

# Barratt Homes Manchester

## Sustainability and Energy Statement



Proposed residential development at  
**Land East of Chipping Lane, Longridge, Ribble Valley**

May 2014

### Introduction

This document reviews the relevance of Percentage Renewable Obligation policies adopted since the introduction of the Merton Rule in 2003 in light of current national and industry thinking on the 'Zero Carbon' agenda, and aims to demonstrate the key sustainability features proposed for the above development, including our approach to Energy. It should be read in conjunction with other supporting documentation which accompany the Planning Application.

A high standard of sustainability throughout the proposed development will be designed to meet the new stringent targets set out within the Building Regulations.

### Emerging Local Policy

The emerging Core Strategy Policy DME5 is set out below but remains unadopted, although we are informed that the Inspector has not raised any concerns at this stage.

***DRAFT POLICY DMES: RENEWABLE ENERGY - IN TERMS OF THE USE OF DECENTRALISED AND RENEWABLE OR LOW CARBON ENERGY IN NEW DEVELOPMENT THE AUTHORITY WILL REQUEST THAT ON NEW NON-RESIDENTIAL DEVELOPMENTS OVER 1000M2 AND ALL RESIDENTIAL DEVELOPMENTS OF 10 OR MORE UNITS THAT AT LEAST 10% OF THEIR PREDICTED ENERGY REQUIREMENTS SHOULD COME FROM DECENTRALISED AND RENEWABLE OR LOW CARBON SOURCES UNLESS THE APPLICANT CAN DEMONSTRATE THAT THIS IS NOT FEASIBLE OR VIABLE. THIS TARGET WILL BE UPRATED IN LINE WITH NATIONAL TARGETS. IMPLEMENTATION OF THIS REQUIREMENT WILL BE MONITORED AND ENFORCED BY THE PLANNING AUTHORITY.***

### Barratt and Sustainability

The term "sustainability" is often misunderstood. For Barratt, sustainability is about ensuring we respect today's environment whilst creating tomorrow's communities. We are committed to the principles of sustainability throughout the running of our business and in the homes we build. We have publicly stated this within our Annual Sustainability Report.

We have identified the key sustainability factors that must be addressed, which include environmental, social and governance, and have grouped these into five key philosophies so that we can manage them effectively. Through our philosophies, entitled Planet, Partners, People, Customers and Performance, we form the basis of our sustainability approach and demonstrate our commitment to the environment as a sustainable developer.

Our sustainability approach and philosophies are supported by corporate policies that define our approach to specific areas, including issues on Sustainability. Details of which can be found on our website and in our Annual Sustainability Report, available to download in full.

One of the main ways we implement governance over sustainability issues is through our management systems, described more fully in our Annual Report and Accounts. Additionally, all divisions within the Group continue to operate an Environmental Management System (EMS) certified to ISO 14001 and a health and safety management system certified to OHSAS 18001.

Barratt have set out 'Our Vision' of what we want to accomplish. This vision provides the inspiration for our 'Philosophies' to be carried forward and guides both our daily operations and our strategic decisions with a sustainable approach that is clear, robust and beneficial to all our stakeholders.

Our Vision is ***to be recognised as the nations' leading house builder, creating communities where people aspire to live.***

### **Barratt approach to Energy and CO<sub>2</sub> Emission Reduction**

More than a decade ago, Merton Borough Council introduced a planning policy which required new developments to generate a percentage of their energy needs from Renewable sources. Many Local Authorities around the country followed suit, and continue to adopt similar 'Merton Rule' obligations as policy, despite the difficulties that arise around the variation in the application and interpretation of such. Indeed, North West Regional Policy (now abolished) took such an approach at that time.

Throughout this period, much has happened in the move towards 'Zero Carbon' homes and the development of the 'Fabric First' ethos has grown in importance. At the same time, 'Merton Rule'-type policies, requiring percentage renewable obligations, have quickly become out-dated and in effect contradict current national government thinking on the reduction of CO<sub>2</sub> emissions.

Current national and industry thinking on the 'Zero Carbon' agenda strongly encourages a 'fabric first' approach to achieving CO<sub>2</sub> emission reductions, and the 'Zero Carbon Hierarchy' and the 'Fabric Energy Efficiency Standard' (FEES) produced by the Zero Carbon Hub will effectively mandate this approach.

The FEES require CO<sub>2</sub> emission reductions to be achieved purely through the building fabric, to specific minimum levels, prior to the use of Low and Zero Carbon (LZC) technologies. This approach supersedes older local requirements, such as the Merton Rule, which require for a percentage of energy to be provided from a LZC source.

Securing CO<sub>2</sub> emission reductions through the building fabric has the following benefits:

- CO<sub>2</sub> reductions are inherent for the design life of the building (approx. 60 years), whereas LZC technologies typically have a lifespan of 25 years.
- There are virtually no maintenance and/or replacement costs to maintain CO<sub>2</sub> reductions achieved through fabric improvements, as opposed to LZC technologies.
- LZC technologies cannot be relied upon to be replaced after 25 year lifespan, and also have a diminishing performance over this 25 year period.
- Fabric improvements, and therefore CO<sub>2</sub> reductions, are apparent in 100% of the new built development, rather than a proportion of, required to meet policy requirements.
- There is no reliance on occupier's behaviour to ensure potential CO<sub>2</sub> reductions are actually achieved. LZC technologies require education, awareness and behavioural changes.

The required behavioural change, maintenance and replacement at end-of-life is beyond the control of both the Local Authority and Barratt, and the diminishing performance of the LZC technology is

unavoidable. Therefore, a situation could easily be justified whereby the technology is only present and performing for its design life of 25 years, and with a diminishing efficiency.

The Harman Review<sup>1</sup>, written to address the myriad of requirements and standards being placed on housebuilders, also highlights the issue with such forms of condition and recommends their urgent consideration. The following statements are taken directly from the report:

- *A process is already in place for further significant improvement in energy efficiency using Part L;*
- *Setting higher standards for energy performance beyond Building Regulations is not always cost effective and specifying types or percentages of renewable energy could lead to perverse outcomes. However, it could be appropriate for local authorities that have invested (or wanted to invest) in a local renewable energy network to require connection to this, but that should be considered as part of the viability testing;*
- *Any higher standards that can be justified and are set by local authorities should be expressed on the common metric, probably CO<sub>2</sub> emissions per square metre, and councils should avoid prescribing the means by which this is achieved (for example, a set percentage of energy supplied by renewables).*

<sup>1</sup> 'A Review of Local Standards for the Delivery of New Homes' – available through [http://www.hbf.co.uk/fileadmin/documents/Email\\_Links/A\\_review\\_of\\_local\\_standards\\_for\\_the\\_delivery\\_of\\_new\\_homes\\_-\\_june\\_2012.pdf](http://www.hbf.co.uk/fileadmin/documents/Email_Links/A_review_of_local_standards_for_the_delivery_of_new_homes_-_june_2012.pdf)

### **Barratt approach to Good Design – Building for Life**

In 2014, Barratt Homes has committed to delivering Building for Life across all new developments. This approach to good design and 'place-making' applies 12 criteria to inform scheme design.

### **Summary & Conclusions**

In light of the above, Barratt believes that the provision of energy from LZC sources, which cannot be relied upon to provide CO<sub>2</sub> reductions for the life of the buildings, is not the way forward when the requirement for this energy can be shown to be omitted through passive measures, i.e. a 'fabric only' approach.

A 'fabric only' approach has no reliance on external factors to ensure CO<sub>2</sub> emission reductions and will therefore be significantly more effective in reducing the annual CO<sub>2</sub> emissions within this development and the wider built environment.

This development will be constructed to the current Approved Document Part L of the Building Regulations, which will ensure that the current statutory requirements for carbon reduction in new build homes are achieved, as set by the Department for Communities and Local Government (DCLG). This will include the following benefits across the whole development:

- High levels of insulation
- High performance windows and doors
- Reduced air infiltration rates
- Enhanced thermal bridging performance
- Maximisation of passive solar and metabolic gains

Our standard specification includes the provision of energy efficient appliances, lighting and space and water heating systems, to further enhance the energy performance of each dwelling and ensure that energy is efficiently generated, distributed and used within the development.

Figures produced by the Zero Carbon Hub, in conjunction with the NHBC Foundation and the BRE trust, show that new builds are typically around 45%-55% more energy efficient than the average UK home. Further, new build homes now being built produce at least 25% less CO<sub>2</sub> emissions than those built to the

2006 regulations and 40% less than those built to the regulations in force in 2002. This means that this development will offer a significant energy demand reduction over both the existing housing stock and other 'new builds' in the area.

In summary, the above approach will deliver the carbon reductions sought by Ribble Valley Council and the planning application can be supported as being in accordance with national and local policies regarding energy and sustainability.