

The Carbon Challenge



Jayne Lomas
English Partnerships

English Partnerships

- Environmental Track Record
- Exemplar programmes
- Millennium Communities
- Design for Manufacture
- Carbon Challenge



Greenwich

Millennium Communities

- Eco-homes Excellent
- 20% reduction in metered energy
- 20% reduction in water consumption
- 10% increase in daylighting
- Reduction in construction waste
- Lower defects
- Lifetime Homes
- IT enabled and homeworking space



Greenwich



Allerton Bywater



Allerton Bywater

Summit House



Urban Summit 2005



Allerton Bywater, Leeds 2006



New Islington



New Islington





Hastings



Oakgrove, Milton Keynes

Design for Manufacture

- Construction cost £784 sq m
- Deliver quality
- Density with houses, not just flats
- Lifetime Homes achieved via detailed drawings
- One thousand and one house types
- Innovation requires integrated project and supply chain
- New players welcome
- Future proof – flexible and expandable, room in the roof
- Place and product must work together
- Requires vision and leadership from the top



**Design For Manufacture,
Taylor Wimpey & Rogers Stirk Harbour
Oxley Park, Milton Keynes**



Design for Manufacture Crest Nicholson, Merton

EP Quality Standards



Policy Guidance

English Partnerships'
Quality Standards
Delivering Quality Places
Revised: from November 2007

Quality Places

Design statements – creating well-laid out and distinct communities

Building for Life Silver (or Gold) – the CABE quality standard

Inclusive design – design of homes for people with a range of physical abilities

Secured by Design – safe and overlooked streets and public spaces

Integration of tenure – creating mixed communities

Car parking – accommodating the car but not letting it dominate

Quality Homes and Buildings

Code for Sustainable Homes Level 3 minimum – tackling climate change and improving environmental quality

BREEAM – Very Good minimum environmental standard for non-residential buildings

Lifetime Homes – flexible, adaptable homes for people of all ages and physical abilities

Noise – reducing noise impact between and within homes

Building specifications – using more environmentally friendly building products – only Category A, B or C products in BRE's *Green Guide to Building Specifications*

Overheating – designs, technology and landscaping to reduce overheating of homes due to rising temperatures

Space standards – minimum space standards for various house-types to make them more likely to appeal to a wider population and sustainable in future housing markets

Fire safety – reducing deaths from fire in the home

Construction Quality

Construction efficiency – better cost efficient buildings that will be supported by lenders and insurers and offer good consumer warranties

Re-use of resources – remediation and demolition plans, controlling site waste and reusing buildings

Civil Engineering Environmental Quality (CEEQUAL) – improving the environmental performance of civil engineering

Health and safety – better construction management to reduce accidents

Rewarding Quality and Delivering Locally

Site-specific issues – addressing local and planning concerns

Deliverability and long-term management – how likely the ideas will be turned into reality with a long-term stewardship of the place and public realm

Community engagement – involving and engaging local people in the process before and after development

Delivery and financial capacity of developers – the capacity of the developer's team and partners and suppliers to deliver the project and act commercially

Key Carbon Challenge Objectives

- Pilot ways of delivering Code Level 6 – zero carbon homes before 2016
- Maintain Quality Standards
- Achieve high levels of affordable housing
- Continue to drive down defects
- Further reduce accidents on site
- Improve community cohesion and safety
- Strive for quality design and exceptional place making
- Achieve cost efficiencies of Design for Manufacture (excluding land and equipment specific to Code Level 6)

Carbon Challenge Generic Brief

- Quality Places
- Quality Homes
- Designing the detail (materials etc)
- Code for Sustainable Homes level 6
- Cost efficiency
- Durability and maintenance
- Local and Site Specific issues

Code Categories



- Energy



- Water



- Materials



- Surface Water Run-off



- Waste



- Pollution



- Health & Well-being



- Management



- Ecology

Zero Carbon

Carbon Challenge - Zero Carbon

Code Level 6

No net carbon emissions from all energy uses in the home, i.e. energy taken from the grid is less than or equal to the amount put back through renewables

Carbon Challenge Sites

- Sites being brought to the market individually
- EP sites: Bristol, Peterborough
- RDA, local authority sites: Bickershaw and Brodsworth

Process

- Stage 1: Expressions of interest.
- Stage 2: Shortlisted developers - full site bids.
- The generic brief is being applied to all sites + local site specific requirements and terms. Evaluation weights different for each site.
- Quality evaluation matrix
- Quality & Price balance

Brodsworth



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LIS FILE: SDS204_Brodsworth

Brodsworth, Adwick Le Street

1:12500 @ A4
23/03/2007

Bickershaw Colliery, Wigan



Peterborough City Carbon Challenge site

station

cathedral

city centre

River Nene

Peterborough United
Football Club





South Bank



South Bank



South Bank

Hanham Hall



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Hanham Hall, Bristol

Hanham Hall



Hanham Hall



Hanham Hall



Monitoring & Dissemination

- All schemes will subject to an open book process
- Developers will be required to share their learning – whilst recognising commercial interests
- Homes will be monitored including by EST – requiring purchaser and tenant cooperation
- Compliance against bids will be an issue & challenge

English Partnerships The National Regeneration Agency



www.englishpartnerships.co.uk

www.http://carbon.englishpartnerships.co.uk