



Charnwood Local Plan 2011 to 2028

Core Strategy

Adopted 9th November 2015



Sustainable Construction and Energy

- 7.50 Most experts now agree that the world's climate is changing, largely as a result of increased greenhouse gas emissions from the burning of fossil fuels. Climate change is one of our biggest challenges. It is a global problem requiring local action.
- 7.51 We have considered the impacts from, and effects of, a changing climate on our communities. We are likely to experience milder and wetter winters and hotter and drier summers. Heat extremes will cause damage to infrastructure, cause problems of heat stress and affect food production. Increased frequency and severity of flooding is also likely to cause damage to infrastructure, properties and livelihoods. We may expect to see periods of water shortage.
- 7.52 The impact of climate change is likely to be greater on certain communities. In particular, our community in northern and central parts of Loughborough face disadvantage from heat stress and people in Syston and Loughborough are vulnerable to flooding.
- 7.53 There is also likely to be increased stress on wildlife where species need to migrate to a more favourable climate and where existing habitats become increasingly fragmented. Decreasing water quality can also have an impact on wildlife and habitats.
- 7.54 We expect developments to incorporate sustainable drainage systems that, as a minimum, maintain a greenfield run off rate and protect and enhance water quality in accordance with the Water Framework Directive. Where possible sustainable drainage systems should help reduce the risk of flooding in the area and benefit biodiversity.
- 7.55 Our strategy promotes a sustainable pattern of development, encourages the effective use of land, providing good access to services and facilities, with a genuine choice to walk, or use a bicycle or take public transport, rather than use the car. We must also take the opportunities presented by development and improve our resilience to climate change, especially in areas of greater vulnerability.
- 7.56 In general terms, the action we must take on climate change is twofold:
- Mitigation: reducing greenhouse gas emissions; and
 - Adaption: helping the built and natural environment to be resilient to future climatic conditions, including extreme weather events and periods of water shortage

Carbon Emissions

- 7.57 The Government's zero carbon homes policy calls for the introduction of zero carbon homes from 2016, which will be implemented through progressive changes to the Building Regulations.

Chapter 7: Our Environment

- 7.58 We want to see significant reductions in emissions by developing homes that are more energy efficient.
- 7.59 We will expect developments to be designed from the outset to meet national sustainable building standards. We will expect to see an assessment for all major developments, which sets out the actions that have been taken to reduce greenhouse gas emissions, having regard to our priority order:
1. to **reduce** the need for energy, through design features that provide natural heating, cooling and lighting, using landform, building layout orientation, massing and landscaping; and
 2. to **generate** the residual energy required through the use of low or zero carbon energy technologies
- 7.60 Our evidence suggests that there are opportunities to go beyond the Building Regulations in the case of our strategic developments outlined in Policies CS19, CS20, CS21, CS22 and CS23 which will have a significant affect on our future carbon footprint. We want the design and layout to maximise opportunities for a reduction in carbon emissions for a development of this scale. We have an aspiration that the schemes will result in a 10% reduction in CO² emissions when compared to the Building Regulations prevailing at the time that a detailed scheme is proposed. This will not apply when zero carbon homes are mandatory. We appreciate the impact that an ambitious package could have on viability. Some of the best ways to improve environmental performance are through simple decisions on the layout and orientation of buildings and spaces. We will offer the flexibility for the scheme to be designed to achieve the best range of measures.
- 7.61 However, we will also support schemes that compensate for CO² emissions where reductions are not possible to achieve through design and construction.
- 7.62 We will not restrict our desire to see energy efficient buildings to our new developments. We will work with our partners to secure funding and deliver projects that support a low-carbon economy across the Borough as a whole. We will encourage on-site, near-site and off-site compensatory measures as appropriate to the location of proposed development and the opportunities presented by that location.
- 7.63 We have also considered the potential for low carbon and renewable energy in our area. The main renewable resource we have access to is wind energy. However, the significant value of our landscape, particularly the Charnwood Forest, means that any opportunities are predominantly on higher ground in the east of our Borough. Policy CS16 takes account of the written ministerial statement published in June 2015 in relation to proposals for wind energy. It is intended to identify suitable areas for wind energy in the Site Allocations and Development Management Development Plan Document.

- 7.64 Our evidence suggests targets for renewable energy developments that are challenging but realistic. Since we prepared our assessment of renewable energy potential a solar farm at Wymeswold Airfield has been built, one of the largest of its kind in the country. The renewable energy delivered at Wymeswold Airfield will significantly contribute to the delivery of renewable energy in Charnwood. However, whilst it would mean we might exceed our lowest target for renewable energy, opportunities for other renewable energy developments will be needed if we are to make progress towards our higher target.
- 7.65 We will monitor the delivery of renewable energy developments. We will consider how we might best make progress towards our targets through work on our strategic developments and our Land Allocations and Development.

Protecting Environmental Resources

- 7.66 There are 4 Air Quality Management Areas in Charnwood in Syston, Mountsorrel and two in Loughborough. These have been declared either because of emissions from transport or from local industry.
- 7.67 Our area also contains areas of high quality agricultural land which is vital for supporting wildlife and for producing food.
- 7.68 Our approach to sustainable design needs to protect important environmental resources such as our air and soil quality.

Policy CS 16

Sustainable Construction and Energy

We will adapt to and mitigate against the effects of climate change by encouraging sustainable design and construction and the provision of renewable energy, where it does not make development unviable.

We will do this by:

- encouraging developments to, where viable, exceed Building Regulations for carbon emissions by prioritising measures that reduce the need for energy and secure residual need for energy through low carbon or renewable sources;
- requiring the Design and Access Statements for major developments to demonstrate how the need to reduce emissions has influenced the design, layout and energy source used;
- supporting developments that reduce waste, provide for the suitable storage of waste and allow convenient waste collections;

- encouraging residential development to meet the equivalent of Code for Sustainable Homes Level 5 for water efficiency (80 litres/person/day);
- encouraging non residential development in excess of 1,000 sqm gross floorspace to achieve the equivalent of BREEAM 3 credits for water consumption as a minimum;
- combating the 'heat island' effect by encouraging green roofs, green walls, increased tree cover, waterways and the layout of external spaces;
- supporting commercial, community and domestic scale renewable energy or low carbon energy developments where they contribute towards our target of at least 27.5MWe, having regard to the impact upon the wider landscape, biodiversity, the historic environment, public safety, noise, odour and other amenity considerations;
- in the case of proposals for wind energy development involving one or more wind turbines, planning permission will only be granted if:
 - the development site is in an area identified as suitable for wind energy in the Site Allocations and Development Management Development Plan Document or a Neighbourhood Plan; and
 - following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing
- encouraging the effective use of land by reusing land that has been previously developed, provided that it is not of high environmental value;
- directing development to locations within the Borough at the lowest risk of flooding, applying the Sequential Test and if necessary, applying the Exception Test. Where development is proposed in flood risk areas, mitigation measures must be in place to reduce the effects of flood water;
- supporting developments which take opportunities to reduce flood risk elsewhere;
- requiring developments to manage surface water run off with no net increase in the rate of surface water run off for Greenfield sites; and
- supporting new development that protects environmental resources including local air quality and our most versatile agricultural land.