750 \times 60t = 45 \text{ kt CO}_2\text{e p.a.}$

Operational emissions = $750 \times 0.5t = 0.38 \text{ kt CO}_2\text{e p.a.}$

Total = $\sim 45.5 \text{ kt CO}_2\text{e p.a.}$

Teignbridge's most recent [provisional annual territorial emissions](#) (2021) published by government = $\sim 762 \text{ kt CO}_2\text{e}$, see table above.

On the basis of the legally binding Carbon Budgets set out in the plan, new developments contribute $\sim 6\%$ increase in overall Teignbridge greenhouse gas emission in the first year, increasing year on year if unchecked.

The legal Carbon Budget targets, as stated by the plan, require an annual reduction of $\sim 3.5\%$, year on year.

Our conclusion is that without clear, measurable and enforceable policies, the plan as it stands, fails the soundness test.



Section 3. Proposed Changes to CC2 Carbon Statement

1. On adoption: set a Net-Zero operational emissions target based on prevailing Part L (currently 2021/22 version) + additional measures; allow for maximum ~25% financial offsetting to be reduced to 0% within 2 years. All measures should be calculated using the prevailing national methodology (currently SAP 10).
See proposed text changes to 2a and 2b below.
2. On adoption: require developers to submit embodied emissions data; require a minimum ~10% financial offsetting to be reduced to 0% within 5 years.
This requires an additional point 4, see proposed text below.
3. Define a verifiable (local) financial offsetting scheme, e.g. new Teignbridge/Devon renewable generation or retrofitting existing properties.
This requires such a scheme to be defined and available when the plan is adopted.
4. Define an incentive mechanism for developers who exceed these targets, e.g. fast-track planning process, promotions/publicity.
This requires the council to develop such a reward scheme to ensure it is effective, implementable and legal.

2a. Minor Residential scheme (up to 9 homes):

- i. **From Plan adoption to 31 December 2024: meet the prevailing Part L of the Building Regulations (current version 2021/22), to be achieved through a reduction in energy consumption via a fabric first approach;**
- ii. **From 1st January 2025 to 31 December 2027: Achieve a minimum 75% reduction in carbon emissions against the prevailing Part L of the Building Regulations (current version 2021/22), to be achieved through further reduction in energy consumption via a fabric first approach.**
- iii. **From 1st January 2028: Achieve net zero carbon emissions.**

2b. Major residential scheme (10 or more homes):

- i. **From Plan adoption to 31 December 2024: Achieve net zero carbon development through a combination of meeting the prevailing Part L of the Building Regulations (current version 2021/22), to be achieved through a reduction in energy consumption via a fabric first approach. The remaining reductions in carbon emissions will be achieved through 'top-up' by a combination of further fabric improvements, verifiable on-site renewable energy generation, or if necessary, through equivalent financial contributions to an agreed Teignbridge approved carbon offsetting fund. Financial offsetting should not account for more than 25% of additional measures from plan adoption, reducing to 0% by 2028. This requirement will not apply to extant permissions granted prior to plan adoption, or extant allocations, where they commence during this period.**



- ii. From 1st January 2025 to 31 December 2027: Achieve net zero carbon development via a minimum 75% reduction in carbon emissions against the prevailing Part L of the Building Regulations (current version 2021/22), to be achieved through a reduction in energy consumption via a fabric first approach. The remaining reductions in carbon emissions will be achieved through ‘top-up’ by a combination of further fabric improvements, verifiable on-site renewable energy generation, or if necessary, through equivalent financial contributions to an agreed Teignbridge approved carbon offsetting fund. Financial offsetting should not account for more than 20% of additional measures in 2025, reducing to 0% by 2028.

- iii. From 1st January 2028: Achieve net zero carbon.

4. Embodied emissions: From plan adoption submit a breakdown of embodied emissions covering scope 1-3. Calculations should be based on a recognised source such as [RICS](#) and associated [LETI targets](#), [AECB's ribbon](#) extension to PHPP modelling or equivalents.

A reduction in embodied emissions is expected to achieve the LETI targets below starting with an equivalent EPC C rating on plan adoption progressing one EPC rating each year.

Table 1: LETI's embodied carbon targets by EPC rating. The design target was band C by 2020, which seems largely to have been achieved, and for 2030 is band A. Note: figures include all building fittings and fixtures; targets for structure alone are typically 50–65% of these values

EPC rating	Target (kg/m ² of gross internal area)			
	Office	Residential	Education	Retail
A++	<100	<100	<100	<100
A+	<225	<200	<200	<200
A	<350	<300	<300	<300
B	<475	<400	<400	<425
C	<600	<500	<500	<550