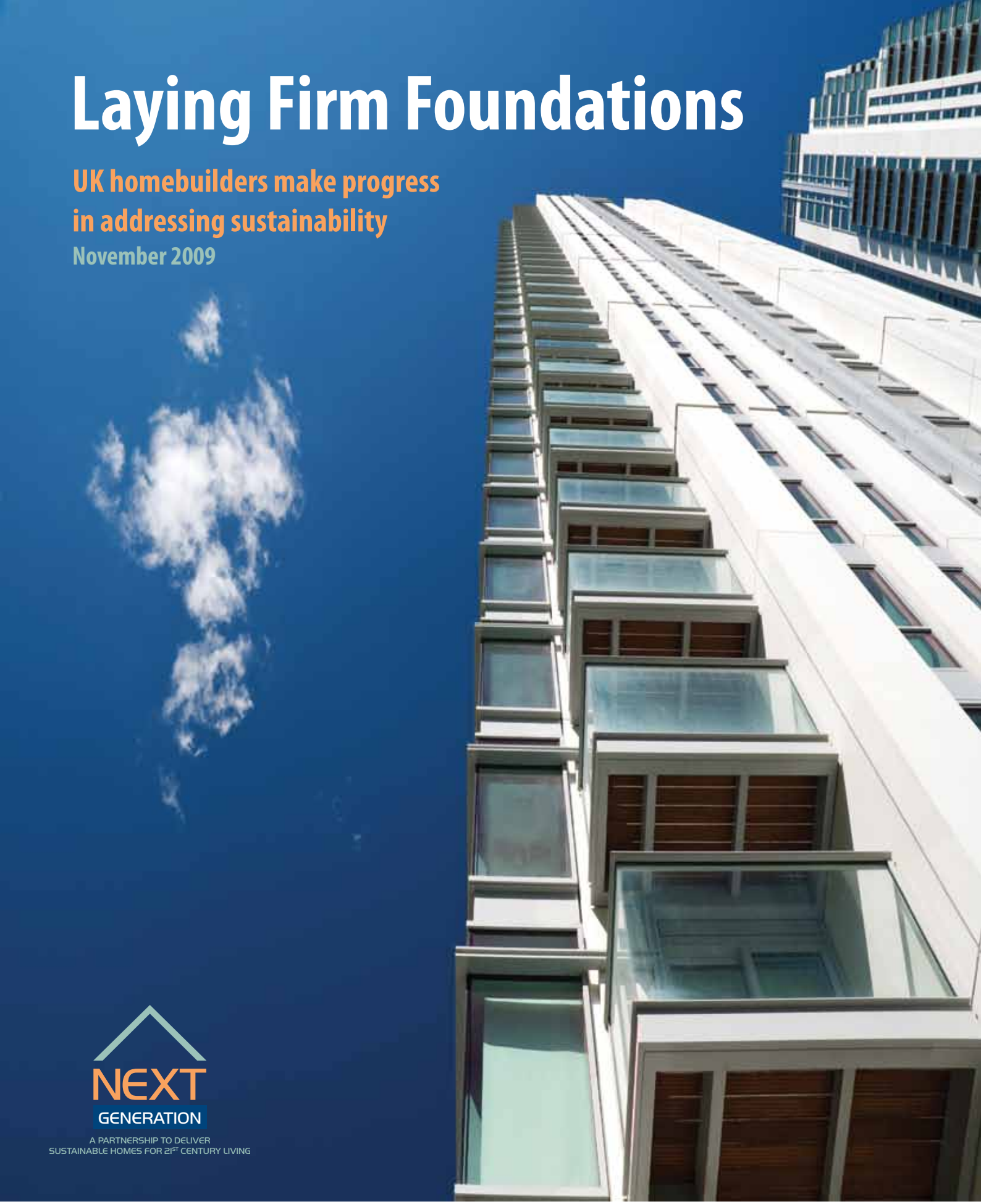
Laying Firm Foundations

UK homebuilders make progress in addressing sustainability

November 2009



NEXT GENERATION

A PARTNERSHIP TO DELIVER SUSTAINABLE HOMES FOR 21ST CENTURY LIVING

WWF

Insight INVESTMENT

BANK OF SCOTLAND CORPORATE

Homes & Communities Agency

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November 2009

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Introduction

It has been two years since the housing market began to decline, which presented the backdrop to the first corporate sustainability benchmark undertaken by NextGeneration in 2007. For the last few years, the industry has been characterised by widespread redundancies and business restructuring. It is only recently that there have been signs of recovery in terms of mortgage approvals increasing, house prices following suit, and developers returning to sites. Full recovery is likely to take some time.

In the interim, the government has injected over £1bn into the sector to aid recovery, consulted on the definition of zero carbon and set up an independent organisation – the Zero Carbon Hub – to help guide the industry towards 2016.

NextGeneration therefore reports on the top 25 UK homebuilders' approach to sustainability in this time of significant uncertainty. During a period when CLG figures indicate a 19% reduction in output across the whole industry in the 12 months to December 2008[1], this group were responsible for approximately 60%[2] of annual output of housing stock.

Box A – NextGeneration

NextGeneration – A partnership to deliver sustainable homes for 21st century living

NextGeneration was launched in 2006 to build on the success of the Insight Investment and WWF sustainability benchmarking exercises (undertaken in 2004 and 2005) and to expand their reach and ownership.

Set up as a multi-stakeholder initiative, NextGeneration aims to drive best practice in sustainability into the heart of the residential sector by encouraging the industry itself to embrace more sustainable house designs and delivery. It is intended to be a platform through which developers can both identify the sustainability-related risks they face and develop a good understanding of how best to address the related opportunities.

For the 2009 benchmark, NextGeneration has been supported and directed by WWF-UK, Insight Investment, The Homes and Communities Agency, and Bank of Scotland – Corporate, all of whom sit on its Executive Committee. Upstream Sustainability Services at Jones Lang LaSalle acts as the secretariat to the initiative, carrying out the analysis for the benchmarking and delivering a range of services to NextGeneration members.

The unique output of NextGeneration is its annual benchmark of the UK's top 25 homebuilders (determined by units built in the reporting year). Following last year's benchmark, which focussed on the industry's approach to addressing climate change adaptation and mitigation issues, this year the benchmark returns to the wider corporate benchmark, also undertaken in 2007.

The benchmark incorporates two sets of scores: the first (the phase 1 score) rates the level of transparency adopted by companies in the benchmark and the second (the phase 2 score, which only NextGeneration members are allocated), rates those companies' additional information in relation to sustainability-related practices beyond those included in reporting.

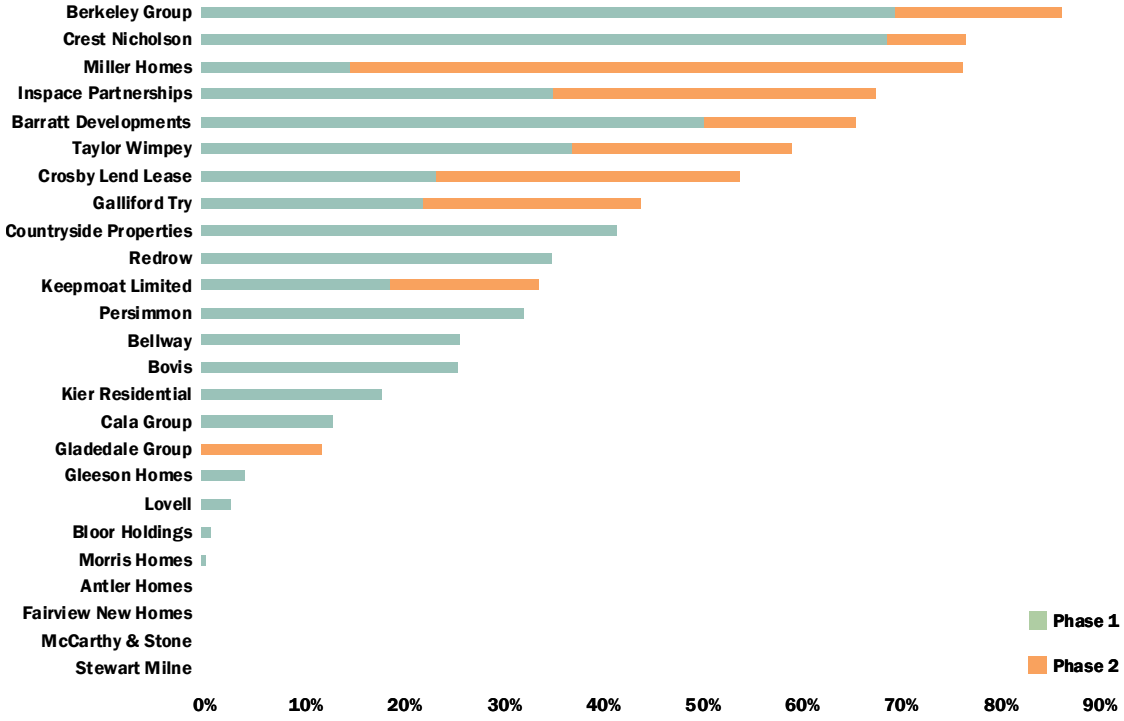
[1] Communities and Local Government, 2009. *House Building December Quarter 2008* [online]. Available from: http://www.communities.gov.uk/publications/corporate/statistics/housebuildingq42008 [Accessed 29 September 2009]. Statistics refer to completions in England only.

[2] This number has been calculated from CLG figures for England, and statistics published in Building magazine's July 2009 edition, as well as directly from the companies in the top 25. Where statistics have not been available estimates have been made based on the percentage change in output of the house building companies from the previous reporting year.

Overall results

Three companies have emerged as leaders in this year's benchmark – the Berkeley Group, Crest Nicholson and Miller Homes achieving 86.7%, 77.0% and 76.6%, respectively. This is shown in Figure A below:

Figure A – Top 25 overall performance



The continued focus on sustainability issues despite recessionary pressures is extremely encouraging. There are still a number of companies in the sector responding strongly to the challenges and the opportunities facing their business operations. However, with a more compact timeline than ever, it is a critical period for the new build housing sector as it comes out of the recession.

Methodology

Similar to previous years, the benchmarking is undertaken in two phases:

Phase one: The top 25 companies are rated on the basis of their publicly available information (corporate responsibility reports, sustainability reports, annual reports and accounts, corporate websites). They are assessed on their strategy, governance and risk management, their efforts to reduce their impacts on the environment and their contribution to society. The result of this phase is a score and ranking of their public transparency through reporting.

Phase two: The performance of the NextGeneration members is then evaluated further through face-to-face engagement with the companies. Their provision of evidence adds information in support of their performance in each of the three areas outlined above.

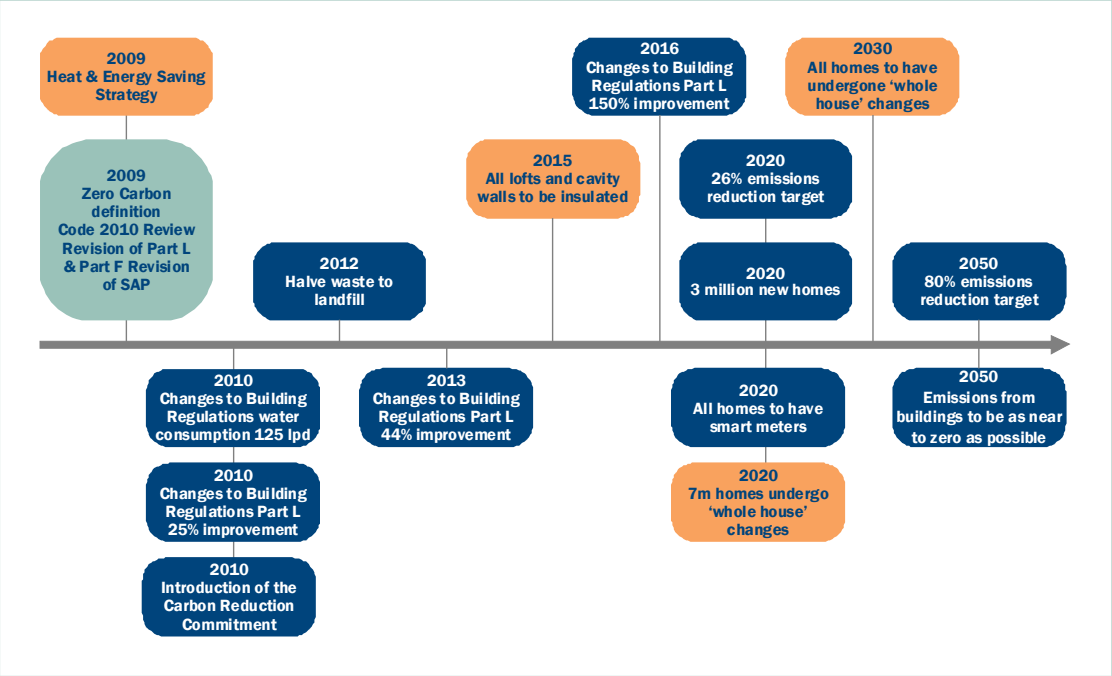
A score of 100% in either phase would indicate that it had achieved best practice as defined by the NextGeneration criteria.

Why undertake a sustainability benchmark?

Despite economic pressures, sustainability impacts facing the homebuilding sector cannot be overlooked. Rising average global temperatures, increasing risks of energy security and water scarcity have potentially significant effects for the homes we build and live in. Issues of affordability, fuel poverty and the health of new homes being built also need to be overcome by the sector.

The government's target to reduce the UK's carbon emissions by at least 80% by 2050 translates into a near to zero as possible reduction from buildings. Housing is the biggest target area for the government in terms of legislation and coupled with ambitious supply targets, the challenge for homebuilders is clear – to increase the provision of affordable and sustainable homes.

Figure B – The road to zero carbon and beyond



NextGeneration believes that by undertaking this corporate sustainability benchmark, companies can focus on the entire range of high-level sustainability issues facing their organisations and understand how best to put structures in place to tackle them. As a collective movement, it provides a valuable link for the homebuilders into government and other stakeholders, and allows discussion of key issues facing the industry in response to consultation documents and emerging regulation. The initiative is designed to assist member companies in their market positioning and in future-proofing their businesses.

With a clear carbon roadmap for the housing sector to 2050 (see Figure B above), those companies entering the recovery with sustainability at the heart of their business practices will be better placed to take the opportunities and mitigate against the risks they face. Homebuilders will need to think innovatively and strategically about both new build and the existing stock in order to meet the challenges ahead.

Progress since the 2007 Corporate Benchmark

The 2007 and 2009 corporate benchmarks were broadly similar in their content (as opposed to the 2008 benchmark which concentrated solely on climate change issues and is, therefore, not comparable) in order to ensure comparability and an understanding of progress made by the sector over the two years. However, there are three distinct changes between the benchmarking years, which are as follows:

1. While broadly similar, and assessing companies against the same headline sections, the criteria for 2009 has evolved since 2007, becoming more stringent in some areas, especially where new legislation has been brought in. The increased stringency represents approximately 10% in terms of a company's final score. For example, if a company was to score 60% in both 2007 and 2009, this would represent an improvement in performance in real terms of around 10%.

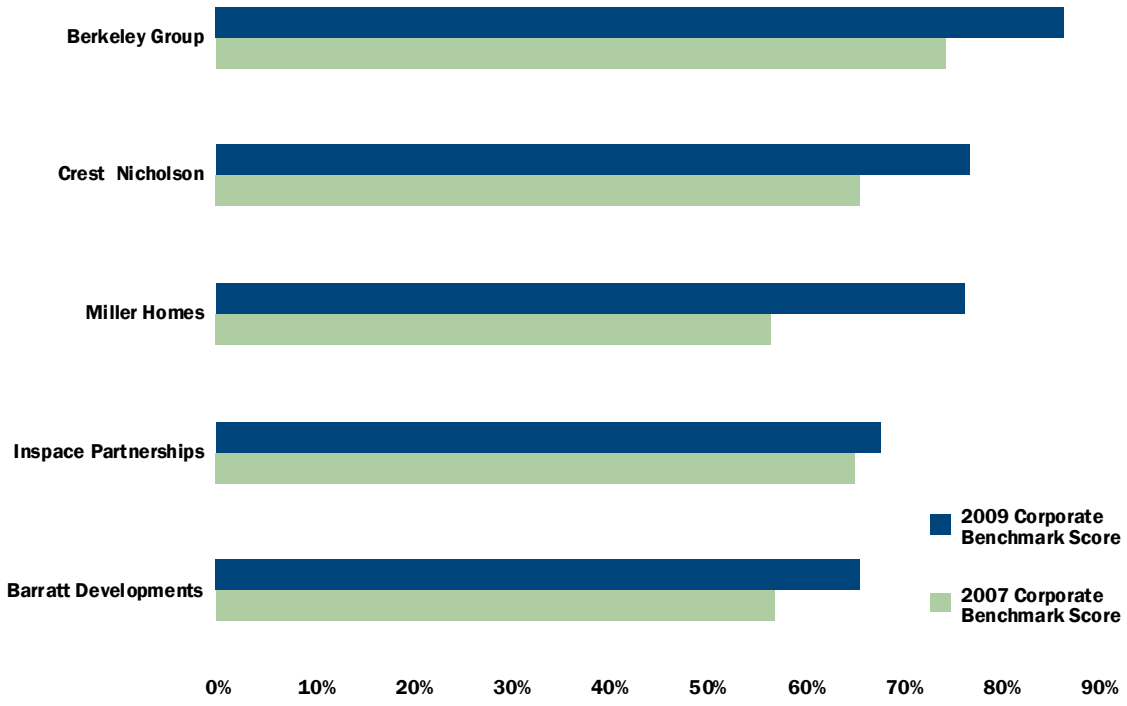
2. The 2007 benchmark assessed the top 20 UK homebuilders, whereas the 2009 benchmark assessed the top 25 homebuilders.
3. The membership between the years has changed and, therefore, the overall scores for those companies who were members in 2007 and are not in 2009 are not fairly comparable. This is also applicable when looking at scores for companies who were not members in 2007 and are in 2009.

The main report provides greater detail regarding the performance of the companies in 2009 compared to those analysed in the 2007 benchmark.

Benchmarking drives improved performance

While the factors outlined above do affect the assessment of all the companies against each other, progress of those companies which have been members of NextGeneration during both the 2007 and 2009 benchmarks shows improvement has been made through engagement and collaboration. This is demonstrated by Figure C and shows that, on average, those companies that have engaged with the initiative since 2007 have improved their performance by more than 10%, which is significantly greater than that for the wider set of homebuilders assessed.

Figure C – Progress since the 2007 Corporate Benchmark[3]



Detailed review of results

The 2009 Corporate Benchmark results show great variation, as with previous years' benchmarking, with a range of scores from 87% to 0%. Member companies of NextGeneration outperformed non-members with respective average scores of 57.9% and 13.5%. With NextGeneration members having the opportunity to provide information further to that in the public domain for consideration in their scoring, this difference in performance is not surprising.

Listed homebuilders continue to outperform non-listed homebuilders with an average score of 44.6% compared with 18.8%, with the bottom eight performing companies being non-listed developers. However, this hides some very strong performances by private companies, notably Crest Nicholson and Miller Homes (2nd and 3rd in the ranking respectively). In addition, as with previous benchmarks, we would highlight that non-member scores may not represent actual performance, rather a lack of disclosure in this area. As with any company that is not currently a member of NextGeneration, we

[3] As Taylor Woodrow and George Wimpey were NextGeneration members during the 2007 Corporate Benchmark, and then merged to form Taylor Wimpey, who are currently NextGeneration members, the merger means that results from these benchmarks are not directly comparable and therefore Taylor Wimpey has been omitted from the above graph.

would encourage these developers to join their peers and engage with the initiative to showcase their approach to these issues.

As with the 2007 benchmark, companies' average performance in strategy, governance and risk management (34.7%), was greater than impact on society (32.6%) and impact on the environment (28.4%). The respective average scores against these sections in 2007 were; 46.4%, 41.0% and 30.3%. While at first this looks like a decline in performance, the average scores for the top performing 20 companies in 2009 against the three headline sections are 43.4% (strategy, governance and risk management), 40.7% (impact on society) and 35.4% (impact on the environment). These are broadly comparable with the 2007 averages and show a greater than 5% improvement in relation to the impact on the environment section.

Strategy, governance and risk management

Below is an outline of each of the criteria within the strategy, governance and risk management section. Also highlighted is an example of best practice performance from the companies benchmarked.

2009 Corporate Benchmark Criteria – Strategy, Governance and Risk Management
Strategy: Board-approved policy in place outlining the company's approach to sustainability, related objectives and targets, a commitment to measuring performance and evidence of engaging with external stakeholders.
Galliford Try's core sustainability objectives are outlined within its Corporate Responsibility, Health and Safety, Environment and Employment Policies. The Corporate Responsibility Steering Committee meets regularly to review progress against targets, and key stakeholders are engaged on sustainability issues to inform Galliford Try's CR strategy.
Governance: Clear governance structures in place at a management level showing Board-driven implementation of the company sustainability strategy, including business objectives and remuneration. Identification of responsibilities for implementing the sustainability strategy at an operational level (both product and offices), supported by a structured training programme.
Inspace Partnerships has a Sustainability Steering Group in place which reviews sustainability strategy and performance against specific targets and objectives, and sustainability issues are included in senior staff's performance reviews and remuneration packages. Operational (construction site and office-based) staff are communicated and engaged with on company sustainability strategy and given training on sustainability issues relevant to individual job roles. Environmental 'champions' are appointed in offices and the Systems Management Team audits the implementation of company sustainability policy on sites.
Risk management: Core business risk analysis accounts for sustainability issues, including both climate change mitigation and adaptation, and company identifies the commercial implications of these.
Crest Nicholson indicates in its public reporting how it is addressing environmental, social and governance risks, and is in the process of re-evaluating key financial and ESG risks before integrating them into the company's core risk management procedures.
Disclosure: Disclosure covers environmental, social and economic issues, includes Key Performance Indicators (KPIs), management and performance targets, and information is assured using external processes and standards.
Barratt Developments has six company Charters in place across a range of sustainability issues, and provides details of how sustainability activities have benefitted the business. Management and performance targets and KPIs are included in public reporting in key impact areas. Third-party independent verification is sought for information and data included in public reporting, following the AA1000 approach.

Impact on the environment

Below is an outline of each of the criteria within the impact on the environment section. Also highlighted is an example of best practice performance from the companies benchmarked.

2009 Corporate Benchmark Criteria – Impact on the Environment
Management Systems: An externally certified Environmental Management System is in place covering all sustainability impacts related to the business.
Keepmoat Limited is in the process of gaining full ISO14001 certification, undertakes internal and external auditing of sites for environmental issues, and did not receive any environmental prosecutions in the last reporting year.
Commitment to Sustainability Building Standards: Performance of all private dwellings is assessed against EcoHomes Very Good standard and level 3 of the Code for Sustainable Homes. Innovate projects and research has been undertaken for levels 4, 5 and 6 of the Code for Sustainable Homes.
Crosby Lend Lease certified 67% of dwellings to at least EcoHomes 'Very Good' in the last reporting year and has set a public target to deliver Code for Sustainable Homes level 4 on all new residential schemes in London and Code level 3 on schemes outside London, with an aspiration to achieve level 4.
Ecology: The protection and enhancement of ecological value of sites is addressed through policy and procedures and the number of sites which are implementing biodiversity action plans (or equivalent) are measured.
Taylor Wimpey has a biodiversity policy in place and provides details in public reporting of a good practice example of enhancing ecological value on a project. External stakeholders such as the Wildlife Trust have been engaged with and it is a requirement that all sites have site specific environmental action plans in place.
Climate Change: Board-approved policy in place outlining the company's approach to climate change, related objectives and targets, a commitment to measuring performance and evidence of engaging with external stakeholders.
Barratt Developments makes commitments in its Environment Charter that will mitigate the negative climate change impacts of its operational activities and the homes it builds, reports performance data in relation to these impacts and has committed to performance targets in the key impact areas of energy, water and waste. Work with key stakeholders such as the Zero Carbon Task Group has been undertaken.
Energy: Operational energy consumption or CO_2 production is measured, short-term targets are set to improve performance and the company commits the business to aspirational long-term goals. Energy efficiency of the company's product is addressed and commitment to achieving the energy component of the Code for Sustainable Homes levels three, four and six for new homes is evidenced.
Miller Homes has committed to a 20% reduction in operational greenhouse gas emissions by 2010 and a 30% reduction by 2012 using 2007 levels as a baseline. Solutions to Code levels 4, 5 and 6 have been developed at the Miller Zero development in Basingstoke, where post-occupation monitoring of energy performance will take place. KPIs are in place for both operational energy consumption and energy efficiency of completed dwellings.
Water: Operational water consumption is measured and yearly targets are set to improve performance. Water efficiency of the company's product is addressed and commitment to achieving the water component of the Code for Sustainable Homes levels three/four and five/six for new homes is evidenced.
The Berkeley Group shows a strong commitment to reducing operational water consumption and improving the water efficiency of its product. Sites and offices are metered for water consumption, and a target is in place to reduce consumption by 5% annually from May 2008. External stakeholders such as Waterwise have been engaged, and technical feasibility studies have been undertaken on a number of projects to inform research into attaining the higher Code levels. A post-occupation monitoring scheme was undertaken at one development, allowing Berkeley to gauge the effectiveness of water efficiency solutions in practice, and test occupier perceptions of these.

Domestic Waste: Commitment and contribution to reducing waste and increasing recycling by enabling and communicating with customers to recycle more effectively.
Crest Nicholson makes provisions for recycling in all new dwellings, provides information to purchasers on local recycling facilities and encourages occupiers to use them, has provided an example of a development with composting facilities in place, and has worked with BioRegional Quintain on its One Brighton development to increase recycling by residents.
Transport: Commitment to reducing car dependency on developments through the use of innovative transport initiatives and the integration of cycle storage on developments. The proximity of developments to public transport is measured across all sites.
The Berkeley Group has 18 current projects with car clubs in place and provides cycle storage on all developments. Other examples of innovative schemes to reduce car dependency are provided in public reporting, as well as data demonstrating that 90% of current projects are within 500 metres of a public transport node.
Procurement & Supply Chain Management: An externally audited sustainable procurement policy is in place ensuring the company addresses its supply chain and material specification processes in relation to environmental and socio-economic issues.
Miller Homes has a Responsible Procurement Policy in place which is subject to internal and external auditing procedures. Company policy states a preference for sustainable materials, and the procurement of sustainable materials in practice was demonstrated by Miller during phase 2 engagement. Priority consideration is given to timber suppliers who supply FSC-certified timber with full Chain of Custody, and an extensive supplier engagement programme is undertaken in which suppliers are monitored on their own approach to sustainability, which informs supplier selection by Miller, and also includes work with suppliers to address specific areas of environmental impact.
Construction Waste: Construction waste is measured with targets in place committing the company to reducing waste produced or increasing recycling.
Miller Homes has developed management targets in order to better understand and reduce waste generation, undertaken work with WRAP to develop a waste minimisation programme, has set a target to eliminate all construction waste going to landfill by 2010, and provides construction waste data in relation to 100% of its sites.
Construction Site Management: Management of construction site activities including carbon emissions and water consumption arising from site activities, and air and water pollution controls in place.
Inspace Partnerships has best practice air and water pollution controls in place on sites through its ISO14001 certification, measures site energy and water consumption, and is making initial steps towards trying to quantify the transport emissions associated with construction site activities.

Impact on society

Below is an outline of each of the criteria within the impact on society section. Also highlighted is an example of best practice performance from the companies benchmarked.

2009 Corporate Benchmark Criteria – Impact on Society
Health and Safety: A comprehensive health and safety policy and management system is in place and health and safety auditing is undertaken. Average accident and incident rates are measured and targets are set. All construction site operatives (and sub-contractors) are Construction Skills Certificate Scheme trained.
Gladedale Group has a formalised Health, Safety and Welfare Policy in place, and undertakes regular internal and external auditing of its construction sites, with site visits also undertaken by Director level employees with responsibility for health and safety issues. No health and safety prosecutions were received in the last reporting year.

Considerate Construction: All sites are signed up to the Considerate Constructors Scheme.

Kier Residential is an associate member of the Considerate Constructors Scheme and therefore every Kier site or project is registered with the scheme and is assessed under its Code of Considerate Practice.

Employment: Commitment and contribution to developing skills within the industry during the construction process and through long-term employment creation.

The Berkeley Group has worked with local colleges to provide work placements for students, has taken part in the Building Work for Women project in 2008, has placed candidates from a Business in the Community employment scheme and has the appropriate procedures in place to ensure that sub-contractors meet basic statutory employment requirements and rights, and that site operatives have the legal right to work in the UK. Engagement with the local community has been undertaken at job fairs, with the aim of promoting local job opportunities, and mixed use projects undertaken with the aim of encouraging economic activity. Reduced rates on commercial space have also been offered to small to medium enterprises.

Stakeholder Engagement: Identification and engagement with key stakeholders on both a strategic and project level.

Taylor Wimpey sets out who its key stakeholders are and how it communicates with each group, and provides examples of senior management participating in external industry events related to sustainability, and of addressing areas of stakeholder interest following engagement. At a project level, it has a Community Policy in place and provides examples of community consultation events undertaken, and also evidences in-depth engagement with an NGO on socio-economic issues.

Customer Engagement: A communication programme is developed and undertaken to provide customers with information related to sustainability issues and to understand the market demand for sustainable housing. Customer satisfaction for all units sold is measured.

Miller Homes provides information to purchasers on the environmental features of its homes, has set up a dedicated website (www.mymillerstreet.co.uk) to encourage purchasers to live more sustainable lives, has undertaken a customer consultation to better understand customer attitudes to sustainability, and has an average customer satisfaction rate of 90%.

Well-being: All sites are designed and built to the principles of Lifetime Homes, Secure By Design and Building for Life. Initiatives are undertaken on developments to promote outdoor recreation, health and community interaction.

Inspace Partnerships builds its homes to Lifetime Homes and Secured by Design standards by default, unless otherwise instructed by its client, and communicates through public reporting its commitment to creating sustainable communities via the provision of community facilities, play spaces, cycle paths and consideration of other environmental factors that contribute to the well-being of residents.

The road to zero carbon... and beyond

As can be seen by these encouraging results, homebuilders have not let recessionary pressures push their sustainability activities aside. The strong focus on research and development and setting of challenging commitments to ensure new building standards are met is very encouraging. However, with the 2016 zero target looming, industry and government alike need to account for the tightened timeframe put upon homebuilders and the increased pressure on the supply chain in light of the downturn. The results of the benchmark show that this is a critical area for attention going forward in order to deliver on the targets in place.

The drive for improved environmental efficiency of product has been remarkable. However, alongside this the socio-economic aspects of sustainability cannot be overlooked. Concepts of community-building and place-making must be at the heart of government policy and industry practice in order to achieve the vision of sustainable community development.

It is against this backdrop that NextGeneration is making the following recommendations to both industry and government in order for homebuilders to continue towards the government's overall vision of delivering sustainable communities and the necessary support required to achieve this.

Recommendations to industry

- Seek to understand the materiality[4] and significance of sustainability issues to business operations and ensure this forms part of current risk procedures and future strategy development.
- Continue to invest in innovative projects and research into achieving higher levels of the Code for Sustainable Homes and seek to collaborate both internally and externally to share best practice and lessons learnt.
- While climate change mitigation issues are beginning to be addressed, keep sight of future, and critical, climate change adaptation challenges, including flood risk and water scarcity.
- Drive performance and understanding within the supply chain (both materials and labour) to ensure the development and availability of sustainable products, and the necessary skills to deliver the required standards.
- Ensure the delivery of more environmentally-efficient homes fits within, and compliments, the wider vision of place-making and community-building.
- Understand and deliver upon the role you have to play in engaging with the customer throughout the sales process, from marketing to handover.

Recommendations to government

- Continue to maintain a global leadership position in terms of driving the industry towards building more sustainable homes and continue to work with developers (and other stakeholders) to ensure the commercial and technical deliverability of these aspirations.
- Ensure that policy and legislation provides a clear and deliverable framework for homebuilders and is implemented consistently across all decision-making bodies, from local through to national levels.
- Invest in research and development in the sector (both developers and supply chain) to support and foster sustainable innovation in the market and on the part of key public sector actors.
- Invest in training programmes and skills development of current and future workers in the construction of sustainable buildings.
- Continue to support the homebuilders to gain a greater understanding of how the homes they are building are performing in practice.
- Provide incentives and programmes through which homebuilders can effectively share information with the wider industry.
- Take a leading role in educating on and marketing sustainable homes to the house buying market.

[4] Global Reporting Initiative, 2009. *G3: Content & Materiality* [online]. Available from: http://www.globalreporting.org/CurrentPriorities/ContentandMateriality [Accessed 29 September 2009].

2 Introduction

This 2009 report presents the results of the second Corporate Benchmark undertaken by NextGeneration. In October 2007, we published the results of our first corporate benchmark in the report entitled "Building a Sustainable Future"[5]. The report outlined the performance of the UK's top 20 homebuilders in terms of their sustainability practice and reporting. The benchmark undertaken in 2008 looked specifically at companies' approach to climate change adaptation and mitigation, rather than their overall approach to managing sustainability issues. NextGeneration presented the results of the top 20 homebuilders in the report entitled "Developing Homes for a Changing Climate"[6]. This report allows us to show both the progress of the sector since 2007 in terms of their wider approach to sustainability, and to draw on some specific and comparable issues drawn out in the 2008 benchmark.

Historically, NextGeneration has benchmarked the UK's top 20 homebuilders. It was decided to extend the 2009 benchmark to the top 25 homebuilders to ensure the benchmark continues to reflect the performance of those companies delivering around half of the UK's new homes, as has been the case with previous benchmarks. All 25 companies were invited to become members of NextGeneration. At the beginning of 2009, six of the 2008 members rejoined and four new members signed up also. The new companies joining for the 2009 benchmark are Crosby Lend Lease, Galliford Try, Gladedale Group and Keepmoat Limited. Logic Homes joins this group of developers as an associate member of the initiative. Those companies who were members in 2008, but did not rejoin in 2009, were Countryside Properties, Fairview New Homes, McCarthy & Stone, Persimmon and Redrow. The membership base of NextGeneration now represents approximately 56%[7] of the market share of the top 25 homebuilders. The top 25 homebuilders built 85,175 of the total number (141,900)[8] of homes completed in the 12 months to December 2008, which represents 60%.

It has been two years since the housing market began to decline, and only recently have there been signs of recovery. In the meantime, the government has injected over £1bn into the sector to aid recovery, consulted on the definition of zero carbon and set up an independent organisation – the Zero Carbon Hub[9] – to help guide the industry towards 2016. With economic conditions creating a more compact timeline then ever, it is a critical period for the new build housing sector as it comes out of the recession.

[5] NextGeneration, 2007. Building a Sustainable Future [online]. Available from: http://www.nextgeneration-initiative.co.uk/index/2007-benchmark [Accessed 2 November 2009].

[6] NextGeneration, 2008. *Developing homes for a changing climate* [online]. Available from: http://www.nextgeneration-initiative.co.uk/index/2008-benchmark [Accessed 29 September 2009].

[7] This number has been calculated from statistics published in *Building* magazine's July 2009 edition, as well as directly from the companies in the top 25. Where statistics have not been available estimates have been made based on the percentage change in output of the homebuilding companies from the previous reporting year.

[8] Communities and Local Government, 2009. *House Building December Quarter 2008* [online]. Available from: http://www.communities.gov.uk/publications/corporate/statistics/housebuildingq42008 [Accessed 29 September 2009]. Statistics refer to completions in England only.

[9] The Zero Carbon Hub, http://www.zerocarbonhub.org [Accessed 29 September 2009].

3 Context of benchmark

3.1 The UK economy and housing sector

At the time of the last NextGeneration report, the UK and global economies were struggling with the effects of the credit crunch that began in August 2007. The economic turbulence has since endured throughout late 2008 and 2009 and the UK officially entered recession on 23 January 2009, as GDP fell by 1.5% compared to the previous three months[10]. To date, GDP has contracted by 1.9% in the first quarter of 2009[11]. NextGeneration has previously discussed the causes of this, and we are now seeing just how wide-ranging and significant the effects on the UK housing market, and homebuilding sector, actually are.

The reduction in mortgage availability associated with the credit crunch has led to a sharp decline in customer demand for new homes. After more than a year of reduced finance in the market, gross lending in June 2009 was estimated at £12.3 billion, a 48% decline from the same month in 2008[12]. For customers to be able to secure finance, a large deposit is necessary[13] and the low Bank of England base rate is not generally being passed on to consumers, meaning that many, especially first time buyers, are still unable to purchase property. Customer demand for new homes has been reduced further as UK unemployment has risen with the deepening recession. The unemployment rate rose to 2.38 million in the three months to May 2009, and the jobless rate increased to 7.6%, which is the highest in more than 10 years[14]. Many customers have been defaulting on loans, or finding themselves unable to secure new finance. Others are being cautious in their spending, and choosing to defer larger purchases such as buying a new home. As a result, the volume of sales has fallen from 59,948 per month from January to April 2008 to 30,997 during the same period in 2009[15].

Coupled with falling demand is a reduction in the number of homes coming to the market, which has also been decreasing over the last two years. RICS anticipates that housing completions in 2009 could be as low as 75,000, although other commentators predict between 100,000 and 150,000. Annual housing starts figures for England, too, have been in decline. They totalled 90,430 in 2008-09, down 42 per cent compared with 2007-08 and 51 per cent below their 2005-06 peak[16]. This is unlikely to be sufficient to meet the demands of the increasing numbers of households (expected to grow at roughly 220,000 per year[17]) and the future needs of those customers who are unable to purchase in the current climate. It also seriously threatens the government target to build 3 million new homes between 2007 – 2020, which is equal to around 240,000 completions annually[18].

While lower supply may be expected to signal rising prices, recessionary pressures have meant that there has been a parallel decline in the price of homes and property. On 30th April 2008 Nationwide reported the first fall in house prices for 12 years[19]. The average price of a house within the UK is now just below £152,000, which is 14% less than a year ago[20].

[10] The Financial Times, 2009. *Hopes dashed for swift UK recovery* [online]. Available from: http://www.ft.com/cms/s/0/72c2c36e-e92f-11dd-9535-0000779fd2ac.html?nclick_check=1 [Accessed September 29 2009].

[11] Improvement and Development Agency, 2009. *Impacts of the recession* [online]. Available from: http://www.idea.gov.uk/idk/core/page.do?pageId=10903863 [Accessed September 29 2009].

[12] Council of Mortgage Lenders, 2009. *June gross mortgage lending* [online]. Available from: http://www.cml.org.uk/cml/media/press/2338 [Accessed September 29 2009].

[13] The Financial Times, 2009. *Home loan squeeze hurts UK builders* [online]. Available from: http://www.ft.com/cms/s/0/2e59b684-6cb4-11de-af56-00144feabdc0.html?nclick_check=1 [Accessed 29 September 2009].

[14] National Statistics, 2009. *Employment Rate falls to 72.5%* [online]. Available from: http://www.statistics.gov.uk/cci/nugget.asp?ID=12 [Accessed 29 September 2009].

[15] Land Registry, 2009. *House Price Index*. [online]. Available from: http://www1.landregistry.gov.uk/assets/library/documents/hpi-june2009.pdf [Accessed 29 September 2009].

[16] Communities and Local Government, 2009. *House Building March Quarter 2009* [online]. Available from: http://www.communities.gov.uk/publications/corporate/statistics/housebuildingq12009 [Accessed 29 September 2009].

[17] Royal Institute of Chartered Surveyors, 2009. *RICS Economics* [online]. Available from: http://www.rics.org/site/download_feed.aspx?fileID=3724&fileExtension=PDF [Accessed 29 September 2009].

[18] Royal Institute of Chartered Surveyors, 2009. *RICS Economics* [online]. Available from: http://www.rics.org/site/download_feed.aspx?fileID=3724&fileExtension=PDF [Accessed 29 September 2009].

[19] Nationwide, 2009. *House Prices* [online]. Available from: http://www.nationwide.co.uk/hpi/ [Accessed 29 September 2009].

[20] Land Registry, 2009. *House Price Index*. [online]. Available from: http://www1.landregistry.gov.uk/assets/library/documents/hpi-june2009.pdf [Accessed 29 September 2009].

Faced with such a difficult market, many homebuilders have had to cut back their operations. Jobs have been lost, offices closed and construction sites shut down or put on hold. The value of many companies' land banks has been written down and share prices have tumbled.

3.2 The outlook

Commentators are split as to when unemployment is likely to peak and the UK recession will end. However, several indicators are already beginning to signal an improvement. At the time of this report, several of the homebuilders' share prices had stabilised, Communities and Local Government (CLG) were publicising an increase in private housing starts and house prices in June[21] showed an increase of 0.1% which is the first positive monthly change since January 2008[22]. Within this report NextGeneration does not intend to speculate on the timescales of any recovery, but offers recommendations to industry and to government with respect to sustainability issues in the context of the challenging economic times we are experiencing now, and the actual impacts that have been seen as a result to this point.

3.3 The political and environmental context

The UK government has taken a number of steps to try to boost short-term demand within the housing market, including a rise in stamp duty exemption, from £125,000 to £175,000, for one year, and a cut in interest rates to 0.5% – the lowest level in the 315-year history of the Bank of England[23]. For various reasons, it is taking time for the effects of these to fully filter through the market.

The most recent initiative to be announced to tackle the supply side is the 'Kickstart' scheme. This scheme will make money available to help revive development projects that have been mothballed. Over 270 sites across the country have been shortlisted for a share in the £925m Kickstart funds which could help get building work on 22,400 homes back on track and create 20,000 jobs[24].

If we continue to emit carbon in current quantities the world is currently on a path that will lead global temperatures to rise by a minimum of two degrees by 2050, although the latest science tells us that this is most likely to be higher. This temperature rise is large enough to disrupt current weather patterns leading to more extreme weather events such as heatwaves or flooding, shifts in agricultural land and movements of entire populations. Sea level rises could mean that even parts of the Western world, including London, could be under water. In view of this, the UK government is not weakening its commitment to sustainability and the need to stimulate housing demand and supply of affordable homes, despite the challenging global economic situation.

Several legislative drivers are likely to result in the development of new regulation applicable to homebuilders, in particular:

- On 26th November 2008, the Climate Change Act[25] was passed. This represents the world's first legally binding framework to tackle climate change and commits the UK to reductions in greenhouse gas emissions of **at least** 26% by 2020 and 80% by 2050 against a 1990 baseline.
- In July 2009, the Department for Energy and Climate Change published the Low Carbon Transition Plan[26], which lays out the 5-year carbon budgets recommended in the Climate Change Act. The budgets are aiming for emission cuts of 34% by 2020.
- The EU is currently debating the recast of the Energy Performance of Buildings Directive, which places a duty on member states to promote the market for low and zero carbon buildings.
- Environment ministers and officials will be meeting in Copenhagen in December this year, to discuss the global approach to reducing greenhouse gasses, and to attempt to agree a

[21] Since this report was written, house price rises have been recorded in subsequent months, up to and including October 2009

[22] Land Registry, 2009. *House Price Index*. [online]. Available from: http://www1.landregistry.gov.uk/assets/library/documents/hpi-june2009.pdf [Accessed 29 September 2009].

[23] Bank of England, 2009. *Interest Rates and Inflation* [online]. Available from: http://www.bankofengland.co.uk/ [Accessed 29 September 2009].

[24] Communities and Local Government, 2009. *Healey kickstarts work on 22,400 homes* [online]. Available from: http://www.communities.gov.uk/news/corporate/1297068 [Accessed 29 September 2009].

[25] Office of Public Sector Information, *The Climate Change Act 2008*, http://www.opsi.gov.uk/acts/acts2008/ukpga_20080027_en_1

[26] DECC, *The UK Low Carbon Transition Plan*, http://www.decc.gov.uk/en/content/cms/publications/lc_trans_plan/lc_trans_plan.aspx

successor to the Kyoto Protocol (an international framework which has set globally binding targets to the year 2012).

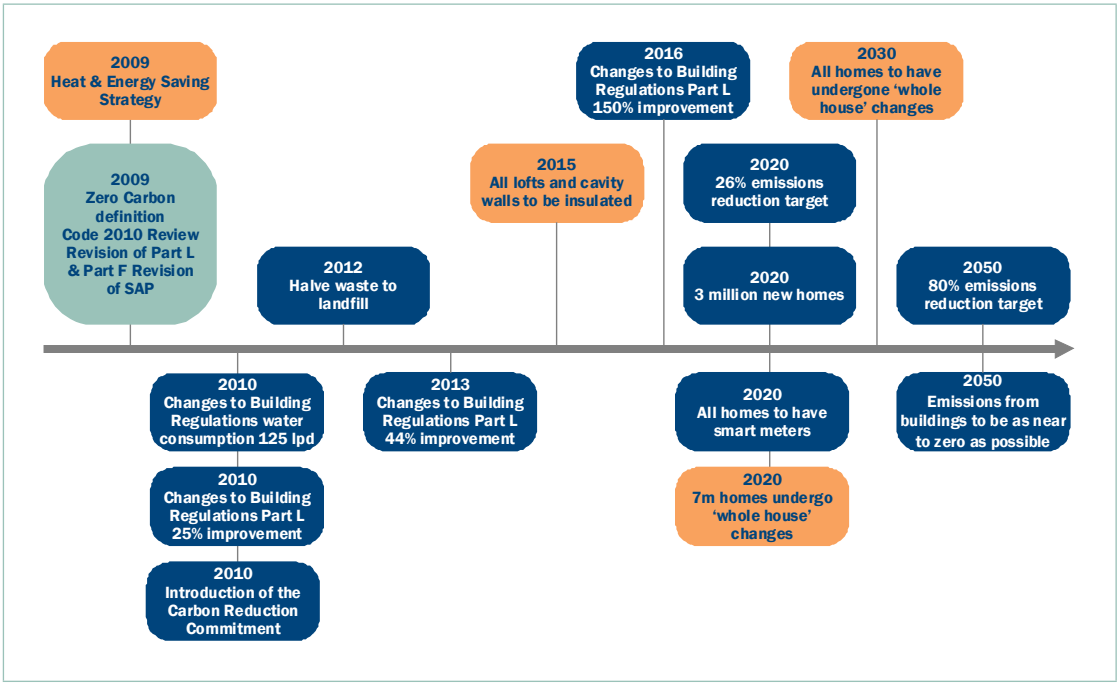
- The EU Green Recovery Plan[27] will see €5 billion invested in energy projects, broadband internet infrastructure and rural development. €3.98 billion of these funds will be invested in gas and electricity infrastructure, offshore wind parks and carbon capture and storage projects.

More immediately, the Carbon Reduction Commitment (a legally enforceable carbon trading scheme to be introduced in the UK next April) and increasing costs of landfill tax (rising by £8 per tonne per year until at least 2013) will have a direct impact on the financial expenditure of most homebuilders. The financial savings possible with better resource efficiency will increase proportionately.

3.4 Building standards

The government continues to regulate for the design and construction of a more sustainable built environment, as Figure 1 shows:

Figure 1 – The road to zero carbon and beyond

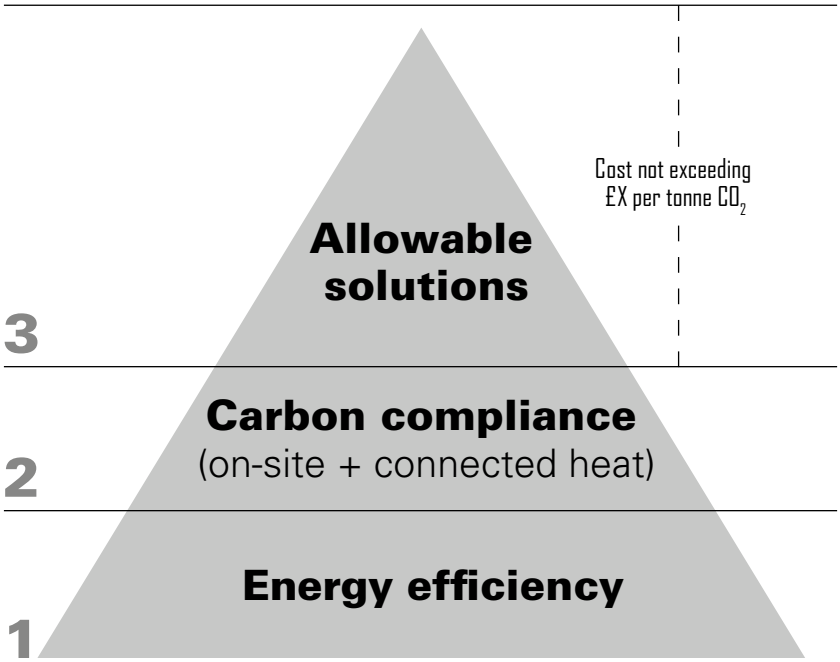


The rating of new build homes against the Code for Sustainable Homes has been mandatory since May 2008 and the target for all new private housing to be zero-carbon by 2016, introduced in the Building a Greener Future policy document, remains in place, with interim targets for improvement in energy performance set at 2010 and 2013. Alongside this, a consultation over changes to the SAP calculation methodology and Part L of the Building Regulations are underway and the government has set a target to halve construction waste sent to landfill by 2012. New minimum water efficiency standard for new dwellings will be introduced through changes to Part G of the Building Regulations in April 2010. The strategic and technical future of the Code will also be consulted upon in November this year.

While this provides a framework for developers, the practical definition of zero carbon will not be finalised until the end of the year. The government consulted on a three-tiered, hierarchical approach (see Figure 2) between December 2008 and March 2009. This prioritised energy efficiency within the building fabric (at a level to be confirmed). Beyond this, carbon compliance sets the 70% level of zero carbon heat/energy to be provided through on- and near- site renewables. A range of possible allowable solutions accounted for the remainder of the carbon. A final decision is expected later in the year.

[27] http://www.europarl.europa.eu/news/expert/infopress_page/034-55118-124-05-19-905-20090505IPR55117-04-05-2009-2009-false/default_en.htm

Figure 2 – Hierarchy of energy solutions[28]



Until a definitive definition is released, homebuilders are faced with uncertainty over the materials and renewable solutions they are currently testing. It is imperative that government provides flexible guidance for homebuilders as to how to deliver the changes necessary, in light of the economic situation, and to avoid costly retrofitting being necessary at a later date. Industry has worked together to respond as a collective voice through groups which are gaining momentum such as the Zero Carbon Hub and UK GBC. This is indicative of a new and more collaborative culture emerging within the sector.

3.5 Supply chain

The supply chain of a homebuilder will have a large impact over the ability to build a Code compliant, or zero carbon, home. Many homebuilders will have found companies within their supply chain to have gone out of business during the recession. As the market picks up they will have to act quickly to ensure that they have access to technologies and materials to meet the increasingly stringent standards required.

The economic slowdown represents an opportunity for homebuilders to work with their supply chain to drive innovation. With contractors competing for work, it may be possible for homebuilders to specify a higher level while achieving a cost saving. This will be dependent on the availability of appropriate, affordable materials and equipment, and skilled labour. Anecdotally, the cost of photovoltaic panels is already declining as they are more widely applied and economies of scale are developed.

3.6 Why benchmark sustainability?

Despite the most difficult market in recent times, the challenge for homebuilders is clear – to increase the supply of affordable and sustainable homes. NextGeneration believes that by participating in a bi-annual corporate benchmark, companies can focus on the entire range of high-level sustainability issues facing their organisations and how best to put structures in place to tackle them. This is especially important as government, planning authorities and investors continue to place an emphasis on the agenda.

The support network provided by being part of a benchmarking initiative such as NextGeneration provides a useful source of knowledge, and a portal to share best practice with peers. This collective movement has provided a useful link to government, and allows discussion of key issues facing the industry in response to consultation documents and emerging regulation.

[28] Communities and Local Government, *Definition of Zero Carbon Homes and Non-Domestic Buildings*, 17 December 2008, http://www.communities.gov.uk/publications/planningandbuilding/zerocarbondefinition

With the market in its current state of flux, it can be difficult for an organisation to measure how well it is performing, particularly strategically. Within this year's benchmark, NextGeneration measures not only the actual performance of homebuilders, but also considers their corporate strategy. This is designed to assist member companies in their market positioning and future-proofing of their businesses.

3.7 This report

The contents of this report provide:

- A summary of the key factors driving homebuilders to address sustainability and how the landscape has evolved since the last benchmark;
- Detailed analysis of the findings of the NextGeneration 2009 corporate benchmarking, highlighting challenges for the future; and
- A series of conclusions and recommendations addressed to both government and the industry.

4 The NextGeneration initiative

NextGeneration was launched in 2006 as a multi-stakeholder initiative with the aim to drive best practice in sustainability into the heart of the new-build residential sector. By encouraging the industry itself to embrace more sustainable house designs and delivery, it is intended to be a platform through which developers can both identify the sustainability-related risks they face and develop a good understanding of how best to address the related opportunities.

4.1 Executive Committee

For the 2009 benchmark, NextGeneration has been supported and directed by its Executive Committee partners WWF, Insight Investment, The Homes and Communities Agency and Bank of Scotland – Corporate. The committee's role has ensured the integrity and transparency of the initiative's governance and that the initiative, and the benchmarking processes, reflect and address their objectives with regards to encouraging sustainability in the housebuilding sector. Upstream Sustainability Services (part of Jones Lang LaSalle) acts as a Secretariat to the initiative, carrying out the analysis of the benchmarking and delivering a range of services to NextGeneration members.

4.2 Endorsement

In addition to the Executive Committee, a number of other organisations support the work of NextGeneration including the UK Green Building Council.

> ***"Our mission is to dramatically improve the sustainability of the built environment, by radically transforming the way it is planned, designed, constructed, maintained and operated. Having been personally involved in the initiative for some years, I know that NextGeneration is instrumental in driving sustainability into the residential sector and I'm delighted to formally endorse it on behalf of the UK-GBC."***

Paul King, Chief Executive, UK-Green Building Council

The model of engagement used by NextGeneration to drive best practice in the residential sector is also endorsed by a number of investor organisations including the UN Principles for Responsible Investment and Morley Fund Management.

> ***"The house builders benchmarking process is an excellent model for other industries to follow. It is a collaboration involving investors, companies, regulators and civil society, and really gets to the heart of the material ESG issues within this sector and the drivers of long term value."***

James Gifford, Executive Director, Principles for Responsible Investment

4.3 2009 Membership

Companies

All of the UK's top 25 homebuilders were invited to become members of NextGeneration. At the beginning of 2009, six of the 2008 members rejoined as members of NextGeneration:

Barratt Developments	**Inspace Partnerships**
The Berkeley Group	**Miller Homes**
Crest Nicholson	**Taylor Wimpey**

In addition, four new member companies joined the initiative:

Crosby Lend Lease	**Gladedale Group**
Galliford Try	**Keepmoat Limited**

Logic Homes joins this group of developers as an associate member of the initiative. The membership base of NextGeneration now represents approximately 56%[29] of the market share of the top 25 homebuilders.

Services

Members benefit from a number of services, in particular greater engagement opportunities within the benchmarking process. In addition, NextGeneration holds quarterly meetings with its members to discuss pertinent sustainability issues facing the sector. This is also an opportunity for other organisations to present to the NextGeneration membership, giving them access to ten of the major UK homebuilders. At the end of last year, NextGeneration ran two consultations with members on behalf of Communities and Local Government (CLG) to discuss the Code 2010 Review and the Code for Sustainable Homes cost analysis feeding into the review.

4.4 Wider activities

Advocacy

Since its inception in 2006, NextGeneration has worked to position itself as a voice on sustainability issues for its homebuilder members. There are a number of groups NextGeneration sits on to help disseminate the views of its members:

- Energy Efficiency Partnership for Homes[30] New Build working group
- Zero Carbon Hub[31] Examples and Scaling-Up workstream
- Zero Carbon Hub Skills and Training workstream
- Zero Carbon Hub Customer Engagement workstream

Sharing best practice

The unique output of NextGeneration is its annual report outlining the top UK homebuilders' sustainability performance. This shares examples of good and best practice from the sector with the wider built environment industry.

4.5 Future activities

Existing Stock Benchmark

Building on the success of its benchmark for new build homes, NextGeneration is launching an existing stock benchmark focusing on the sustainability performance of private residential landlords, investors and property managers. In line with the government's progressive agenda for the existing housing sector, NextGeneration is using its experience of benchmarking the new build sector to help organisations owning and managing existing residential stock to understand the challenges it faces and the opportunities of addressing these.

Associate membership

Logic Homes has continued its associate membership of NextGeneration and benefits from a number of the same services offered to full members of the initiative. There are a range of associate membership packages now available for new build developers and we encourage homebuilders outside of the top 25 to engage with the initiative.

[29] This percentage has been calculated from statistics published in Building magazine's July 2009 edition, as well as directly from the companies in the top 25. Where statistics have not been available estimates have been made based on the percentage change in output of the house building companies from the previous reporting year.

[30] The Energy Efficiency Partnerships for Homes, http://www.eeph.org.uk/ [Accessed 29 September 2009].

[31] The Zero Carbon Hub, http://www.zerocarbonhub.org/ [Accessed 29 September 2009].

5 The benchmark methodology

5.1 Benchmarked companies

The third NextGeneration industry benchmark (and second Corporate Benchmark) assessed the top 25 UK homebuilders by volume, based on the number of units they completed in the financial year 2007/08. The benchmarking is undertaken in two phases:

Phase one: The top 25 companies are rated on the basis of their publicly available information (corporate responsibility reports, sustainability reports, annual reports and accounts, corporate websites). They are assessed on their strategy, governance and risk management, their efforts to reduce their impacts on the environment and their contribution to society. The result of this phase is a score and ranking of their public transparency through reporting.

Phase two: The performance of the NextGeneration members is then evaluated through face-to-face engagement with the companies and their provision of evidence adds information in support of their performance in each of the three areas outlined above.

The following companies were benchmarked; member companies are in bold and indicated by an asterisk:

Antler Homes	**Crosby Lend Lease***	Lovell
Barratt Developments*	Fairview New Homes	McCarthy & Stone
Bellway	**Galliford Try***	**Miller Homes***
Berkeley Group*	**Gladedale Group***	Morris Homes
Bloor Holdings	Gleeson Homes	Persimmon
Bovis	**Inspace Partnerships***	Redrow
Cala Group	**Keepmoat Limited***	Stewart Milne
Countryside Properties	Kier Group	**Taylor Wimpey***
Crest Nicholson*		

All 25 companies were benchmarked in phase one and the 10 members were also benchmarked in phase two.

5.2 Criteria review

The 2009 benchmark is based on broadly the same criteria as used in the previous Corporate Benchmark undertaken in 2007. It also builds on elements of the 2008 Climate Change Benchmark. However, to take account of the ever-progressing regulatory landscape and the changing expectations as to what is considered standard, good and best practice across the industry, some of the criteria are more stretching.

Where appropriate, the criteria have been aligned with European and national legislation and government policy, including the emissions reductions bring brought in by the Climate Change Act, energy and water efficiency requirements within dwellings (as introduced through Building Regulations) and waste management plans being implemented on all new sites. NextGeneration members were consulted during the criteria development process and provided input to their content. Even though the criteria have changed, the results for individual companies, and the sector as a whole, are broadly comparable with those in the 2007 benchmark. However, when reviewing the results, readers should keep in mind the increased stringency of the criteria and factor this into views of the sector's progress (see section 6.4 for more details). NextGeneration provides commentary within the detail of the report, especially where particularly relevant.

The same three overarching categories were used in this benchmark as in previous exercises: strategy, governance and risk management; impact on the environment; and impact on society. The issues addressed within each are as follows:

Strategy, governance and risk management

- Strategy
- Governance
- Risk Management
- Disclosure

Impact on environment

- Management systems
- Commitment to Building Standards (2007: Commitment to EcoHomes)
- Ecology
- Climate change
- Energy
- Water
- Domestic waste
- Transport
- Procurement and supply chain engagement
- Construction waste
- Construction site management

Impact on society

- Health and safety
- Considerate construction
- Employment
- Stakeholder engagement
- Customer engagement
- Wellbeing

5.3 Scoring and engagement process

As with previous benchmarks, all 25 homebuilders were subject to phase one of the benchmarking, whether they were a NextGeneration member or not. This phase undertook an analysis of each company's publicly available information, such as corporate disclosure through annual reports or sustainability/corporate responsibility reports, and information on company websites. Information analysed during this stage had to be publicly available before 15th May 2009. The results of this phase provide an assessment of the quality of reporting of UK homebuilders on sustainability issues as covered by the benchmarking criteria. All companies were provided with a copy of their phase one analysis and score. They were then given the opportunity to respond to the analysis, query scores and highlight any additional publicly available information not captured in the initial analysis. A final score for the quality of their reporting was then allocated.

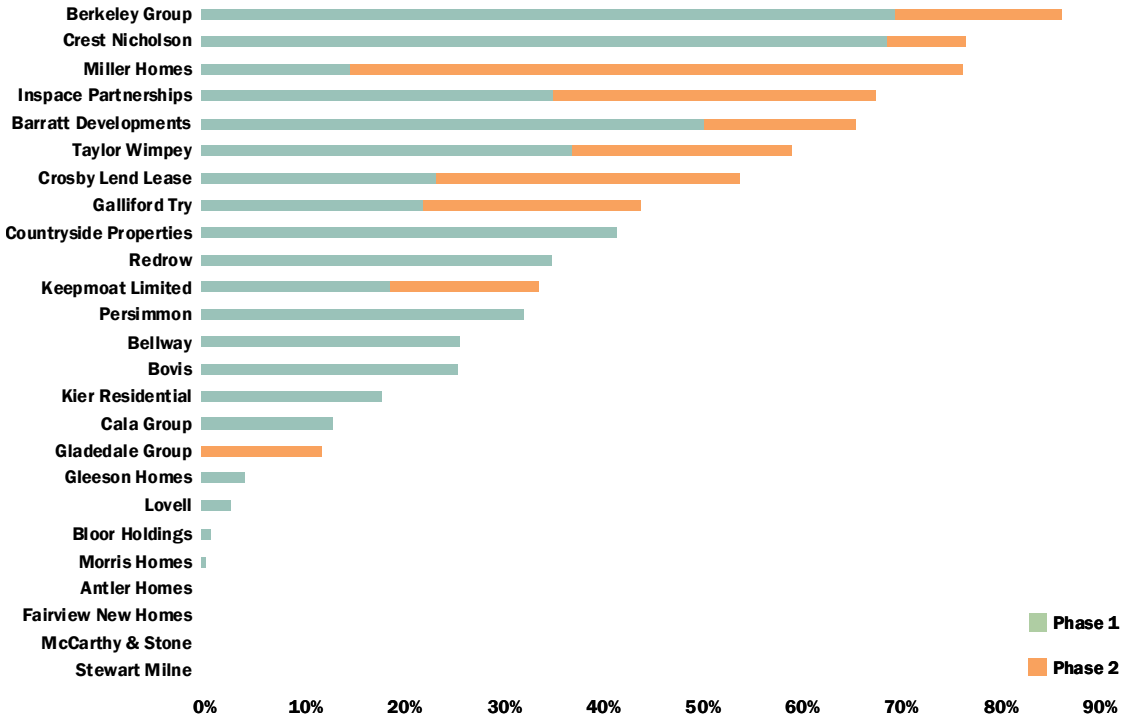
In phase two, NextGeneration members, as one of their membership services, met Upstream Sustainability Services and selected representatives of WWF, Insight Investment, the HCA and the Bank of Scotland to discuss their phase one score and their additional evidence on all criteria. Each company was given the opportunity to provide further evidence to support its reporting commitments to addressing sustainability issues. Members then received an initial phase two report outlining their second score in light of the further information disclosed during this second tranche of the benchmarking. This phase of the process thus generated a fuller assessment of the performance of NextGeneration members on sustainability issues.

6 Summary of results

6.1 Company ranking in 2009

As shown by Figure 3 below, three companies have emerged as leaders in this year's benchmark – the Berkeley Group, Crest Nicholson and Miller Homes achieving 86.7%, 77.0% and 76.6% respectively. Inspace and Barratt have performed encouragingly against the 2009 criteria, both scoring over 65%. The remaining five companies within the top 10 scored over 35%, with Taylor Wimpey and Crosby Lend Lease performing well with scores of 59.4% and 54.3% respectively. Keepmoat Limited, Persimmon, Bellway and Bovis all scored above 25%, and Kier Residential, Cala Group and Gladedale Group scored within 6% of each other (ranging from 18.2% to 12.2%).

Figure 3 – Top 25 overall performance



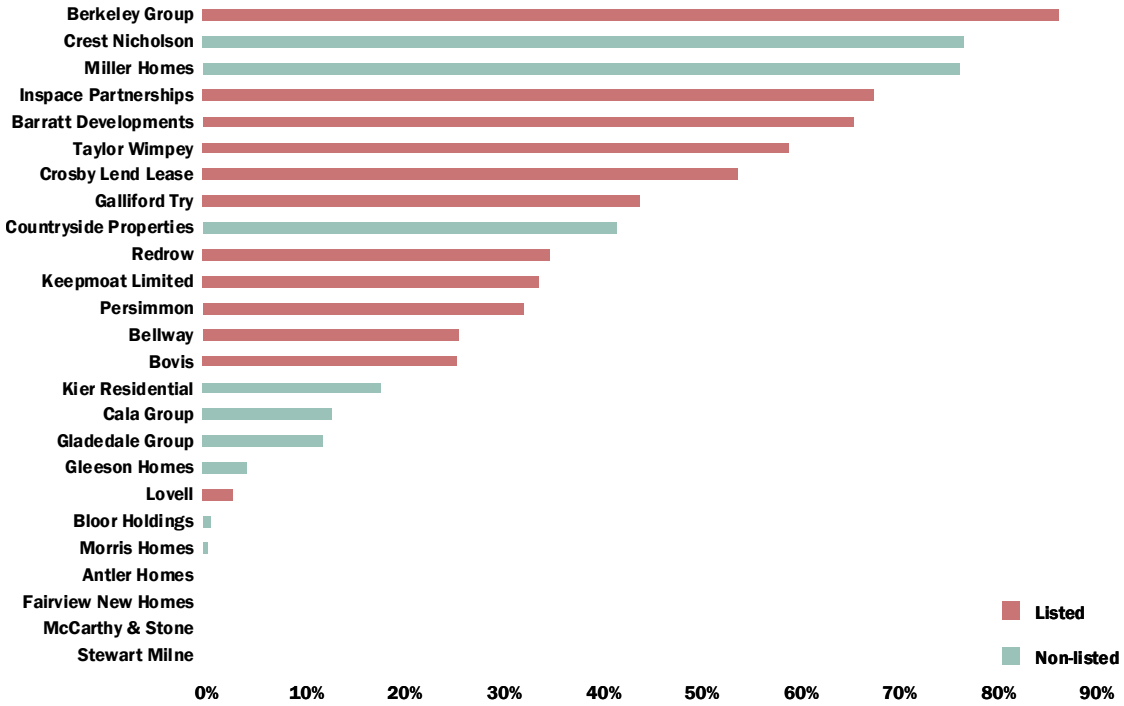
There were eight companies scoring below 10%, all of whom are not members of NextGeneration. These scores are therefore not necessarily reflective of actual performance, but a lack of disclosure in this area. As with any company that is not currently a member of NextGeneration, we would encourage these developers to join their peers and engage with the initiative to showcase their approach to sustainability.

The average score for member companies in the benchmark was 57.9%, compared with 13.5% for non-members. Of the 15 non-member companies who are benchmarked, ten are private companies and therefore are under less pressure to report, which offers a further explanation for the difference between the member and non-member averages. The difference between listed and non-listed housebuilders is illustrated below.

6.2 Listed companies vs. non-listed companies

Of those benchmarked, 12 companies are listed and 13 companies are non-listed (see Figure 4 below). On average, listed companies outperformed non-listed companies with scores of 44.6% and 18.8% respectively. This compares to scores of 49.0% and 28.7%, respectively, in the 2007 benchmark. While the average score for listed companies is greater than that for the non-listed companies, two of the top three performing companies are privately owned and not subject to the same reporting requirements, which is the likely driver of the higher average performance of listed companies. Of particular interest is Miller Homes, which has never been a listed company and is commended for its approach to addressing and reporting on sustainability issues.

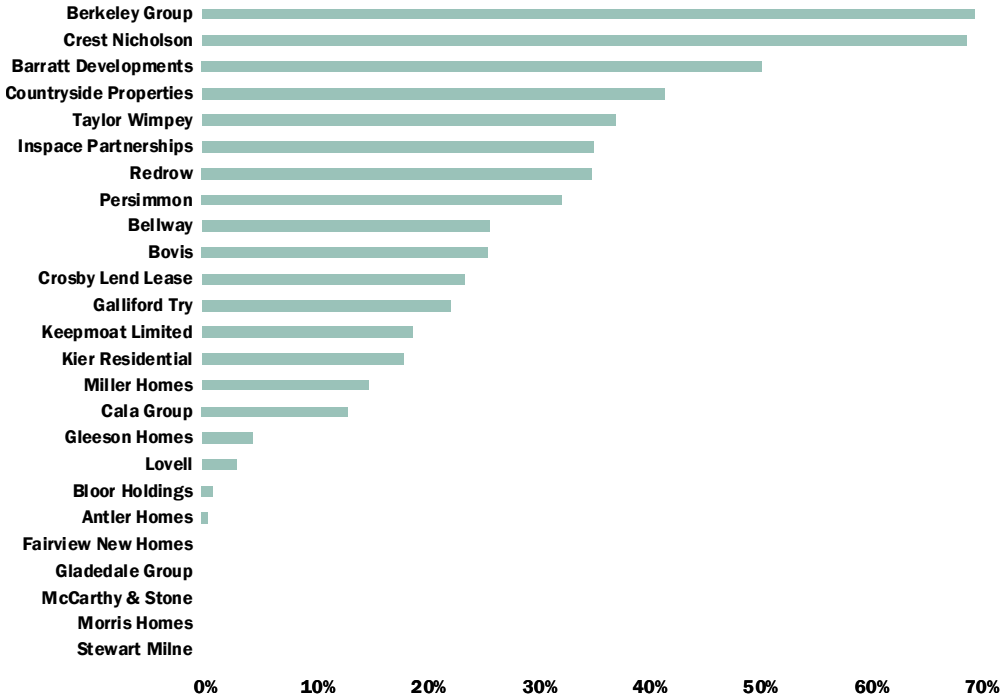
Figure 4 – Listed vs. non-listed companies



6.3 Public transparency

As outlined in the methodology section, the NextGeneration benchmarking is undertaken in two phases; the first phase is an assessment of companies' reporting and disclosure. Members and non-members are analysed on a like-for-like basis during this phase. The second phase is an assessment of members' additional information (not detailed in public communications). The following graph (Figure 5) looks at the top 25 companies' public transparency scores in isolation.

Figure 5 – Public transparency



The results show very varied performance between companies' approaches to reporting on sustainability issues. In 2007, NextGeneration reported that 12 of the top 20 homebuilders report on sustainability issues either through a printed or web-based sustainability report. In 2009, it was found that 16 companies now report against sustainability impacts showing how reporting has encouragingly increased in the sector. In the 2009 benchmark, the top two performing companies – Berkeley Group and Crest Nicholson – scored 70% and 69%, showing a significant uplift in the top scores related to this part of the benchmarking. This compares to the scores of the top two performing companies in the 2007 benchmark in relation to quality of reporting – Countryside Properties and Taylor Woodrow – of 55% and 54%.

It should also be noted that eight companies choose to disclose only limited information on their approach to sustainability issues through their corporate reporting or websites, and that they are also not NextGeneration members. They are Gleeson Homes, Lovell, Bloor Holdings, Antler Homes, Fairview New Homes, McCarthy & Stone, Morris Homes and Stewart Milne. Their appearance as eight of the bottom nine companies, therefore, does not necessarily reflect their actual sustainability performance. As with any company, NextGeneration would encourage increased transparency so that stakeholders are able to have a greater understanding of their sustainability performance and approach.

As discussed above, the homebuilding sector has become increasingly transparent since the 2007 benchmark, especially when looking at the performance of the higher scoring companies. However, the industry as a whole could improve further in terms of disclosure to catch up with other sectors. There are a number of ways in which this could be achieved:

- The assessment of sustainability risks to core business activities and associated commercial implications;
- Both the measurement and management of relevant performance data being reported in line with best practice standards; and
- Accounting for future scenarios and how these will impact on the business.

6.4 Progress since the 2007 Corporate Benchmark

The 2007 and 2009 benchmarks were broadly similar in their content in order to ensure the two sets of results were comparable and that NextGeneration could report on how the sector has progressed over the two years. However, there are three distinct changes between the benchmarking years, which are as follows:

1. While broadly similar, and assessing companies against the same headline sections, the criteria for 2009 has evolved since 2007, becoming more stringent in some areas, especially where new legislation has been brought in. The increased stringency represents approximately 10% in terms of a company's final score. For example, if a company was to score 60% in both 2007 and 2009, this would represent an improvement in performance in real terms of around 10%.
2. The 2007 benchmark assessed the top 20 UK homebuilders, whereas the 2009 benchmark assessed the top 25 homebuilders.
3. The membership between the years has changed and, therefore, the overall scores for those companies who were members in 2007 and are not in 2009 are not fairly comparable. This is also applicable when looking at scores for companies who were not members in 2007 and are in 2009.

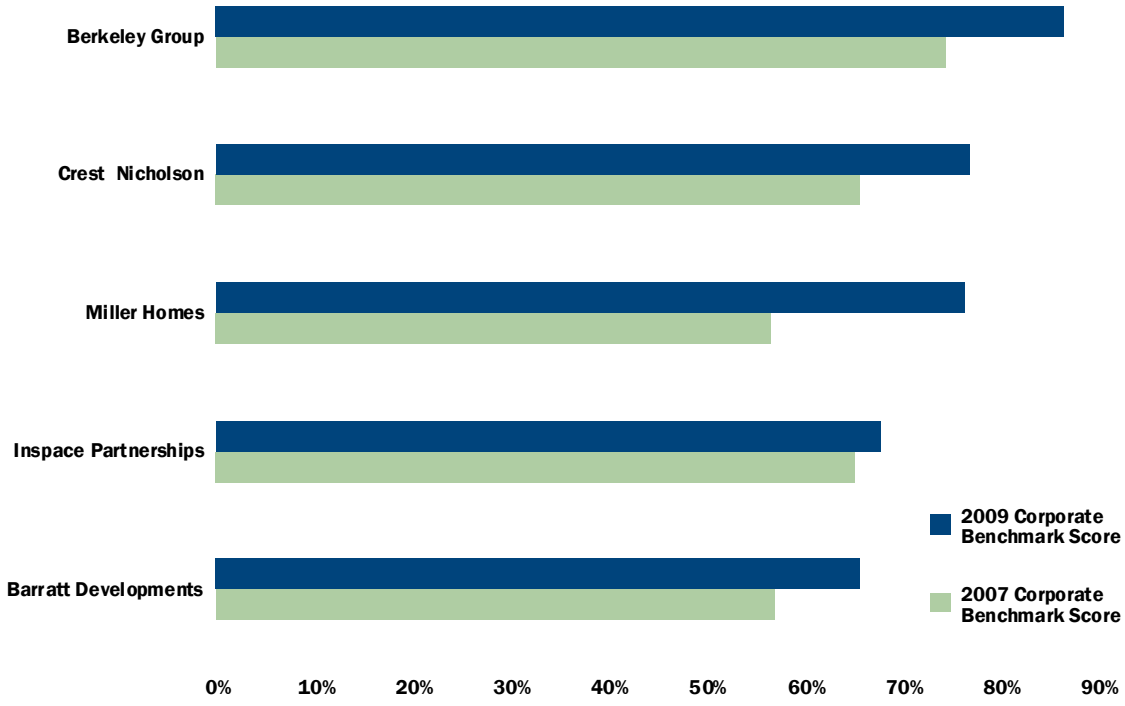
With this in mind, the graph below (Figure 6) shows the average performance of the top 20 companies in the 2009 benchmark and the average performance of the companies assessed in the 2007 benchmark. As the graph shows, this average score is the same (39%) for the two benchmarks when comparing the 20 companies assessed in both years (instead of the full 25 companies assessed in 2009). The third bar on the graph represents the perceived average of the 20 companies assessed in 2007 if the same information provided was assessed against the 2009 criteria. This takes into account the uplift in stringency of the criteria and, in turn, shows that the average performance (when compared against the same set of criteria) of the companies has increased from 2007 to 2009.

Figure 6 – Comparison with 2007 Corporate Benchmark

6.5 Benchmarking drives improved performance

While the factors outlined above do affect the assessment of all the companies against each other, progress of those companies which have been members of NextGeneration during both the 2007 and 2009 benchmarks shows improvement has been made through engagement and collaboration. Figure 7 below looks at the scores of the five companies who were members in 2007, 2008 and 2009 – The Berkeley Group, Barratt Developments, Crest Nicholson, Inspace Partnerships and Miller Homes. In addition to these five companies, Taylor Woodrow and George Wimpey were NextGeneration members during the 2007 Corporate Benchmark, and then merged to form Taylor Wimpey (currently a NextGeneration member). The merger means that results from these benchmarks are not directly comparable and for this reason the company has been omitted from the graph.

Figure 7 – Progress since 2007 Corporate Benchmark



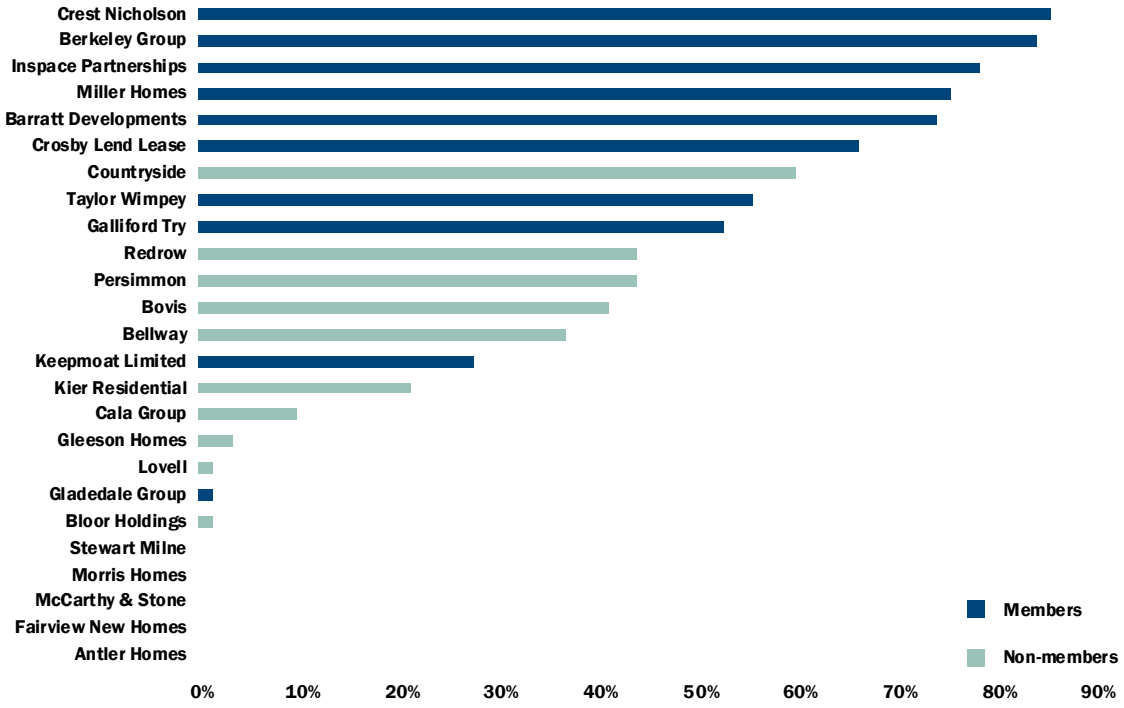
Looking at just the corporate benchmarks, the average score of the five companies who were members in both 2007 and 2009 benchmarks has increased from 64% to 75%. In addition, the average scores (58%) of all 10 members of NextGeneration this year showed those companies outperformed the members of NextGeneration 2007 (11 companies) during the last corporate benchmark (2007 average score: 56%).

7 Strategy, Governance and Risk Management

7.1 Results overview

The 25 companies benchmarked achieved an average score of 34.7% on strategy, governance and risk management – the highest across the three benchmarking sections. Listed homebuilders (51%) outperformed private homebuilders (20%) against this section. Member companies (60%) scored higher on average than non-member companies (18%). Overall performance by all companies is shown in Figure 8 below.

Figure 8 – Companies' overall score against strategy, governance and risk management



7.2 Progress since the 2007 Corporate Benchmark

When looking at performance compared to 2007, the 20 companies assessed scored an average score of 50.5% against the strategy, governance and risk management section. As suggested, there are a number of reasons why the average scores might have decreased between the two benchmarks, including:

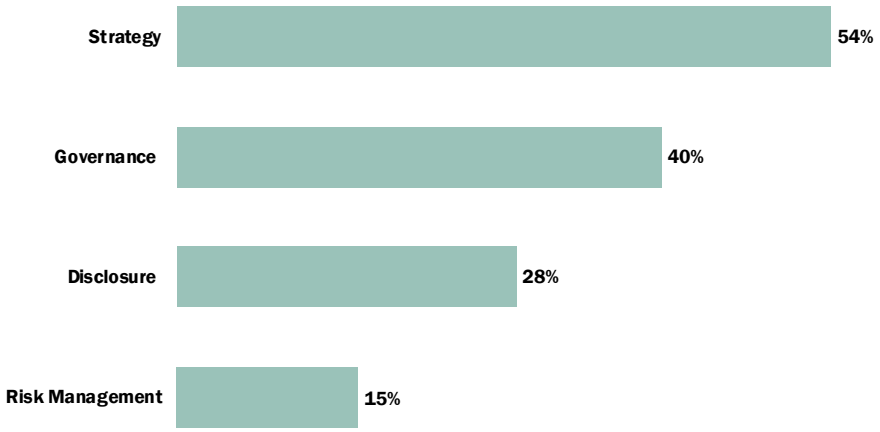
- While broadly similar, the criteria for 2009 have evolved since 2007, becoming more stringent in some areas. In terms of this section of the criteria, considerable development of sections related to internal governance structures, risk management and the quality of disclosure was undertaken. This means a proportion of this section has been adapted and developed (see Figure 9 to see average score of the companies assessed in both 2007 and 2009 against the 2009 set of criteria).
- The 2007 benchmark assessed the top 20 UK homebuilders, whereas the 2009 benchmark assessed the top 25 homebuilders. The bottom nine performing companies all scored less than 5%, which has obvious implications on the average score. The top scoring 20 companies in 2009 (rather than 25) scored an average 43.4% against this section of the criteria.

Figure 9 – Average performance of companies assessed in 2007 and in 2009 against the 2009 criteria related to strategy, governance and risk management

7.3 Performance against individual criteria sections

Within the strategy, governance and risk management section, the highest average scores (see Figure 10 below) were achieved on the strategy criteria (54%), followed by those assessing governance (40%), disclosure (28%), and then risk management (15%). The following paragraphs will look at these individual sections in more detail.

Figure 10 – Breakdown of average performance against strategy, governance and risk management



7.4 Strategy

A coherent, developed strategy is still considered the critical foundation for any company's approach to addressing sustainability issues. Any strategy should be based upon:

- A thorough materiality[32] review to understand significant sustainability impact areas;
- The achievement of business objectives;
- Consultation with external stakeholders to understand their views and opinions.

As with the overall performance in this first section of the benchmark, listed homebuilders outperformed private ones. This does not necessarily suggest that a number of the private developers have not developed good strategies, rather that they may have chosen to not publicly disclose them.

Despite the lower average scores against this section, the results suggest that many companies are developing a strategy-led approach for dealing with sustainability issues. Of the 25 homebuilders assessed:

- Fifteen companies have in place a Board-level sustainability or Corporate Responsibility (CR) policy, with clear corporate objectives to implement the sustainability strategy;

[32] Global Reporting Initiative, 2009. *G3: Content & Materiality* [online]. Available from: http://www.globalreporting.org/CurrentPriorities/ContentandMateriality [Accessed 29 September 2009].

- Thirteen companies review progress against a (varying) number of specific targets;
- Twelve have committed to measuring performance against significant impact areas; and
- Nine companies have engaged with stakeholders at a strategic level to help review their approach in this area.

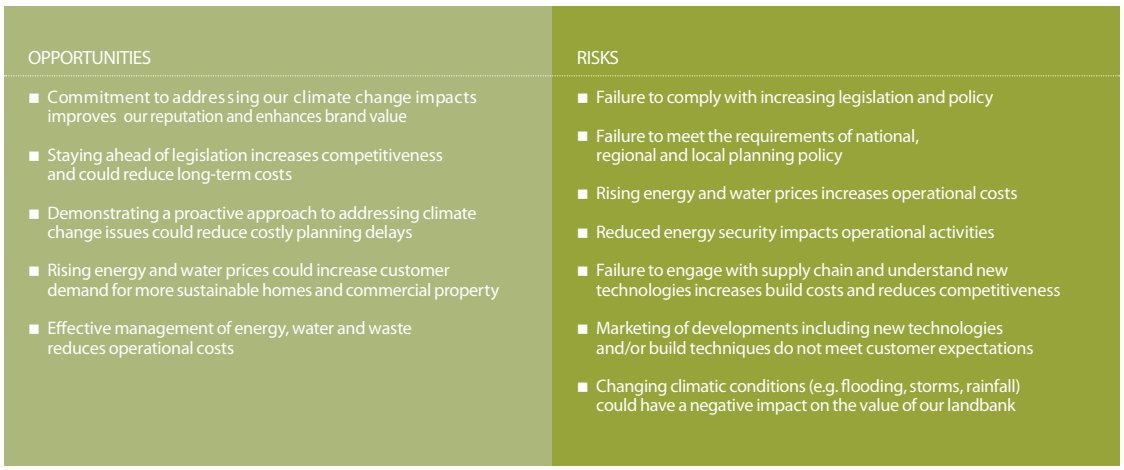
7.5 Risk Management

The pertinence of effective risk management is growing in light of highly challenging legislation related to both operations (for example, Carbon Reduction Commitment) and product (for example, zero carbon from 2016), the critical need to account for climate change issues such as flood risk during land acquisition, and fluctuating energy and fuel prices posing significant commercial implications. Any sustainability strategy should be developed in line with a materiality review of impact areas. This should be considered against the environmental, social and governance risks facing the business.

In light of the growing importance of the risk management process, the criteria used to assess companies against this section of the benchmark have been made more stringent between 2007 and 2009, notably more than other parts of the criteria. With this in mind it is difficult to directly compare performance between the two benchmarks, however in 2007 NextGeneration reported that 5 of the homebuilders discuss sustainability risks faced by the business in their annual report and accounts. In 2009, nine companies (see Figure 11) provided information (to varying degrees) in their reporting on how sustainability risks are accounted for by the business (the example for the Berkeley Group is shown by Image A below). More interestingly, only three companies demonstrated evidence of going beyond the descriptive assessment found in reporting to actually analysing the significance of sustainability risks, in line with financial risks, and the commercial implications facing the business. While these three companies are commended for their approach in this area, a lot more needs to be done by the majority of homebuilders and as a sector to ensure these risks are truly being accounted for in business decisions.

Figure 11 – Public disclosure on ESG risk management

Image A – The Berkeley Group ESG opportunities and risks



http://www.berkeleygroup.co.uk/media/adobepdf/2/b/Berkeley_Group_Sustainability_Report.pdf

7.6 Governance

In order to support the development and implementation of a sustainability strategy, appropriate governance structures need to be put in place to ensure responsibility and management of sustainability issues is undertaken from Board to site operative level. This requires the assignment of responsibilities at all levels within the business and, often, the creation of a guiding function to drive implementation of the sustainability strategy. Of those assessed, 13 companies could evidence having a high level committee in place focussing on sustainability issues, reviewing progress against targets and KPIs.

Appropriate governance structures allow clear communication of the strategy and related objectives throughout the company, and help to identify the correct training provided for employees. The benchmarking assessed how successful companies were in this regard at both an office and site level. In relation to offices:

- Seven companies have sustainability or 'green' champions in place;
- Eight companies engage with staff to help develop the strategy and provide training on sustainability issues; and,
- Five companies provide information on sustainable living to their employees.

The companies leading in this area provided evidence of incorporating sustainability objectives into the core business objectives of senior management and including sustainability issues in their remuneration and appraisals. For the senior managers of four companies, sustainability issues form some of their business objectives and three companies include measures of sustainability into remuneration packages.

An example of best practice in this area is Inspace Partnerships. The company has a Sustainability Steering Group in place which reviews sustainability strategy and performance against specific targets and objectives, and sustainability issues are included in senior staff's performance reviews and remuneration packages. Operational (construction site and office-based) staff are communicated and engaged with on company sustainability strategy and given training on sustainability issues relevant to individual job roles. Environmental 'champions' are appointed in offices and the Systems Management Team audits the implementation of company sustainability policy on sites.

7.7 Disclosure

Transparency and accountability are two of the key principles of sustainability. Putting sustainability information into the public domain allows companies to more effectively communicate with their stakeholders. It is important for investors and shareholders in listed companies to help inform decision making, for current and prospective employees to understand the sustainability ethos of the company they work for, and for any other organisation seeking to understand the approach of different businesses. As sustainability issues rise up the agenda for all stakeholders, reporting against progress gives homebuilders a clear opportunity to build their reputation and brand associated with their sustainability activities.

In 2007, NextGeneration reported that 12 of the top 20 homebuilders report on sustainability issues either through a printed or web-based sustainability report. In 2009, it was found that sixteen companies now report against sustainability impacts showing how reporting has encouragingly increased in the sector. In the 2009 benchmark, the top two performing companies – Berkeley Group and Crest Nicholson – scored 70% and 69%, showing a significant uplift in the top scores related to this part of the benchmarking. This compares to the scores of the top two performing companies in the 2007 benchmark in relation to quality of reporting – Countryside Properties and Taylor Woodrow – of 55% and 54%.

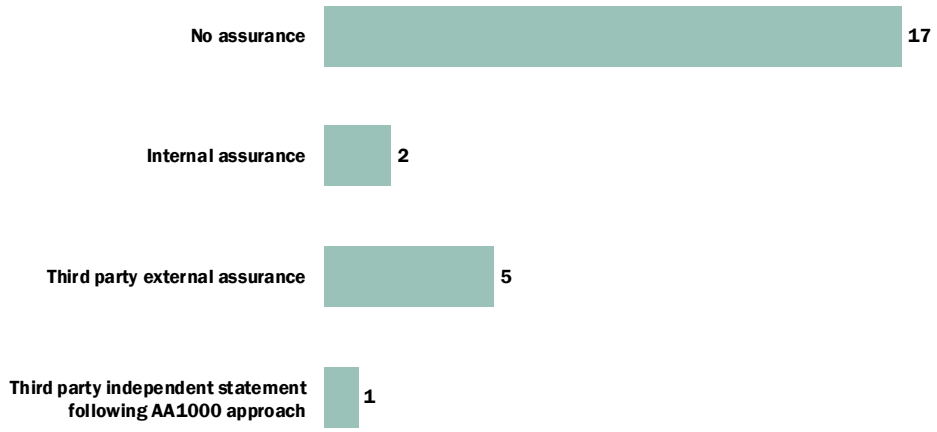
The nine companies that do not report on sustainability information are private homebuilders. While less obligated to report to investors than listed homebuilders, there are a number of other stakeholders – including central government, local planning authorities and customers – to which any homebuilder is encouraged to report.

This years' analysis shows that of the 16 companies reporting on sustainability issues coverage, 14 are measuring performance against all or some key impact areas. Further to measuring performance, 12 are setting management targets and ten are setting performance targets to drive progress in the associated key impact areas. Of the 25 assessed, nine companies are explaining through disclosure how sustainability issues are influencing the performance of the business.

For companies reporting on their sustainability performance, assurance of such disclosure, whether internal or external, is critical to ensuring the validity and accountability of that information. In 2007, NextGeneration reported that while a number of companies seek external assurance of their sustainability reports, this tends to be provided internally or by their sustainability consultants. The situation in 2009 has not progressed (see Figure 12 for further detail). Barratt Developments continues to be the only company seeking external assurance to a recognised standard. In this case, the AA1000 approach has been undertaken by Barratt.

External assurance is still seen as a cost burden for homebuilders. Without a clear understanding of the value this adds to sustainability reporting, NextGeneration believes this situation will remain the same within the homebuilding sector. However, the importance placed on companies to ensure robust auditing of performance data and assessment of targets will increase as there is a greater emphasis placed on the comparability of company data by investors, government bodies and other interested organisations.

Figure 12 – Assurance for public disclosure on sustainability performance

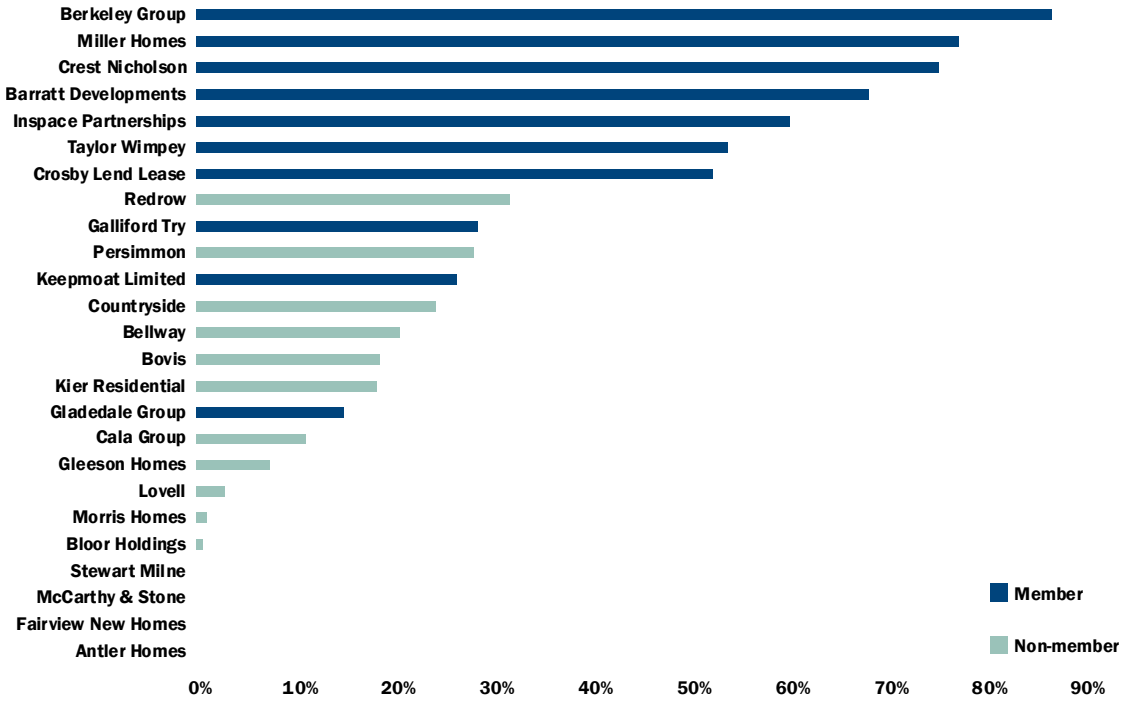


8 Impact on the Environment

8.1 Results overview

The 25 companies benchmarked achieved an average score of 28.4% against impact on the environment – the lowest across the three benchmarking sections (see Figure 13 below). Listed homebuilders (40%) outperformed private homebuilders (18%) against this section and member companies (55%) scored higher on average than non-member companies (11%). In addition to the averages already provided, it is interesting to note that the top scoring 20 companies in 2009 (rather than 25) scored an average 35.4% against this section of the criteria.

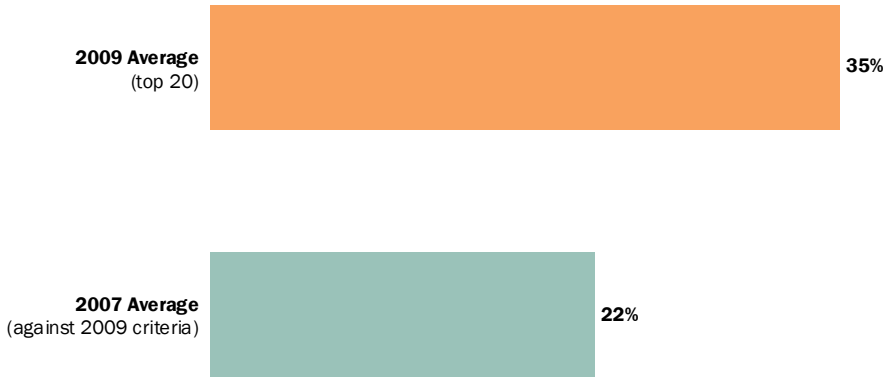
Figure 13 – Companies' overall score against impact on the environment



8.2 Progress since the 2007 Corporate Benchmark

When looking at performance compared to 2007, the 20 companies assessed scored an average score of 31.6% against the impact on the environment section. As with the strategy, governance and risk management section, the average scores might have decreased between the two benchmarks for a number of reasons. In terms of this part of the criteria, sections related to commitment to sustainability building standards, climate change, construction waste, energy and water (mainly in line with new legislation in these areas and the criteria used for the 2008 NextGeneration Climate Change benchmark) have been significantly adapted and developed (see Figure 14 for average score of the companies assessed in both 2007 and 2009 against the 2009 set of criteria).

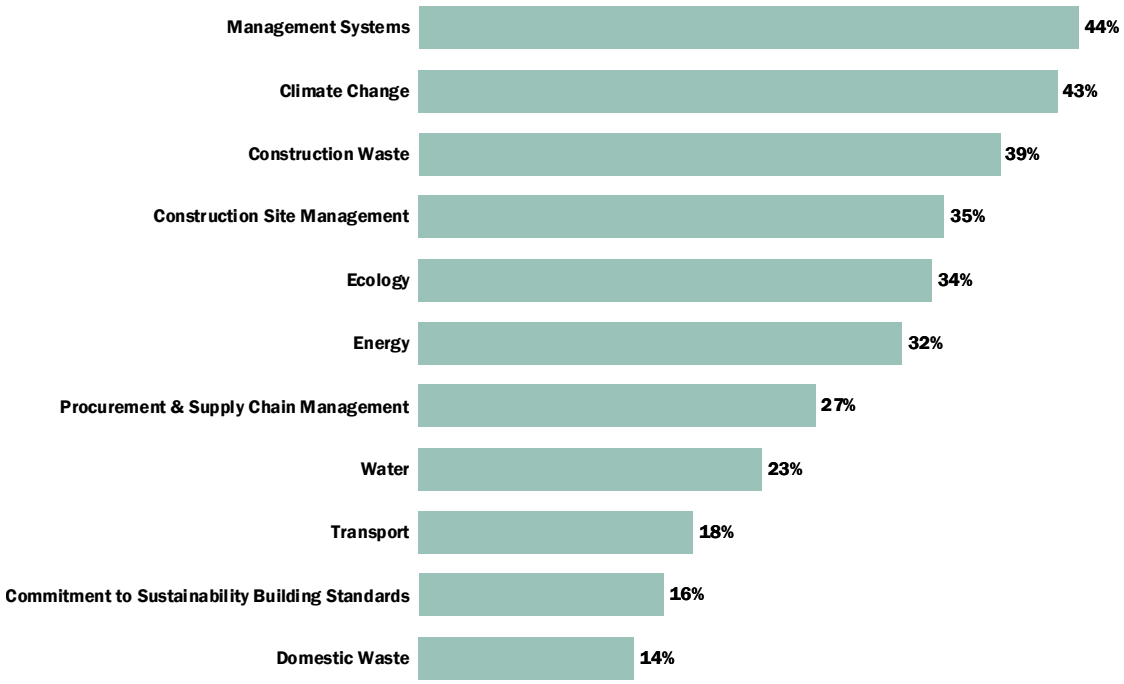
Figure 14 – Average performance of companies assessed in 2007 and in 2009 against the 2009 criteria related to impact on the environment



8.3 Performance against individual criteria sections

Figure 15 shows great variation of average scores within the impact on the environment section. The highest average score was for management systems (44%) with companies also scoring relatively well on average against climate change, construction waste, construction site management, ecology and energy (all section averages above 30%). It can also be seen from the graph that against a few sections, notably transport, commitment to sustainability building standards, and domestic waste (all section averages below 20%), the company averages were relatively poor. The following paragraphs will look at these individual sections in more detail.

Figure 15 – Breakdown of average performance against impact on the environment



8.4 Climate Change

Global average temperatures have risen by nearly 0.8 °C since the late 19th century, and have been rising at about 0.2 °C/decade over the past 25 years. The revised edition of 'The Climate of the United Kingdom and recent trends', released by the UK Climate Impacts Programme (CIP) in January this year, found that these observed increases are very likely (more than 90% probability) to have been caused by man-made greenhouse gas emissions.

In recognition of the human influence on the changing climate, the Kyoto Protocol was established in 1997 to set a legal framework on international greenhouse gas emissions until 2012. Ministers and officials are due to meet in Copenhagen in December this year to agree a successor, and secure new binding reduction targets. Science shows that this agreement will have to limit changes in

temperature to no more than 2°C compared to pre-industrial levels. As well as providing protection from increasing weather events such as flooding, this will also present opportunities for the UK to innovate and become a leader in the 'green economy'. In the run up to Copenhagen, the government has published a 'UK low carbon transition plan' which sets out how the government plans to reduce emissions between today and 2020. It is hoped that this document will set the standard for other nations during the forthcoming climate change talks.

In the lead up to Copenhagen, the Climate Change Act was passed in November last year, legally committing the UK government to **at least** a 26% reduction in greenhouse gas emissions by 2020, and 80% by 2050. The more detailed carbon budgets as laid out in the UK Low Carbon Transition Plan[33] set the 2020 target at 34%. Analysis has shown that housing is a sector that has been identified as an easy target for achieving carbon reductions, and is likely to have to make up for emissions from aviation and shipping in order to meet overall targets, which will provide additional challenges for homebuilders. In order to meet these stretching targets, support will be needed from government for both the domestic and corporate sectors through the introduction of new incentives and regulation.

One such piece of legislation, already introduced, is the Carbon Reduction Commitment which will come in to effect next April. The Carbon Reduction Commitment (CRC) is a mandatory emissions trading scheme specifically targeting medium- to low-energy intensive sectors. Announced in the May 2007 Energy White Paper, the scheme is designed to achieve a 4 million tonne reduction in carbon dioxide emissions by 2020. Every year, each participating organisation will have to buy carbon allowances from the government to cover the following year's predicted carbon emissions. Inclusion in the CRC will be determined on the basis of energy use on the half-hourly market, but is likely to capture a number of organisations within the new-build housing sector.

The residential sector's response to addressing climate change issues has been encouraging. The Berkeley Group, Crest Nicholson, Inspace Partnerships, Barratt Developments, Taylor Wimpey, Redrow, Keepmoat Limited, Persimmon, Bellway and Bovis all have a Climate Change Policy (or alternative policy document outlining company approach) in place (see Image B – The Berkeley Group Climate Change Policy, Image C and Image D below for examples). A further two companies provided internal documentation during engagement to reflect their corporate approach to addressing climate change. In addition, ten companies measure their performance against climate change impacts and eight companies setting associated targets (specific examples of these can be seen in the sections below, for example, energy, water and waste). Further to this, six companies have engaged with stakeholders on climate change issues affecting their business.

This strategic recognition of climate change is driving good practice through to implementation in a number of companies. Greater inclusion of climate change adaptation and mitigation issues in core risk management procedures will solidify this approach going forward.

Image B – The Berkeley Group Climate Change Policy

The biggest commitment we can make to tackling climate change is by reducing the carbon footprints of the developments we build. We are therefore committing to ensure that all sites seeking planning permission after the 1 January 2008 will commit to certifying all new homes (excluding refurbishments) to Level 3 of the Code for Sustainable Homes. This commits us to:

- Reducing the carbon emissions of the homes we build by 25% (compared to 2006 Building Regulations).
- Reducing the water consumption of the homes we build to 105/litres/person per day – a 30% reduction from the average consumption in the UK.
- Addressing other climate change pertinent issues including waste management, site water management, material specification, and ecology, as appropriate, on a site by site basis.

We will also be working to reduce our direct climate change impacts. Specifically, we will commit to:

- Reducing our direct carbon emissions and water consumption (associated with our offices, sites and car fleet) by 20% by April 2008 (compared to April 2007).
- Reducing by 50% construction waste sent to landfill by 2010 (based on 2007/08 baseline) and send zero waste direct to landfill for all office operations by April 2009
- Implementing our green office management policy across the whole company, which includes a commitment that all sites and offices must procure their electricity through Green Energy Tariffs.
- Implementing our green car policy, and extending this to become a Green Travel Policy across the whole company by April 2008.
- Implementing our Sustainable Procurement Policy to cover all purchasing, which gives a preference to procuring environmentally sustainable materials and services which minimise climate change impacts

http://www.berkeleygroup.co.uk/media/adobepdf/1/a/Climate_Change_Policy.pdf

[33] http://www.decc.gov.uk/en/content/cms/publications/lc_trans_plan/lc_trans_plan.aspx

Image C – Barratt Developments' Environment Charter

Customer Service Charter

1. We will embed our Customer Service Charter across the organisation by promoting and enhancing the 10 key points and the fundamental principles behind them. We will provide a consistent service across the Group and develop a culture where recommendations and suggestions are encouraged.

2. We expect all Suppliers and Contractors to adhere to the Customer Service Charter and will monitor their compliance. We will work openly and co-operatively with our Suppliers and Contractors to ensure high standards of quality and service are achieved.

Code of Practice and Code of Conduct

3. We will use our Code of Practice and our Code of Conduct to give clear guidelines on what we expect, as a Company, of all staff, suppliers, Contractors and anyone representing the Barratt Group of Companies. We will promote professional ethics and continue to develop a service ethos throughout the Group and our supplier network.

Communicating with customers

4. We are improving our customer satisfaction survey information to enable us to:
   a. Improve the way we measure, manage, promote and set customer satisfaction goals.
   b. Have a more uniform method of reporting and utilising feedback.

5. We have adopted a single out of hours emergency service across the Group. This includes an automatic electronic registering process to ensure easy access, quality and speed of response from our emergency service suppliers.

6. We will improve electronic accessibility to the organisation with the development of on-line customer communication / complaints systems. We will develop a more streamlined process for dealing with queries, enquiries and concerns with the introduction of a formal escalated complaints procedure and utilise Customer Relationship Management to get an improved understanding of our customer's needs, demands and expectations.

7. We will work to continually reduce the number of referrals to the NHBC.

Staff development

8. We are committed to the continuous development of our staff to meet the demands of our customers and will ensure all customer facing staff have the right skills and development opportunities. To deliver this we will introduce a new two phase National Programme of customer focused training and techniques. Phase 1 will be introduced by December 2008 and underpins the customer service process and Phase 2 will be introduced by June 2009 and will focus on behavioural change.

This Charter will be reviewed annually
M S Clare, 2008

http://www.barrattdevelopments.co.uk/ir/reports/reports/CR_Report_2008.pdf

Image D – Crest Nicholson Climate Change Policy

Specifically, Crest Nicholson commits to:

- Ensuring we understand the likely adaptation & mitigation measures required for our development activities as a consequence of anticipated climate change.
- Ensuring we understand the risks and opportunities deriving from scientific understanding of and the regulatory response to climate change, and manage them appropriately.
- Continuously engage with our stakeholders and review our approach in relation to their response.
- Ensuring we measure quantitatively our direct and indirect greenhouse gas emissions and other significant climate change impacts in line with globally accepted reporting standards.
- Maintaining an emissions reductions strategy which includes progressive targets for both our direct and indirect impacts

http://www.crestnicholson.com/assets/pdfs/policies/Climate_Change_Policy.pdf

8.5 Energy

Energy security continues to be a major issue for the UK, and the past year has seen dramatic fluctuations in energy prices. This, and a raft of policy and legislation at a European, national and regional level is driving homebuilders to assess their energy strategies at both a corporate and project level.

The recast of the European Performance of Buildings Directive[34] (the EU legislation responsible for the introduction of Energy Performance Certificates and Display Energy Certificates in the UK) is currently being debated by the European Parliament. The aim of this is to tighten the existing legislation, in order to ensure that all EU nations are taking action on reducing emissions from the built environment. While any changes that arise are unlikely to be significant for the new build-housing sector, this will have an impact in the UK in terms of the existing stock, and does signal continuing influence from Europe on the sustainability agenda, and the possibility of further regulation in future, especially in response to any agreements made at Copenhagen in December.

[34] Communities and Local Government, 2009. *Recast of the Energy Performance of Buildings Directive* [online]. Available from: http://www.diag.org.uk/media/314921/epbd%20uk%20recasting%20proposals.pdf [Accessed 29 September 2009].

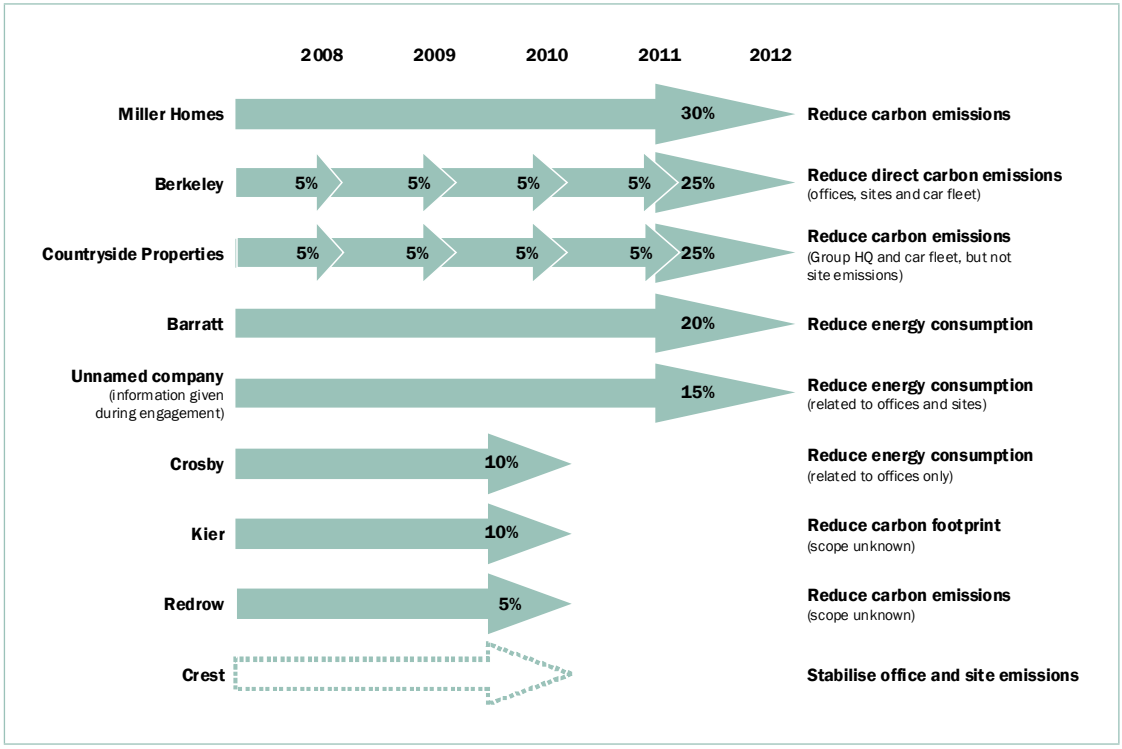
Upcoming UK regulation which will affect the homebuilders approach to addressing energy issues relating to operations has been outlined in the previous section on climate change. Considering the significance of this issue for the homebuilding industry, the performance of the companies benchmarked is varied. This part of the criteria has been developed since the 2007 benchmark and looks at both the approach to operations and product. Looking at operations first, while over half of companies assessed have a clear commitment to reducing operational energy consumption, just nine companies are setting management targets to tackle these issues and only eight companies are collecting operational energy performance data. The data (see Table A below) reported shows there is still no clear consistency in metrics for reporting on energy consumption meaning comparisons between companies are very difficult to make. For the purposes of the benchmark, NextGeneration assessed companies on whether they gather any operational energy use data and the associated data collection methods, rather than their performance in this area.

Table A – Reported operational energy use data

Operational energy use (public reporting relating to operational energy impact)		
Company	**Energy measured**	**Energy metric and scope**
Barratt Developments	4,121 $kgCO_2$	CO_2 emissions per $100m^2$ of office space
	1,792 $kgCO_2$	CO_2 emissions from construction process per unit
Berkeley Group	1,059 GJ	Direct gas consumption on sites and in offices
	38,344 GJ	Electricity procured for sites and offices
Bovis Homes	1,400,000 kWh	Electricity consumed in regional offices
Cala Group	204.6 kg	CO_2 emissions per m^2 of office space per year
Countryside Properties	14.3%	Reduction in car fleet emissions achieved
	16.4%	Reduction office related emissions achieved
Crest Nicholson	2,206 MWh	Energy consumption in offices
	153 kWh	Gas consumption in offices per m^2
	143 kWh	Electricity consumption per m^2 of office space
	168gCO_2	Average car fleet emissions per km
Inspace Partnerships	150gCO_2	Average car fleet emissions per km
Kier Residential	65$kgCO_2$	Operational emissions per m^2
Persimmon	3,600,000 kWh	Electricity consumption in offices
	4,000,000 litres	Fuel use of vehicle fleet

In addition to the nine companies setting management targets, nine companies are also setting performance targets related to stabilising or reducing operational energy. The detail of these targets is in Table B:

Table B – Reported operational energy targets[35]



While tackling operational energy consumption is important for the homebuilding industry, the key issue in terms of energy is in relation to the design and development of homes. Government figures indicate that during 2007 the residential sector accounted for 26% of the UK's carbon emissions[36]. The need to ensure new build homes are constructed to high efficiency standards is therefore critical. Draft regulations amending Part L of the Building Regulations are currently awaiting approval, and are expected to come in to force in April or October 2010, and will see an enforced saving of 25% in CO_2 emissions per year (compared to a 2006 baseline). At the same time the standard assessment procedure (SAP) will move from an annual energy calculation to a monthly one, in an attempt to improve accuracy.

In addition, the definition of zero carbon is currently being debated, following a consultation which closed in March this year. The proposed approach is a three tiered one (see Figure 2 on page 17). This prioritises energy efficiency within the building fabric. Beyond this, carbon compliance set the level of zero carbon heat/energy to be provided through on- and near- site renewables. A range of possible allowable solutions are anticipated to account for the remainder of the carbon. A final decision on the definition was expected in July, but has been postponed until later in the year.

Despite recessionary pressures, this is an area where the homebuilders have shown resilience and focus. The 2007 benchmark was undertaken in the year after the Building a Greener Future policy document was released, and the Code for Sustainable Homes was launched. It left many developers asking questions about "how" these standards could be achieved and the challenge was significant. The challenge is still significant, but companies are now talking about "what" it is they need to do to progress construction standards in the UK. While there are still many questions surrounding zero carbon and the possibility of achieving such standards on all dwellings, the benchmark can reveal numerous examples of companies working with their design, technical and commercial teams, suppliers and contractors, and consultants to make the improvements required to building standards work for them.

Since the last Corporate Benchmark, Barratt Developments have published key preliminary findings from their EcoSmart Show Village in Chorley, Lancashire. Working with academics from the University of Manchester, a range of renewable technologies were installed in the seven-unit development, and their effectiveness monitored over a 15-month period. The technologies trialled included a ground

[35] The companies included in this table have varying baselines against which the targets have been set.

[36] Department of Energy and Climate Change, 2009. *Carbon dioxide emissions by end user 1990-2007* [online]. Available from: http://www.decc.gov.uk/en/content/cms/statistics/climate_change/co2_end_user/co2_end_user.aspx [Accessed 29 September 2009].

source heat pump, photovoltaic roof panels, solar hot water thermal collectors, micro-wind turbines and combined heat and power units.

Quote 1 – Barratt Developments

> ***"The eco village has been an invaluable test bed which has helped separate renewable myth from renewable reality. The challenge now is to drive down costs to ensure that they have the widest possible take-up."***
>
> ***"Barratt is now using renewable technologies at 40 of our developments. The Photovoltaic roof panels and Solar Hot Water Thermal Collectors are key features which we will use going forward. So too is the Air Source Heat Pump, which operates on similar principles to other Heat Pumps."***

Mark Clare, CEO of Barratt Developments

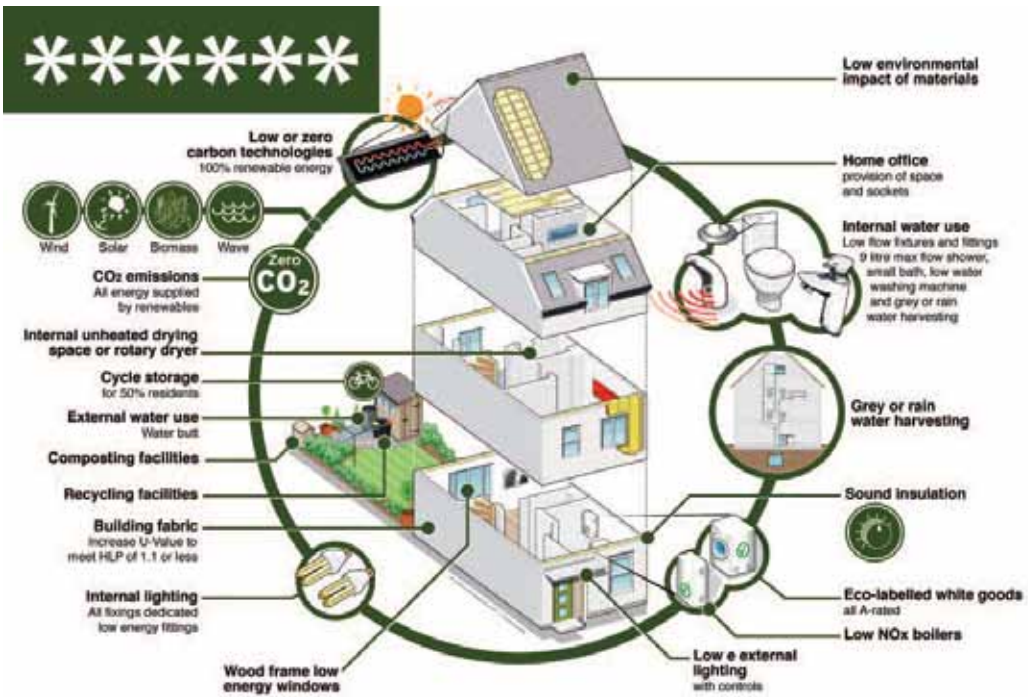
Crest Nicholson also gives details in its 2008 Sustainability Report on its progress in terms of design and innovation geared at improving the energy efficiency of their homes, which includes applying for planning permission for a 260-dwelling development deigned to attain the energy component of the Code for Sustainable Homes level 6.

Quote 2 – Crest Nicholson

> ***"Crest Nicholson's Code 3 framework developed in 2007 has been used to assess and inform the planning, design and build of many of our developments, enabling an accurate cost base to be quantified early on in project development and improving efficiencies in build. Last year we delivered our first 20 homes to Code level 3, a full four years ahead of the Government's timetable, and applied for planning permission for One Gallions – 260 dwellings to Code level 6 for energy."***

Crest Nicholson Sustainability Report 2008

Image E – Crest Nicholson Code level 6 design



http://www.crestnicholson.com/assets/pdfs/reports/Crest_Nicholson_2008_Sustainability_Report.pdf

Miller Homes has worked closely with its supply chain to develop single units achieving Code levels 3, 4, 5 and 6 at its Miller Zero development in Basingstoke. Post-occupation performance monitoring is due to commence to allow for analysis of the energy efficiency of the dwellings whilst they are lived in.

While the investment in R&D has been encouraging, this is by no way demonstrating mainstream uptake of Code level 6 or zero carbon housing. There are still many questions around how such developments can be financed and there are a number of organisations developing potential schemes and solutions. The UK GBC has recently released a report recommending a 'pay as you save' scheme be introduced across the UK to provide finance for low carbon refurbishment for homeowners. This will provide a whole house plan for low carbon refurbishment of a property (through energy saving technology such as wind turbines, photovoltaic panels and heating controls), with the costs being provided by a third party. This would then be paid back over time, based on the projected savings that would result. Further agreement is required from government as to how this scheme would work in practice, but it is likely that such a scheme will be rolled out across the country.

Last December, the UK Energy Bill was amended to incorporate feed in tariffs for renewable energy. This is designed to incentivise small scale production of low-carbon and renewable energy by allowing domestic and small scale producers of this energy to sell power back to the Grid at a preferential rate. This is an approach already used by several other countries, such as Germany, with great success. The proposals for how the feed in tariff will be administered here, and the rates that producers are to receive, are currently under consultation.

8.6 Water

Rising up the agenda alongside the critical need to address climate change issues, global water scarcity is becoming increasingly pertinent. Homebuilders will have a key role to play in addressing this through the homes they produce – not only in terms of water efficiency but also in terms of surface water run-off.

In response to growing pressures on the global and UK water supply, the Environment Agency has recently released its water strategy for England and Wales. This sets out a series of actions to abstract and use water in a more sustainable way, now and in the future, in order to deliver a secure water supply and safeguard the environment.

In terms of product, from April 2010 new planning applications will have to comply with an updated version of Part G of the Building Regulations, concerned with sanitation, hot water safety and water efficiency. This clarifies the usage of grey water and rainwater in the home, and introduces a maximum daily usage of 125 litres per person in new homes. It will also bring the national calculation methodology in line with that used for the Code for Sustainable Homes.

An updated version of the calculator used to measure water usage in the home, which underpins the Code for Sustainable Homes, was released in May this year. This is in response to previous concerns that water specifications were being driven down to a level which would mean buyers of new homes may retrofit white goods, negating any environmental improvements.

In terms of improving the water efficiency of dwellings, 16 companies showed a commitment in this area, and three companies measure their performance. Six companies demonstrated that they had worked with stakeholders to better understand how to improve the water efficiency of dwellings, and amongst the companies benchmarked, there were four examples of monitoring the water efficiency of completed units provided, and a further two companies due to commence a monitoring exercise. Research into achieving Code levels 3 and 4, or evidence of building out to this level was demonstrated by eight companies in the benchmark; for Code levels 5 and 6, seven companies provided evidence to support their approach.

The benchmark also assessed the companies approach to reducing operational water consumption in both office and on sites. Of those assessed:

- Eleven companies in the benchmark showed a commitment to reducing their operational impact in terms of water consumption;
- Eight of these companies have qualitative targets in place; and
- Five have KPIs measuring their site and office water consumption.

While the majority of companies in the benchmark do not set any kind of performance targets in relation to reducing water consumption, Barratt Developments, The Berkeley Group, Crest Nicholson,

Crosby Lend Lease and Countryside Properties all have public targets in place, typically for a 5% or 10% reduction over the next reporting year.

The Berkeley Group showed a strong approach in this area of the benchmarking. Sites and offices are metered for water consumption, and a target is in place to reduce consumption by 5% annually. External stakeholders such as Waterwise have been engaged, and technical feasibility studies have been undertaken on a number of projects to inform research into attaining the higher Code levels. A two bedroom, two bathroom apartment at The Berkeley Group's Acton development was used to test the implications of achieving various performance levels set by the Code for Sustainable Homes. The study ran over a period of five, month long intervals during which the fixtures in the unit were changed to meet the internal potable water use performance standards of Code levels 1/2 (120 litres pppd), Code levels 3/4 (105 litres pppd) and Code levels 5/6 (80 litres pppd).

Two occupants lived in the unit during the study period and water use was monitored via a data logger fitted to the water meter. The occupants were surveyed at the end of each month long period to establish their perceptions of the various specifications.

The results showed that average monthly water use in the unit over the trial period remained within the range 55 to 61 litres per person per day (significantly lower than each of the mandatory performance levels in the Code) and did not display a progressive pattern of reduction as the higher standards required by Code Level 1/2, 3/4 and 5/6 were met. Results from the occupant survey suggest that customers are likely to find that units certified to the Code for Sustainable Homes will have one or more fixtures installed which they consider to have too low a flow/capacity. The survey results also indicate that where flow rates are too low, customers may consider replacing them to gain better performance. Figure 16 provides a summary of the test results:

Figure 16 – Water consumption data from The Berkeley Group

Time period	Actual average use for period (l/p/d)	CfSH Water Calculator predicted consumption (l/p/d)	CfSH Level
Month 1	58.11	164.68	Standard (no code rating)
Month 2	60.47	119.01	1/2
Month 3	58.67	103.88	3/4
Month 4	55.73	101.06	3/4
Month 5	57.23	81.04	5/6

8.7 Commitment to Sustainability Building Standards

The top 25 companies scored an average of 16% in this section. This average was brought down considerably due to the fact that 11 companies (all non-members) did not score in this section.

Six companies provide data on the number of their private dwellings attaining at least EcoHomes 'Very Good' certification, with another two companies providing data, but not qualifying if this relates to private dwellings only. Of the six companies providing data on their private dwellings, Bellway, Crest Nicholson and The Berkeley Group report on this publicly, with the number of private dwellings certified to at least EcoHomes 'Very Good' at 18%, 22% and 27.7% respectively.

When building regulations are amended in 2010 to reflect the energy requirement of Level 3 of the Code for Sustainable Homes, Code Levels 1 and 2 will be below minimum standards. This has necessitated a review of the Code. Options being explored are leaving the Code as it is, making only minimal changes to the energy and water categories, or setting out a timeline for change in 2010, 2013, and 2016. The review is expected to be completed in March 2010.

The energy efficiency element of the definition of zero carbon is currently being finalised, following a consultation which closed in March this year. The proposed approach is a three tiered one. This prioritises energy efficiency within the building fabric. Beyond this, carbon compliance set the level of zero carbon heat/energy to be provided through on- and near- site renewables. A range of allowable solutions are anticipated to account for the remainder of the carbon. A final decision on the definition was expected in July, but has been postponed until later in the year.

As the Code for Sustainable Homes becomes the standard industry benchmark for measuring the sustainability of a dwelling, this year's benchmark has shown that companies are putting the procedures in place to collect data on Code certifications obtained. Ten of the companies benchmarked are collecting data on the number of dwellings certified to the Code. Of these companies, Cala Group, Bellway, Persimmon, Barratt Developments and Crest Nicholson disclose data in public reporting. Understandably this data indicates that a relatively minimal number of Code level 3 dwellings were built during the last reporting year.

Seven companies in the benchmark demonstrated that they had undertaken research into achieving Code for Sustainable Homes levels 4, 5 and 6, including Miller Homes, who has worked closely with supply chain partners to develop three pilot schemes at the Miller Zero project in Basingstoke. Environmental features of the units include high insulation, photovoltaic panels, a biomass boiler running on wood pellets, rainwater harvesting and triple glazed windows.

Image F – Miller Zero, Basingstoke (Miller Homes)

http://www.crestnicholson.com/assets/pdfs/reports/Crest_Nicholson_2008_Sustainability_Report.pdf

Five companies (Barratt Developments, The Berkeley Group, Crest Nicholson, Crosby Lend Lease and Inspace Partnerships) have made public commitments to achieving Code levels 3 or 4 ahead of government legislation. Whilst these challenging public targets are commended by NextGeneration, it is key that progress against these targets is communicated transparently. Two of these companies have recently provided updates on their progress.

Quote 3 – The Berkeley Group

> ***"Since January 2008, we have been committed to certifying all dwellings (excluding refurbishments) submitted for planning permission to Level 3 of the Code for Sustainable Homes. We are proud that this commitment now equates to 11,132 units to be certified to Level 3 of the Code. Only dwellings on one site have not been designed to this level, due to financial viability in the current market, and it is now uncertain whether this scheme will go ahead."***

The Berkeley Group

Quote 4 – Crest Nicholson

> ***"At the end of the financial year 4,944 units had been submitted for planning, 82% of which are specified to Code for Sustainable Homes or EcoHomes standards. 39% of units are to be built to Code level 3 (1,903 units) and 5% to the energy requirements of code level 6 at our One Gallions development in East London."***

Crest Nicholson

Barratt Developments is due to give an update on progress towards their Code level 3 commitment in their forthcoming Corporate Responsibility Report.

8.8 Procurement & Supply Chain Management

Organisational procurement decisions are influenced by a variety of factors, and increasingly sustainability risks are being considered along more traditional factors such as price. Sustainability risks associated with construction goods include:

- Labour standards and fair prices (especially when goods are sourced from the developing world)
- Toxicity of materials
- Contributions to local economies
- Climate change impacts (including lifecycle analysis)
- Legality of supply
- Child labour

It is therefore becoming increasingly necessary for developers to account for the origin of products specified.

The average score across all companies in this section was 27%, however the top three performing companies scored 80% or higher. Miller Homes was the top performing company against this criteria section with a score of 95%. Miller Homes has a Responsible Procurement Policy in place which is subject to internal and external auditing procedures. Company policy states a preference to sustainable materials, and the procurement of sustainable materials in practice was demonstrated by Miller Homes during phase 2 engagement. Priority consideration is given to timber suppliers who supply FSC-certified timber with full Chain of Custody, and an extensive supplier engagement programme is undertaken in which suppliers are monitored on their own approach to sustainability, which informs supplier selection by Miller Homes, and also includes work with suppliers to address specific areas of environmental impact.

Eleven companies have a sustainable procurement policy (or set of procedures) in place. In terms of auditing procedures, the top four performing companies undertake internal auditing of the implementation of their policy, and of these, only two (The Berkeley Group and Crest Nicholson) report on this publicly. Two companies in the benchmark have external auditing undertaken. Around two-thirds of companies in the benchmark provided a mixture of policy commitments to responsible sourcing of materials, or provided examples in practice of good practice in material procurement.

The materials category of the Code for Sustainable Homes awards points for those building elements which have a lower environmental impact based on the BRE Green Guide. Official certification schemes do exist for some materials, such as timber, but in many cases companies will have to

devise their own methodology for assessing the sustainability of their procurement practices and goods and services procured.

Thirteen companies in the benchmark demonstrated that they undertook some form of monitoring of their supply chain, with five companies specifically stating they select suppliers on the basis of their environmental credentials. The top six performing companies in this section were able to provide examples of how they had engaged with their supply chain to address a particular area of environmental impact.

The UK is the third largest importer of illegal timber; 55% of which goes into our homes. Due to this proliferation of illegal timber entering and being used in the UK, it remains a significant reputational risk for the homebuilding sector. The Forest Stewardship Council (FSC) is the only fully certifiable scheme, and the only one backed by WWF and other industry bodies, but other international standards are sometimes used. Homebuilders should be able to demonstrate a preference for certified timber, but also seek an audit of the full Chain of Custody. This can be a timely and complex process but is the only reliable way to identify any illegal timber entering the supply chain.

In terms of timber procurement, there is very little transparency within the sector's largest home builders, and information found in the public domain will typically be stating a preference for FSC-certified timber, with very little evidence of auditing procedures in place.

8.9 Construction Waste

The construction sector is responsible for around 120 million tonnes of waste each year. Through the government's Waste Strategy and Strategy for Sustainable Construction, a national target has been set to halve the amount of this waste sent to landfill by 2012, based on 2008 levels.

In addition to reducing environmental impacts, good waste management practises are also likely to reap significant cost benefits. As set out by the 2009 budget, landfill taxes will rise by £8/tonne each April, until at least 2013 when it will cost £72 to dispose of one tonne of waste to landfill.

Alongside the national target to reduce waste to landfill, there are measures in place at an international level to reduce waste impacts. The EU Waste Directive[37] prescribes measures to prevent or reduce the negative impacts of waste generation and management at a community level, and applies a hierarchical approach as follows:

- Prevention
- Preparation for re-use
- Recycling
- Other recovery (e.g. energy recovery)
- Disposal

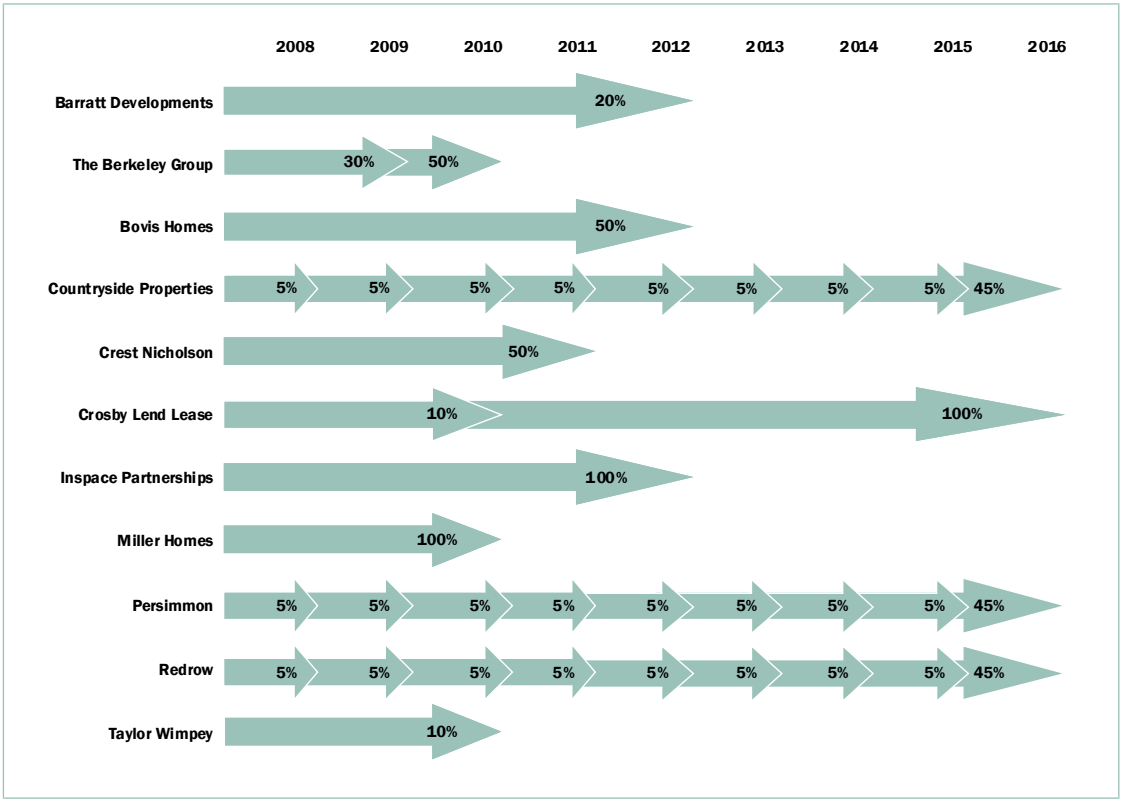
The Directive entered into force in December 2008, and has specific compliance requirements of EU member states at 2013 (establishment of waste prevention programmes) and 2020 (minimum recycling requirements).

The average score across all companies benchmarked was 39% in this section. Out of all 25 companies, 15 have management targets in place to reduce volumes of construction waste produced, and 12 companies were able to demonstrated how a good waste management strategy had led to reduction in waste or an increase in recycling, and therefore some form of cost saving. Although there is no public reporting from 12 companies on the volume of waste produced on sites, ten companies (including public reporting of waste data from Barratt Developments, Bellway, The Berkeley Group, Crest Nicholson, Persimmon, Redrow and Taylor Wimpey) collate waste data from 100% of their developments, with three companies (Gladedale Group, Inspace Partnerships and Keepmoat Limited) reporting data from a proportion of their sites.

While 14 of the companies benchmarked do not report any performance targets related to construction waste reduction, the remaining 11 companies have a range of targets in place, as shown by Table C below.

[37] Official Journal of the European Union, 2008. *Directive 2008/98/EC of the European Parliament and of the Council* [online]. Available from: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:0030:en:PDF [Accessed 29 September 2009].

Table C – Reported construction waste targets[38]



With construction waste being such a high environmental impact area, and also a high financial risk area for companies not developing strategies to minimise waste generation, NextGeneration would encourage those companies not collating operational data, setting targets and reporting transparently on this to do so. WRAP[39] has a section of its website dedicated to helping the construction industry to halve waste to landfill by 2012.

8.10 Construction Site Management

The Code requires that construction impacts be measured on a site by site basis, and developers should be aiming to capture as many sites with regular performance data monitoring as possible. This is the only way to truly ascertain actual carbon footprint, and other environmental impacts. In addition, centralised monitoring of construction impacts will help organisations to better understand entire operations and the associated cost savings arising from improved energy, water and pollution control. With the implementation of the Carbon Reduction Commitment, this will become even more pertinent.

The average score across all companies in this section was 39%, with ten companies not scoring any points and the top five performing companies all scoring at least 80%. Eleven companies have best practice air and water pollution controls in place, and five companies measure water consumption on their sites, with six companies measuring energy consumption or CO_2 emissions arising from development activities. Some companies have made initial steps towards trying to quantify the emissions associated with transport movements to and from their sites, however this is generally not very developed amongst the group.

8.11 Transport

Transport accounts for 21% of all UK carbon emissions and its management is therefore key if the UK is to reduce emissions by 80% by 2050. A Carbon Reduction Strategy for Transport was published by government in July this year, with the aim of promoting low carbon transport choices amongst commuters and travellers. Homebuilders are in a position to facilitate this by providing residents with alternatives to the one-passenger private car through, for example, cycle storage, car clubs and

[38] The companies included in this table have varying baselines against which the targets have been set, therefore they have been ordered alphabetically to reflect the difficulty in ranking these targets against one another.

[39] WRAP, http://www.wrap.org.uk/construction/index.html [Accessed 29 September 2009].

dedicated travel advisors. On a macro-level, location decisions, such as contributions to infrastructure improvements and proximity to local transport, will also influence the carbon footprint of resident travel and should be considered by the developer.

The approach to promoting use of public transport by those companies benchmarked varies greatly across the 25 companies. An example of best practice is this area is provided by the Berkeley Group. It has 18 projects where car clubs have been implemented and provides cycling storage on all developments. At The Quarter's in High Wycombe, each home was provided with an allowance to purchase cycle equipment. The Berkeley Group is also contributing to enhancing local transport infrastructure at Royal Arsenal by creating a new Crossrail terminal. Crest Nicholson provides cycle storage on 50% of dwellings, and provided several examples of car clubs on projects. Crest has worked with the Borough of Poole to design a travel benefits package in conjunction with local businesses and local transport operators for residents of Poole Quarter. Bellway, at its Grangefields development in Doncaster has promoted the use of public transport in its show home and sent information packs to all home owners, as well as providing a South Yorkshire Annual Travel Mastercard, which grants unlimited travel on all public transport throughout South Yorkshire. Taylor Wimpey also provided examples of car clubs and has implemented a Green Travel Plan at its Raploch development in Stirling. Two companies provided data during phase 2 engagement demonstrating that cycle storage facilities are provided on all developments.

Due to issues such as flood risk and carbon emissions related to car dependency, homebuilders are increasingly playing a role in ensuring developments they build are serviced by appropriate infrastructure. In terms of companies' awareness of the proximity of public transport nodes to their developments, Barratt Developments list each of their developments on their website, with information provided on local public transport links. Cala Group report that 82% of their developments are within 500 metres of a public transport node and the The Berkeley Group reports a figure of 90%. Only one other company in the benchmark was able to provide data in this area.

8.12 Management Systems

An Environmental Management System (EMS) provides a framework for organisations to manage their environmental impacts. Underpinning an Environmental Management System is an identification of key impact areas and the associated risks, and implementing policies and procedures to manage and monitor these. Alongside appropriate long and short term targets and robust data collection systems, an EMS can help companies identify areas of improvement and drive performance in key areas, as well as establishing a clear audit trail and signalling commitment to investors and stakeholders. External standards, such as ISO 14001 (see Box B for further detail) and EMAS exist to certify Environmental Management Systems and recognise organisations that go beyond minimal legal compliance.

Box B – ISO 14001 Environmental Management System

A formal Environmental Management System (EMS) can provide a structured way to identify environmental impacts and legal responsibilities, set clear objectives and targets, and then implement and review changes for continual improvement.

ISO 14001 is an internationally recognised voluntary standard for EMSs. The standard specifies the actual requirements for an EMS. It applies to those environmental aspects that the company can control and over which it can be expected to have an influence. This standard is now widely recognised as an effective element in helping to sustain the environment for future generations and helping to ensure the long-term survival and prosperity of business through its three key aims of continual improvement, prevention of pollution and legal compliance.

Formal procedures around auditing sites on environmental issues is an area where those companies benchmarked could develop their approach. Twenty-two of the companies have internal auditing procedures in place, however only six of these also have external auditing undertaken and Director-involvement in their auditing procedures. Having external or Director-level audits undertaken will add credibility to the approach of those companies reporting on this publicly.

8.13 Ecology

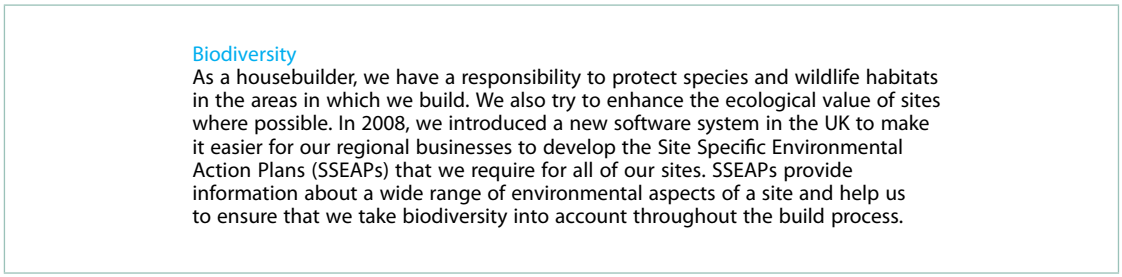
The term biodiversity describes the variety of life on earth, and the habitats upon which they depend. Biodiversity is a fundamental part of the earth's delicate balance and developers must take action to minimise any adverse impacts arising from the construction process. Any development will potentially affect the ecological value of a site, and developers should consider how best to protect and enhance biodiversity. The re-use of land through building on brownfield sites, for example, can slow down the destruction of natural habitats and help prevent further loss of vital green-belt. It can also protect or provide land for agriculture and recreation.

For developers, addressing biodiversity issues and enhancing the ecological value of sites presents clear business benefits[40]. Within the planning system, a good track record in this area in relation to peers may secure an advantage in submissions, due to public or stakeholder approval or acceptance. Biodiversity can also be an effective way to drive stakeholder engagement and enhance corporate reputation in the process. In addition, it enhances the amenity value of sites, which is attractive to consumers.

Ecology is also one of the nine Code for Sustainable Homes categories. Available points are based on the principles of avoiding negative impacts through discouraging developments on land with high ecological value, minimising any damage arising throughout the construction process, and enhancing biodiversity if possible.

Nine companies in the benchmark address the protection of ecological value through a biodiversity policy or action plan (or incorporate biodiversity into an environmental policy- see 16 below), and seven companies collect data on the proportion of their developments upon which a biodiversity action plan or equivalent is in place. With 40% of the companies benchmarked not reporting at all on their approach to biodiversity or ecological value, this would be highlighted by NextGeneration as an area where increased transparency would be welcomed by stakeholder groups.

Image G – Taylor Wimpey



http://www.taylorwimpey.com/CRreportssee

8.14 Domestic Waste

Over the past year, 27% of domestic waste was recycled compared to just 7% in 2007. European countries, however, recycle well over half of waste from households, and a lot remains to be done to meet the government target of achieving national recycling rates of 40% by 2010 and 50% by 2020. Studies have shown that households are more likely to recycle if it is made easy for them to do so. Homebuilders should, therefore, be providing appropriate recycling facilities and encouraging their use.

[40] The Institute of Environmental Management and Assessment, November 2007. *The business of biodiversity: a guide to its management in organisations*. IEMA, 2007.

Figure 17 – Companies' approach to domestic recycling

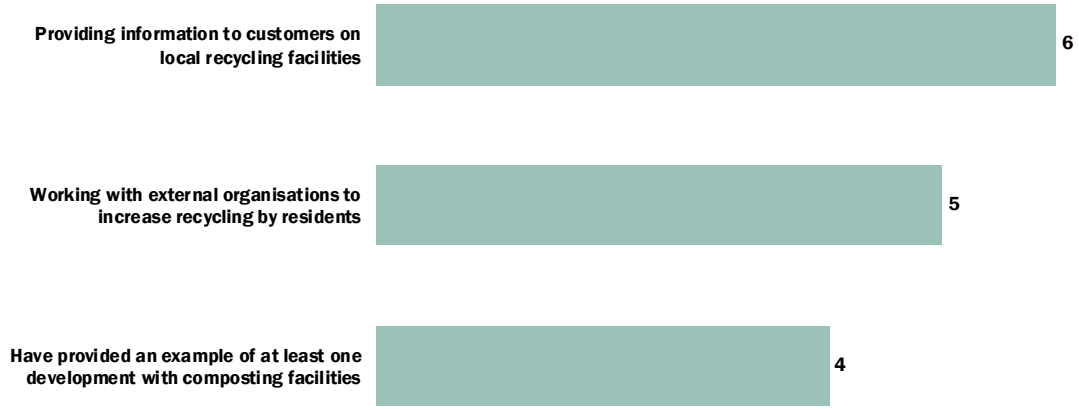


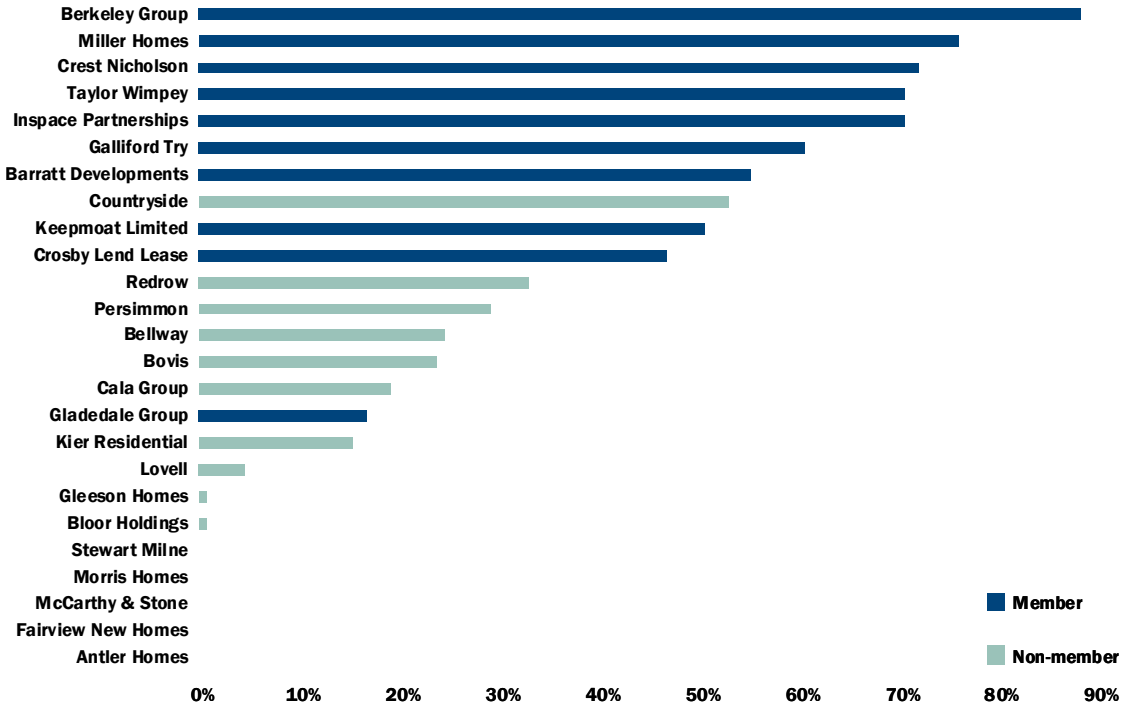
Figure 17 above shows that out of all the companies benchmarked, only six are providing information to purchasers on local recycling facilities. Five companies were able to provide examples of working with external organisations to work towards increasing recycling undertaken by residents (e.g. WRAP, or local residents association), and four companies provided examples of developments that had composting facilities provided, either as communal facilities or within individual dwellings. Most companies can provide examples of developments where recycling facilities have been provided within dwellings, however this is unsurprising given EcoHomes and Code for Sustainable Homes requirements. Crest Nicholson in particular displays a strong commitment in this area, reporting that 92% of developments in the reporting year were provided with recycling facilities, and committing to providing this in all new dwellings going forward.

9 Impact on Society

9.1 Results overview

The 25 companies benchmarked achieved an average score of 32.6% on impact on society (see Figure 18 below). Listed homebuilders (47%) outperformed private homebuilders (20%) against this section and member companies (61%) scored higher on average than non-member companies (14%). In addition to the averages already provided, it is interesting to note that the top scoring 20 companies in 2009 (rather than 25) scored an average of 40.7% against this section of the criteria.

Figure 18 – Companies' overall score against impact on society



9.2 Progress since the 2007 Corporate Benchmark

When looking at performance compared to 2007, the 20 companies assessed scored an average score of 43% against the impact on society section. As with the strategy, governance and risk management, and impact on the environment sections, the average scores might have decreased between the two benchmarks for a number of reasons (see Figure 19 for average score of the companies assessed in both 2007 and 2009 against the 2009 set of criteria). However, in terms of this part of the criteria, development between the two benchmarks was minimal compared to that undertaken between 2007 and 2009 for the other two sections. This could be attributed mainly to the criteria development mainly reflecting legislative progress, and the government agenda has been significantly more focused on environmental issues than socio-economic ones. This aside, the section related to well-being was developed in line with recognised industry good and best practice standards, and the thresholds for performance in relation to data (for example, CSCS-carding, sites signed up to the Considerate Construction Scheme, and RIDDOR rates) were tightened to reflect how the industry should have made improvements in these areas over the past few years.

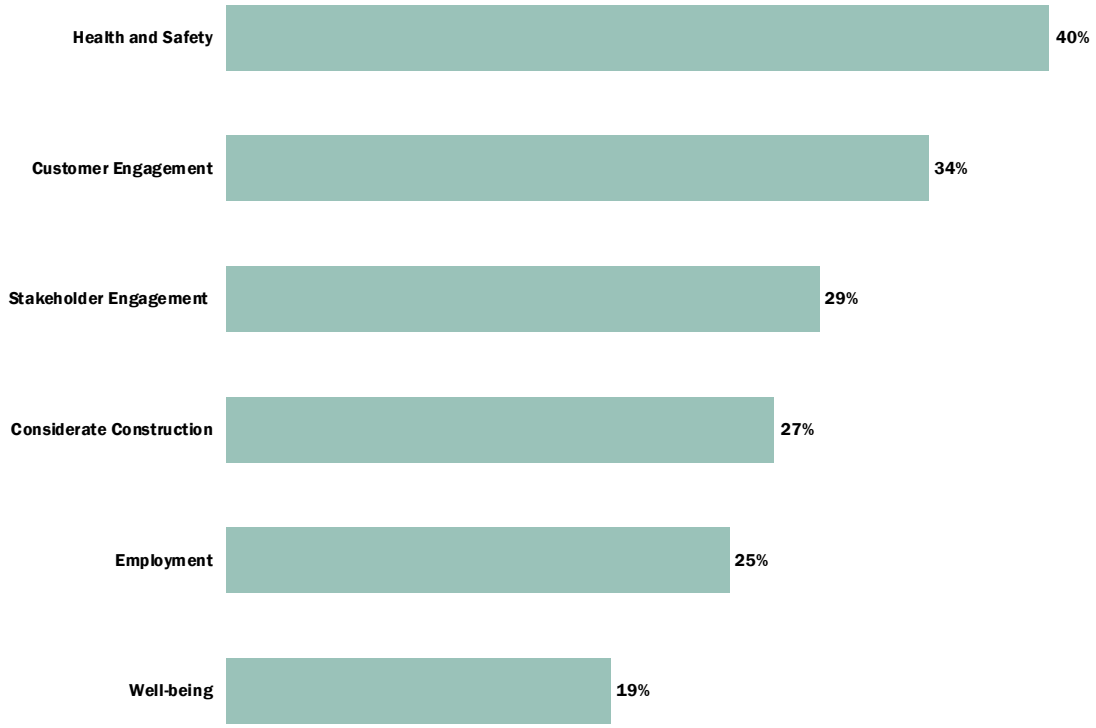
Figure 19 – Average performance of companies assessed in 2007 and in 2009 against the 2009 criteria related to impact on society

9.3 Performance against individual criteria sections

While high-profile policy seems dwelling-centric, it is critical for planners and developers not to forget the wider community issues associated with the built environment. Not considered by the benchmark explicitly, issues such as fuel poverty, housing affordability, mixed tenure communities, development of public realm and the health of new homes should be considered alongside climate change and other environmental concerns. Future NextGeneration benchmarks will seek to address these areas in more detail to help developers and other stakeholders understand how the sustainable communities' vision is being realised.

Figure 20 shows the average company scores across the different issues assessed against this section. The highest average score was for health and safety (40%) with companies also scoring relatively well on average against customer engagement. The remaining sections – stakeholder engagement, consider construction, employment and well being – all averaged scores of below 30%. The following paragraphs will look at these individual sections in more detail.

Figure 20 – Breakdown of average performance against impact on society



9.4 Health and Safety

In June this year, the Health and Safety Executive (HSE) launched their new strategy "Be part of the solution". The document outlines the HSE's view on how companies should be accounting for health & safety risks facing their business and helping to reduce the number of employee accidents and associated lost working days.

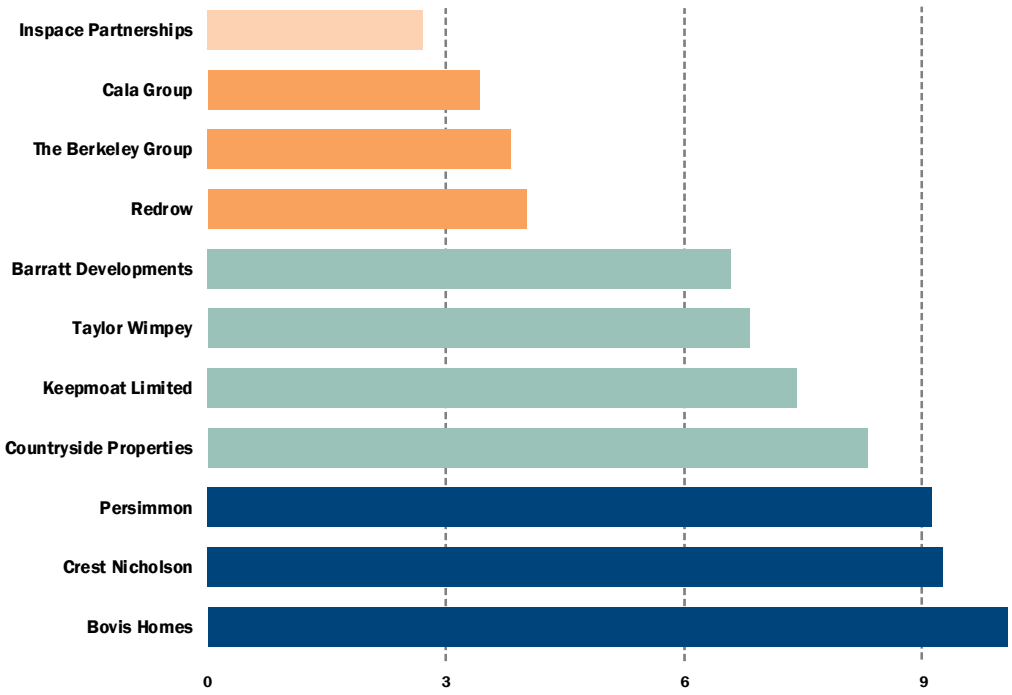
When NextGeneration reported in 2007, fatalities in the housing sector had risen from 217 in 2005/06 to 241 in 2006/07. Figures for 2007/08 showed this number had fallen to 229, however, this must be viewed in line with falling construction activities and widespread redundancies across the sector. While the introduction of H&S legislation in the UK has driven the issue up the agenda, and the past three decades have seen overall improvements, homebuilders need to ensure they continue to account for the risks associated with site activities even in the difficult economic climate.

Analysis found that 90% of the companies assessed have a formal health and safety policy or management system in place. Persimmon, Countryside Properties, Keepmoat Limited, Galliford Try, Taylor Wimpey, Inspace Partnerships, Crest Nicholson and The Berkeley Group all report publicly on their health and safety management system in place that is in accordance with OHSAS 18001 or HS(G)65.

In terms of auditing these procedures on sites, 14 of the companies benchmarked have got internal auditing procedures in place on sites for health and safety issues. A further 11 companies have external auditing undertaken and audits are undertaken by Directors with responsibility for health and safety issues at nine companies.

Figure 21 below shows that 11 companies report transparently on their annual RIDDOR rate. Of these, six companies achieved a RIDDOR rate of less than 9 per 1000 employees, with five companies less than 6 per 1000. Inspace Partnerships reported a RIDDOR rate of less than 3 per 1000 employees. In an effort to manage health and safety risks and incidents, six companies have targets in place to not exceed the previous year's average industry accident rate. The Berkeley Group and Inspace Partnerships have set a target to reduce their accident rate from the previous year and have demonstrated that their RIDDOR rate has been less than the industry average for the previous three years.

Figure 21 – Reported RIDDOR rates[41]



[41] All figures apart from figures for Cala Group, Countryside Properties and Crest Nicholson are RIDDOR rates per 1000 employees. Cala Group, Countryside Properties and Crest Nicholson report their injury rates as AIR (Accident Incident Rate). RIDDOR rates of 3, 6 and 9 are marked on the graph as these are the thresholds that companies must achieve in order to score points against the NextGeneration criteria.

Of the companies that either report or provided information on the proportion of site operatives that hold Construction Skills Certification Scheme (CSCS), six recorded a rate of at least 90%. There were seven companies with at least 75% of site operatives CSCS-carded. Both the average level of performance and complications with auditing operatives on site suggest that the industry still has a way to go in preparation for the government target of allowing only CSCS card-carrying operatives on site by 2010.

9.5 Considerate Construction

By making sure that development sites minimise their negative impacts on the environment and on surrounding communities, employees and the public, homebuilders help to reduce the risk of breaching environmental legislation and damaging their reputations. While companies often manage environmental issues through an audited EMS, or site employee issues through an audited H&S management system, the Code for Sustainable Homes helps to drive good practice in this area by allocating points for developments signed up to the Considerate Construction Scheme (CCS). In 2007, NextGeneration reported that six homebuilders are disclosing information in relation to how many sites are signed up to the CCS, and this increased only by one in 2009 to seven companies. A further four companies provided information during further engagement regarding their approach to the CCS, or a similar internally developed scheme.

9.6 Employment

As a result of the UK recession, the UK unemployment total rose to 2.26m in the first quarter of 2009, and the CBI forecasts that this will peak at over 3m next spring[42]. A recent sector analysis undertaken by Housebuilder magazine believes this poses the biggest threat to the recovery of the housing market, through reduced spending power and low consumer confidence.

With the UK recession hitting the domestic homebuilding industry so deeply, it is hardly surprising that many job losses have been witnessed as sites, divisions, and even entire companies, have been forced to close. As the industry begins to see signs of recovery there is a danger that skilled staff who were forced to leave the sector by the recession will choose not to return, so measures must be taken by government and homebuilders to attract the necessary people at the right time.

The construction sector has long been recognised as having a skills shortage, which is likely to have been exacerbated further by recession. The number of skilled workers arriving from abroad, for example, has reduced in recent months, and many foreign workers have returned home as work has dried up. Trainee schemes and apprenticeships have also been limited during the recent market conditions.

A key issue to consider, too, is the availability and type of new skills that will be needed to support a move towards a greener homebuilding industry. Jobs in the low carbon economy are likely to grow faster than those in the traditional industries, however as demand has been low during the recession, relevant skills may not be in place throughout the employment supply chain.

In addition to providing employment in the construction sector, developers will also play a part in catalysing economic regeneration and long-term employment in an area. With the average number of job vacancies currently at a record low, completed mixed-use developments will provide much needed growth in local employment opportunities for residents.

Crest Nicholson and Taylor Wimpey provided examples of working with appropriate partners to develop the skills of site operatives, of employment initiatives to assist underrepresented groups into the construction industry and of sourcing employment from local subcontractors as a priority. Of those assessed, six companies were able to demonstrate that they had the appropriate controls in place to ensure that all site operatives have the legal right to work in the UK, and that subcontractor contracts meet basic statutory requirements.

In relation to promoting long-term employment opportunities, the companies benchmarked were able to provide some examples of offering reduced rates on commercial space to SMEs, of providing home office working provisions and of building mixed-use projects with the aim of encouraging economic

[42] Confederation of British Industry, 2009. *Employment trends in 2009* [online]. Available from: http://www.cbi.org.uk/ndbs/press.nsf/38e2a44440c22db680256730006730 1b/56ebefb25149a68b802575da00308471/$FILE/CBI%20-%20Harvey%20Nash.%20Work%20Patterns%20in%20the%20Recession.%20June%202009.pdf [Accessed 29 September 2009].

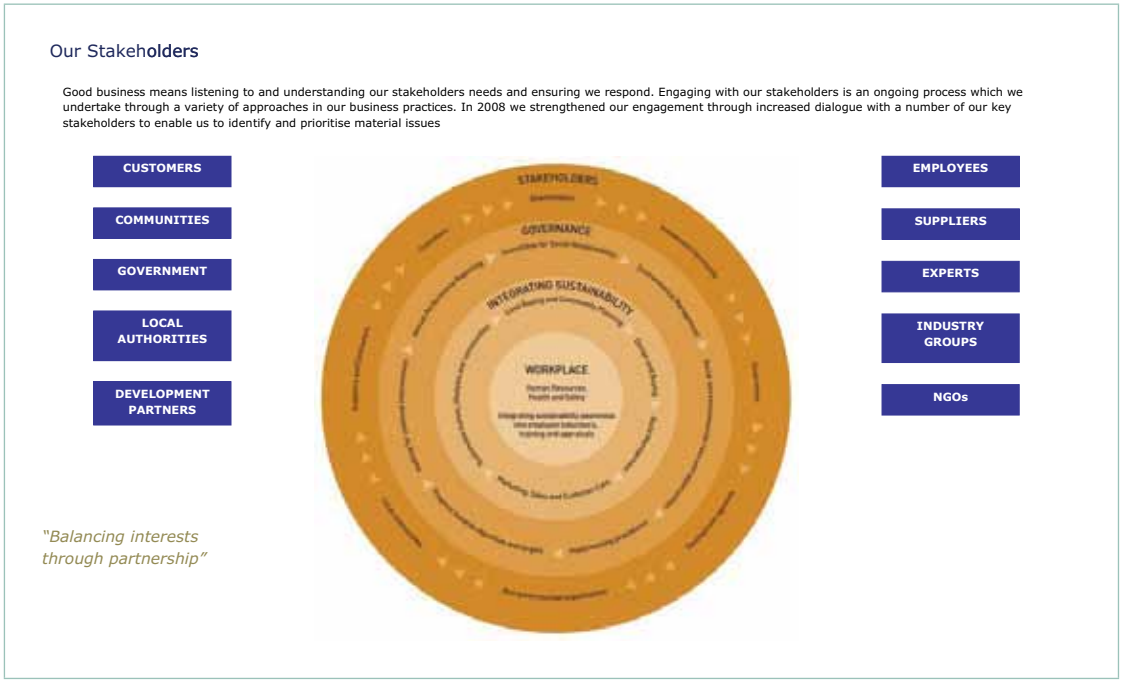
activity in the area. Developers will find it increasingly necessary to consider emerging flexible working practices, such as a growing trend of home-working, and the implications this will have on home design.

9.7 Stakeholder Engagement

A well-developed sustainability strategy requires engagement with stakeholders to understand their views and interests (see Image H and Image I below). Understanding how to respond to these views and interests will help to ensure continual improvements in strategy development. Only five companies currently provided evidence that shows they have clearly defined who their stakeholders are and how they engage with them. A further five companies provided evidence of more ad-hoc engagement whose approach in this area is not as strategically established. In addition, the top ten performing companies in the benchmark provided numerous examples of engaging in external industry events.

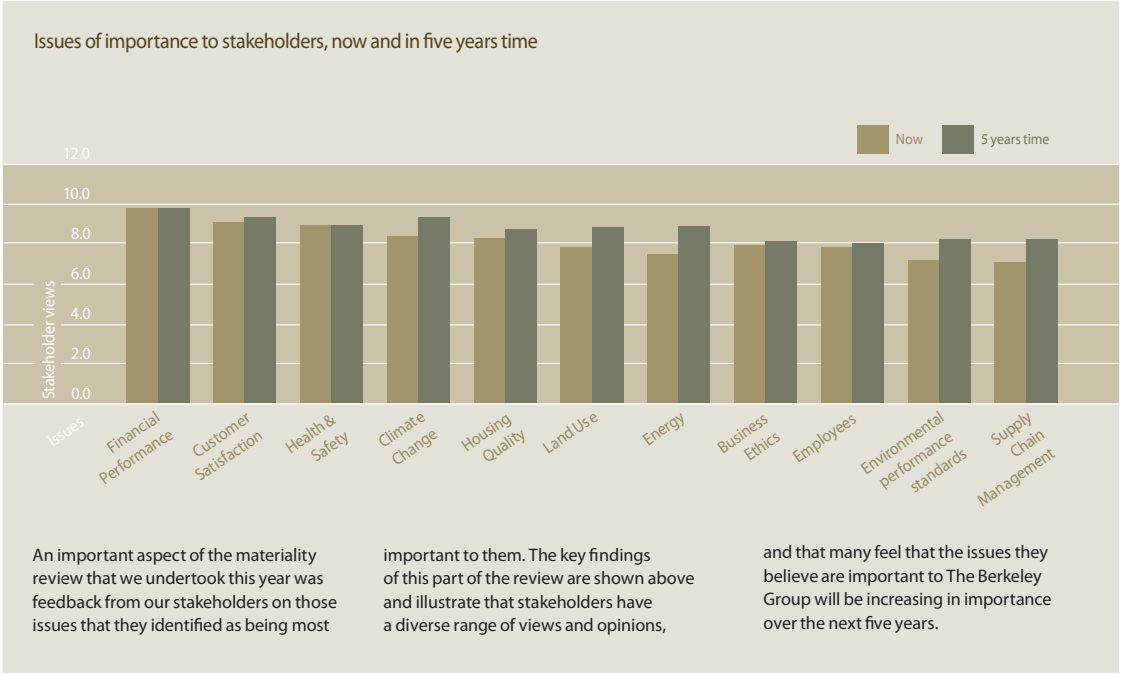
On a project level, homebuilders wanting to use community engagement or collaborative design techniques are reporting reductions in the time taken for planning permission to be granted, which has major positive financial implications. In line with this, eight companies have guidelines that are followed for community engagement and four companies have provided examples of engagement with NGOs on developments.

Image H – Crest Nicholson stakeholder engagement



http://www.crestnicholson.com/assets/pdfs/reports/Crest_Nicholson_2008_Sustainability_Report.pdf

Image I – The Berkeley Group – issues of importance to stakeholders



http://www.berkeleygroup.co.uk/media/adobepdf/2/b/Berkeley_Group_Sustainability_Report.pdf

9.8 Customer Engagement

Studies are divided as to how important sustainability factors are in the purchase of a new home. Certainly, with the introduction of Home Information Packs and Energy Performance Certificates, sustainability issues (particularly energy) are being made slightly more prominent in the buying process, but it is yet to be seen whether and how these will actually affect buyer behaviour. With the government agenda driving more sustainable homes despite this, the industry as a whole will have to engage with its customers, and potential customers, to ensure that a market exists for dwellings which may look and feel quite different to more traditional builds. Engagement with customers will be especially necessary to ensure that residents are using new technologies such as Mechanical Heat Recovery and Ventilation systems in the right way – both to facilitate well-being in the home, but also to reap maximum sustainability benefits and discourage retrofitting.

In response to the publication of its market study report entitled 'Homebuilding in the UK'[43], the homebuilding industry said it would set up a voluntary code to address matters set out in the market study report. As a result, representatives from across the sector have agreed to form a body to deliver a code of conduct and redress scheme for consumers, which it aims to have fully operational by March 2010. However, if the industry fails to make adequate progress or deliver an effective solution, the Office of Fair Trading (OFT) recommends further intervention through a statutory redress mechanism. The OFT was officially informed in writing on the 16 February 2009 that Zurich Insurance Company (UK) Limited (Zurich) had withdrawn from the body which proposed to administer the homebuilding code, leaving National House Building Council and MD Insurance Services Limited to form the code body alone.

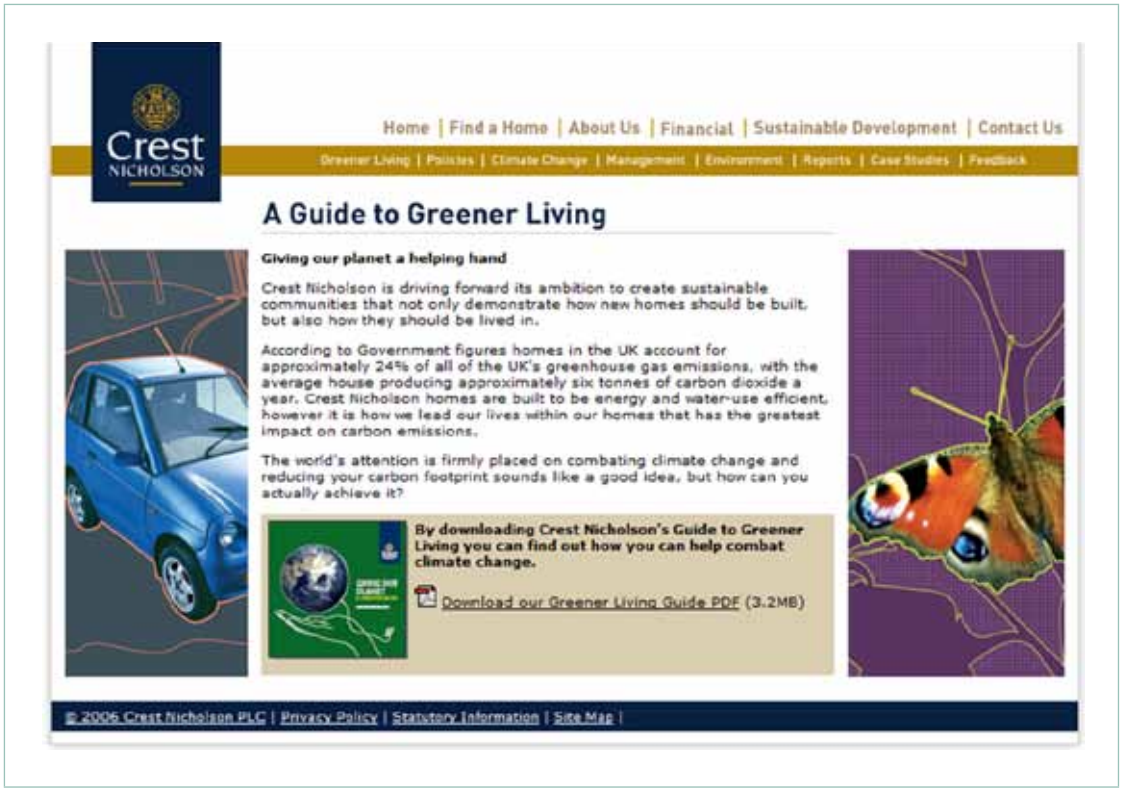
Miller Homes, The Berkeley Group and Crest Nicholson performed strongly against this section due to their range of techniques used for engaging with customers on sustainability issues related to their homes (see images below). In addition, a total of five companies provided data showing customer satisfaction showing that over 90% of customers would recommend the company to a friend.

[43] Office of Fair Trading, 2008. *Homebuilding in the UK* [online]. Available from: http://www.oft.gov.uk/shared_oft/reports/comp_policy/oft1020.pdf [Accessed 29 September 2009].

Image J – Miller Homes

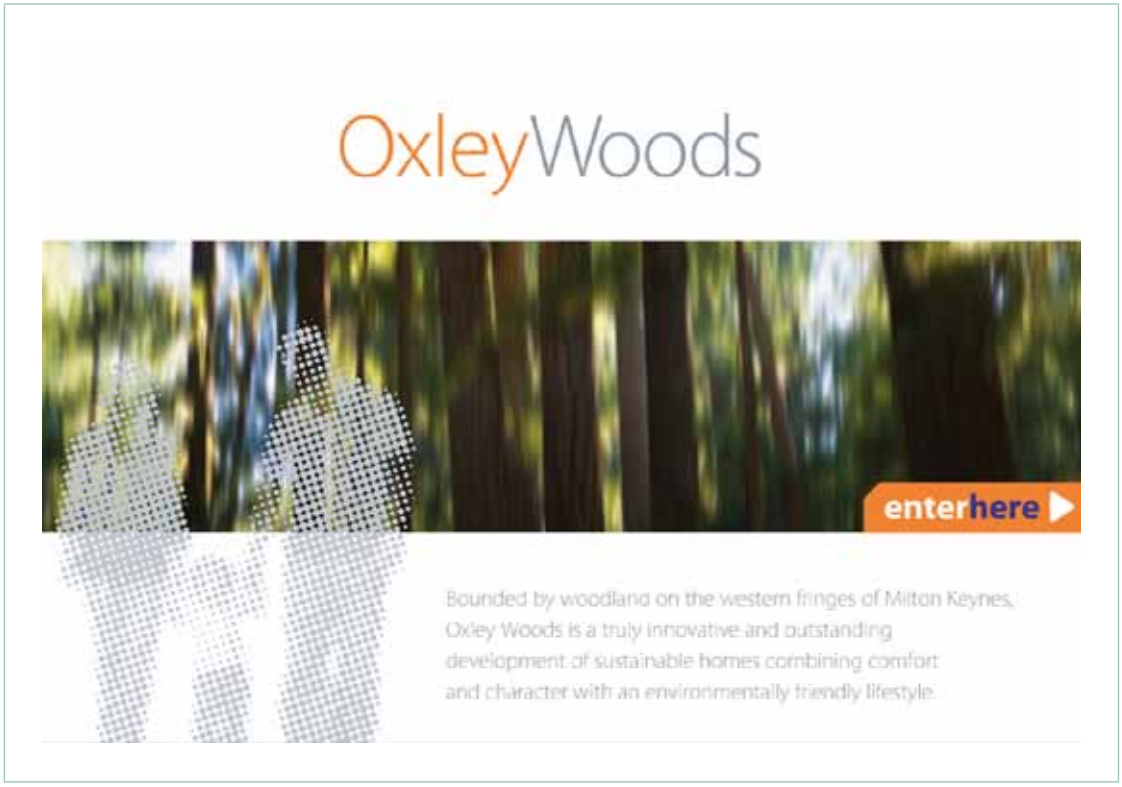
http://www.mymillerstreet.co.uk/

Image K – Crest Nicholson



http://www.crestnicholson.com/sustainabledevelopment/greenerliving.aspx

Image L – Taylor Wimpey



http://www.oxleywoods.com

During the recession, customer engagement remains especially key, in a potential attempt to buoy demand for new homes, and promote affordable home-ownership options such as rent-to-buy and shared ownership. Market research, and monitoring of customer satisfaction, also remain important in a slow market to ensure customer needs are met. Developers are in a unique position to promote green living amongst their residents. This may be through the provision of green technology, but also through providing information and encouraging sustainability in the home.

9.9 Well-being

The design of a home greatly affects both the physical and mental wellbeing of its occupants. Homebuilders, therefore, should consider how best to meet the needs of their residents, both now and in the future. Key to this is addressing the ageing population of the UK, and ensuring that new build housing is flexible and adaptable to account for changes in living patterns, such as accessibility. Lifetime Homes, as an external standard, may be used to asses this and is often a requirement imposed by local planning authorities.

Older people will make up 48% of all new growth in households to 2024 and a substantial majority of new households in many regions will be over 65. The largest number of new older households will be in the South East. New housing and its surrounding infrastructure should reflect this demographic change. Houses need to be easily accessible and supported by the right infrastructure, so that people have access to health, housing, transport and care services. Planning is vital and Planning Policy Statement 3 now requires Regional Spatial Strategies and Local Development Frameworks to consider demographic trends in terms of the housing requirements of older people[44].

Quality of life will also increase where crime, and fear of crime, is low. The Secured by Design standard provides a framework to enhance crime prevention through the design and layout of new homes and developments. Initiatives to encourage inclusivity and diversity, such as integrating community facilities in to new developments, will also foster a sense of wellbeing amongst residents.

[44] Communities and Local Government, 2007. *Homes for the future: more affordable, more sustainable* [online]. Available from: http://www.communities.gov.uk/documents/housing/pdf/439986.pdf [Accessed 29 September 2009].

The Building for Life standard consists of 20 criteria for well designed homes and neighbourhoods, and takes both the above factors in to account to promote functional, attractive, sustainable housing. This raises the point that in order to fully facilitate well-being in to the future, new homes will also have to be adaptable to a changing environment, e.g. hotter summers and wetter winters as a result of climate change.

Many companies provided examples of building out to the three different design standards outlined above. However only Taylor Wimpey (all new house types are Secured by Design compliant) and Inspace Partnerships (promotes both Lifetime Homes and Secured by Design standards to all clients) commit to particular standards on all units built. Almost half of the companies benchmarked were able to provide a number of examples of promoting well-being on developments.

10 Conclusions

The 2009 corporate benchmark shows that homebuilders have not let recessionary pressures see their sustainability activities be pushed aside. The understanding within the sector of the current challenges, and those ahead, is encouraging, with some companies seeing sustainability as the differentiating factor for their businesses as they enter recovery. With a more compact timeline to zero carbon homes then ever, it is a critical period for the new build housing sector as it comes out of the recession.

Reflections on overall performance

Three companies have emerged as leaders in this year's benchmark – The Berkeley Group, Crest Nicholson and Miller Homes.

Inspace Partnerships and Barratt Developments also performed encouragingly against the 2009 criteria. The remaining five companies within the top ten scored over 35%, with Taylor Wimpey and Crosby Lend Lease leading this group. A further four companies – Keepmoat Limited, Persimmon, Bellway and Bovis – scored above 25% and Kier Residential, Cala Group and Gladedale Group scored within 6% of each other.

Eight companies scored below 10%, all of whom are not members of NextGeneration. As with the other companies who are benchmarked, but have not taken up membership of the initiative, these scores are not necessarily reflective of actual performance, but a lack of disclosure in this area.

As with the 2007 benchmark, companies average performance in strategy, governance and risk management was greater than impact on society, and impact on the environment. This continues to raise questions about the effective implementation of homebuilders corporate sustainability strategy on the ground. NextGeneration believes the bi-annual corporate benchmarking allows companies to focus on the entire range of high-level sustainability issues facing their organisations and how best to put structures in place to tackle them.

Can the supply chain deliver the challenges ahead?

While the homebuilders have been understanding product availability and pushing innovation through their research and development into the higher level of the Code for Sustainable Homes, engagement across the supply chain has not progressed in the last few years. Concentration in the last 18 months has been on trying to achieve the necessary cost savings to ensure projects that have been active have been able to progress and many homebuilders will have found companies within their supply chain to have gone out of business during the recession.

The supply chain of a homebuilder will have a large impact over the ability for mass-scale delivery of Code compliant, or zero carbon, homes. As the market picks up the homebuilders will have to act quickly to ensure that they have access to technologies and materials to meet the increasingly stringent standards required.

In addition to technologies and materials, there is a huge question surrounding skills within the construction and homebuilding industries. The long-term skills shortage within these sectors can have only been exacerbated by the recession. This will be a key area for both industry and government to address going forward in order to ensure the feasibility of the future vision of zero-carbon housing.

Is the vision of sustainable communities being achieved?

While high-profile policy seems dwelling-centric, it is critical for planners and developers not to forget the wider community issues associated with the built environment. Issues such as fuel poverty, housing affordability, mixed tenure communities, development of public realm and the health of new homes should be considered alongside climate change and other environmental concerns. Future NextGeneration benchmarks will seek to address these areas in more detail to help developers and other stakeholders understand how the sustainable communities' vision is being realised.

What will recovery look like for the homebuilding sector?

It has been two years since the housing market began to decline, and only recently have there been signs of recovery in terms of mortgage approvals increasing, house prices following suit, and developers going back onto site. While NextGeneration does not intend to speculate on the timescales of such recovery, the outcome must be a more sustainable model than before the crash.

With a carbon roadmap for the housing sector to 2050, those companies entering the recovery with sustainability at the heart of their business practices will be better placed to take the opportunities and mitigate against the risks they face. Homebuilders will need to think innovatively and strategically about both new build and the existing stock in order to meet the challenges ahead.

11 Recommendations

This report provides the context against which the NextGeneration benchmarking was undertaken. It is against this backdrop that NextGeneration is making the following recommendations to both industry and government in order for homebuilders to continue towards the government's overall vision of delivering sustainable communities and the necessary support required to achieve this.

Recommendations to industry

- Seek to understand the materiality and significance of sustainability issues to business operations and ensure this forms part of current risk procedures and future strategy development.
- Continue to invest in innovative projects and research into achieving higher levels of the Code for Sustainable Homes and seek to collaborate both internally and externally to share best practice and lessons learnt.
- While climate change mitigation issues are beginning to be addressed, keep sight of future, and critical, climate change adaptation challenges, including flood risk and water scarcity.
- Drive performance and understanding within the supply chain (both materials and labour) to ensure the development and availability of sustainable products, and the necessary skills to deliver the required standards.
- Ensure the delivery of more environmentally-efficient homes fits within, and compliments, the wider vision of place-making and community-building.
- Understand and deliver upon the role you have to play in engaging with the customer throughout the sales process, from marketing to handover.

Recommendations to government

- Continue to maintain a global leadership position in terms of driving the industry towards building more sustainable homes and continue to work with developers (and other stakeholders) to ensure the commercial and technical deliverability of these aspirations.
- Ensure that policy and legislation provides a clear and deliverable framework for homebuilders and is implemented consistently across all decision-making bodies, from local through to national levels.
- Invest in research and development in the sector (both developers and supply chain) to support and foster sustainable innovation in the market and on the part of key public sector actors.
- Invest in training programmes and skills development of current and future workers in the construction of sustainable buildings.
- Continue to support the homebuilders to gain a greater understanding of how the homes they are building are performing in practice.
- Provide incentives and programmes through which homebuilders can effectively share information with the wider industry.
- Take a leading role in educating on and marketing sustainable homes to the house buying market.

NEXT GENERATION

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