

## Matter 7: Climate Change, Flood Risk and Pollution

*Whether the Local Plan makes appropriate provision to address climate change, flood risk and pollution.*

### **a) Does the Local Plan contain a proactive strategy to mitigate and adapt to climate change?**

Policy CP2 sets out the Council's overall approach to mitigating and adapting to climate change which is set within the context of changing national policy and viability. The policy acts as an overarching policy in terms of how the Council will respond to the causes and impacts of climate change. It is strategic in nature and covers principles rather than details. For example, the policy sets out a number of high level plan requirements, including trying to ensure that the location of development minimises travel by private car and maximises choice, that consideration of opportunities for the use of renewable energy sources is given, that best practice in sustainable construction methods is achieved and that there efficient use of water and appropriate flood protection.

The overall strategy of urban concentration, City Centre growth, encouraging mixed use development in accessible locations and the efficient use of previously developed land all contribute to the proactive strategy for mitigating and adapting to climate change. Many of these issues are covered in more detail by specific policies of the Plan. Policies such as CP23, CP24 and AC5 all contribute to the climate change strategy insofar as they seek to promote travel choice and modal shift and increase capacity on the road network which may reduce congestion and the resultant emissions.

The 'Our City, Our River' programme is perhaps the biggest and best example of a proactive strategy to mitigate and adapt to climate change. The GI policies and the principle of protecting green wedges offer flooding/drainage mitigation and can reduce urban heat island effect by offering cooling as well as offsetting Carbon Dioxide. Policy CP3 takes forward the ideas established by CP2 in terms of maximising opportunities for low carbon decentralised energy and building in 'resilience' at the design stage. All of these policies work together to build as proactive a strategy as can realistically be achieved while still ensuring delivery of the growth required.

### **b) Does Policy CP2 reflect a positive strategy to promote energy from renewable and low carbon sources? Does it contain an appropriate balance between maximising renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily?**

Criterion (e) of policy CP2 encourages the use of renewable and decentralised forms of energy but also recognises and reflects the effect that such schemes can have on viability and delivery. The evidence in the 'Cleaner, Greer Energy Study' (EB065) indicates that Derby has opportunities to take advantage of decentralised forms of energy production. Its urban nature means that smaller scale forms of energy production can be implemented which are close to and can serve dense areas of energy use. The study indicates, however, that there is very limited potential for large scale wind energy production. The applications we have already had for wind turbine delivery have actually been quite problematical in terms of the proximity to East Midlands Airport and their operations.

This suggests that, while the Council would obviously judge any application on its merits in line with local and national policy, it is not something that the policy need make specific reference to.

Criterion (j) requires developers to use 'appropriate' forms of carbon reduction and decentralised energy. This is considered to be a flexible and realistic requirement as consideration of whether the solution is appropriate would include any impacts of viability. The policy seeks to strike a balance between delivering energy efficient and sustainable development without overly burdening developers. Suggested modification CS18 (CD002) seeks to make this clearer.

In preparing the Plan, the Council considered opportunities for a potential District Heating System within the City. However, it was concluded that the deliverability of such a scheme was too uncertain to include in such a policy.

**c) Is policy CP2 consistent with national policy following the Housing Standards Review and the Written Ministerial Statement of March 2015, particularly in terms of sustainable design and construction?**

It is recognised that there are elements of CP2 that will need to be amended if they are to meet the most recent Government guidance and legislation. Modifications have been suggested to the policy to reflect this. These are set out in document CD002 - suggested modifications CS15 - CS19. It should be noted that in response to comments made at the draft stage of consultation and as a result of our understanding of viability, amendments had already been made to the policy to remove reference to specific requirements for 'Code for Sustainable Homes'.

**d) Has it been demonstrated that the Local Plan requirements for climate change mitigation measures would not threaten the viability of development?**

There are no requirements within the policy which would threaten the viability of development. The policy has evolved over time to be less prescriptive and more flexible as a result of our understanding of viability more generally and the additional costs associated with climate change mitigation. As with many policies in the plan, it is clearly stated that while the Council wishes to encourage good practice, it will also take viability into account in considering any and all proposals.

It is understood that there are parts of the City, and certain types of development, that are currently only marginally 'deliverable'. The Council also understands that it has a responsibility to deliver growth. Therefore, a balance must be struck between policy requirements and delivery. This is a recurring theme throughout the plan which reflects the evidence base and current local circumstances but is also flexible should economic circumstances change in the future.

This is not to say that the Council is not taking climate change seriously. As noted earlier, the plan contains numerous policies which seek to mitigate and adapt to climate change and seeks to achieve this through a range of measures, many of which - such as ensuring development is located in accessible locations - have no cost associated with them. The Council's approach to climate change is robust without being to the detriment of growth.

**e) Does the approach to flood risk in Policy CP2 accord with national policy and would it be effective?**

Policy CP2 accords with national policy and will be an effective mechanism for addressing applications in areas of flood risk. Paragraphs 100 to 103 of the NPPF broadly set out the national policy on flood risk; establishing the basic principles that we must adhere to and the requirement to follow the sequential and exception tests for applications.

Criteria k-p of Policy CP2 address 'flood risk and water management' issues with criteria 'l' and 'm' specifically referring to the requirement to apply the sequential test and ensuring that development is flood resilient and resistant and does not lead to an increased flood risk elsewhere. This element of the policy is completely consistent with the NPPF. While the Council does not think it is always necessary or appropriate to repeat national policy, it is noted that the Core Strategy does not make any specific reference to the 'exception test'. It is recognised that this may not make the requirements of the policy as clear as possible. If the Inspector felt that such a reference would help clarify the requirements of the policy and provide the necessary link to the NPPF, then additional text could be added to the end of criterion l to read:

"... will take account of the availability and suitability of alternative sites and, where appropriate, apply the exception test in line with national policy ".

This suggested modification, along with any consequential modifications to the supporting text, will be added to the schedule of modifications that the Council wishes to be considered.

**f) Does the 'Our City, Our River' programme provide an appropriate basis for managing flooding and development in the River Derwent corridor? Does Policy AC8 provide an effective framework for considering small scale development in this area?**

The Council considers that the Our City Our River project (OCOR) is appropriate for managing flooding and development along the River Derwent. The OCOR Flood Risk Management Scheme is a project developed from the Environment Agency's Lower Derwent Flood Risk Management Strategy and Derby City Council's 2012 OCOR Masterplan (EB070) which combines flood defence with regeneration aspirations of Derby City. The scheme includes proposals for defences which would protect many areas against a 1 in 100 year annual chance of flood occurrence.

The OCOR project has been under development for a considerable period of time. A number of alternative options have been considered, looking at a range of strategic and local options which have been subject a significant amount of modelling and consultation. For example, the option of increasing the height of existing flood defences along the length of the Derwent Valley were considered by the Environment Agency but this was found to be inappropriate due to the height of the defences needed and the detrimental impact this solution would have on the riparian environment, the City Centre and the Council's aspiration to make the river both a key sustainable transport route and an important component of the wider Green Infrastructure network. Therefore, a more appropriate solution developed by the Environment Agency and incorporated into AC8 pulled back the defences. The scheme objectives are to:

- reduce flood risk to 1,500 homes and almost 800 businesses

- protect strategic infrastructure
- protect and enhance ecology, wildlife and biodiversity
- encourage investment
- deliver regeneration aspirations
- unlock economic potential on land currently at significant flood risk
- protect and enhance heritage assets in Derby.
- Maximise economic regeneration and sustainable development opportunities along the river corridor with the realisation and delivery of the economic potential of at least 80 hectares of brownfield sites
- Reduce flood risk and maximise resilience to protect people, property and jobs
- Enhance the significant heritage assets, ecology, wildlife and biodiversity along the river corridor to help promote tourism and enhance the visitor economy

It is considered that the policy is sufficiently flexible to ensure that, irrespective of scale, development does not compromise the new flood defences and/or can help facilitate their implementation. Small scale development will be equally at risk of flooding within this area and should be subject to the same overriding policies. The policy does allow, however, for a proportionate approach. It should also be noted that there are references to specific sites and opportunities within the AC8 area throughout the plan. This demonstrates that the Council is being proactive about the regeneration benefits OCOR will have, as well as the environmental.

It should be noted that a number of planning permissions have already been granted within the 'OCOR area'. Irrespective of their use or scale, all have incorporated the measures prescribed in the policy to ensure the requirements of OCOR are met.

**g) Has the requirement in Policy CP2 for developments to incorporate Sustainable Drainage Systems justified and consistent with national policy?**

The Inspector's attention is drawn to the SFRA1 (EB066 – page 104) which provides important evidence for the Council's position on SuDs. This is further backed up by the recommendations of the Derby HMA Water Cycle Study (EB068 – page ix). These provide some of the basis and logic for requiring SuDs within CP2.

PPG paragraph id: 7-050-20140306 also states that Local authorities and developers should seek opportunities to reduce the overall level of flood risk and that this can be achieved through the layout and form of development, including green infrastructure and the appropriate application of sustainable drainage systems. The NPPF (paragraph 103) states that development in areas of flood risk should only be permitted where sustainable drainage has been incorporated. As a result of the Written Ministerial Statement of 18 December 2014 (reference HCWS161), it has been a requirement for all major development to incorporate sustainable drainage measures unless inappropriate to do so (also see PPG paragraph Reference ID: 7-079-20150415). The Council considers, therefore, that the policy, and in particular criterion (p), is justified, appropriate and meets the requirements of national policy.

#### **h) Has the effect of the Local Plan policies on air quality been appropriately assessed?**

Air quality issues in the City are well understood. There are a number of defined air quality management areas (AQMAs) within the City and the likely impact of development on these areas has been considered in terms of considering the scale and location of development. A specific assessment of the impact on air quality has not been carried out. However, as air quality issues in the City are intrinsically linked to traffic volume, behaviour and congestion, the detailed traffic modelling we have carried out has provided a good indication of the likely impacts of development on air quality, particularly on the AQMAs. Understanding where congestion is now and where it is likely to take place has allowed us to identify where there might be continuing and future air quality issues and what mitigation options could be effective in addressing these.

Importantly, the plan has sought to minimise the impact on air quality as much as it can by trying to locate development in areas away from AQMAs (as far as is possible in Derby's compact nature and constrained choices), where congestion is able to be mitigated and in accessible locations which facilitate 'travel and route choices'. The promotion of walking, cycling and public transport are all key components in minimising the impact on air quality, as are trying to reduce trip lengths by providing on site facilities. However, this must all be balanced in terms of the need to provide significant levels of growth. This will not be achieved without some detrimental impact on air quality as a result of increased traffic.

#### **i) Are there any implications for the Local Plan arising from the DEFRA Air Quality Plans for nitrogen dioxide, December 2015?**

The areas of concern identified by DEFRA late in 2015 are not directly related to the strategic sites in Derby's proposed Core Strategy. National data sets have been used to provide estimations of traffic volumes, fleet composition and vehicle emissions from older and more polluting engines and these have suggested potential exceedances of NO<sub>2</sub> by 2020 on a limited area of Derby's transport network. The issue is not solely related, therefore, to housing growth or development, it also relates to issues outside the control or scope of the planning system. However, it is obvious that the growth associated with the Core Strategy could make it more difficult to achieve the objective levels of key pollutants, as will national background growth. However, this generalised impact is unavoidable if the required level of growth is to be achieved, and is likely to happen anyway without the plan in place. Indeed, the Core Strategy provides an opportunity to mitigate these impacts through the management of the location of growth and the implementation of measures to mitigate impacts. Derby City Council is also working with DEFRA to develop schemes to address the modelled exceedances and to gain a better understanding of the issue using local data.