

**Report to Shropshire Local Plan Hearing**  
**Ref A0492**  
**Matter 1 Q2; 15**

1. My concerns about the draft Shropshire Local Plan centre on its failure to properly assess the impact that building 30,800 houses and 300 ha. of employment land will have on the County's environment. In particular the Plan has failed to consider the impact that the construction of new housing and employment-related buildings will have on the production of greenhouse gases, nor has it considered the ongoing "running costs" of CO2 in the heating and use of those buildings.
2. The Inquiry will need no reminders of the seriousness of the threat that climate change and global warming present, but one recent report deserves quoting. On April 4<sup>th</sup> 2022 the Intergovernmental Panel on Climate Change (IPCC) released its latest warning that to limit the average global temperature rise to below two degrees Celsius will require "immediate and unprecedented action from every country". This is an issue for today, and it is an issue to which agencies and authorities at all levels of government – including local planning authorities – have a duty to respond.
3. The draft Local Plan has many policies about, and references to, protecting the environment and mitigating climate change and these are welcomed. The term "sustainability" occurs frequently throughout the Plan and its supporting documents. In the Council's Draft Housing Strategy 2020 – 2025 there are six Key Objectives directed at delivering the strategy. Key Objective 5 is "To minimise the environmental impact of existing housing stock and future housing development in the interest of climate change..." Unfortunately these worthy statements have not extended to any meaningful consideration of the volume of CO2 that will be produced in both the construction and the running of new housing and employment developments.
4. I am not opposed to necessary house building or employment developments in Shropshire. However, the fact that there is a need for such building does not absolve the Council from a proper assessment of the impact that this will have on CO2 production and climate change.
5. My comments focus mainly on Policy SP2 "Strategic Approach" and its housing and employment land forecasts. But clearly other policies and documents are relevant, in particular Policy SP3 "Climate Change" which includes the principal aims of "Reducing carbon emissions through a number of means" (SP3(1)); and "Mitigating and adapting to the impacts of climate change" (SP3(4)). The Sustainability Appraisal document is also important in that its conclusions underpin whether the Local Plan has met its environmental ambitions.
6. New housing development generates CO2 in two ways:
  - (i) In the process of constructing the building. The Carbon Trust and the Energy Saving Trust both estimate that around 56 tonnes of CO2 are produced in the construction of a single house. Figures for flats and apartments are higher. This is a one-off figure.

- (ii) In the “running” of the household once it is occupied, in particular in energy use. The Carbon Trust estimate is that the average household generates about 20 tonnes of CO<sub>2</sub> each year. This is an on-going figure, but it is hoped that it will reduce as fossil fuels are replaced by renewables. Meanwhile it’s all we have to go on at this time.
7. Using the figures from paragraph 6 the following calculations of CO<sub>2</sub> production can be made for Shropshire:
- (i) New housing construction 2016 – 2038:  $30,800 \times 56 = 1,724,800\text{tCO}_2$ . (This is approximately the same as Shropshire’s annual output of CO<sub>2</sub> of 1,760,000 quoted in the Local Plan). On the basis of an average annual housebuilding rate of 1,400 the annual CO<sub>2</sub> generation would be  $1,400 \times 56 = 78,400$ , or approximately 4.5% of the County’s total annual CO<sub>2</sub> generation.
  - (ii) CO<sub>2</sub> “running costs” of new housing 2016 – 2038:  $30,800 \times 20 = 616,000\text{tCO}_2$  will be the CO<sub>2</sub> output during the last year of the Plan in 2038, or 35% of Shropshire’s annual generation at current figures. It is hoped that this figure will reduce significantly as renewable energy replaces fossil fuels. On the basis of an annual housebuilding rate of 1,400 the CO<sub>2</sub> generated in “running costs” will be  $1,400 \times 20 = 28,000\text{tCO}_2$ .
8. Adding together the annual CO<sub>2</sub> output for both housing construction and running the total is 106,400tCO<sub>2</sub>, or just over 6% of the County’s annual CO<sub>2</sub> generation. Note that none of the above calculations include CO<sub>2</sub> generated in the building and running of employment sites.
9. With these figures in mind I would refer the Inquiry to the Sustainability Appraisal in the Local Plan. Paragraph 1.8 of the SA lists sixteen Sustainability Objectives. From a climate change perspective the key ones are:

SO12 - Reduce carbon dioxide emissions

SO13 – Promote adaptation and mitigation to climate change.

The SA has considered the impact on all the Sustainability Objectives of the policies within the draft Local Plan. Table 1.1 in the SA considers the impact of the earlier housing growth options of moderate, significant and high growth. It concludes that none of the options show “significant negative effects”. Table 1.1 also considers Policy SP2 – which sets out the housing and employment growth levels in the Plan – and again concludes that there are no significant effects.

10. In Chapter 11 of the SA (11.1) the document repeats National Planning Guidance which requires that “The Sustainability Appraisal should identify any likely significant adverse effects and measures envisaged to prevent, reduce and, as fully as possible, offset them”. Table 11.1 in chapter 11 then describes “Significant effects for Local Plan policies” in which the impact of policies is judged against the sixteen Sustainability Objectives, including the two key ones regarding climate change, SO12 and SO13. Under Policy SP2, which includes

the requirement for 30,800 houses and 300 ha of employment land, the SA finds that “No objectives are significantly affected”.

11. The Inquiry should consider whether the conclusions reached in Tables 1.1 and 11.1 of the SA are valid given the likely volumes of CO<sub>2</sub> generated by the amount of new housing and employment growth proposed. In effect the conclusions drawn in the SA are that an increase of over 6% in Shropshire’s annual CO<sub>2</sub> levels are insignificant, and that the levels of housing and employment growth can be justified in terms of CO<sub>2</sub> production. Given that there is widespread recognition of the scale of the climate crisis, and that Shropshire Council itself declared a Climate Emergency in 2019, this seems a perverse conclusion.
12. In the light of these concerns I would draw the attention of the Inquiry to the increase in the housing figure, 2016 – 2038, that is described in the Explanation to SP2. Paragraphs 3.3 to 3.6 describe an increase from the housing requirement calculated using the Local Housing Need Assessment (25,894 dwellings) to 30,800 dwellings as the final Local Plan figure. The justification for the increase of almost 5000 houses, or nearly 20%, is very vague (see 3.6(a) to 3.6 (b)). To claim that the increase is justified to “respond to sustainable development opportunities” is largely meaningless and does not suggest that this significant uplift has been assessed or justified with any rigour. Perhaps if we were not facing an existential threat from climate change such a casual approach could be excused, but not I suggest in our current circumstances.
13. In conclusion, may I draw the attention of the Inquiry to the Zero Carbon Shropshire Plan. This is a plan to achieve Net Zero in Shropshire by 2030, not 2050 which is the government’s target. It has been produced by the Shropshire Climate Action Partnership and is overseen by a Steering Group comprising a wide range of authoritative and respected organisations. These include the Environment Agency, local Universities, Marches Local Enterprise Partnership, the NFU, Severn Trent, the NHS Hospital Trust, the Wildlife Trust, and Shropshire Council. The Zero Carbon Shropshire Plan is comprehensive, well researched and clearly presented. It pulls no punches about the urgency needed to tackle climate change, the scale of the task ahead and the upheavals necessary to avoid a catastrophic climate outcome – and it points to the role that Shropshire must play in this.
14. As the orchestrator of future housing and employment growth in the County the Council has a major part to play in determining how well – or how badly – Shropshire responds to the ambitious but important timetable set out in the Zero Carbon Shropshire Plan. In the sections on buildings, the ZCSP asks about reducing CO<sub>2</sub> – “How do we do it?” One of its answers is: “to demand better of our politicians, our Council, our planners and our builders”. A more careful consideration of the scale of growth proposed in the Local Plan, and in particular its significant contribution to CO<sub>2</sub> production, would be a worthy response to this challenge.

Jack Parry. 30.05.2022