

Consultation response from Councillor Ray Bullen RIBA

12 September 2021

I am an elected Councillor of Bishop's Tachbrook Parish Council. This is my personal response to this consultation.

Initial Observations

1. Although these proposals are an attempt to address the government target of meeting net zero carbon nationally by 2050 as a declared reaction to the Climate Change Emergency now recognised, the proposals do not include any practical methods that will achieve that objective.
2. Zero Carbon is a most difficult calculation and depends on accounting for all actions necessary to achieve the obvious actions. CO₂ sequestration applies to the whole of the global atmosphere. As temperatures are rising and forests burn, seas warm and the Carbon cycle changes, this leads to more atmospheric CO₂ than is absorbed naturally.
3. In short the draft plan is too little too late.

The Problem that must be addressed

Climate Change expressed as limiting global temperature rise to 1.5 degrees C and mitigation of the effects therefrom does not recognise the scale of the problem. It does not get to the cause of the temperature rise, that is, the increased amount of Carbon Dioxide in the global atmosphere and the rate at which it is increasing. Carbon Dioxide is only mentioned 7 times in the consultation paper and 6 of these are in the glossary. Other gases such as Methane although released into the atmosphere will have a greenhouse effect, but they are converted to CO₂ through electrostatic weather in a relatively short space of time, adding to the CO₂ problem or in the case of Nitrous Oxide or Sulphur Hexafluoride reduced air quality.

First, this is a global problem. It is essential that all parts of the globe take action to reduce the volume of CO₂ discharged into the atmosphere from all causes and each small part of the globe, such as Warwick District Council, must ensure that human activity is redirected to both stop further CO₂ emissions but also reduce that which is already in the atmosphere.

I recall my first physics lesson in the first year of Grammar School in 1950, when we learnt that the air around us was mainly about 80% Nitrogen and 20% Oxygen with 0.28% (or 280 parts per million) of CO₂ and that this was necessary as part of the carbon cycle upon which all life depends. Simply put, before the Industrial revolution in the 17th century, atmospheric CO₂ had been a constant 250ppm from the time life began on earth, as plant life needed CO₂ for photosynthesis and this balanced the CO₂ discharged by other life forms. In June this year, the Global atmospheric CO₂ level was 415.48ppm and is currently rising at a 5 year average of 2.4ppm per annum.

Why has the atmospheric CO₂ risen by 135.48ppm in the last 70 years? It is due to human population growth, increased energy usage for heating, cooling, lighting, multiple electrical goods, transport, that did not exist in the 50's and that everybody naturally wants their part of.

Science advises that when the Global atmospheric CO₂ exceeds 450 ppm across the planet, including the seas, then, from that time, CO₂ released from natural sources will uncontrollably increase atmospheric CO₂ at an increasing rate outside the Carbon cycle as temperatures rise. This may be the case in just 13 years' time or by 2034 $(450-415.48)/2.4 = 13.27$ years). The actions promoted in the draft consultation will be completely insufficient to stop this happening and in any case will not have been completed by then.

We need to be aware that Venus, the closest planet to the Earth, may have had a similar climate to us 4 billion years ago, but today it has a 95.6% Carbon Dioxide atmosphere and an average surface temperature of 462° C. The threat to us cannot be clearer.

Comments on The Local Context

1.1.1 *"On 27 June 2019 Members of Warwick District Council (WDC) unanimously declared a climate emergency"* **If this date is correct, then this consultation is 2 years 3 months later. What was the emergency? There are now only 13 years left !**

"Becoming a net-zero carbon organisation, including contracted out services, by 2025".

Does this mean the whole of WDC buildings, staff, housing and other services? What is its current CO₂ output and how will this be reduced to zero?

"Facilitating decarbonisation by local businesses, other organisations and residents so that total carbon emissions within Warwick District are as close to zero as possible by 2030." **Will facilitating include funding for necessary works and staff to achieve this date? Who measures the success or otherwise of this objective? How does it begin?**

"Working with other local councils to lobby central government to help address the above points including by funding and changing regulation." **Government has been aware of this for many years but have still not improved regulations to reduce CO₂ emissions.**

"Engaging with and listening to all relevant stakeholders including members of the Warwickshire Youth Parliament regarding approaches to tackling the climate emergency." **This consultation is perhaps part of this but what else is proposed?**

"Ensuring that tackling the Climate Emergency is central to the strategic business plan – both in terms of adaptation and mitigation." **In what ways has this been incorporated?**

1.1.2 *"Following this, the Council adopted a Climate Emergency Action Programme at its meeting in February 2020. The Action Programme included a strong recognition of the important influence of planning in tackling climate change including the following areas for possible action: Ensure that the planning system, led by the Local Plan, sets developments and land use standards aimed at reducing carbon emissions and building sustainable communities*

Develop and implement policies that will deliver improved net zero carbon building standards - subject to national policy" **Does this mean that unless the Government sets out the necessary zero carbon standards, WDC will not be able to set its standards? How would compliance to those standards be controlled - through planning conditions or Building Regulations? Who has the expertise to calculate whether Zero carbon buildings do not discharge CO₂ into the global atmosphere, both in design and operation?**

“Ensure carbon reduction features and BREEAM standards are included in major development schemes “ **These standards only reduce CO₂ emitted, rather than achieve zero carbon. So far, despite these features have been available for the last 20 years at least, the rate of increase of CO₂ emissions is rising not reducing.**

- 1.1.3 *The CEAP recognises the importance of the planning system in achieving its ambitions: “In the coming decade, Warwick will have to improve the efficiency of all its buildings to reduce the demand for energy. Low carbon and/or renewable heating, energy reduction and an increase in the adoption of energy efficiency technologies in both commercial and domestic buildings will be required.” A key part of this is a proposal to “Develop and implement policies that will deliver improved net zero carbon building standards”.* **Agreed in principle but how will this be done at the speed that is now required? Does it mean all buildings in WDC ownership and rented properties or, in addition, all new buildings that pass through the planning system and existing buildings when they are to be altered, updated or otherwise require planning permission.**

Comments on The National Context

- 2.2 *“ The 2020 CCC update report highlights five clear investment priorities in the months ahead: Low-carbon retrofits and buildings that are fit for the future .”* **This effectively means the whole of the current building stock a lot of which can only be partially improved. For WDC it means that the current Local Plan has given planning permission for at least 16,521 dwellings of the 16,776 set as a minimum in the adopted local plan. Of these, at least 7,174 have been completed and 2,853 are under construction. The estimated number of permissions that will be complete by 2030 is 4,179 more than the 16,776 set out in the LP, that is 20,955 dwellings, all currently due to be built to fabric first standards which will add substantially to the UK CO₂ atmospheric emissions. This increase is due to a larger number of windfalls than included by the Local Plan Inspector and the granting of additional permissions on sites not included in the Local Plan.**

“Tree planting, peatland restoration, and green infrastructure “ **This is an important part of the Carbon cycle as atmospheric CO₂ is absorbed by these plants. However, tree planting requires substantial sites to be identified and does not contribute until the trees have grown sufficiently which will be at least five to ten years, that is beyond 2025. The Bishops Tachbrook Country Park that should be one of the tree planting sites, is still being planned and planting here is unlikely until 2023/4 so will only compensate for new construction CO₂ sequestration until after 2028/9. It also indicates that green infrastructure should not be lost for new developments, as these should be within urban areas. Currently large areas of forests are being lost due to higher temperatures across Europe (Turkey, Greece, southern France), North and South America and Australia. Seasonal variation accounts for about 8ppm demonstrating the important part that plants play in the carbon cycle.**

“Energy networks must be strengthened “ **Presumably this refers to the increasing availability of solar and wind electricity and this then is a question of capacity to take over from coal, natural gas and other fossil fuels. It needs to be managed nationally and I hope someone has identified how the national grid will be reinforced to provide electrical energy not only to buildings but to all transport.**

“Infrastructure to make it easy for people to walk, cycle, and work remotely “ **Unless housing relates to work opportunities, then walking and cycling will not increase as transport from dormitory locations to workplaces demands personal transport or good public transport.**

“Moving towards a circular economy.” **What does this mean? It is not defined in the glossary except as a low carbon economy, sustainable economy, decarbonise the UK economy and the local economy. What is circular?**

- 2.3 *“The report finds that UK action to curb greenhouse gas emissions is lagging behind what is needed to meet legally-binding emissions targets. “* **It certainly is.**
- 2.4 *“The UK has legislated for net-zero emissions by 2050 and in a statement in April 2021, the Prime Minister announced the UK’s ambition to cut greenhouse gas emissions by 78% by 2035.”* **2050 is too late and there is not a reliable plan to show how the 78% will be achieved.**
- 2.5 *“Given the significant proportion of emissions nationally that stem from buildings, it is a key part of the Government’s strategy to improve building standards. As a result, the Government has published its intentions to introduce new buildings regulations during 2021, updating Part L for new homes and non-domestic buildings as a first step towards a Future Homes Standard. The new building regulations will require standards that are expected to reduce emissions from new buildings in comparison with current standards by 31%. Further, proposals to bring in to effect a Future Homes Standard from 2025 have been published. The proposed Future Homes Standard seeks to deliver homes that are zero-carbon ready by: setting the performance standard of the Future Homes Standard at a level which means that new homes will not be built with fossil fuel heating, such as a natural gas boiler. “* **It is now mid-September 2021 and so far as I can see Part L has not yet made it to consultation. The planning changes that pointed to future homes standard have this week been withdrawn. Standards to reduce CO₂ emissions by 31% in new buildings if nothing is done about existing buildings emissions will still increase atmospheric CO₂. It is 4 years since the Grenfell Tower tragedy, but cladding, heating, escape in tower blocks is an integrated subject that needs very urgent action. My experience shows that where insulation standards are improved, expected savings are not realised fully as occupants adjust to the increased comfort that comes with the improvement.**
- “future-proofing homes with low carbon heating and high levels of energy efficiency. ensuring no further energy efficiency retrofit work will be necessary to enable them to become zero-carbon as the electricity grid continues to decarbonise. “* **Unless passivhaus standards of insulation and no carbon energy fuels i.e. electricity from green sources form the basis of part L , with fire resistant insulation, future proofing is unlikely, certainly within the cost levels set by developers.**
- 2.6 *The Government expects the proposals for a Future Homes Standard to “ensure that an average home will produce at least 75% lower CO₂ emissions than one built to current energy efficiency requirements. In the short term this represents a considerable improvement in the energy efficiency standards for new homes. Homes built under the Future Homes Standard will be ‘zero carbon ready’, which means that in the longer term, no further retrofit work for energy efficiency will be necessary to enable them to become zero-carbon homes as the electricity grid continues to decarbonise.”*
- 2.8 *We recognise that there is a need to provide local authorities with a renewed understanding of the role that Government expects local plans to play in creating a greener built environment; and to provide developers with the confidence that they need to invest in the skills and supply chains needed to deliver new homes from 2021 onwards. To provide some certainty in the immediate term, the Government will not amend the Planning and Energy Act 2008, which means that local planning authorities will retain powers to set local energy efficiency standards for new homes.”* **As planning permission has already been granted for**

6,494 dwellings that have not yet started construction and 2,853 are being built, how will there be any method of requiring these properties to be built to these standards if and when they are implemented. The planning system cannot prevent it unless alterations to the approved scheme require an additional permission to meet building regs. I thought that due to a decision in the courts, local authorities were not able to set local energy efficiency standards for new homes and if this is the case, how does the Planning & Energy Act 2008 retain powers to LA's to do so?

4.1 Aims

- 4.1.1 *This DPD aims to focus on minimising carbon emissions from new buildings within the District to support the achievement of national and local carbon reduction targets set out in section 1.1 and paragraph 2.4 above. From adoption (and earlier where possible) the DPD will aim to ensure all new developments (as set out on para 5.4) should be net zero carbon in operation. **All these aims apply only to new buildings which will add something to atmospheric CO₂ levels. Existing buildings, the current cause of the problem are not addressed at all, so district zero carbon cannot be achieved.***
- 4.1.2 *In achieving this aim, the DPD will ensure that new development does not add to the District's carbon deficit and will therefore ensure that the significant cost of retrofitting buildings to achieve net zero carbon does not increase. **This statement is unlikely to be achieved.***
- 4.2 *Objectives 4.2.1 Objective 1: To provide a clear policy framework to enable developers to understand the requirements for planning proposals to ensure new buildings are planned and constructed to be net zero carbon in operation. **I await to see the clear policy framework suggested and wonder who will be the judge and jury to determine whether it is met or not.***
- 4.2.2 *Objective 2: To ensure practical and viable low carbon building standards that can be applied to new buildings. **How is this different to objective 1?***
- 4.2.3 *Objective 3: To support the consideration of low carbon energy sources as part of large scale development proposals. **This may be practical depending on a range of issues***
- 4.2.4 *Objective 4: To provide the policy framework for addressing residual carbon from new buildings through a robust carbon offsetting policy. **Carbon offsetting is a practice to avoid as it leads to doubtful cost advantages that act contra to the original intentions.***

From here to the rest of the document I find the approach totally confusing and complex. I can see 'experts' writing reams to large volumes with huge costs. It is very repetitive in its attempt to analyse the problem out of existence.

The use of SAP ratings is complex enough and leads to at least assessing the energy requirements of the dwellings or other building types. Use of carbon free fuels is an obvious requirement but assumes that the National Grid will be able to meet the countrywide demand for all energy

needed and that it can be delivered to all properties in the country, doubtless with much reinforcement.

Demands on materials to achieve the insulation required in a safe manner could well exceed supply and compromises may need to be accepted, but the largest failure is that existing properties are not covered at all. This is not acceptable since it is these properties that are

the cause of the present situation with atmospheric CO₂ emissions and which are the most difficult to reduce emissions, let alone get to zero-carbon.

But the most important issue is that time is fast running out and there is a big risk that we shall be too late to avoid runaway atmospheric CO₂ due to our interruption of the carbon cycle with the increased energy demand of the Global population..

Think simple and write the document in an easy to understand manner. As it stands , how will the planning officer be able to assess the applications and determine whether permission should be granted?

In my past with Coventry City Council in the 1990's we were able to improve energy usage of about 10,000 existing dwellings with elderly occupants, basically to reduce fuel poverty. In those days, electricity was the worst fuel to use as it was dependent on coal or other fossil fuels to be generated. Nevertheless, the action that we took was sufficient to lead to a noticeable reduction in natural gas volumes supplied to the whole city.