

Response from Chris Lowe

Comments On: The draft vision for the district

Response:

Structure

The headings are unfortunate and misleading. A “Vision” should be what improvements that the people in the district and anyone else who comes to the district will actually experience.

A 'Vision' does not need to say how it will be achieved – that comes from the Objectives and the Local Plan.

In addition the sequence should be in terms of relative priorities, and the Vision should not be replicated in the draft strategic objectives, because the former are verbal aspirations and the latter are actual results to be obtained.

In addition the current draft merely mentions 'low carbon' rather than 'Zero carbon', and climate change has two mentions, primarily in relation to adaptation.

Likewise biodiversity has similar lack of priority.

In contrast “growth” and “economy” receive many mentions despite the fact that they are meaningless without a much more detailed context.

The “Economy” is the wrong target because it is meaningless and is very difficult to measure in a way that relates to residents' quality of life.

For example, we may get increasing use of services such as Deliveroo and perhaps Uber, which may increase their turnover and hence their profits.

Although they may be cheaper, that is at the cost of their employees quality of life, ranging from poor pay, widely varying working hours, intense pressure to provide service only when required together with lack of sick pay, and restricted or no paid holidays.

Hence “Residents quality of Life” is a far more important priority for the Council and embraces far more than just the economy and hence is more meaningful to everyone in the District, not just those who benefit from an expanding economy.

Furthermore a growing economy is not an indicator of prosperity, and prosperity can be achieved just as easily *without* growth. See, for example, “**Prosperity without Growth: Economics for a Finite Planet**”, by **Professor Tim Jackson, (Earthscan, London, (2009), ISBN 1844078949, 160 pp.)**

In summary, he shows that for advanced economies, such as ours, ever increasing consumption or an ever growing economy, adds little to human happiness, and may even impede it.

More urgently, it is now clear that the ecosystems that sustain our economies are collapsing under the impacts of our rising consumption, and indeed our waste, as the Council has already found.

Unless we can radically lower the environmental impact of economic activity – and there is no evidence to suggest that we can – we will have to devise a path to prosperity that does not rely on continued growth.

Tim Jackson provides a credible vision of how our society can flourish within the limits of finite planet.

Hence the most urgent task for the Council is to fulfil this vision – and not just the empty words of “grow the economy”.

Climate & Biodiversity Emergencies

The climate and biodiversity emergencies are the major priority.

If we do not take action to actually reduce our immense impact on the climate and biodiversity, then life will be extremely uncomfortable for us all. For example regular temperatures of 40 C are now likely, and similarly our damaged biodiversity will be unable to continue to provide all the services it provides of absorbing pollution, rain, temperature modulation etc., making life even more difficult.

Climate Change

The Government, County Council and Canterbury City Council are committed to becoming Carbon Zero, with national legislation and national and local action plans to implement climate change legislation.

So any change to land must give consideration to the significant carbon sequestration and carbon absorption of the land and its vegetation, and any Proposals for work on the land or which will affect land, must be assessed for climate change impacts or benefits.

Natural ecosystems suck up 60% of our carbon emissions, so restoring nature is our primary defence against climate change.

CPRE reports that Hedges in Great Britain store 13 million tonnes of Carbon (47 Mt CO₂).

It is estimated that a site could be absorbing and sequestering 8 tonnes of carbon dioxide per hectare per year, .

This contrasts with the average emissions in the South East of 4.7 tonnes per person per year (2018 data).

So this shows the vital role that natural areas site currently play in reducing climate change.

Revised National Planning Policy Framework (NPPF)

The government's NPPF was revised on 20th July, 2021, and it places much emphasis on reducing carbon, improving biodiversity as well as meeting the UN's 17 Global Goals for Sustainable Development.

My recommendations for changes fall within that new guidance.

Assessment of the Carbon Benefits of Habitats

Natural England, the national body responsible for England's natural environment, has assessed the great value of that environment and how to use Nature-based solutions to protect and enhance that environment.

The summary below shows the wide-ranging importance of taking a holistic approach to the Local Plan, and the detailed document should be used in the next stage of drafting the Local Plan, while this summary shows the main areas of importance is setting the Plan's priorities.

Nature-based solutions

Climate change and biodiversity loss are inextricably linked and need to be addressed in an integrated way.

Nature-based solutions (NbS) is a broad concept which describes how protecting, restoring and managing natural systems can solve societal problems. A widely used definition is that of the International Union for the Conservation of Nature (IUCN): nature-based solutions are “actions to protect, sustainably manage, and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits”. (page iv)

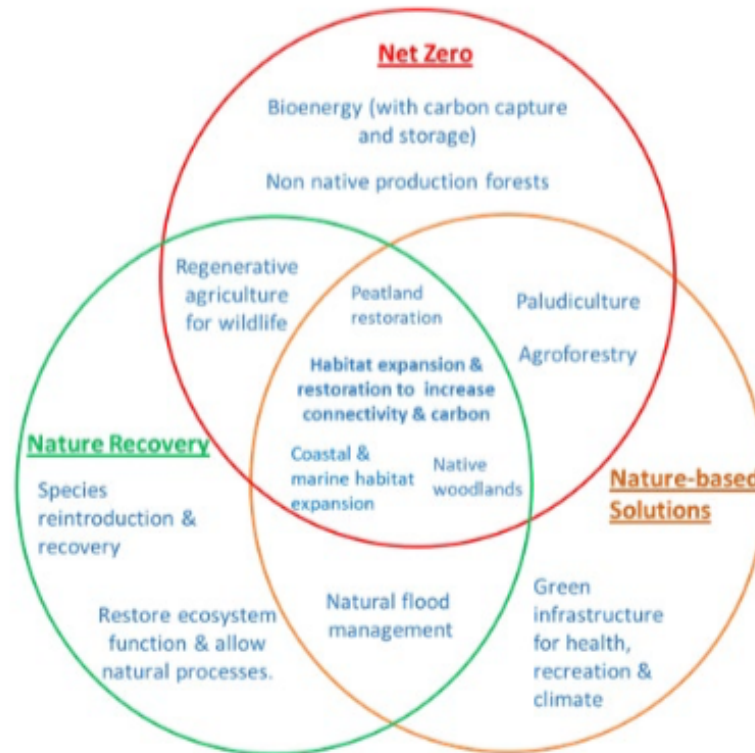


Figure 1 Examples of relationships between nature-based solutions, nature recovery and net zero

The most effective NbS for climate change mitigation are often those based on habitat restoration and creation (figure 1), as land use change from a degraded habitat to a functioning, resilient one offers the greatest potential in capturing carbon dioxide from the atmosphere. **The protection of existing habitats is also vital, as their biodiversity and carbon stocks may have taken centuries to millennia to become established and are quickly lost if disturbed.**

The largest carbon sequestration rates amongst semi-natural habitats are in woodlands. Native broadleaved woodlands are reliable carbon sinks that continue to take up carbon over centuries with benefits for biodiversity and other ecosystem services (page v).

Timber production can have benefits for climate change mitigation where wood products store carbon for the long-term, or replace more fossil fuel intensive materials and fuels; and can be produced in ways that support biodiversity, such as using native tree species and management of rides and forest edges. However, non-native species of tree generally support lower levels of biodiversity.

Hedgerows, orchards and other trees outside woodland can also sequester and store carbon as well as providing other benefits within an agricultural and biodiversity context (page v).

Page vi has carbon stored data & page vii has carbon flux data.

Opportunities for NbS to deliver for climate change mitigation

NbS is a key concept for tackling the climate and biodiversity crises. A joined-up approach that addresses both climate change and biodiversity decline together is the only realistic way of meeting the multiple demands on our environment (page vii).

The success of NbS for climate is dependent on location. It is important to be rigorous in assessing how much difference any change in land use or management will make to biodiversity and climate in a particular place. If NbS is to make a significant contribution to achieving net zero by 2050, implementation needs to increase significantly and immediately (page vii).

Nature-based solutions can deliver for climate adaptation, as well as mitigation, and future change must be considered. Nature-based solutions should be designed, managed and evaluated to ensure that they will continue to be effective in a future which is warmer and subject to changes in rainfall, including more extreme events such as droughts and floods (page viii).

key principles (page viii)

Create new native broadleaved woodlands. Native woodland is an effective carbon sink and over much of England can deliver comparable carbon uptake to non-native species and provide more benefits for biodiversity. Growing the right trees in the right place is however critical to maximise these benefits.

Protect existing semi-natural habitats. Most of England has been intensively managed for a long time and semi-natural habitats, of all types, are rare fragments containing many of our native species that are not found elsewhere. Many of these, including grasslands and heathlands, also store appreciable amounts of carbon in their vegetation, undisturbed soils and sediments.

Integrate NbS for climate into landscapes which are primarily devoted to agriculture or production forestry. To meet the scale of change required in greenhouse gas emissions, there is a need to take land out of agriculture, particularly for woodland creation and peatland restoration. Actions such as hedgerow planting, good soil management and innovative agricultural approaches, such as paludiculture, can also contribute whilst enabling agricultural production to continue. Within production forest biodiversity can be supported by including broadleaved trees and appropriate management of forest rides and edges.

Ensure mitigation and adaptation to climate change are planned together. This is important to ensure the durability of solutions for carbon sequestration and storage and to promote synergies rather than conflicts between objectives. We should look for multifunctional and integrated opportunities when planning our responses to the climate and biodiversity crises.

Figure 1.1 (page 1) shows the carbon cycle with the movements and storage of carbon. Notably, Soils store between 1500 – 2400 GtC, compared to 450 – 650GtC stored in vegetation, in other words three as much in Soils than vegetation. Land Use Change E_{LUC} emits 1.5 GtC/year, and Land Uptake S_{LAND} storing 3.2 GtC/year, which highlights the significance of changing land use, which halves the benefit of carbon absorption in land.

Figure 1.2 (page 2) shows that habitats generally store more carbon over the centuries until equilibrium is reached, after which no more carbon is stored. Woodlands reach equilibrium long after that is reached by grassland and other habitats in succession, and woodlands also store far more carbon.

Figure 1.3 (page 2) shows that disturbance, such as tree felling, dramatically reduces the carbon stored in the soils and vegetation, and the carbon stored may then increase back to original level if habitat is restored to original, or if woodland then becomes grassland or arable it decreases to much lower value.

Hence this means that land management is of vital importance in reducing carbon emissions, and:

“agriculture, forestry and other land use (AFOLU) are responsible for 23 per cent of global greenhouse gas emissions largely due to land use change practices such as deforestation and agriculture (IPCC 2019).

In the UK, soils represent the largest terrestrial carbon stock, holding approximately 95 per cent of land carbon. Therefore, land use changes that disturb the stability or function of soils pose the biggest threat to the UK’s carbon stores. On the other hand, positive land use change by restoring ecosystems and their functional processes could deliver a long-term carbon gain.” (page 3)

Importantly, and legally, achieving Zero carbon by 2050 is a statutory requirement of the Climate Change Act 2008, so: “will require major changes in the way we manage the natural environment, alongside decarbonisation in the energy, transport and other sectors.” (page 3-4).

The challenge is emphasised because: “Reducing emissions from degraded ecosystems and promoting carbon uptake, for example through planting trees, are important elements of achieving zero carbon.” (page 4)

Unfortunately the national situation has been made worse because degraded peatlands are now found to increase 3.5% to national emissions, and “the ageing profile of woodlands and decline in planting rates is weakening the strength of forests to sequester CO₂” (page 4).

Although “The destruction and degradation of natural habitats has resulted in a direct loss of carbon stored within them” it is fortunate that “improved land stewardship is currently the most mature and cost-effective carbon dioxide removal method. The conservation and restoration of natural systems can reduce net emissions at the same time as supporting and restoring biodiversity.” (page 5).

“The reliance of ecosystem services, such as climate regulation, on biodiversity means that, for nature to substantially contribute to mitigation approaches will require an expansion in land cover of healthy, semi-natural habitats (Roberts and others 2020). The large carbon stocks held in old, undisturbed habitats require continued protection, as alteration in management or plant communities can release significant quantities of carbon back to the atmosphere (Sozanska-Stanton and others 2016). Protection of established habitats also provides the most benefits for biodiversity.” (page 6).

All this means that the city Council must “support the embedding of climate change mitigation and nature-based solutions into development of environmental and land management policy.” (page 8).

Biodiversity

For biodiversity, the UN's Food and Agriculture Organisation has recently produced:

FAO, ITPS, GSBI, SCBD and EC. 2020. *State of knowledge of soil biodiversity – Status, challenges and potentialities, Summary for policy makers*. Rome, FAO. <https://doi.org/10.4060/cb1929en>

This has a Key Messages section which explains soil biodiversity and its importance for us and the world, and like the Natural England document above, shows key aspects which are vital for the development of the Local Plan.

Government Policy and Guidance

The National Planning Policy Guidance (PPG) was upgraded last year (2020), and now imposes a duty on Councils to conserve biodiversity in all its activities.

The Planning Policy Guidance highlights that Green infrastructure is a natural capital asset that provides multiple benefits, at a range of scales. For communities, these benefits can include enhanced wellbeing, outdoor recreation and access, enhanced biodiversity and landscapes, food and energy production, urban cooling, and the management of flood risk. These benefits are also known as ecosystem services (Paragraph: 005 Reference ID: 8-005-20190721 Revision date: 21 07 2019).

These benefits need to be protected and enhanced.

The PPG also refers to the need for sustainable management and maintenance if it is to continue to provide these benefits.

In the new Environment Bill: “Biodiversity net gain will be mandated in the planning system, ensuring that developments such as new homes are not built at the expense of nature, and creating thriving natural spaces for communities. These will require a 10% net improvement in biodiversity, guaranteeing that richer natural spaces will come with new developments.”

(<https://hansard.parliament.uk/lords/2021-06-07/debates/6E1FE4FF-613D-44D6-8668-C8468E87D916/EnvironmentBill>)

However the Environmental Audit Committee's recent Report on the Government Plans, concludes:

“These policies are a welcome start, but in their current form do not represent the transformative change required to bend the curve of biodiversity loss. As a result, nature will continue to decline and the next generation will inherit a more depleted, damaged natural environment. Action needs to be stepped up in scale, ambition, pace, and detail.”

See: ANNEX Environmental Audit Committee Report Summary

(<https://publications.parliament.uk/pa/cm5802/cmselect/cmenvaud/136/136-summary.html#heading-0>)

This means that even more needs to be done to protect and improve our precious environment.

So the Revised Vision in order of Priority should be:

Climate Change, Biodiversity, Culture and the Environment

The District will have minimal climate change emissions, with a large and expanding biodiversity to provide an attractive environment for its varied historical and cultural facilities.

Healthy communities and Quality of Life

The District will provide better Health and Quality of Life of all our residents and visitors by ensuring all our policies, our extensive assets and our local enterprises and public bodies work together to deliver our commitment to sustainability and the environment.

Note: this version retains all the organisations, such as universities, hospitals etc., in the Draft, but is wider ranging and more inclusive.

Improved Connectivity

The District will provide good connectivity to open spaces and services for everyone as well as easily accessible footways, cycleways and public transport, together with improved digital services to all buildings.

Instead of 'Growth' the vision needs to say where development should take place. Thus:

Developments and Improved Facilities

The District will be a leading national and international green city.

The District will have new or improved developments and facilities carefully located to minimise impacts while enabling all the above. A range of Housing will be available, with priority for those in need of social housing.

Strategic Objectives

In view of above the sequence needs to be changed so that climate change and biodiversity are emphasised first, and wording amended to show that the district will actually be taking major action to greatly reduce climate change and enhance biodiversity.

So the revised order becomes:

1 Adapt to and **reduce the impacts of climate change** by making sure new development is highly energy efficient and encourages low carbon lifestyles

This includes no mention of renewable energy, and incorporating Photovoltaic panels on all buildings needs to be added so that Objective is revised to:

Ensure that whole District becomes Zero Carbon by 2040, while adapting to and **reducing the impacts of climate change** by **requiring all developments incorporate photovoltaic panels and use low carbon energy and are** highly energy efficient and encourage low carbon lifestyles

2 **Protect and enhance our rich environment**, creating spaces, supporting wildlife and biodiversity and improving the health and wellbeing of our communities

Again, this needs slight re-wording to emphasise **enhancement** as well as protection, revise to:

Enhance our rich environment, creating spaces, **increasing** wildlife and biodiversity, **and improving protection together with** improving the health and wellbeing of our communities

3 Provide **high quality affordable housing** for everyone as part of **mixed, sustainable communities:**

This needs to prioritise social housing - affordable housing is not affordable for most people.

Hence revise to:

“Provide **high quality social and other housing** for everyone as part of **mixed, sustainable communities**”

4 Make sure housing is of **high quality design, low carbon and energy efficient**, with access to **community facilities and open space**

'Make sure' is insufficient – the Council can **require** that all development (not just housing) meets this standard. Hence revise to:

“Require all buildings and developments are **high quality design, low carbon and energy efficient**, with access to **community facilities and open space**”

5 Create a **thriving economy** with a wide range of jobs, including more **high paid jobs**, to support **increased opportunities** for everyone

The reference to **high paid jobs** is unnecessary in itself, because creating a “wide range of jobs” means that all pay grades should benefit. In addition special emphasis is needed on those currently unemployed or homeless.

Hence should revise to:

“Create a **thriving economy** with a wide range of jobs to support **increased opportunities** for everyone, especially **the unemployed or homeless**.”

6 Support the **growth and development of our universities** as a centre of **innovation and learning excellence**, which will help create **business start ups and skilled jobs**

7 Create a transport network with a focus on **low carbon travel** to improve air quality and people’s health, while making sure there’s **excellent access to city and town centres** on foot, cycle and by public transport, including **intelligent transport systems**

The one thing missing from this is: “**reducing the need to travel**”. Although the next objective includes: “**while creating a local transport network which means most residents can access their day-to-day needs within 15 minutes through healthy, environmentally friendly journeys**”, this should be in this objective, so that it is not diluted by longer distance travel issues. **This is a key aspect of planning communities so that all regular needs can be met near where people live.**

Hence this needs to be revised to:

Create a **local** transport network with a focus on **reducing the need to travel as well as low carbon travel**, to improve air quality and people’s health, while making sure there’s **excellent access to city and town centres** on foot, cycle and by public transport, including **intelligent transport systems, so that most residents can access their day-to-day needs within 15 minutes through healthy, environmentally friendly journeys**

8 Take advantage of, and improve, our links to and from **London and the continent**, while creating a local transport network which means most residents can access their **day-to-day needs within 15 minutes** through **healthy, environmentally friendly journeys**

As No 5 has the local transport aspects this also needs to emphasise the low carbon aspects, and especially avoid supporting a London-centric aspect, as that will not help Canterbury.

Hence revise to:

Take advantage of, and improve, our low carbon links to and from **areas outside the district and the continent**,

9 Support the **sustainable growth of our rural communities** with affordable housing, community facilities and transport, and take advantage of opportunities to grow the rural economy

Again needs **social housing** so revise to:

Support the **sustainable growth of our rural communities** with **social and other** housing, community facilities and transport, and take advantage of opportunities to grow the rural economy

Capitalise on our **rich and distinctive heritage and culture**, enhancing character, sense of place and quality of life, supporting tourism and the local economy for our residents, visitors and businesses

Exploit the **delivery of infrastructure** needed to support growth to maximise the benefits for existing residents and businesses, and ensure the critical infrastructure is delivered at the right time to support development

Create **accessible vibrant town centres, maximising digital connectivity**, for residents, visitors and businesses to shop, stay and enjoy their leisure time

Additional Issues

The following aspects need to be considered in developing the Options because these aspects, as well as the revisions above will affect the suitability or acceptability of the Options.

Local Plans and Policies need to provide more action on climate change, wildlife, ecology and biodiversity.

For example, Plans and Policies should require

1 Protection of all trees and hedges

2 Strict adherence to the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012), which details the steps that should be taken to ensure that trees are appropriately and successfully retained when a development takes place.

3 All site proposals include requirements to add additional trees and hedges.

If any trees or hedges are being removed or damaged by the proposals, then must be replaced by at least double the number of trees or length of hedge, to compensate for loss of stored carbon.

The National Planning Policy Framework, Paragraph 170 states that “Planning policies and decisions should contribute to and enhance the natural and local environment by: a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); [...] d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”.

The National Planning Policy Framework requires (Paragraph 174 et seq.) that the Council's planning policies and decisions should contribute to and enhance the natural and local environment.

So the Council needs to be more proactive in protecting *and* improving the environment.

The Climate Change Committee recommend that UK aims to deliver 19% woodland cover as a key part of the country’s response to the climate and ecological emergency, and target of Zero carbon emissions by 2050.

Kent County Council (KCC) recognised the [climate emergency](#) in May 2019 and committed, through the [Energy and Low Emissions Strategy](#), to set a target of Zero Carbon by 2050, and create an action plan for the county.

In October 2019 we also committed to plant a tree for every person in Kent, which totals just over 1.5 million (Priority 8.3).

KCC's tree target also commits all Kent Local Authorities to participate in this target.

Growth options

This title is, of course, wrong as already highlighted because 'Growth' per se, is meaningless.

So better title is “Options for delivering Vision and Objectives”

As above evidence shows any development is severely limited by the need to reduce climate emissions and increase biodiversity.

So all the options proposing new roads are unacceptable on these grounds and also because transport planners have long agreed that new roads induce more traffic.

The planet is finite so creating, for example, enough electric vehicles just to replace existing ones is unachievable. For example batteries require enormous resources, especially scarce ones, which will run out but also mining causes huge damage.

This is especially true if electric aircraft were to take off in a serious way, as many hope.

So traffic needs reducing, as required by the draft objectives even without my improvements.

This also means that housing must be minimised, so if Government insists on 9,000 new dwellings, then that is the maximum the district can support.

So none of the higher housing options are acceptable.

Likewise, the “Freestanding settlement” is unacceptable.