

## Comment

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<b>Comment by</b>	Cllr. Bryony Holroyd (1173970)
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<b>Nature of response</b>	
<b>Do you agree with this content?</b>	Object

### Please tell us why

- The plan isn't carbon audited to show how it meets the NPPF requirement to meet the aims of the Climate Change Act 2008 - it won't achieve radical reductions in carbon emissions in line with the climate change act as is required by national policy and legislation, and is unsound and legally challengeable as a result.
- Climate mitigation policies for new build development are just supportive policies encouraging "high levels" of energy efficiency. They don't objectively measure carbon emissions from new development, and aren't going to achieve much. There's no requirement for on-site renewable energy generation.
- There is a district heating policy – Development should be prioritised in locations which can be served by this.
- There appear to be no climate adaptation policies, as required by national policy.
- Whilst the plan professes to prioritise cycling and walking, the infrastructure spending is strongly slanted towards new road construction, with barely any infrastructure spending for cycling / walking. We need to see what the projected infrastructure investment costs for new roads and walking and cycling are, and whether these match the stated priorities as I don't think they do (ineffective). How

are the road investments are compatible with national and covenant of Mayors carbon emission reduction commitments?

- Discussion of the cycling network is that it's already pretty good in Darlington itself. This is not really true - it's not safe enough to encourage kids and families to use it (a good useable cycle network should be suitable for unsupervised use by those of ages 8-88). It's painted lines on the road with no physical separation or painted lines on pavements not designed for cyclists. There are very few safe segregated routes on main routes, or off-road, and these are not prioritised over motor traffic.

- There's not much policy to encourage and enable renewable energy - other authorities have created maps for different wind, solar and heat density resources - or requirement to install it on either new domestic properties or new commercial / industrial properties / sites.

**If you have any supporting documentation you feel is relevant, please upload it here.** [CSE review of Sustainability Appraisal & Local Plan](#)



# Rapid Review of Darlington Local Plan

11<sup>th</sup> August 2020  
Daniel Stone



CSE have undertaken a rapid desk based review of the Darlington Local Plan publication Draft Aug 20 (Reg. 19)<sup>1</sup>, looking primarily at the climate change adaptation and mitigation policies within it. We have also had an opportunity to look at your sustainability appraisal.

We have set our comments out by the policy and chapter headings in the plan, or according to our own titles where additional commentary is necessary. Where we have suggested changes to policy text (boxed in blue), suggested additions are shown **underlined in bold italics**, and suggested deletions are shown ~~struck through~~. Example policies which you might want to consider are shown boxed in orange. They are the best policies we have come across, but we haven't yet been able to do a thorough review capturing all the best practice policy approaches, and therefore other alternatives may be available.

We have commented in confidence from the perspective of a "critical friend" and will not release these comments or make them public without your permission.

The comments are made on the basis of the planning system as it currently exists. The Planning for the future consultation<sup>2</sup> has been published during the time that these comments have been written. The scope for local plans to include climate change mitigation and adaptation policies is not yet clear under this revised proposed system.

## Approach to Carbon Accounting / Auditing and soundness of plan

The Planning and compulsory Purchase Act (section 19) and the NPPF (Paragraph 148) require Local Plans to carbon audited, and to achieve radical carbon emission reductions in line with the Climate Change Act (upgraded to a -100% requirement by 2050). Paragraphs 1 and 7 of the online Planning Practice Guidance (PPG) resource, published by the Ministry of Housing, Communities and Local Government provides further detailed interpretation of the NPPF requirements. The details are summarised in a legal briefing<sup>3</sup> from TCPA, RTPI and Client Earth.

We agree with the analysis from Client Earth and the Town and Country Planning Association that Local Plans are required to demonstrate how their policies are in line with the legally binding carbon emission reduction targets in the Climate Change Act. Local Plans are to:

- Take into account baseline emissions
- Robustly evaluate future emissions, considering different emission sources, taking into account requirements set in national legislation, and a range of development scenarios
- Adopt proactive strategies to mitigate carbon emissions in line with the Climate Change Act, a 100% reduction by 2050.

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<sup>1</sup>

[https://darlington.objective.co.uk/portal/pp/pub\\_draft\\_reg\\_19/local\\_plan\\_reg\\_19?pointId=d6229019e541#section-d6229019e541](https://darlington.objective.co.uk/portal/pp/pub_draft_reg_19/local_plan_reg_19?pointId=d6229019e541#section-d6229019e541)

<sup>2</sup> <https://www.gov.uk/government/consultations/planning-for-the-future>

<sup>3</sup> [www.tcpa.org.uk/Handlers/Download.ashx?IDMF=4927d472-a9f0-4281-a6af-463ddc642201](http://www.tcpa.org.uk/Handlers/Download.ashx?IDMF=4927d472-a9f0-4281-a6af-463ddc642201).

The plan does not comply with these requirements and we do not think that it is not legally sound in terms of its climate change mitigation policies and duties. As written it is not fully aligned to help you to deliver on your climate emergency declaration.

The evidence base should provide an overall carbon budget for the district to 2050, consistent with the updated Climate Change Act. It should show baseline emissions and the impact of development and mitigating policies on this emission curve. The policies should aim to secure radical carbon reductions in line with a trajectory for the authority area that is consistent with the UK achieving full carbon neutrality by 2050, and in the short term should test the policy options available to achieve the highest level of ambition possible to meet this goal. To the extent possible, all new development should be zero carbon given that the country’s net zero target must be met in the next 30 years.

### Evidence base - carbon baselines and budgets

The Tyndall Institute provides a free tool to provide a science-based carbon budget by local authority area, based on the Paris Climate Accord commitments:

<https://carbonbudget.manchester.ac.uk/reports/>

Some authorities have used the SCATTER tool (Setting City Area Targets and Trajectories for Emission Reduction) which support local authorities and city regions to standardise their greenhouse gas reporting and set targets in line with the Paris Climate Agreement.

<https://scattercities.com/>

### Sustainability Appraisal

The sustainability appraisal (S.A) shares the same fault as the local plan, in that it assesses the plan against the general aspiration (para 1.9) “to reduce greenhouse gas emissions” rather than the objective requirement set out in legislation and guidance for the local plan to achieve radical carbon reductions in line with the 2008 Climate Change Act, which now commits the UK to achieving net zero emissions by 2050. This has consequences for how the S.A then assesses the sustainability of the policies which follow.

The approach to assessing the proposed settlement hierarchy seems flawed and partial. The three options for distributing development are assessed against criteria including the potential reducing greenhouse gas emissions, with the assessment that all options would have a neutral effect. This doesn’t make sense, as allowing development to go ahead in settlements with few or no services will inevitably increase transport emissions compared with concentrating development in locations that are accessible to services by active travel.

POLICY SH 1: SETTLEMENT HIERARCHY	Significance of Effect		
	Option A	Option B	Option C
Sustainability Objective			
8. Reduce greenhouse gas emissions and increase the Borough’s resilience to climate change.	0	0	0

The discussion below contains only passing discussion of the impact on emissions. It discusses unsustainable development without really defining what this means.

POLICY SH 1: SETTLEMENT HIERARCHY	
<b>Option A Summary:</b>	Focusing growth purely on the urban area of Darlington and service villages could have potential negative impacts on the medium sized rural villages as new development would be discouraged in these settlements. As such the needs of more rural communities may not be met, such as meeting
	local housing needs and supporting services and facilities in these settlements. There could also be positive social and economic effects if development was directed towards the more sustainable main urban area and service villages.
<b>Option B Summary:</b>	Focusing the distribution of development on the urban area, service villages and medium sized rural villages with settlement limits would have potential positive effects in terms of the location of new development. Development would be focused in the main urban area whilst also promoting sustainable development in a wider range of large and medium sized rural settlements, helping to support rural communities. Policies relating to development in the countryside would come into play for the smaller villages and hamlets (those without settlement limits) preventing unsustainable development.
<b>Option C Summary:</b>	Focusing the distribution of development across the urban area, service villages and all rural villages/hamlets could result in unsustainable development in the countryside. This approach would be likely to place increasing pressure on development in smaller rural settlements which has the potential to result in negative environmental and social effects.
<b>Preferred policy option:</b>	<b>Option B</b> – would provide the most positive potential effects and is considered the most appropriate approach for the Borough. Development would be focused on the main urban area of Darlington but also allowing an amount of growth in the service villages and medium sized villages (those with settlement limits) to support and enhance the vitality of rural communities.

The same approach is adopted throughout the S.A. It doesn't really draw out the real implications of any of your policy choices in terms of their impact on emissions within the district, or take into account your climate emergency declaration. Further detailed analysis would be required to understand whether it presents a complete picture of the implications of your policy choices in terms of resilience to climate impacts.

## Approach to reducing carbon emissions

Whilst your local plan does discuss tackling and adapting to climate change it should be strengthened significantly to reflect recent developments. In summer 2019 the Climate Change Act was upgraded to commit the UK to net zero emissions by 2050. The 2018 IPCC (Intergovernmental Panel on Climate Change) report<sup>4</sup> released in October 2018 revealed the true dangers of a global temperature rise of 2°C, which are far worse than we thought: This report states:

*Beyond a 1.5°C rise the risks of drought, floods, extreme heat and poverty for hundreds of millions of people are predicted to significantly increase.*

The net zero commitment demands wholesale changes in how we plan our society, as summarised in the IPCC report:

<sup>4</sup> Global warming of 1.5°C – Summary for Policy Makers – Intergovernmental Panel on Climate change  
[www.ipcc.ch/site/assets/uploads/sites/2/2018/07/SR15\\_SPM\\_version\\_stand\\_alone\\_LR.pdf](http://www.ipcc.ch/site/assets/uploads/sites/2/2018/07/SR15_SPM_version_stand_alone_LR.pdf)

*“The challenge of avoiding catastrophic climate breakdown requires rapid, far-reaching and unprecedented changes in all aspects of society”*

The IPCC report underlines the need for more radical and urgent carbon reductions and advises that to limit us to a 1.5°C global temperature increase, greenhouse gas emissions have to be reduced by 45% from 2010 levels by 2030, and we need to reach carbon neutrality (reduce emissions by 100%) by 2050.

The IPCC report comments:

*“The challenge of avoiding catastrophic climate breakdown requires rapid, far-reaching and unprecedented changes in all aspects of society”*

The IPCC report, the Climate Change Act and the legal duties on local planning authorities around climate change mitigation and adaptation mean that climate change needs to take a more central role within Local Plans, and Local Plans need to take a more rigorous approach to bringing forward development which is consistent with and moves very quickly towards a zero carbon world, with radical changes set in motion well within the lifetime of your plan. The gradualist approach set out in some parts of the plan is not equal to the scale and rate of change required and will not help deliver on your climate emergency declaration. The challenge to entirely decarbonise our society also demands that all other policies be tested against this objective.

## Chapter 3 - Vision and Objectives

The Vision and Objectives within the plan should be updated to incorporate reference to the updates carbon reduction commitments in the climate change. Objective 6 in particular understates the duties on local planning authorities in respect of carbon reduction, discussing carbon reduction in general, aspirational terms rather than in the concrete, objective terms required by national legislation and policy and your own climate emergency declaration.

**6. Responding to Climate Change and Reducing Energy Consumption – support the continued move towards a low carbon community by encouraging efficient use of resources, good design and well located development, whilst increasing resilience to impacts from climate change.**

In order to achieve this Aim, our Objectives are:

- a. Manage flood risk from all sources.
- b. Maximise opportunities to generate and use renewable energy in all developments.
- c. Actively encourage energy and water efficient design in all new and existing housing, industrial and commercial developments.
- d. Locate development in areas not susceptible to flooding and encourage flood resilient design where necessary.

The NPPF (para 149 & 149.) advises that plans should take a proactive approach to mitigating and adapting to climate change, shaping places in ways that contribute to radical reductions in greenhouse gas emissions *in line with the objectives and provisions of the Climate Change Act 2008*. Given that the climate change act commits the UK to achieving net zero carbon emissions by 2050, the implications of this for planning within your district are extremely significant and are not captured in this objective.

Please see the alternative wording below from the Wirral Local Plan (with my suggested revisions in **bold and underlined**) which refers back to their climate emergency declaration, which you could borrow wording from.

Strategic Objective 4:

Ensure the responsible use of land and natural resources to mitigate and adapt to Climate Change, **consistent with** and ~~promote~~ the transition to a **zero** ~~low~~-carbon Borough by 2041.

- To ensure sustainable resource use by reducing waste, increasing recycling and safeguarding potential minerals reserves.
- To **maximise the development and use of** ~~promote appropriate~~ renewable energy and green technologies.
- To ensure the **long-term** resilience of infrastructure, and ~~vulnerable~~ development **and people** to Climate Change.

The plan should summarise the duties around carbon auditing and budgeting early and prominently within the plan, to set the context for the policies which follow. The commitment to reduce emissions to nothing within 30 years needs to influence all policies, and all policies should be assessed for compliance against this overarching objective.

The Greater Manchester Spatial Framework approaches this well, page 76 – 78 and Policy GM-S 2, though Greater Manchester are committed to carbon neutrality ahead of the 2050 deadline, in line with their Climate Emergency Resolution. This is based on analysis carried out by the Tyndall Institute which considers baseline emissions and sets a carbon budget in line with the Paris Climate Accord, and a 2038 target for carbon neutrality.

[www.research.manchester.ac.uk/portal/files/83000155/Tyndall\\_Quantifying\\_Paris\\_for\\_Manchester\\_Report\\_FINAL\\_PUBLISHED\\_rev1.pdf](http://www.research.manchester.ac.uk/portal/files/83000155/Tyndall_Quantifying_Paris_for_Manchester_Report_FINAL_PUBLISHED_rev1.pdf)

Objective 3 – a well-connected borough should be revised to reflect the government’s ambitions for decarbonising the transport system, set out at a high level in its consultation, decarbonising Transport<sup>5</sup>. Whilst appreciating this document has only emerged recently, it seeks to ensure that “Public transport and active travel will be the natural first choice for our daily activities. We will use our cars less and be able to rely on a convenient, cost-effective and coherent public transport network.” The following is a one page summary from this consultation:



### Accelerating modal shift to public and active transport

- Help make public transport and active travel the natural first choice for daily activities
- Support fewer car trips through a coherent, convenient and cost-effective public network; and explore how we might use cars differently in future
- Encourage cycling and walking for short journeys
- Explore how to best support the behaviour change required



### Decarbonisation of road vehicles

- Support the transition to zero emission road vehicles through:
  - regulatory framework
  - strong consumer base
  - market conditions
  - vehicle supply
  - refuelling and recharging infrastructure
  - energy system readiness
- Maximise benefits through investment in innovative technology development, and development of sustainable supply chains



### Decarbonising how we get our goods

- Consider future demand and changing consumer behaviour for goods
- Transform 'last-mile' deliveries – developing an integrated, clean and sustainable delivery system
- Optimise logistics efficiency and explore innovative digitally-enabled solutions, data sharing and collaborative platforms



### Place-based solutions

- Consider where, how and why emissions occur in specific locations
- Acknowledge a single solution will not be appropriate for every location
- Address emissions at a local level through local management of transport solutions
- Target support for local areas, considering regional diversity and different solutions



### UK as a hub for green transport technology and innovation

- Utilise the UK's world-leading scientists, business leaders and innovators to position the UK as an internationally recognised leader of environmentally sustainable technology and innovation in transport
- Build on expertise in the UK for technology developments and capitalise on near market quick wins



### Reducing carbon in a global economy

- Lead international efforts in transport emissions reduction
- Recognise aviation and maritime are international by nature and require international solutions
- Harness the UK as a global centre of expertise, driving low carbon innovation and global leadership, boosting the UK economy

The wording of bullet A. of objective 3, that “new development is in places where it will be reasonably accessible by public transport, cycling and walking” seems insufficiently ambitious, both in the context of the government’s aspirations and your own climate emergency declaration. It also doesn’t seem to match up to draft policy IN1, which goes much further than this.

Objective d. “To improve the local highway network by managing our strategic highway demands” implies a “predict and provide” approach to managing the highway network, prioritising (vehicular) demands over the cycle and pedestrian environment.

The climate emergency necessitates a change in the approach to transport planning (which may already be well underway within your authority), from primarily *managing the highway network to maintain capacity and minimise congestion* to *managing the transport network to reduce emissions*. The suggested wording changes below are to reflect this, but depending on the culture within your council and staff, work may be needed to ensure this mindset is embedded within the council. The wording of this objective doesn’t seem to be in line either with the government’s consultation or your own climate emergency declaration. Please see the alternative wording below from the Wirral Local Plan (with my suggested revisions to them in **bold and underlined**)

### Strategic Objective 3:

Promote sustainable travel, improve accessibility, connectivity, and ease of movement and direct new development to locations which will provide easiest access to existing centres, high frequency public transport corridors, pedestrian and cycle routes, **and secure the provision of new high quality sustainable transport infrastructure.**

- To enable sustainable travel solutions to **secure radical emission reductions**, improve air quality, support behaviour change and reduce congestion
- **To achieve a significant modal shift to sustainable, active transport modes**, ~~Seek to improve and encourage improvements to~~ public transport, **provision for** walking and cycling, including access for all sections of the community to work, shopping, health, education, leisure, valued environments and other facilities.
- **To embed, convenient, direct and high quality cycle and walking infrastructure provision within all new development.**
- ~~Seek to encourage the implementation of~~ a sustainable and integrated transport strategy making active travel the mode of choice for short journeys.
- To **significantly** reduce reliance on private cars for local journeys ~~where possible~~, through spatial development choices and well-designed layout of communities.
- To support the construction of new road infrastructure only where this is related to achieving sustainable development, environmental enhancement, public transport or road safety benefits **and to manage road capacity, congestion and the allocation of road space in ways that are compatible with the requirements of Climate Change Act (net zero emissions by 2050) and local carbon reduction targets.**
- To support sustainable freight distribution by road, rail and water.
- To safeguard land required for new sustainable transport proposals, including active travel, public transport, road and water facilities, from prejudicial development.

## Policy SH 1 - Settlement Hierarchy (Strategic Policy)

In general we support the approach to distributing development, albeit with reservations about the amount of development allowed in rural villages given their lack of services.

In general looking at the process of allocating development sites, we would encourage that specific consideration be given to whether allocated development sites are large enough

and at a high enough density to make their connection to district heating systems economically viable and technically feasible, and large enough to fund good quality strategic transport infrastructure.

We have a new tool, Thermos<sup>6</sup> which will semi-automate the process of designing and optimising district heating networks for existing neighbourhood. We are also looking at applications of this tool which will enable proposed layouts and masterplans to also be tested for their district heating potential, with the potential to be used by both developers in masterplanning and by local authorities during the assessment of planning applications.

CSE may be able to help here in testing potential strategic allocations for their likely feasibility for district heating. We are in the process of developing a bid for another local authority to help them determine the lowest emission heating approaches suitable for different parts of their district and to develop guidelines to maximise the potential for district heating, and hopefully this work will be applicable in other areas too.

## Policy DC 1 - Sustainable Design principles

**Policy DC 1** View Comments (0) Add Comments

**Sustainable Design Principles and Climate Change (Strategic Policy)**

Good design is required to create attractive and desirable places where people want to live, work and invest. Good design will help to reduce carbon emissions and increase the resilience of developments to the effects of climate change. All development will be required to follow the design principles of the Darlington Design of New Development SPD <sup>(6)</sup> by demonstrating that:

- An analysis of the constraints and opportunities of the site and the function of development has informed the principles of design, including:
  - that the proposal reflects the local environment and creates an individual sense of place with distinctive character;
  - that the detailed design responds positively to the local context, in terms of its scale, form, height, layout, materials, colouring, fenestration and architectural detailing;
  - that the proposal has taken account of the need to safeguard or enhance important views and vistas; and
  - the layout of the development maximises opportunities for natural surveillance.
- The layout, orientation and design of buildings (where these factors are not otherwise constrained) helps to reduce the need for energy consumption, how buildings have been made energy efficient and how measures have been implemented to reduce carbon emissions from development;
- Energy efficiency measures and low carbon technologies will be encouraged, where this does not result in harm to the significance of a heritage asset;
- Non-residential buildings of 1,000 sqm floorspace or more will be required to meet BREEAM 'Very Good' standard;
- The proposal provides suitable and safe vehicular access and suitable servicing and parking arrangements in accordance with Policy IN 4;
- The layout of the proposal, associated green infrastructure, and landscaping has been developed to complement and enhance both the ecological function of the local area and character of the built environment, retaining existing features of interest;
- Any associated landscaping scheme has been developed to enhance both the natural and built environment, retaining existing features of interest;
- Proposals for development on land affected by contamination will be permitted where the applicant can demonstrate that the site is suitable for the proposed use and development will not result in unacceptable risks to human health or the environment.

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<sup>6</sup> This has been released for testing. The introduction can be viewed here: [www.thermos-project.eu/home/](http://www.thermos-project.eu/home/) and the tool can be accessed here: <https://tool.thermos-project.eu/login?redirect-to=/>

## Energy Efficient Design

### 5.1.8

[View Comments \(2\)](#)

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Minimising the impact of and increasing resilience to the effects of climate change is an objective of the Local Plan. Mitigating climate change is about ensuring that the design and construction of new development (external fabric and structure) and the layout of internal and outdoor space minimises carbon emissions. Whereas, increasing resilience to climate change is about ensuring that buildings can still function effectively in the future when the climate is expected to be different. Mitigation and resilience measures are complementary, they should be integrated into the design of new development.

### 5.1.9

[View Comments \(0\)](#)

[Add Comments](#)

The layout, orientation and design of buildings can reduce the need for energy consumption by maximising the potential to secure the benefits energy provides, e.g. heating, lighting and cooling, through alternative means. Design features such as south facing windows can allow for heat and light from the sun to be captured passively, whilst roof overhangs can provide natural shading, thereby reducing the need for cooling systems. Where layout, orientation and design is not constrained or dictated by other factors, i.e. by the character of the surrounding area or the juxtaposition of adjacent buildings, applicants will be required to demonstrate how the design of the development has reduced the need for energy consumption.

### 5.1.10

[View Comments \(3\)](#)

[Add Comments](#)

A significant reduction in carbon emissions can be achieved by ensuring that buildings use energy more efficiently. By incorporating higher standards of insulation and using combined heat and power systems in buildings, occupiers can get more out of each unit of fuel that they use. Energy efficiency is currently promoted by, and measured against, Part L of the Building Regulations. The regulations were amended in 2010 to reflect improved standards for carbon emission reduction that were then set within the Code for Sustainable Homes. Although the Code is being phased out as part of the Government's wider review of housing standards, and while the national target of 'net zero CO2 emissions' from 2016 has been scrapped, energy efficiency standards will continue to be promoted through Building Regulations. These standards will be updated over the coming years to further improve the energy efficiency of new homes on an ongoing basis.

Whilst the policy (clause b) includes helpful sustainable design criteria and does look at carbon emissions reduction from new development, it is not strong or detailed enough. Whilst the policy has moved on from the 2018 iteration of the plan it still includes no objective benchmark for case officers to target or any requirement for developments to predict carbon emissions from new development.

The policy is setting case officers up to fail, and the discussion of building regulations in paragraph 5.1.10 further undermines the intent of the policy. If the policy proposed is adopted as written, the likelihood is that new development will just comply with minimum standards in building regulations, with minimal changes to the layout and orientation of new development.

The policy references the Design of New Development Supplementary Planning Document, but if I'm looking at the right document (dating from 2011) large portions of the SPD have been superseded by subsequent regulatory changes; for instance the Code for Sustainable Homes which it references no longer exists. The policy requires developers to follow the design principles of the Darlington Design of New Development SPD, presumably meaning the energy hierarchy and other principles at page 19 – 21. To avoid confusion, it would be helpful to update the SPD, if only to cross out the sections which you no longer expect developers to comply with.

Policy DC1 would benefit from being sub-divided into several different policies, covering different aspects of climate mitigation and adaptation in greater detail. Our experience suggests that it is not possible to cover these issues in sufficient depth through one policy alone.

The most ambitious and all-encompassing zero carbon policy of which we are aware is that from the draft London Plan, which has now gone through examination without major amendments.

**Example policy – Draft London Plan Policy SI2: Minimising greenhouse gas emissions**

[https://www.london.gov.uk/sites/default/files/draft\\_london\\_plan\\_-\\_showing\\_minor\\_suggested\\_changes\\_july\\_2018.pdf](https://www.london.gov.uk/sites/default/files/draft_london_plan_-_showing_minor_suggested_changes_july_2018.pdf)

'A Major development should be net zero-carbon. This means reducing greenhouse gas emissions in operation, and minimising both annual and peak energy demand in accordance with the following energy hierarchy:

- 1) Be lean: use less energy and manage demand during operation.
- 2) Be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly.
- 3) Be green: maximise opportunities for renewable energy by producing, storing and using renewable energy on-site.
- 3A) be seen: monitor, verify and report on energy performance.

B Major development proposals should include a detailed energy strategy to demonstrate how the zero-carbon target will be met within the framework of the energy hierarchy.

C A minimum on-site reduction of at least 35 per cent beyond Building Regulations is required for major residential development. Residential development should achieve 10 per cent, and non-residential development should achieve 15 per cent through energy efficiency measures. Where it is clearly demonstrated that the zero-carbon target cannot be fully achieved on-site, any shortfall should be provided, in agreement with the borough, either:

- 1) through a cash in lieu contribution to the relevant borough's carbon offset fund, or
- 2) off-site provided that an alternative proposal is identified and delivery is certain.

D Boroughs must establish and administer a carbon offset fund. Offset fund payments must be ring-fenced to implement projects that deliver carbon reductions. The operation of offset funds should be monitored and reported on annually.

DA Major development proposals should calculate and minimise carbon emissions from any other part of the development, including plant or equipment, that are not covered by Building Regulations, i.e. unregulated emissions.

DB Development proposals referable to the Mayor should calculate whole lifecycle carbon emissions through a nationally recognised Whole Life-Cycle Carbon Assessment and demonstrate actions taken to reduce life-cycle carbon emissions.

Different approaches for mitigating carbon emissions from buildings are adopted by different authorities but as in the case of the London Plan typically comprise energy performance / energy efficiency policy, comprising minimum energy efficiency levels beyond building regulations, binding requirements for on-site renewable energy and payments into a carbon offset fund to achieve overall carbon neutrality.

Local authorities will often commission a study to consider the right approach for the building typologies found within their area and land values, such as this example from Currie Brown (other companies are available): [www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/LP20162036/cost\\_of\\_carbon\\_reduction\\_in\\_new\\_buildings\\_report\\_publication\\_version.pdf](http://www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/LP20162036/cost_of_carbon_reduction_in_new_buildings_report_publication_version.pdf).

The conclusions of the Currie and Brown report will feed into policy choice and also plan-wide viability testing. If as we hope, you decide to pursue zero carbon policies within your revised plan, you may need to commission this type of work to support your policies.

The Green Building Council policy playbook includes a number of different examples of energy performance standards adopted by different councils: [www.ukgbc.org/wp-content/uploads/2018/09/The-Policy-Playbook-v.-June-2019-final.pdf](http://www.ukgbc.org/wp-content/uploads/2018/09/The-Policy-Playbook-v.-June-2019-final.pdf)

The government has consulted on revisions to Part L of the Building Regulations<sup>7</sup> which would ratchet up energy efficiency requirements, however the response to the consultation from the majority of commentators was that this would not achieve carbon emission reductions at the rate required to meet our climate commitments and the response to the consultation is awaited. The powers remain in place under the planning and energy act 2008 for you to introduce energy performance standards beyond building regulations and requirements for on-site renewable energy generation.

To complement a technical carbon reduction policy, local authorities will often also adopt a sustainable design and construction policy, capturing and expanding on some of the points made within the bullet point within your policy. This example from Bristol City Council is a good approach:

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[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/835536/Future\\_Homes\\_Standard\\_Consultation\\_Oct\\_2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835536/Future_Homes_Standard_Consultation_Oct_2019.pdf)

## **Draft Policy CCS1: Climate change, sustainable design and construction** Bristol

Local Plan Review - Draft Policies and Development Allocations

<https://www.bristol.gov.uk/documents/20182/34536/Local+Plan+Review+-+Draft+Policies+and+Development+Allocations+-+Web.pdf/2077eef6-c9ae-3582-e921-b5d846762645>

Development ~~should~~ must contribute to both mitigating and adapting to climate change, and to meeting targets to reduce carbon dioxide emissions. Development ~~should~~ must mitigate climate change, working towards zero carbon, through measures including:

- High standards of energy efficiency including optimal levels of thermal insulation, passive ventilation and cooling and passive solar design (Draft Policy CCS2 'Towards zero carbon development');
- The use of renewable and low-carbon energy supply systems and connection to low carbon heat networks (Draft Policy CCS2 'Towards zero carbon development');
- The efficient use of natural resources in new buildings (Draft Policy CCS4 'Resource efficient and low impact construction');
- Forms of development which encourage walking, cycling and the use of public transport instead of journeys by private car.

The design should be sufficiently flexible and adaptable to enable changes of use or layout, and facilitate future refurbishment. Development ~~should~~ must adapt to climate change through measures including:

- Site-level adaptations, relating to site layout, orientation, massing and the use of green infrastructure (Draft Policy CCS3 'Adaptation to a changing climate');
- Building-level adaptations to provide for the comfort of occupiers over the lifetime of the development, taking account of anticipated changes in the local climate (Draft Policy CCS3 'Adaptation to a changing climate').

These measures should be integrated into the design of new development.

New development should demonstrate through Sustainability Statements how it would contribute to mitigating climate change, adapt to its impacts and contribute to meeting targets to reduce carbon dioxide emissions by means of the above measures.

### **Sustainable Design Standards**

For major non-residential development, a BREEAM assessment will be required. A BREEAM "Excellent" rating will be expected.

For residential or mixed use development consisting of more than 200 residential units, a BREEAM for Communities assessment will be required. A BREEAM Communities "Excellent" rating will be sought. There are a number of other sustainable design standards and methods that are available covering a range of development types, including new homes. Where relevant, the voluntary use of methods such as PassivHaus certification to support compliance with Draft Policies CCS1-CCS4 will be encouraged.

### **Water Efficiency**

Development of new homes will be expected to achieve a water efficiency standard of no more than 110 litres per person per day as calculated using the methodology in Building Regulations Approved Document G.

## Policy DC 1 - Sustainable Design principles – clause c – energy efficiency and low carbon technologies in heritage assets

The incorporation of this clause supporting energy efficiency improvements to heritage assets is welcomed, however the policy is worded too negatively, requiring that energy efficiency measures should not have *any* impact on significance. The weight given to the benefits of energy efficiency improvements is insufficient. I've suggested revised wording below, which re-balances this weighting to align with national policy:

C)

Energy efficiency measures and low carbon technologies will be encouraged, where this does not result in **significant** harm to the significance of a heritage asset; **or where the public benefits including climate change mitigation and / or fuel poverty alleviation** ~~to~~ outweigh the harm.

This weighting is in accordance with guidance from Historic England, who are clear that there are multitude of legal duties on local authorities, including in respect of climate change, housing conditions and fuel poverty which are capable of being material considerations in energy retrofitting applications<sup>8</sup>.

This alternative approach from Bath and North East Somerset sets out criteria for support and refers to SPD which define responsible approaches to retrofitting historic and traditional buildings.

### **POLICY CP1: Retrofitting Existing Buildings – Bath and North East Somerset<sup>9</sup>**

Retrofitting measures to existing buildings to improve their energy efficiency and adaptability to climate change and the appropriate incorporation of micro-renewables will be encouraged.

Priority will be given to facilitating carbon reduction through retrofitting at whole street or neighbourhood scales to reduce costs, improve viability and support coordinated programmes of improvement. Masterplanning and 'major development' (as defined in the Town & Country Planning (Development Management Procedure (England) Order 2010) in the District should demonstrate that opportunities for the retention and retrofitting of existing buildings within the site have been included within the scheme. All schemes should consider retrofitting opportunities as part of their design brief and measures to support this will be introduced.

#### **Retrofitting Historic Buildings**

The Council will seek to encourage and enable the sensitive retrofitting of energy efficiency measures and the appropriate use of micro-renewables in historic buildings (including listed

<sup>8</sup> See table 1 of **The Sustainable Use of Energy in Traditional Dwellings: Using legislation and policy to guide decision-making** - [www.shorturl.at/zBMX3](http://www.shorturl.at/zBMX3)

<sup>9</sup> [https://www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/Core-Strategy/core\\_strategy\\_-\\_adopted\\_interactive\\_version.pdf](https://www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/Core-Strategy/core_strategy_-_adopted_interactive_version.pdf)

buildings and buildings of solid wall or traditional construction) and in conservation areas, whilst safeguarding the special characteristics of these heritage assets for the future. Proposals will be considered against national planning policy. The policy will be supported by the Council's Sustainable Construction and Retrofitting Supplementary Planning Document.

## New policy - Climate Change Adaptation

Whilst the supporting text (para 5.1.8) discusses climate adaptation, there appears to be no actual policy within the plan which requires climate adaptation within new development or details what is required. The NPPF (para 17 & 20) requires that local plans must include strategic policies to address each local planning authority's priorities, and defines climate adaptation as a strategic issue. The lack of climate adaptation policy is a major omission which makes the plan unsound.

This policy from Bristol City Council is quite good on high level adaptation measures at site and building level and could be adapted for use in your plan:

**Draft Policy CCS3: Adaptation to a changing climate** - Bristol Local Plan Review - Draft Policies and Development Allocations

<https://www.bristol.gov.uk/documents/20182/34536/Local+Plan+Review+-+Draft+Policies+and+Development+Allocations+-+Web.pdf/2077eef6-c9ae-3582-e921-b5d846762645>

Development will be expected to include site and building-level measures to be resilient to future climate change impacts and provide for the comfort, health, and wellbeing of current and future occupiers and the surrounding environment over the lifetime of the development. These measures should be integral to the layout and design of new development and should take the vulnerability of the building occupants into account.

### **Site-level adaptations**

Development should be designed, through its layout, form and massing and through the use of green/blue infrastructure, to:

Minimise the overheating of buildings;

Provide comfortable external spaces in hot weather; and

Conserve water supplies and minimise the risk and impact of flooding.

The use of green/blue infrastructure should provide multifunctional benefits in relation to climate change adaptation. Where appropriate to its context, this should include the use of living roofs with a sufficient substrate depth to maximise cooling benefits.

### **Building-level adaptations**

Building designs and building-integrated measures should:

- Mitigate the risk of overheating, ensuring that cooling needs are met sustainably (Draft Policy CCS2 'Towards zero carbon development');
- Conserve water supplies;
- and Avoid responses to climate impacts which lead to increases in energy use and carbon dioxide emissions.

### **Adaptation strategy**

Proposals for development should demonstrate through an adaptation strategy how these issues will be addressed. This should include technical modelling and assessment of the risk of overheating in current and future climate change scenarios.

In considering the likely impact of climate change over the lifetime of the development (particularly in relation to overheating), reference should be made to the most recent climate change projections.

## New policy - Overheating

The plan would then benefit from a specific detailed policy in respect of overheating. The NPPF (para 149) makes specific mention that in considering climate change adaptation, local plans should taking into account the risk of overheating from rising temperatures. This approach from the London Plan is quite comprehensive.

### **Policy SI4 Managing heat risk – Draft London Plan**

[https://www.london.gov.uk/sites/default/files/draft\\_london\\_plan\\_-\\_showing\\_minor\\_suggested\\_changes\\_july\\_2018.pdf](https://www.london.gov.uk/sites/default/files/draft_london_plan_-_showing_minor_suggested_changes_july_2018.pdf)

- A. Development proposals should minimise the adverse impacts on the urban heat island through design, layout, orientation, materials and the incorporation of green infrastructure.
- B. Major development proposals should demonstrate through an energy strategy how they will reduce the potential for internal overheating and reliance on air conditioning systems in accordance with the following cooling hierarchy:
  - 1) reduce the amount of heat entering a building through orientation, shading, high albedo materials, fenestration, insulation and the provision of infrastructure
  - 2) minimise internal heat generation through energy efficient design
  - 3) manage the heat within the building through exposed internal thermal mass and high ceilings
  - 4) provide passive ventilation
  - 5) provide mechanical ventilation
  - 6) provide active cooling systems.

## Policy ENV 4 - Green Infrastructure

### Policy ENV 4

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#### Green Infrastructure

Green and blue infrastructure will be protected, and where appropriate, improved and extended to provide a quality, safe and accessible network of well connected, multifunctional open spaces for recreation and play and to enhance visual amenity, biodiversity, landscape and productivity. This will be achieved through:

- A. All new development within, or immediately adjacent to, the buffer of an existing strategic or local green corridor (as defined in Darlington's Green Infrastructure Strategy) should, through good design, seek to conserve and enhance the function, setting, biodiversity, landscape, access and recreational value of the corridor;
- B. All new development that is crossed by a proposed strategic or local green corridor (as defined in Darlington's Green Infrastructure Strategy) should incorporate the green corridor into the sites layout and design;
- C. Capitalising on opportunities to enhance and/or create green links between green infrastructure features;
- D. Working with partners and the community to bring forward priority projects identified in Darlington's Green Infrastructure Strategy;
- E. Providing green infrastructure as part of new residential and non-residential developments in line with Policy ENV 5;
- F. Refusing planning permission for development that would result in the loss of existing green space<sup>(30)</sup> unless it can be demonstrated that the loss of the space would not cause significant harm to the character and appearance of the area or to local biodiversity (in line with Policy ENV 7), and one or more of the following criteria are met:
  - i. There is an identified surplus of that type of green infrastructure in the area and that its loss would not adversely affect the recreational needs of residents;
  - ii. Satisfactory replacement green space is provided in a suitable location, accessible to current users, and at least equivalent in terms of size, usefulness, attractiveness and quality;
  - iii. For development involving the loss of playing fields:
    - the sports facilities on the site would be best retained and enhanced through the development of a small part of the site, and the benefits of the development to sport and recreation clearly outweigh the loss of the land; or
    - the proposal involves the development of an alternative outdoor or indoor sports facility on the site, and the benefits of the development to sport and recreation clearly outweigh the loss of the playing field.

Policy ENV 4 is good. My only suggestion is that it should be amended to also reference the key role of green and blue infrastructure in ameliorating and adapting to the impacts of climate change.

## Policy IN 1 - Delivering a Sustainable Transport Network

### Policy IN 1

[View Comments \(0\)](#)

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#### Delivering a Sustainable Transport Network (Strategic Policy)

The Council is committed to delivering an efficient transport system with a focus on the provision of infrastructure improvements, to encourage greater use of sustainable modes, leading to less reliance on single occupancy vehicle journeys. We will work with partners and developers to make the best use of and improve existing transport infrastructure, where appropriate, using developer contributions to manage the impact of development on the transport network.

To achieve this, the following priorities and actions have been identified:

#### A) For cycling, walking and other sustainable transport:

- i. Protecting existing footpaths, cycle routes and bridleways from development which would impair their functioning for recreation or as alternatives to the private car for accessing employment opportunities, shops and other community facilities;
- ii. Supporting the development of the 'Strategic' priority corridors identified within the Tees Valley Local Cycling and Walking Infrastructure Plan and 'Local Green Corridors' identified in the Darlington Green Infrastructure Strategy and safeguarding their routes from development which would impair their functioning for recreation or as routes for pedestrians and cyclists to access employment opportunities, schools, shops and other community facilities;
- iii. All new developments will provide permeability and connectivity for pedestrians and cyclists to make walking and cycling the first choice for short journeys, including cycle parking provision at new commercial developments, and residential developments should give consideration as to where bicycles will be stored;
- iv. Improving local connections across busy transport corridors which act as a barrier to local access. This will include working with Highways England and Network Rail to ensure the permeability of the A66 and rail networks respectively;
- v. Protecting and enhancing public rights of way as set out in the Rights of Way Improvement Plan, 'Local Green Corridors' identified in the Darlington Green Infrastructure Strategy and links to long distance routepaths such as the Teesdale Way and NCN 14;
- vi. Identification and creation of a route that mirrors the original Stockton and Darlington Railway line as close as practicable in advance of the 2025 bicentenary (See also Policy ENV 2);
- vii. Support the creation of routes that allow residents in outlying villages to access Darlington, particularly by bicycle.

#### B) For rail-based transport network:

- i. Improving inter and sub-regional links to neighbouring centres by ensuring that the Borough is served by high quality rail and bus links;
- ii. Improving connectivity between other forms of sustainable travel and the rail network mainly by providing improved interchange facilities;

##### Specific priorities for the rail network:

- iii. Supporting the improvement of Darlington Station. Informed by a masterplan, work will be undertaken to improve interchange facilities and improvements to the mainline, local and inter-regional routes, potential high speed rail services and sustainable access to the station including bus, walking and cycling.

#### C) For road-based transport network:

- i. Mitigating the impact of development at key junctions, on main arterial routes that form the towns Key Road Network and other important links that contribute to the effective movement of traffic to limit congestion.
- ii. Working with Highways England and adjoining authorities to ensure the safe and efficient operation of the strategic and main road networks;
- iii. Providing new local access roads and key road links to open up the locations for development identified in the Local Plan. Such works will be linked to development phasing and secured by legal agreement.
- iv. Maintaining an efficient bus network by ensuring new developments accommodate the needs of bus users, facilitate new bus routes and stops where appropriate and mitigate the impact of development trips on bus journey times through the provision of bus priority measures.

##### Specific priorities for the road network:

- v. Working with Highways England and TVCA to ensure development within the plan period does not compromise the potential delivery of a Northern Link Road between the A1 and A66 strategic routes.
- vi. Working with Highways England to ensure the existing route of the A1 and A66 is maintained and improved in order to maintain its strategic function and enables residents and businesses to continue to benefit from good links to the strategic road network, with contributions sought from developers to a programme of highway improvements where applicable.
- vii. Provision of key routes for new road and public transport links to support specific developments included in the Local Plan. These include:
  - West Park Garden Village - link road connecting Edward Pease Way to Newton Lane;
  - Stag House Farm - link road connecting Newton Lane to Staindrop Road;
  - Coniscliffe Park - link road connecting A67 to Staindrop Road;
  - Link 86 / Symmetry Park - link road connecting the B6279 Tornado Way to B6280 Yarm Road;
  - Burdon Hill - link road connecting A1150 to B6279 Tornado Way and new link road to Red Hall;
  - Skertingham access roads;
  - Faverdale link road.

Policy IN 1 seems ok, however it only has general objectives for a "more" efficiency transport system with "greater" use of sustainable transport modes and "less" reliance single occupancy vehicle journeys. It could be more explicit about the extent of change needed to align with your climate emergency declaration, which has objective and measureable targets (net 0 emissions by 2050). The

decarbonising Transport<sup>10</sup> consultation shows a more robust approach would align well with the direction of national transport policy.

With other partners, CSE prepared some of the evidence for Bristol City Council's one City Climate Strategy, the council's action plan to getting to net zero by 2030. Our report, Bristol net zero by 2030<sup>11</sup> found that in order to achieve this objective, "a nearly 50% reduction in car miles and 40% reduction in van and lorry miles travelled in the city is necessary, returning them to levels seen in the mid 1980s. This would be driven by a significant effort to shift travel to public transport, cycling, walking (to a modal split more like Amsterdam) and to reduce demand for vehicle use through behaviour and system change, including freight consolidation and use of cargo and e-bikes, car-clubs and 'mobility as a service' initiatives."

Clearly your deadline is 2050 not 2030, and therefore you have longer in which to bring about changes in transport behavior and expectations, but the similar scale of change is the same. The policy doesn't suggest that this degree of change will be needed. I'd suggest that the first sentence is toughened up and tightened up with something similar to the following:

The council is committed to a significant modal shift to sustainable and active transport modes from the private car and a significant reduction in transport emissions, in line with our 2050 net zero commitment.

I'd also suggest that text is included similar to Bristol's policy below, which aim to direct high trip generating uses to the most accessible locations along main public transport corridors. In addition, Bristol's policy goes beyond the provision of infrastructure to talk shaping places and streets for the needs of pedestrians and cyclists.

**Draft Policy T1: Development and transport principles Bristol Local Plan Review - Draft Policies and Development Allocations**

<https://www.bristol.gov.uk/documents/20182/34536/Local+Plan+Review+-+Draft+Policies+and+Development+Allocations+-+Web.pdf/2077eef6-c9ae-3582-e921-b5d846762645>

Development proposals will be located where sustainable travel patterns can be achieved, with more intensive, higher density mixed use development at accessible locations and along or close to main public transport routes. Proposals should minimise the need to travel by private car and maximise opportunities for walking, cycling and public transport.

Developments should be designed and located to ensure the provision of safe, walkable streets and reduce as far as possible the negative impacts of vehicles such as excessive volumes, fumes and noise. Proposals should create places and streets shaped by the needs of pedestrians, cyclists and public transport users and where road traffic and parking is carefully integrated to produce a liveable environment. ...

The plan discusses the prioritization of cycling and walking, but from a quick review, the investment decisions do not seem to reflect this. The plan mentions the following new and improved roads and junctions:

<sup>10</sup>

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/878642/decarbonising-transport-setting-the-challenge.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/878642/decarbonising-transport-setting-the-challenge.pdf)

<sup>11</sup> [https://www.cse.org.uk/downloads/reports-and-publications/policy/insulation-and-heating/energy-justice/renewables/behaviour-change/building-performance/Bristol\\_net\\_zero\\_by\\_2030\\_study\\_CSE\\_26\\_Feb\\_2020.pdf](https://www.cse.org.uk/downloads/reports-and-publications/policy/insulation-and-heating/energy-justice/renewables/behaviour-change/building-performance/Bristol_net_zero_by_2030_study_CSE_26_Feb_2020.pdf)

- Northern link road between A1 and A66
- A66 capacity improvements
- A1(M) Junction 58 improvements
- West Park Garden Village - link road connecting Edward Pease Way to Newton Lane;
- Stag House Farm - link road connecting Newton Lane to Staindrop Road;
- Coniscliffe Park - link road connecting A67 to Staindrop Road;
- Link 66 / Symmetry Park - link road connecting the B6279 Tornado Way to B6280 Yarm Road;
- Burdon Hill - link road connecting A1150 to B6279 Tornado Way and new link road to Red Hall;
- Skertingham access roads;
- Faverdale link.

Cycle and pedestrian infrastructure improvements seem much more modest and hesitant, with the only specific reference being the creation of 2.6 km of cycleway along the A167. What is the forecast infrastructure investment predicted for road building versus that for active travel? The figures are not available, but the extent of road building proposed suggests that the plan will reinforce car dependence rather than bring about the sustainable transport network you aspire to.

Accepting that some of the infrastructure spending arises from regional transport bodies and the Highways Authority and therefore might be outside of your direct control, how does the extent of road building proposed within your plan align with your climate emergency resolution?

I'd hope to see a similar list of segregated cycle links and routes that are to be funded to achieve the modal shift you aspire to.

## Policy IN 2 - Improving Access and Accessibility

**Policy IN 2** [View Comments \(0\)](#) [Add Comments](#)

**Improving Access and Accessibility (Strategic Policy)**

The Council expects development to promote accessibility and permeability by creating places that are well connected with each other and with existing transport networks. The needs of pedestrians, cyclists, bus and rail users, as well as those with specific needs should be prioritised to reduce the need for travel by private vehicle.

Development will be appropriately located to reduce the need to travel by car and the number and length of car trips made to access local amenities.

In order to improve access and accessibility during the plan period:

- a. Proposals for new buildings or the change of use or alteration of existing buildings to which the general public and employees have access will be required to provide suitable access and facilities, particularly for people with mobility issues.
- b. Ensure that all new neighbourhoods are permeable and provide easily accessible, safe walking and cycling routes to important local services such as shops, particularly those selling fresh food, schools, primary health care and leisure opportunities.
- c. All developments should provide safe access to the Borough-wide cycling and walking network including links to the Public Rights of Way network and leisure routes.
- d. All new major development should provide easy and safe access for those who wish to use public transport. Accessibility is based on 80% or more of the site being within 400 metres walking distance of a bus stop served by a regular service.
- e. All new development (excluding extensions) should include secure cycle storage facilities to encourage cycle travel and employment uses should accommodate secure cycle storage and where possible, changing and shower facilities.
- f. Contributions will be sought from all developments, where considered appropriate, for the following sustainable travel measures:
  - Provision of regular bus services and infrastructure in locations that are currently poorly served by public transport;
  - Safer Routes to School;
  - Measures to support the Travel Plan;
  - Public Rights of Way improvements.

The policy wording is fine and improved from the 2018 iteration of the plan, but given the climate crisis and your objectives for modal shift towards sustainable and active transport, I'd recommend that it should be more explicit as to the standard of cycle infrastructure provision required from major development proposals, with wording similar to the following, adapted from Policy T2 of the

[Lambeth Local Plan](#). The new national design standards for cycle infrastructure<sup>12</sup> offers an opportunity to set minimum standards for new cycle infrastructure, and therefore I've added in italics a suggested reference to it.

Development proposals should deliver an improved environment for pedestrians and cyclists, appropriate to the scale and nature of the proposal, with particular regard to their accessibility, safety, convenience and directness of movements, provision of new routes and desire lines, and enhancement of existing routes. Significant major and super-major development proposals will be expected to incorporate and/or fund segregated cycle routes within their layouts, proportionate with the scale of development and level of trip generation. *New cycle infrastructure should be designed in accordance with Local Transport Note 1/20 - Cycle Infrastructure Design, (DfT) July 2020.*

At paragraph 10.6.2, the plan appears somewhat complacent in terms of the cycle network in Darlington and I would ask what proportion of journeys are made by bike in Darlington? I don't know the area, but unless the network in Darlington comprises a comprehensive network of segregated, dutch style cycle lanes and cycling consists of 30+ % of journeys, further improvements will be needed to secure the modal shift you aspire to.

**10.6.2** Darlington has a **well-developed** cycle network including over 40 kilometres of dedicated off road cycle routes based around seven radial routes which start in the town centre and end in various locations on the edge of the urban area. These routes link major employment sites to the main residential areas within the town. The routes are signed using specially approved cycle signs which show typical cycle times rather than distances and are colour coded depending on the route. There is also a circular route which connects the main radial routes to each other and provides a longer leisure route for cyclists. Work in recent years has focussed on connecting rural communities to the urban area of Darlington, and also connecting to County Durham in the north where a significant number of commuter journeys begin or end. The Borough already has an extensive network of cycle routes, but more needs to be done to make cycling a more attractive option compared to the private car. Larger employers, particularly within the urban area, will therefore be encouraged to provide facilities such as secure cycle parking, changing and showering facilities, where practicable.

## Policy IN 4 Parking Provision including Electric Vehicle Charging

### Policy IN 4

[View Comments \(4\)](#)

[Add Comments](#)

#### Parking Provision including Electric Vehicle Charging

In addition to supporting and facilitating the use of sustainable transport modes, the Council will continue to ensure there is an adequate supply of safe, secure and convenient public parking for vehicles within and adjacent to the town centre.

Throughout the Borough, new development (including change of use) will be required to provide safe and secure space for vehicle parking and servicing within the site. Provision should be made for residents, employees, customers, deliveries, visitors and others who may visit the premises, including people with disabilities. The number of spaces provided and the nature of the provision (including provision for motor cycle parking) will have regard to local circumstances and the standards set out in the Tees Valley Highway Design Guide or any successor.

Safe, secure and appropriate cycle parking will be provided within all new developments including shared facilities within flats.

Every new residential property which has a garage or dedicated marked out residential car parking space within its curtilage should include an electrical socket suitable for charging electric vehicles.<sup>(60)</sup> An exemption would be made for residential apartments and residential care homes with communal parking areas.

Non-Residential development creating over 50 parking spaces should provide at least one double electric vehicle charge point (2 spaces). For each additional 50 parking spaces one double charging point should be provided.

Unless detail is provided in supplementary planning guidance, I'd recommend that further detail is included about the standard required for cycle parking:

Cycle storage in all development should be:

- a. fully integrated into proposals from the initial design stage;
- b. directly and conveniently accessed from outside the building;
- c. accessible, attractive, secure and safe to use;
- d. either in individual lockers, or in stores shared by groups of immediate neighbours;
- d. covered, fully ventilated, robustly constructed and easy to maintain; and
- e. inclusive, allowing for different user needs.

Given the growth of electric vehicles and the need to accelerate this to achieve carbon emission reductions, I'd recommend toughening up and tightening up your requirements for EV vehicle charging infrastructure. This is a policy approach being developed by Bath and North east Somerset Council:

**DM16 Emerging policy approach for electric vehicles infrastructure – [Bath and North East Somerset Local Plan 2018](#)**

**Overarching principle**

Require all development proposals to integrate the provision of infrastructure into the design and layout of the development to enable the charging of electric or other Ultra-Low Emission vehicles

**Residential Development:**

- All individual dwellings with one or more dedicated parking spaces or garage to include infrastructure for charging electric vehicles.
- Where off street parking is not provided within a development proposal, the design and layout of the development should incorporate infrastructure to enable the on street charging of electric or other vehicles.
- For residential development with communal off street parking provision, at least 20 % of spaces to have active charging facilities, and passive provision for all remaining parking spaces with the layout of the car park ensuring that all spaces can be easily activated with minimal disruption as demand increases.

**Active/passive charging**

Preferred approach: Require 100% active charging facilities for all residential development (subject to further work).

**Alternative approach:**

At least 20 % of dwellings to have active charging facilities, and the remaining 80% of dwellings to have passive provision.

**Rapid/fast charging points**

High density and/or large scale residential/mixed use developments to provide at least one rapid charging point clustered with a fast charging point (number per car to be determined) and the provision of an electric vehicle car club, and provide dedicated spaces for the car club with active charging facilities.

**Non-residential development:**

- In all non-residential developments providing 1 or more car parking bays, ducting to be installed to enable provision of charging facilities for electric vehicles.
- Where 10 or more car parking bays are provided, at least 20% of those bays to provide active charging facilities for electric vehicles, and passive provision for all remaining bays.
- In non-residential development where provision is made for taxis stopping, the taxi spaces are required to include active charging facilities.

## Policy IN 9 - Renewable and Energy Efficient Infrastructure

### Policy IN 9

[View Comments \(0\)](#)

[Add Comments](#)

#### Renewable Energy Infrastructure (Strategic Policy)

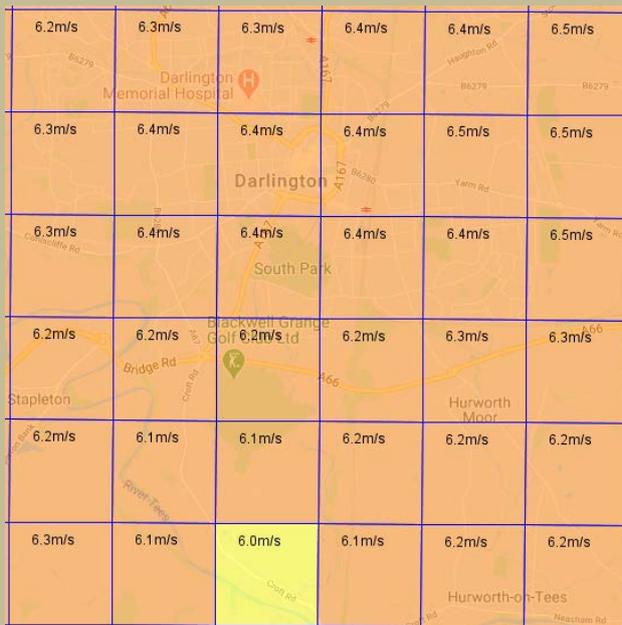
Renewable and low carbon energy development in appropriate locations will be supported. In determining planning applications for such projects significant weight will be given to the achievement of wider social, environmental and economic benefits.

- a. Wind energy development will be granted planning permission if the applicant can demonstrate that the proposal will not have unacceptable impact, either individually or cumulatively upon:
  - i. shadow flicker;
  - ii. visual dominance;
  - iii. protected species and habitats;
  - iv. landscape character and fabric;
  - v. heritage assets;
  - vi. communication links; and
  - vii. aviation and radar.
- b. Solar Power developments will be granted planning permission if the applicant can demonstrate that the following considerations have been taken into account:
  - i. the importance of siting systems in situations where they can collect the most energy from the sun;
  - ii. need for sufficient area of solar modules to produce the required energy output from the system;
  - iii. the colour and appearance of the modules;
  - iv. demonstrate effective use of land by focussing large scale solar farms on previously developed and non agricultural land;
  - v. where a proposal involves agricultural land it has been demonstrated that:
    1. the land has been shown to be poorer quality land in preference to higher quality agricultural land; and
    2. the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around solar arrays;
  - vi. the proposal has adequately mitigated the visual impact on the landscape and the effect of glint and glare on neighbouring uses and aircraft safety.
- c. Hydro Power: Applications for hydropower will need to be accompanied by a detailed Flood Risk Assessment. Early engagement should take place with the local planning authority and the Environment Agency.
- d. District Heating: Required in major development over 300 houses to be enabled for district energy connection unless demonstrated not to be feasible or financially viable to do so.

Where relevant, planning applications will also need to include a satisfactory scheme to restore the site to a quality of at least its original condition once operations have ceased.

Whilst policy IN 9 is supportive of onshore wind, it fails to clearly identify and map suitable areas for onshore wind, meaning that unless neighbourhood plans take forward policies, onshore wind will be undevelopable within your district. CSE have significant experience of supporting neighbourhood planning groups, including groups considering onshore wind policies. Whilst with intensive support, some groups take forward policies, NDP groups are ill-suited to this task and you as the local planning authority would be better placed to pursue policies.

High level mapping of wind speeds from [Rensmart](#) (see below) suggests that the area might have a deployable wind resource (as a rule of thumb, wind speeds of over 5 M/S are potentially developable).



Whilst there might be potential conflicts due to aviation issues with Teeside airport, there appear to be no major landscape designations which would prevent onshore wind from being developed.

We would encourage the policy or the evidence base to go further and identify key developable renewable energy assets, including sites for micro-hydro and solar. The policy could also do more to reference the key role of renewable energy in decarbonising grid electricity and delivering on your climate emergency resolution.

The Climate Change Act means that we must entirely phase out fossil fuel energy entirely within the next 30 years if not sooner. As a result of this and the need to also decarbonise (and therefore electrify) heat and transport, renewable electricity generation must quadruple from current levels to meet these demands. Please see the proposed draft policy below from Stroud Local Plan, which takes such an approach. We would also encourage the inclusion of text or a policy giving specific encouragement to community energy projects.

**Policy ES2 - Renewable or low carbon energy generation - Stroud District Local Plan Review - Draft Plan for Consultation -**

[www.stroud.gov.uk/info/Draft\\_Plan\\_2019.pdf](http://www.stroud.gov.uk/info/Draft_Plan_2019.pdf)

Decentralised renewable and low carbon energy schemes will be supported and encouraged, and will be approved where their impact is, or can be made, acceptable. In determining applications for renewable and low carbon energy, and associated infrastructure, the following issues will be considered:

- a. the contribution of the proposals, in the light of the Council's pledge to be carbon neutral by 2030, to cutting greenhouse gas emissions and decarbonising our energy system.
- b. the impact of the scheme, together with any cumulative issues, on landscape character, visual amenity, water quality and flood risk, heritage significance, recreation, biodiversity and, where appropriate, agricultural land use, aviation and telecommunications.
- c. the impact on users and residents of the local area, including where relevant, shadow flicker, air quality, vibration and noise.
- d. the direct benefits to the area and local community.

Ground-mounted solar energy developments are more likely to be supported in areas identified as suitable in principle as set out on the Policies Map. Outside these areas, applicants will need to provide a clear justification for the suitability of the chosen development site for solar development at the relevant scale.

Proposals for renewable energy proposals within the AONB will be encouraged, however, where development proposals will affect the AONB, the benefits of development must demonstrably outweigh any harm to the designated area or its setting.

Additionally, proposals for wind energy development:

- should be located within a suitable area as indicated on the Policies Map;
- are more likely to be supported if they fall within Landscape Character Areas of lower sensitivity to the relevant development scale;
- may also be suitable in principle if they are located in large new development sites, existing industrial estates or if they are proposed in neighbourhood plans or through community energy schemes; and it can be clearly demonstrated that the scale of the development is appropriate to the site, the benefits of the development outweigh any harm to the local community, and that the development complies with the relevant criteria in Policy ES2.

Where appropriate, provision should be made for the removal of the facilities and reinstatement of the site should it cease to be operational.

Particular support will be given to renewable and low carbon energy generation developments that are led by, or meet the needs of local communities.

We would also suggest the addition of a policy like the following, to help safeguard existing and potential renewable energy resources and allow their exploitation.

***Example policy - Cornwall Local Plan Policy 15: Safeguarding renewable energy***

New development, where appropriate, should show that it does not significantly harm the performance of any existing facility and the potential for optimisation of strategic renewable energy installations, or the availability of their resource (where the operation is dependent on uninterrupted flow of energy to the installation).

## District Heating

Clause d of policy IN 9 requires developments of over 300 houses to be enabled for district heating energy connection. The wording is not particularly clear, and could be interpreted to mean that development should be designed to enable them to be connected to district heating systems in the future, putting the substantial costs of de-carbonising their heat supply to the public purse, rather than requiring developments of this scale to incorporate and be planned around district heating systems now.

The NPPF states (paragraph 151) to help increase the use and supply of renewable and low carbon energy and heat plans should identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems. The wording of the policy should therefore be strengthened to require developers to install district heating from the start where it is feasible and viable. Instead of using a (somewhat arbitrary) size threshold of 300 houses, the evidence base should identify areas where the heat density would support feasible district heating networks, as the basis for defining district heating priority areas.

Policy CP4 from Bath and North East Somerset below is very strong, in that it requires developers to integrate energy planning into master-planning processes, so that the use mix and density of development required to make district heating work influences the form of development proposals coming through at an early stage. As discussed, the potential for district heating should also be considered when initially allocating sites for housing and we are developing a bid for a tool which might help with this.

**POLICY CP4: District Heating -**

[https://www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/Placemaking-Plan/cs\\_pmp\\_vol\\_1\\_district-wide.pdf](https://www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/Placemaking-Plan/cs_pmp_vol_1_district-wide.pdf)

The use of combined heat and power (CHP), and/or combined cooling, heat and power (CCHP) and district heating will be encouraged.

Within the three “district heating priority areas”, indicated on Diagram 19 (Bath Central, Bath Riverside and Keynsham High Street), and shown in detail in the associated evidence base, development will be expected to incorporate infrastructure for district heating, and will be expected to connect to existing systems where and when this is available, unless demonstrated that this would render development unviable.

Within the remaining 12 “district heating opportunity areas” shown on Diagram 19... development will be encouraged to incorporate infrastructure for district heating, and will be expected to connect to any existing suitable systems (including systems that will be in place at the time of construction), unless it is demonstrated that this would render development unviable.

Masterplanning and major development in the District should demonstrate a thermal masterplanning approach considering efficiency/opportunity issues such as mix of uses, anchor loads, density and heat load profiles to maximise opportunities for the use of district heating.

Where a district heating scheme is proposed as part of a major development the Council will expect the scheme to demonstrate that the proposed heating and cooling systems (CHP/CCHP) have been selected considering the heat hierarchy in line with the following order of preference:

1. Connection with existing CHP/CCHP distribution networks
2. Site wide CHP/CCHP fed by renewables
3. Communal CHP/CCHP fuelled by renewable energy sources
4. Gas fired CHP/CCHP

**Delivery**

1. This policy will provide a basis for Development Management to support the principle of CHP, CCHP and District Heating included in planning applications
2. Planning Applications within the DHPAs will need to demonstrate how they are incorporating district heating and to justify any alternative approach.
3. Planning Obligations or a Community Infrastructure Levy (CIL) may be able to be used to contribute towards the delivery of the delivery of strategic district heating infrastructure.
4. Further opportunities for interventions that will increase commercial viability of district heating are identified in the B&NES District Heating Feasibility Study and will include actions that the Council and the Private Sector can initiate.

As an alternative, this example from the London Plan is very comprehensive

**Example policy - London Plan Policy SI3 – Energy Infrastructure**

[www.london.gov.uk/sites/default/files/draft\\_london\\_plan\\_-\\_showing\\_minor\\_suggested\\_changes\\_july\\_2018.pdf](http://www.london.gov.uk/sites/default/files/draft_london_plan_-_showing_minor_suggested_changes_july_2018.pdf)

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B. Energy masterplans should be developed for large-scale development locations which establish the most effective energy supply options. Energy masterplans should identify:

1. major heat loads (including anchor heat loads, with particular reference to sites such as universities, hospitals and social housing)
2. heat loads from existing buildings that can be connected to future phases of a heat network
3. major heat supply plant including opportunities to utilise heat from energy from waste plants
5. secondary heat sources
6. opportunities for low temperature heat networks
7. possible land for energy centres and/or energy storage
8. possible heating and cooling network routes
9. opportunities for futureproofing utility infrastructure networks to minimise the impact from road works
10. infrastructure and land requirements for electricity and gas supplies
11. implementation options for delivering feasible projects, considering issues of procurement, funding and risk, and the role of the public sector.

11A opportunities to maximise renewable electricity generation and incorporate demand-side response measures.

C. Development Plans should:

- 1) identify the need for, and suitable sites for, any necessary energy infrastructure requirements including upgrades to existing infrastructure
- 2) identify existing heating and cooling networks and opportunities for expanding existing networks and establishing new networks.

D. Major development proposals within Heat Network Priority Areas should have a communal low-temperature heating system

- 1) the heat source for the communal heating system should be selected in accordance with the following heating hierarchy:
  - a. *connect to local existing or planned heat networks*
  - b. *use zero-emission or local secondary heat sources (in conjunction with heat pump, if required)*
  - c. *use low-emission combined heat and power (CHP) (only where there is a case for CHP to enable the delivery of an area-wide heat network)*
  - d. *use ultra-low NOx gas boilers.*
- 2) CHP and ultra-low NOx gas boiler communal or district heating systems should be designed to ensure that they meet the requirements of policy SI1 (A)
- 3) Where a heat network is planned but not yet in existence the development should be designed for connection at a later date.

I hope these comments are useful and would welcome you to contact me to discuss them further.

Yours sincerely

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