



A PARTNERSHIP TO DELIVER
SUSTAINABLE HOMES FOR 21ST CENTURY LIVING

BUILDING A SUSTAINABLE FUTURE:

UK home builders' progress in addressing sustainability Autumn 2007



October 2007

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Executive summary

Introduction

The imperative to address sustainability issues in the housing sector has never been stronger. The acute shortage of housing, especially affordable housing, combined with issues of land availability and the recognition of the urgent need to address climate change, has made building sustainable homes and communities one of the government’s key priorities.

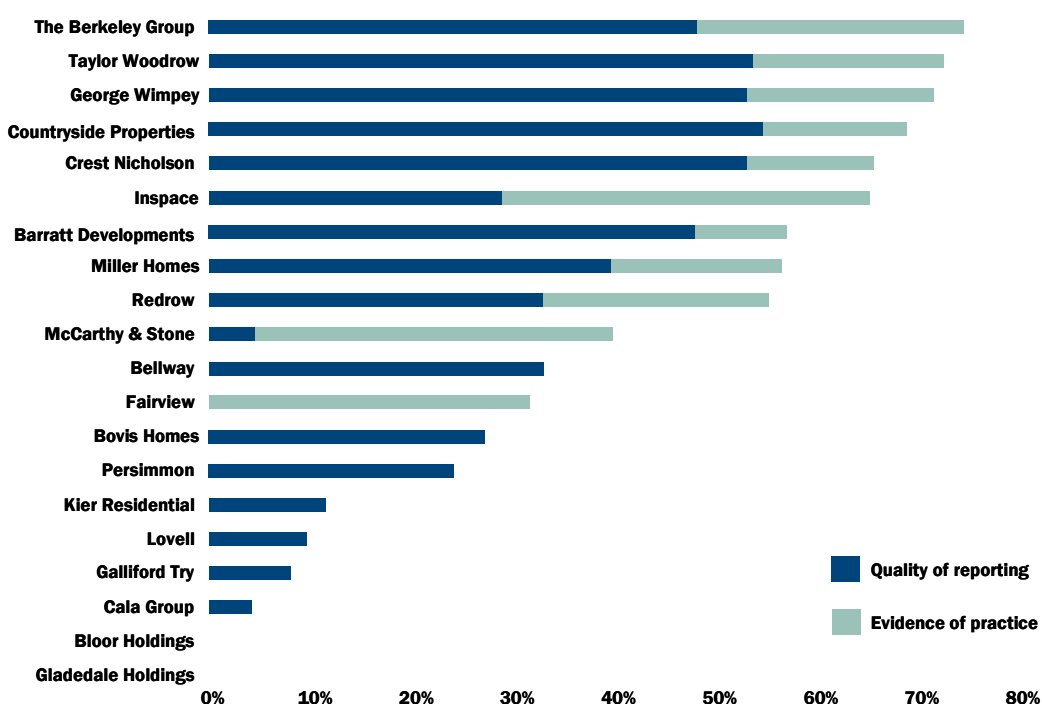
In response to this challenge, the NextGeneration initiative (see Box A) brings together many of the UK’s top home builders with three key stakeholders: a major investor in the sector (Insight Investment), a well-respected non-governmental organisation (WWF-UK) and the public sector funder of affordable housing (The Housing Corporation).

This review of the UK’s Top 20 home builders – responsible for delivering over 95,000 homes each year – aims to provide a detailed picture of how the sector is facing up to the challenge of building sustainable homes and communities. The benchmark report draws an important ‘line in the sand’ for the home building industry – it acknowledges the progress that has been made to date, but also highlights the enormity of the political, commercial and practical challenges ahead.

Overall results

As Figure A indicates, three leading companies emerge from the benchmark – The Berkeley Group, Taylor Woodrow and George Wimpey (subsequently merged to form Taylor Wimpey).

Figure A: Top 20 overall performance



These results are broadly encouraging: they indicate that a number of companies in the sector have recognised the pivotal importance of sustainability issues to their business operations and are responding strongly. However, there is a large gap between where the industry is now and where it needs to be by 2016 if the government’s vision for all new homes to be zero-carbon is to be realised.

Box A: NextGeneration

Previous to this year's NextGeneration benchmark, Insight Investment and WWF-UK jointly benchmarked the performance of the UK's major publicly listed home builders on sustainability practice and reporting in 2004 (13 listed companies) and 2005 (12 listed companies).

NextGeneration was launched to build on the success of these previous benchmarking exercises and to expand their reach and ownership. Set up as a multi-stakeholder initiative, NextGeneration aims to drive best practice on sustainability into the heart of the housing 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.

NextGeneration is supported and directed by The Housing Corporation, WWF-UK and Insight Investment, all of whom sit on its Executive Committee. Upstream acts as a secretariat to the initiative, carrying out the analysis for the benchmarking and delivering a range of services to NextGeneration members.

In addition, a Steering Group with representatives from the Executive Committee and member companies helps to guide the evolution of the initiative and ensure good governance.

The first output of NextGeneration is this, the 2007 benchmark of the UK's top 20 home builders based on the number of units built during the last financial year (2005/06). The benchmark incorporates two sets of scores: the first that rates the quality of reporting of the sector on sustainability and the second that rates its performance in this area.

The sector and the government face three key challenges in delivering sustainable communities: sustainability, availability and affordability. In light of the importance of all of these issues, the government has pledged to put housing at the heart of its future policy programme and the political agenda that has emerged reflects the prioritisation of housing issues. The government's target is to build three million more affordable and more sustainable new homes by 2020.

Methodology

The benchmarking is undertaken in two phases:

Phase One: A benchmark of the top 20 companies' publicly available information (corporate responsibility reports, annual reports and accounts, corporate websites) to assess their strategy, governance and risk management, impact on the environment and impact on society. All companies are awarded a score to reflect the quality of their reporting.

Phase Two: Eleven of the top 20 home builders have joined NextGeneration as members. Detailed engagement and qualitative evidence review of the members revealed further information of what is going on behind the scenes, in addition to what is reported. Members are awarded a second score to reflect their sustainability practice.

A score of 100% in either phase would not indicate that a company was completely 'sustainable' but that it had achieved best practice as defined by the NextGeneration criteria.

Some companies chose not to disclose more information, stating that they would rather keep some of their initiatives confidential in the belief that they provide commercial advantage. This is a compelling indication of the increasing recognition of the business benefits a strong sustainability programme can yield.

Good progress is evident

It is very encouraging to see many of the UK's largest home builders acknowledging the challenges ahead and coming together through the auspices of NextGeneration to benchmark their performance and share best practice. Some good practice is emerging:

- 70% of home builders report publicly on their approach to sustainability;

- 65% have published a corporate sustainability policy;
- 65% have waste management strategies in place; and
- 60% have set targets to improve the energy efficiency of their homes.

Two core principles of sustainability are transparency and accountability; hence the home builders have been benchmarked on the quality of their public disclosure of environmental, social and economic impacts, drawing on their annual report and accounts, detailed sustainability/corporate responsibility reports and corporate websites. In addition, 11 of the top 20 home builders have joined NextGeneration as members and provided additional information and evidence of their approach to sustainability, enabling their scores to fully reflect all their activities in this area. Some companies have chosen not to disclose more information because they would rather keep some of their initiatives confidential, believing that they provide commercial advantage. This is a compelling indication of the increasing recognition of the business benefits a strong sustainability programme can yield.

Achieving the government's targets

While the detail of what sustainability encompasses and what a sustainable home is can be debated indefinitely, what cannot be denied is that sustainability is no longer a fringe issue in the home building industry. The current debate concerning the provision of sufficient land, the effectiveness of the planning system, the structure of the home building industry and market demand are all inextricably linked to the delivery of sustainable homes and communities.

The *Housing Green Paper*, the *Code for Sustainable Homes*, the *Building a Greener Future* policy document and the *Draft Strategy for Sustainable Construction* together lay out the government's vision for achieving zero-carbon homes by 2016 and thus set out a demanding agenda and set of standards for home builders.

It is clear from in-depth discussions with the NextGeneration members that they are struggling to keep up with the very rapid pace of change in this area and have yet to fully grasp the implications of sustainability for their businesses:

- While 60% of home builders recognise climate change as a significant issue to the sector, none has a climate change policy in place;
- Only 25% have an understanding of the carbon footprint of their operations; and
- Only 15% of companies have sustainable procurement policies.

The sector will need to change very rapidly if it is to meet government targets. To help facilitate this evolution, the government needs to significantly step up the support it provides to the sector to ensure that developers are able to play their part in delivering sustainable communities. This includes ensuring robust policies and frameworks for implementation are in place. Sector reviews such as the Callcutt Review of Housebuilding Delivery and the Office of Fair Trading market study are welcome, but more recognition and rapid action in order to respond to the pressures faced by the sector is needed.

The evolving marketplace

There is also the remaining question of the marketplace. Choosing a home is not like purchasing other 'products': most, if not all, decisions are driven primarily by location even among the most sustainable consumers. However, several recent surveys have found that most home buyers do care about environmental issues, particularly climate change, and they would like (and indeed expect) a new home to be energy efficient. And while a minority say they would be willing to pay more for sustainability features, most would not – thus presenting developers with a difficult challenge: how to deliver more sustainable homes cost-effectively.

Detailed review of results

The 2007 results show significant variation in the performance of the top 20 home builders with scores ranging from 74.6% to 0%, and a sector average score of 38.8%. NextGeneration members outperformed non-members with average scores of 59.8% and 13.1% respectively. This is not surprising, given that members were able to provide additional non-public information to support their scoring.

Listed home builders (49.0%) also performed better on average compared with the private companies (28.7%). It should also be noted that six companies chose not to fully disclose their approach to sustainability in their corporate reporting or websites, and are also not NextGeneration members. They are Kier Residential, Lovell, Galliford Try, Cala Group, Bloor Holdings and Gladedale Holdings. Their appearance as the bottom six companies does not therefore necessarily reflect their actual sustainability performance, but rather reveals a lack of disclosure in this area. As with any company not currently a member of NextGeneration, we encourage these developers to join their peers and engage with the initiative to showcase their approach to sustainability and performance in this area.

The detail within each of the three sections of the benchmark – strategy, governance and risk management; impact on the environment; and impact on society – reveals commendable areas of best practice and interesting case studies. However, home builders need to translate the best practice they exhibit on a few developments into effective procedures to ensure the delivery of similar standards across all of their developments.

Strategy, governance and risk management

Companies achieved an average score of 50.5% in this section, the highest of the three, reflecting the fact that a number of companies have well-developed strategies in place across their businesses.

Increased disclosure through reporting

As many as 70% of the companies produce a dedicated sustainability report and/or use web sites to disclose their approach to sustainability. For the majority, these reports cover environmental, social and economic performance, providing stakeholders with greater transparency on company performance.

Analysis revealed that while the scope and breadth of sustainability reporting in the home building sector has significantly improved, there are still areas where greater transparency could be achieved – notably risk management, performance data and target setting. This would ensure that companies provide stakeholders with a clearer view of their approach to sustainability, as well as their commitments for the future, and would bring the level of sophistication of their reporting closer to that seen in other industry sectors.

The difference between the Phase One and Phase Two analyses also shows that companies are not including all their initiatives in their public disclosure. Companies with a good degree of disclosure need to ensure that this is as a result of a deliberate strategy to withhold information that may provide them with commercial advantage as opposed to simply neglecting to publish relevant information. Companies lower down the rankings need to get on the first rung of the reporting ladder, ensuring that at least very basic information on their approach to sustainability issues is incorporated in their annual report and accounts, or in a separate report, and on their websites. These forms of communication are the first port of call for many stakeholders.

Strategy and reporting not effectively accounting for value and risks

While 60% of all companies have identified the key sustainability risks faced by their business, only 35% have begun to assess the commercial implications of these risks. This means that few companies are in a position to assess how sustainability adds value to their businesses. Examples of such benefits include:

- Cost savings related to good waste management: Taylor Woodrow, one of four companies to score 100% for construction waste management, disclosed in its 2006 report that the cost of waste per home had decreased to £291 from £351 in 2005 despite increasing landfill tax;
- Health & safety (H&S) insurance savings: one company reported an annual saving of £1 million in its insurance costs due to making improvements in its H&S systems;
- Gaining planning permission: The Berkeley Group disclosed in its 2006 Sustainability Report that it believes that full stakeholder engagement in the planning process at its Kingsway Square development meant it only took 13 weeks to obtain detailed planning permission for the project (including Section 106 agreements), listed build consent and conservation area consent.

These commercial benefits are rarely aggregated and articulated by companies to their investors or others – something that the leading companies should seek to do.

Impact on the environment

Companies scored most poorly on their approach to addressing their environmental impacts, scoring 31.6% on average. This is particularly worrying as environmental issues are at the heart of the government's policy agenda – notably climate change, energy, water and waste.

Climate change issues not being addressed strategically

As arguably the most serious risk facing the housing sector today, and the key sustainability issue in the public consciousness, it might be reasonable to expect that climate change would be at the top of the sustainability agenda for home builders. However, analysis reveals that developers are not yet giving sufficient strategic weight to the key risk of climate change. While 60% of home builders say they recognise climate change as a significant issue for the sector, none of them currently has a climate change policy in place. Failing to address this issue at a strategic level means that companies cannot have a full understanding of the commercial implications – both risks and opportunities – that climate change poses to their business operations.

Some of the key risks include:

- Flood risk (particularly important concerning land acquisition strategies and land banks);
- Adaptability of homes being built for a visibly changing climate;
- Embodied energy in building materials; and
- Energy performance of dwellings.

In addition to the introduction of Energy Performance Certificates, climate change issues feature strongly in the forthcoming Code for Sustainable Homes; developers need to accelerate their efforts to prepare for, and comply with these new legislative and regulatory drivers.

Is the industry prepared for the Code for Sustainable Homes?

Potentially the area of greatest concern in terms of the environment is that the top 20 home builders achieved an average score of just 8.5% for their commitment to EcoHomes. It was clear from the evidence provided by the companies that they have only built homes to EcoHomes standards where required by planning or funding agreements; they have not taken their expertise in the social sector and translated it to private dwellings.

The Code for Sustainable Homes is broadly based on EcoHomes criteria and standards and, indeed, in most cases, exceeds those standards. It is clear that the industry needs to gear up very quickly to meet the statutory requirements for the assessment of dwellings against the Code. Moreover, as local planning authorities start using the Code as a way of setting minimum standards for all dwellings, home builders may find that a consistent approach across both private and affordable housing may be necessary.

The industry also has some more technical and practical challenges to address, such as:

- How will renewable energy requirements be delivered in the face of technological and cost uncertainties? One developer, Crest Nicholson, provided the only example of a zero-carbon development under construction.
- How will considerable reductions in water consumption be achieved and still provide homes that are appealing in the market place? Only 30% of home builders are currently measuring the performance of their dwellings in terms of water consumption.
- How do homes need to be designed to adapt to climate change?

Stepping up to waste legislation

Waste management is an area where home builders have clearly recognised the business benefits of a proactive approach and responded accordingly. With the challenge of impending legislation, 70% of home builders provided evidence of waste management being undertaken on sites, with 50% of companies providing performance data in relation to waste across all sites. However, even in this highest performing of the environment criteria, some home builders were unable to show that they are fully prepared for the Site Waste Management Plans legislation coming into effect in 2008.

Impact on society

Company scores for addressing their impact on society were relatively better than those for managing their environmental impacts, but not as strong as those for governance and strategy. The average score was 43% for all companies.

In much of the current dialogue on sustainability matters, socio-economic issues are a poor relative to the environment, rarely considered beyond the rhetoric of ‘building sustainable communities’. Moreover, these issues are not well covered by the Code for Sustainable Homes, which sends the signal to developers that they are less significant. They are, however, important elements of sustainable communities and should be given greater attention. It appears that both government and the industry have focused on a few aspects of sustainability to the detriment of others, i.e. treating the interconnected elements as if they can be de-linked and delivered in a piecemeal fashion, or that certain aspects can just be ignored as they are less important. The reality is that sustainability is a multi-dimensional concept and should be delivered as a package.

Some social issues, such as affordability and design, are not addressed by this benchmark. By their very nature, these issues are relative to local communities and the local context, so it is difficult to benchmark the corporate approach to such issues. However, the Commission for Architecture and the Built Environment (CABE) has a Building for Life¹ standard which includes criteria addressing design issues in more detail.

Maintaining health and safety standards

The sector clearly takes the issue of health and safety seriously. Many of the top 20 home builders are providing evidence of implementing robust health and safety policies and management systems with 70% publicly reporting their RIDDOR² rate. However, with recent increases in the number of fatalities in the construction industry, home builders must continue to focus on this key issue. NextGeneration urges the industry to develop and adopt a standard RIDDOR measurement system, and companies to have their performance in this area externally audited so that the data disclosed is robust.

Sustainability and economic regeneration

While a number of the home builders provide some information about the extent to which they contribute to the local economy and employment, this is an area where they appear to be under-selling themselves. Many socio-economic dimensions of sustainability are the ‘glue’ that holds communities together; home builders should cover more of their initiatives in this area in their sustainability disclosure, including initiatives to provide access to employment opportunities and to maximise the benefits of inward investment.

A sustainability skills shortage?

Both the Housing Green Paper and the Draft Strategy for Sustainable Construction highlight concern over the lack of skills among the construction workforce needed to deliver sustainable communities on the ground. The Academy of Sustainable Communities has recently released a report, *Mind the Skills Gap: A review of the skills we need for sustainable communities*³, also indicating that there are significant labour shortages and that the skills gap is widening. The NextGeneration benchmark has shown that even the home builders with the most well-developed strategies are not always effectively delivering through their operations, and the sector’s skills shortage is a contributory factor. With only half of home builders providing data in relation to the number of Construction Skills Certification Scheme site operatives that carry cards, there are clear training gaps which the industry must fill.

Better housing design

While 65% of home builders were able to provide examples of improving community wellbeing through various initiatives, only two companies provided evidence of achieving the Lifetime Homes standards across all developments. This raises questions as to the adaptability of the homes the sector is building at a time when the consultation document, *The Future of the Code for Sustainable Homes*, is addressing how it envisages the sector achieving Lifetime Homes across developments. While it highlights the need to address design issues in terms of

¹ www.buildingforlife.org/

² RIDDOR: Reporting of Injuries, Diseases and Dangerous Occurrences Regulations

³ The Academy for Sustainable Communities, *Mind the Skills Gap – The skills we need for sustainable communities*, 2007, See: www.ascskills.org.uk/download/General/research/mind_the_skills_gap_full_report.pdf

demographic changes, as noted above, it also appears that the sector has not yet begun to think about whether current design techniques can deliver a housing stock capable of adapting to future climate changes.

The future

The government has committed to building many more homes each year than it has in the past, to ease a general housing shortage and particularly the dearth of key worker and affordable homes. This offers the prospect of growing revenues for the sector. But at the same time, the government has said that the industry must deliver sustainable homes to contribute to the 60% decrease in greenhouse gas (GHG) emissions the UK needs to achieve by 2050 – a commitment that will be embedded in law when the Climate Change Bill is passed in 2008. This challenge only becomes more pertinent in light of WWF-UK and other organisations calling for the government to increase this target to 80%.

Those companies that can capitalise on the building boom and find the most cost-effective ways of building sustainable homes will be tomorrow's winners. Critical to success will be investment in innovation and a willingness to break from the past to design and deliver homes that are both efficient and adaptable to the changing but uncertain future climate.

We therefore make the following recommendations to both industry and government in the hope that home builders will rise to the challenges of delivering sustainable communities and the government will provide the necessary support to help the sector achieve this.

Recommendations to the industry

- Seek to understand and better articulate the commercial implications – both risks and opportunities – of the sustainability issues facing the sector.
- Seek to understand the commercial value of sustainability to core business operations and include commentary on this in financial presentations.
- Develop a strategic approach to climate change by introducing corporate policies and setting short- and long-term targets aligned to the government's targets to reduce carbon emissions of both operations and product.
- Innovate and experiment to understand the commercial, technical and customer implications of building homes to the levels in the Code for Sustainable Homes and publicly share best practice.
- Implement a communications strategy to address how sustainable housing can be better marketed to the customer and to promote more sustainable lifestyles among occupiers.
- Think holistically about operations to ensure that cost savings in sustainable materials specification and construction waste management are captured by the whole business.

Recommendations to the government

- Ensure that the recent plethora of policy documents and legislation provides clear guidance for home builders in terms of achieving the 2016 zero-carbon housing target; indeed, provide a consistent definition of 'zero-carbon'.
- Ensure that future iterations (for example, the proposed review in 2010) of the Code for Sustainable Homes are holistic in their approach to addressing sustainability issues.
- Ensure the Code for Sustainable Homes is consistent with standards being set in other policy documents and legislation.
- Introduce incentives/sanctions to encourage home builders to build more sustainable housing.
- Ensure fiscal measures are in place to help home builders realise the commercial benefits of building sustainable housing – notably through stamp duty exemption and council tax reductions.
- Take a leading role in marketing sustainable homes to the house buying market.

We hope the findings of this process will enable home builders to identify the key challenges and opportunities, respond to these with clarity and assist government in understanding the very practical barriers that the sector has to overcome.

Introduction

Insight Investment and WWF-UK jointly benchmarked the performance of the UK's major publicly listed home builders on sustainability practice and reporting in 2004 (13 listed companies) and 2005 (12 listed companies). The results of those benchmarks are presented in the reports *Building towards Sustainability*⁴ and *Investing in Sustainability*⁵ respectively. Since then, the UK's home building sector has experienced a fundamental shift in the government's housing policy agenda. In a plethora of documents including the *Housing Green Paper*⁶, *Building a Greener Future* policy document⁷, Draft Strategy for Sustainable Construction⁸, *Planning for a Sustainable Future White Paper*⁹, and the Code for Sustainable Homes, the government has clearly laid down its commitments to ensuring that more environmentally friendly and affordable homes are built each year.

NextGeneration

NextGeneration was launched to build on the success of these previous benchmarking exercises and to expand their reach and ownership. Set up as a multi-stakeholder initiative, NextGeneration aims to drive best practice on sustainability into the heart of the housing 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 as well as develop a good understanding of how best to address the related opportunities.

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The first output of NextGeneration is this, the 2007 benchmark of the UK's top 20 home builders (i.e. the 20 developers that have built the largest number of units during the last financial year – 2005/06). The benchmark incorporates two scores: the first rates the quality of reporting of the sector on sustainability and the second rates its performance in this area.

In future, a full corporate benchmark will be carried out bi-annually (with the next one due in 2009) and issue-specific benchmarks will be published in the interim years (i.e. 2008, 2010) to assess the sector's performance in addressing particular issues. Next year's benchmark will focus on developers' progress in mitigating and adapting to climate change.

The benchmarking is undertaken in two phases:

- **Phase one: The top 20 companies are rated on the basis of their publicly available information (corporate responsibility 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 on the quality of the companies' reporting.**
- **Phase two: The performance of NextGeneration members is then evaluated through face-to-face engagement with the companies and their provision of evidence to demonstrate their practice in each of the three areas outlined above.**

A score of 100% in either phase would indicate that a company had achieved best practice as defined by NextGeneration (see Appendix 1 for further information).

⁴ WWF/Insight Investment, *Building Towards Sustainability*, 2004, See: www.insightinvestment.co.uk/Documents/responsibility/Reports/building_towards_sustainability.pdf

⁵ WWF and Insight Investment, *Investing in Sustainability: Progress and performance among the UK's listed house builders – revisited*, September 2005, See: www.wwf.org.uk/investinginsustainability

⁶ Department of the Environment, Transport and the Regions, *Quality and Choice: A Decent Home for All - The Housing Green Paper*, April 2000, See: www.communities.gov.uk/archived/publications/housing/qualitychoice2

⁷ Department for Communities and Local Government, *Building a Greener Future: Policy Statement*, July 2007, See: www.communities.gov.uk/documents/planningandbuilding/pdf/building-greener

⁸ Defra, *Draft Strategy for Sustainable Construction A consultation paper*, July 2007, See: www.berr.gov.uk/files/file40641.pdf

⁹ HM Government, *Planning for a Sustainable Future White Paper*, May 2007, See: www.communities.gov.uk/documents/planningandbuilding/pdf/320546

The UK home building sector in 2007 – an overview

During the last year there has been significant consolidation in the home building sector. Barratt Developments acquired Wilson Bowden; George Wimpey and Taylor Woodrow merged to create Taylor Wimpey; Galliford Try acquired Linden; and Ben Bailey was sold to Gladedale Holdings. In addition, McCarthy & Stone and Crest Nicholson have delisted and are now both privately owned. The top 20 companies within the sector built over 95,000 homes in 2006; NextGeneration companies were responsible for delivering almost 58,000 of these (approximately 60%). The impetus for the housing sector to address sustainability issues has primarily been driven politically at national, regional and local levels. However, there are a number of other drivers, all of which are outlined below.

Regulatory changes

Had the political environment not moved on significantly, home builders would have shown a marked improvement in their sustainability performance since the last benchmark. However, in recent months, the government has considerably strengthened legislation and regulation to address sustainability issues and achieve much higher sustainability standards in home building. While some home builders demonstrate they are implementing best practice in some areas, this first NextGeneration benchmark highlights the considerable gap between where the companies are and where they need to be if they are to keep up with the pace of change and deliver the vision the government has set out.

The policy document, *Building a Greener Future*, sets out the government's ambitions to achieve zero-carbon housing in the next nine years. The commitments made are aligned with the energy requirements within the Code for Sustainable Homes: 25% more energy-efficient than Building Regulations Part L by 2010 (energy requirements of Code Level 3); 44% by 2013 (Code Level 4); and zero-carbon by 2016 (Code Level 6). In addition to energy, there are many other categories within the Code, with minimum standards for water (at every level – energy is the same), materials, surface water run-off and waste (at entry level). The remaining categories for which additional points can be scored are pollution, health and wellbeing, management and ecology.

The most important question for the sector is whether it is prepared for, and capable of, achieving the government's policy goals. To better understand the current challenges facing the industry, several review processes have been initiated. The Callcutt Review of House Building Delivery is determining whether the home building sector is structured sufficiently to deliver the government's goal to deliver sustainable, mixed communities as visualised in its Sustainable Communities Plan. In addition, the Office of Fair Trading has launched a review into the sector's ability to deliver housing, also looking at homebuyers' satisfaction with the properties available. The outcome of both of these reviews, expected in autumn 2007 and summer 2008 respectively, could lead to further changes and regulation to the industry.

Both the Housing Green Paper¹⁰ and the Draft Strategy for Sustainable Construction¹¹ highlight concerns over the availability of skills to deliver sustainable communities on the ground. The NextGeneration benchmark has shown that even the home builders with the most well-developed strategies are not always effectively delivered through their operations and the sector skills shortage is a contributing factor to that.

Operational efficiency

Maintaining healthy revenues and profit margins is critical to businesses' financial success. However, addressing sustainability issues is now essential too, and some companies in the housing sector are beginning to find ways to reap financial benefits from addressing sustainability.

The cost of sending waste to landfill is set to increase by £8 per tonne each year until 2010/11 and an estimated 13 million tonnes of materials delivered to construction sites leaves again without being used. By failing to manage waste effectively or address specification inefficiencies, home builders incur unnecessary costs.

¹⁰ See: Footnote 3

¹¹ See: Footnote 5

In addition to waste management, developers can use their buying power to structure more cost-effective specification agreements for sustainable materials, white goods, energy-efficient fittings and water saving measures. There is much debate over the true cost of building homes to the levels within the Code. Some developers report being able to build Code level 3 homes at little extra cost; however, Cyril Sweett has estimated that Code Level 5 homes could increase build costs by up to £35,000 for each dwelling¹². Centralising the procurement function is one of the most effective ways home builders can achieve operational efficiency and cost savings. Moreover, there is an opportunity for the industry to think about how it might pool its aggregate buying power to increase demand for, and reduce the cost of, more sustainable building materials and components. Valuable lessons have been learned from the government's Sustainable Procurement Strategy, and private initiatives such as the One Planet Products buying group.

Customer demand and market imperatives

Home purchasers' decision-making regarding buying property is primarily driven by location. There has always been uncertainty as to whether there is anything more than a niche market for the sustainable homes that the government is pushing to be built.

The 2006 report by Sponge – a not-for-profit network of professionals interested in sustainable development and the built environment – entitled *Eco Chic or Eco Geek*¹³, suggested that although people are willing to adopt more sustainable lifestyles, there is a need for the government to address the perceived lack of consumer demand for sustainable housing. Nine out of 10 people agree that the government should be providing incentives to encourage customer demand.

Savills' research, entitled *The Market for Sustainable Homes*¹⁴, indicated that awareness of green issues among home buyers is increasing and most people consider the environmental impact of their home to be important. However, this conflicts with the number of respondents who said they were willing to pay for measures to reduce this environmental impact, with only 25% saying they would be prepared to pay for energy-saving measures in their home.

In its *Homes for the Future Green Paper*¹⁵, the government has set a target of 70,000 new affordable homes a year. The issue of affordability poses a challenge to the government: to reconcile its commitment to sustainable housing with its commitment to delivering low-cost, high quality homes.

The recent Royal Institute of Chartered Engineers (RICS) report, *Housing Accessibility and Affordability Update for Great Britain*, indicates that increases in house prices are significantly outstripping average salary increases. The average house price has now topped £200,000, meaning that a couple both on lower quartile earnings buying for the first time have to save the equivalent of 96% a year of joint take-home pay to afford a deposit and stamp duty¹⁶.

Investor pressure

Listed and private home builders alike are driven by the people and institutions investing in them. As sustainability issues rise up the government and public agendas – and thus the operating environment for developers evolves – investors in turn are placing more emphasis on assessing how well companies address their environmental and social risks and opportunities.

Recently, Socially Responsible Investment (SRI) has grown exponentially in the UK and the rest of the world. More than £538 billion was invested in socially responsible funds in the

¹² Cyril Sweett, A cost review of the Code for Sustainable Homes Report for English Partnerships and the Housing Corporation, February 2007. See: www.cyrilsweett.com/pdfs/Code%20for%20sustainable%20homes%20cost%20analysis.pdf

¹³ Sponge, *Eco Chic or Eco Geek*, 2006. See: www.spongenet.org/library/Eco%20Chic%20or%20Eco%20Geek%20Executive%20Summ.pdf

¹⁴ Savills, *The Market for Sustainable Homes*, summer 2007. See: www.savills.co.uk/research/Report.aspx?nodeID=8266#

¹⁵ Department of Communities and Local Government, *Homes for the future: more affordable, more sustainable*, July 2007. See: www.communities.gov.uk/documents/housing/pdf/439986

¹⁶ RICS, *housing accessibility and affordability update for Great Britain Q2 2007 Page 1*. See: www.rics.org/NR/rdonlyres/7616A983-CD65-4F15-925E-D4C65C22160C/0/affordability_update_q2_2007.pdf

UK at the end of 2006¹⁷. The recently launched UN Principles for Responsible Investment have attracted the support of more than \$10 trillion of assets worldwide – demonstrating that the consideration of environmental, social and ethical factors in investment has begun to be accepted by mainstream investors. This means that UK home builders are likely to face greater pressure from both their UK and foreign investors to demonstrate their commitment to sustainability.

Social responsibility issues are also being brought to bear in property investments. Some investors are beginning to ask that their money be invested only in sustainable buildings. Investment managers are therefore increasingly screening property investments from this perspective and some are setting up specific funds. Examples include Morley's Igloo Regeneration Fund and PruPIM's Improver Fund. Investors such as the Bank of Scotland, part of the HBOS group, have begun to invest in home builders through their corporate banking arms.

This report

The contents of this report provide:

- A summary of the key factors driving home builders to address sustainability;
- Detailed analysis of the finding of the NextGeneration 2007 corporate benchmarking, highlighting challenges for the future; and
- A series of conclusions and recommendations addressed to government and developers.

¹⁷ *Eurosif*, European SRI Study, 2006 www.eurosif.org/content/download/580/3548/version/1/file/Eurosif_SRIStudy_2006_complete.pdf

Benchmarked companies

This first NextGeneration industry benchmark encompasses the top 20 home builders in the UK by volume, based on the number of units they completed in the financial year 2005/06. All 20 were benchmarked in phase one and 11 were benchmarked in phase two.

The 20 home builders were offered membership of NextGeneration and 11 accepted. Two further companies outside the top 20 are associate members. Both full and associate members benefit from a number of services including greater engagement opportunities within the benchmarking process. The following companies were benchmarked; member companies are in bold and indicated by an asterix:

- | | |
|--|------------------------------------|
| 1. George Wimpey* | 11. Crest Nicholson* |
| 2. Persimmon | 12. McCarthy & Stone* |
| 3. Barratt Developments* | 13. Lovell Partnerships |
| 4. Taylor Woodrow Developments* | 14. Bloor Holdings |
| 5. Bellway Homes | 15. Gladedale Holdings |
| 6. Redrow Group* | 16. Cala Group |
| 7. Miller Homes* | 17. Kier Residential |
| 8. Bovis Homes Group | 18. Fairview New Homes* |
| 9. The Berkeley Group* | 19. Countryside Properties* |
| 10. Galliford Try | 20. Inspace Partnerships* |

The two associate members of the initiative are:

- **Logic Homes***
- **Stewart Milne Group***

As associate members outside the top 20 home builders, the results of Logic Homes and Stewart Milne Group do not feature in this report.

Since the inauguration of NextGeneration in late 2006, Taylor Woodrow and George Wimpey merged to form Taylor Wimpey. As the two companies entered the initiative separately and were operating as separate entities during the benchmarking phase, they will be referred to separately throughout this report.

Criteria review

NextGeneration is based on broadly the same criteria as used in the previous two WWF/Insight Investment benchmarks. But because the regulatory landscape has changed so significantly in recent years, and because of changing expectations as to what is considered standard, good and best practice across the industry, the criteria have been extended and made more stretching in some areas. Where appropriate, they have been aligned with legislative drivers, including the requirements on home builders to report publicly on environmental and social risks, water efficiency requirements within dwellings and waste management plans to be implemented on all sites. NextGeneration members were consulted during the criteria development and provided input to their content.

Because the criteria have changed, the results for individual companies are not directly comparable with those in the previous benchmarks. For example, to score the maximum points on some criteria, home builders would have to have provided examples of industry best practice (which was not required in past benchmarks) with respect to AA1000 reporting assurance, FSC timber procurement and community planning techniques, for example. However, it is possible to infer the general status and direction of the sector by looking at progress since the 2005 benchmark.

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

- Governance
- Disclosure

Impact on environment

- Management systems
- Commitment to EcoHomes
- Ecology
- Climate change
- Energy
- Water
- Domestic waste
- Transport
- Procurement and supply chain management
- Construction waste
- Construction site management

Impact on society

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

See Appendix 1 for more detailed information related to each of the above criteria.

Scoring and engagement process

All top 20 home builders 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 contained on company websites. Some criteria, including domestic waste and transport, allowed information from sales and marketing literature to be scored. Information analysed during this stage had to be publicly available before 30 April 2007. This phase therefore provides an assessment of the quality of reporting of UK home builders on sustainability issues.

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.

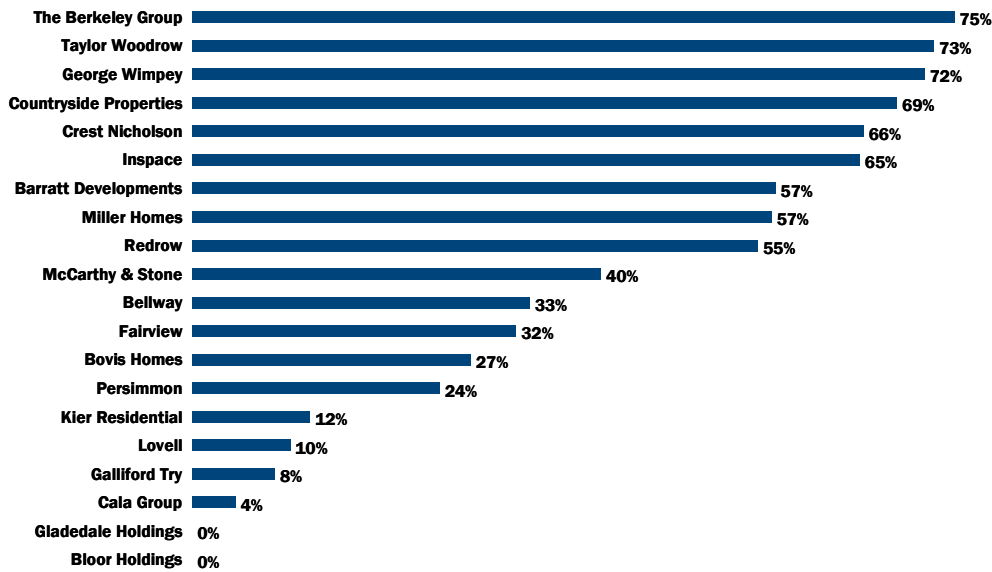
In phase two, NextGeneration members, as one of their membership services, met Upstream and selected representatives of WWF, The Housing Corporation and Insight Investment to discuss their phase one score and their practice on all criteria. Each company was given the opportunity to provide further evidence regarding its strategy, operations and performance. 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.

Overall summary of benchmarking results

Company ranking

Figure 1 shows three leading companies – The Berkeley Group, Taylor Woodrow and George Wimpey – emerging from the benchmark with a score of over 70%. Two of these companies, The Berkeley Group and George Wimpey, appeared in the top three in the 2005 WWF/Insight Investment benchmark, and Taylor Woodrow was fourth. Following the 2007 leading pack were six companies all scoring between 69% and 55%: Countryside Properties, Inspace, Crest Nicholson, Barratt Developments, Miller Homes and Redrow. A group of five companies, led by McCarthy & Stone, scored between 40% and 24%. The remaining six, all with very limited publicly available information, scored below 12%.

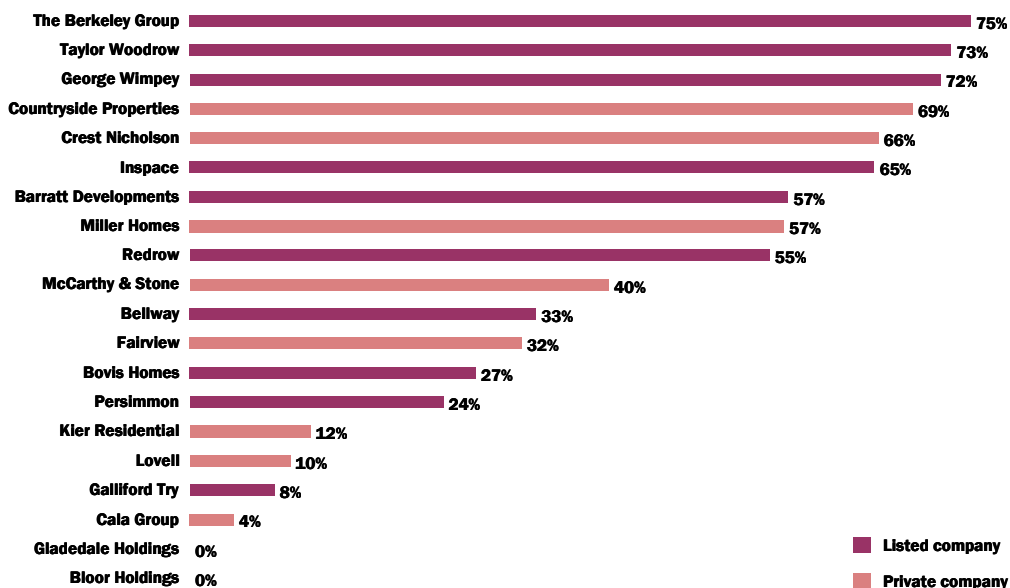
Figure 1: Top 20 UK home builders NextGeneration results



Listed vs. Private

It is interesting to note that listed companies scored higher than private companies, with average scores of 49.0% and 28.7% respectively. This is likely to be explained by the historic reporting requirements listed companies are subject to.

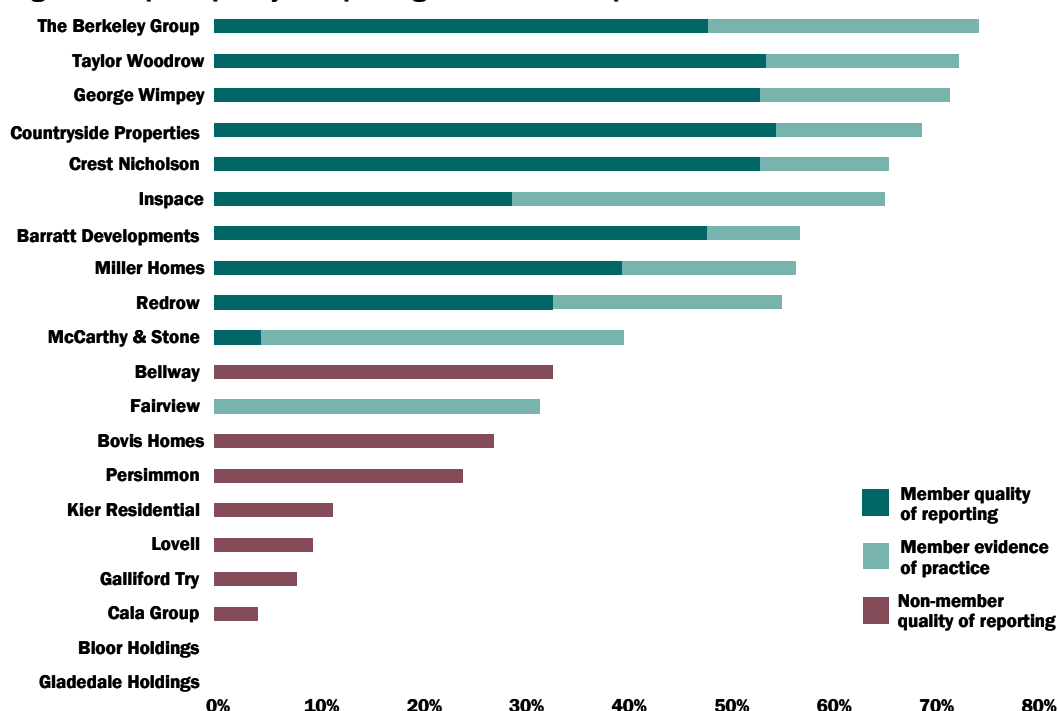
Figure 2: Top 20 overall performance



Quality of reporting vs. evidence of practice

Figure 3 shows member companies' scores for their quality of reporting and evidence of practice, and non-members' scores who were evaluated only on the quality of their reporting.

Figure 3: Top 20 quality of reporting vs. evidence of practice



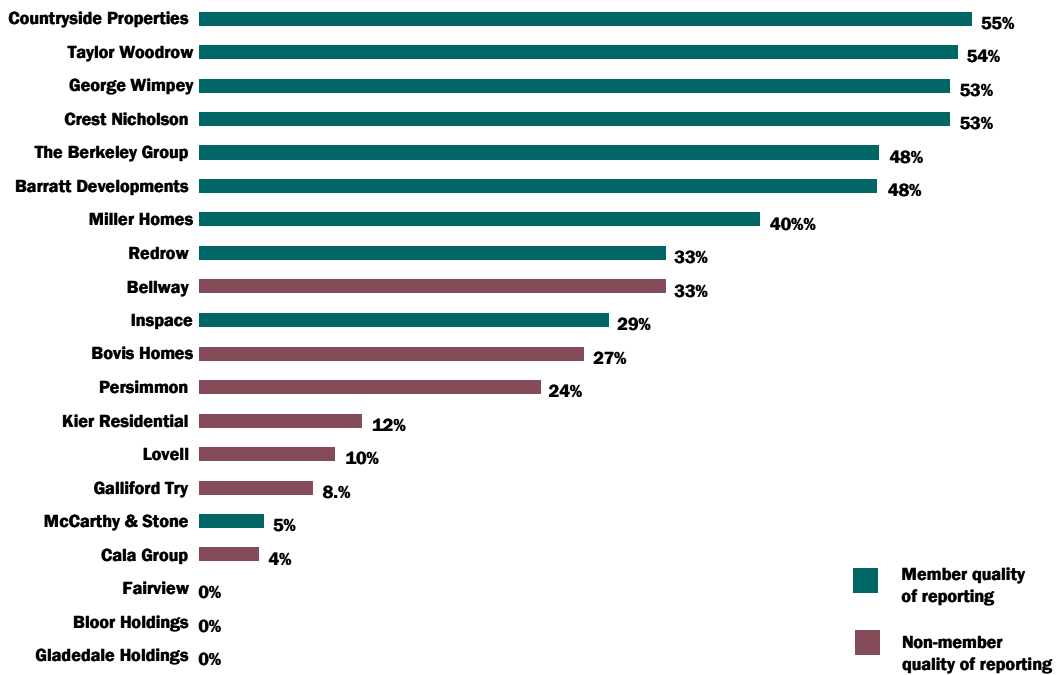
NextGeneration members outperformed non-members with average scores of 59.8% and 13.1% respectively. The fact that companies are able to increase their scores in phase two reflects that homebuilders are not publishing comprehensive information on all aspects of their sustainability strategies and operations.

It should also be noted that six 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 Kier Residential, Lovell, Galliford Try, Cala Group, Bloor Holdings and Gladedale Holdings. Their appearance as the bottom six companies, therefore, does not necessarily reflect their sustainability performance. As with any company not currently a member of NextGeneration, we would welcome these homebuilders to engage with the initiative so that we can gain a greater understanding of their sustainability approach and performance.

Focussing only on quality of reporting, there are clearly significant differences between the companies as to the extent to which they are transparent and open in their reporting (see Figure 4). While it is accepted that reporting should not be considered a forum for companies to discuss every detail of their approach to sustainability, they could further improve their disclosure in line with other sectors. Reporting should be used to communicate with companies' key stakeholders; different stakeholder groups may warrant different types of reporting. There are three key areas in which home builders could improve disclosure in order to keep up with leading sectors in the field of reporting:

- The materiality and commercial implications of sustainability risks to their core business – for example, as undertaken by Sonae Sierra (a Portuguese property company) in its 2006 CR report;
- The relevance and sophistication of performance data being reported; and
- The targets they are setting indicating where they visualise their future position – for example, the Marks & Spencer Plan A target to have UK and Irish operations carbon neutral within five years.

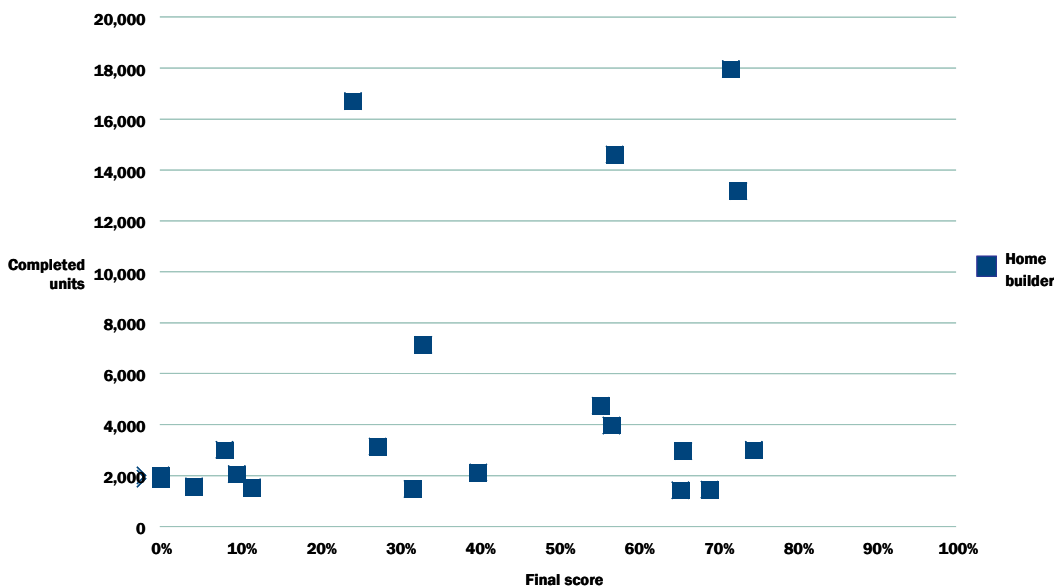
Figure 4: Top 20 quality of reporting



Volume vs. performance

As seen in previous benchmarks, Figure 5 indicates that there is little correlation between companies' sustainability performance and size (indicated by the volume of homes they complete). While the top three performers are all in the top 10 in terms of volume, Countryside Properties and Inspace, the fourth and sixth best performing companies, are also the two smallest in the benchmark.

Figure 5: Top 20 volume vs. performance



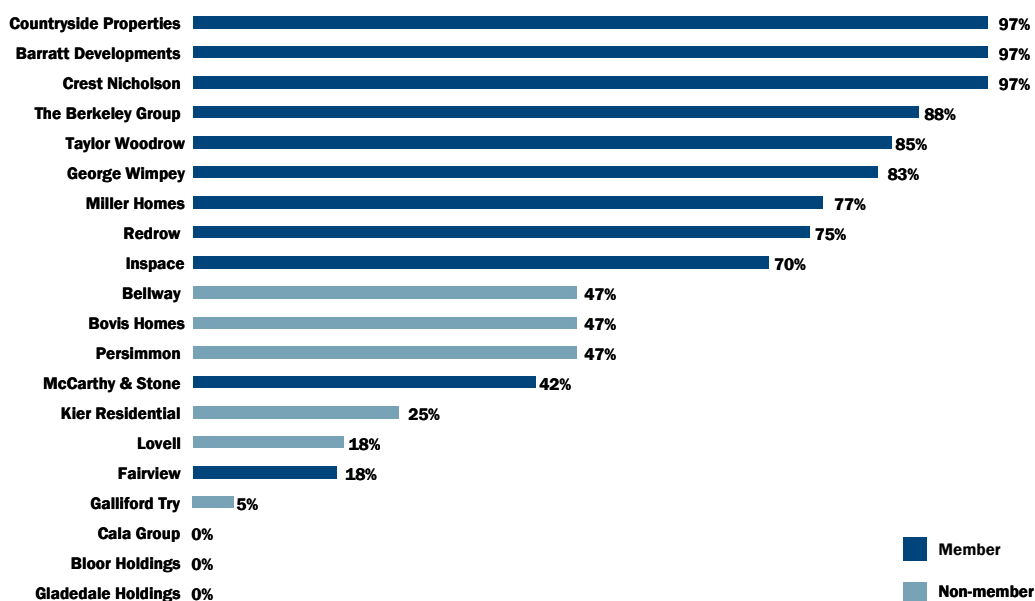
A number of factors contribute to this lack of correlation, including:

- Different companies have different priorities, no matter what size their business operations;
- Some of the smaller, well performing companies have sought to differentiate themselves in the market place by placing greater emphasis on sustainability issues.

Results overview

Companies achieved an average score of 50.5% on strategy, governance and risk management – the highest across the three benchmarking sections. Figure 6 shows listed home builders outperformed private companies overall. The average score for listed companies was 64.3% and 36.6% for private companies. The exceptions were Countryside Properties and Crest Nicholson, which were listed until recently (2005 and 2007 respectively), and Miller Homes – the laudable exception as a private company with high levels of disclosure. It comes as little surprise that listed companies provide greater disclosure in relation to their sustainability performance because of their legal obligations related to reporting. However, the foundations of sustainability are accountability and transparency, so the NextGeneration initiative encourages all home builders, whether listed or private, to report their sustainability approach and performance to their key (and often external) stakeholders.

Figure 6: Strategy, governance and risk management – overview of individual company performance



Within the strategy, governance and risk management section, the highest average scores were achieved on the governance criteria (56%), followed by those assessing risk management (47%) and then disclosure (45%). See Appendix 1 for more detail on each of the criteria.

Risk management

Given the uncertainty over future energy and water prices, rapidly emerging renewable energy technologies and the changing climate, managing sustainability risks is becoming an important imperative facing home builders. With the government putting pressure on the sector to help deliver its housing and energy goals, the quickly evolving regulatory field is also posing a significant risk to home builders. Although not a new climate phenomenon, 2007 has witnessed one of the worst years of flooding for many years with insurance costs already estimated to total £3 billion¹⁸. One urgent task facing home builders is to assess the potential flood risk to their current landbank and improve processes to assess those risks for land they purchase in the future.

Sustainability risks, notably climate change, are being recognised at a high level through reporting, with many CEO statements broadly outlining their implications for the business. Although these risks are being increasingly incorporated into companies' risk registers, they are yet to be covered sufficiently by all home builders in the appropriate sections of their financial reports. Table 1 shows that just 25% of home builders currently discuss sustainability risks faced by the business in their annual report and accounts.

¹⁸ Global Continuity, Costs of UK Floods will top £3 billion, August 2007 See: www.globalcontinuity.com/current_headlines/cost_of_uk_floods_will_top_3_billion

Table 1: Company reporting on sustainability risks

Company	Sustainability risks discussed in AR&A	Sustainability risks discussed in Sustainability reporting
Barratt Developments	Yes	Yes
Bovis Homes	Yes	Yes
George Wimpey	Yes	Yes
Taylor Woodrow	Yes	Yes
The Berkeley Group	Yes	Yes
Bellway	H&S only	Yes
Redrow	H&S only	Yes
Countryside Properties	No	Yes
Crest Nicholson	No	Yes
Inspace	No	Yes
Miller Homes	No	Yes
Persimmon	No	Yes
Bloor Holdings	No	No
Cala Group	No	No
Fairview	No	No
Galliford Try	No	No
Gladedale Holdings	No	No
Kier Residential	No	No
Lovell	No	No
McCarthy & Stone	No	No

Good practice example 1: Risk management

Countryside Properties

For all development companies there is a wide range of environmental, social and economic risks and opportunities. We have identified these impacts in the ESE objectives that we set in 2001. We continue to refine them to ensure we manage our impacts, appreciate stakeholder expectations and help maintain our differential within the industry.

Our ESE objectives apply to all aspects of our business and all our people are committed to sustainable development. Our Board is dedicated to ensuring the highest standards of integrity, accountability and corporate governance.

The Group has established a risk management strategy and systems to ensure that the Board is fully informed of all risks and that the Board is able to make informed decisions and regularly review and update the risk management strategy. This is overseen by the Risk Management Committee. The Board is able to see at a glance the risks and opportunities that we face and the Board regularly reviews the risk.

strategic objective	actions/targets	progress 2006/2006 & future actions
1. Promote environmental, social and economic performance	Review all projects and ensure that they meet the highest standards of environmental, social and economic performance.	100% of the Group's projects are ESE compliant. 100% of the Group's projects are ESE compliant. 100% of the Group's projects are ESE compliant.
2. Promote environmental, social and economic performance	Review all projects and ensure that they meet the highest standards of environmental, social and economic performance.	100% of the Group's projects are ESE compliant. 100% of the Group's projects are ESE compliant. 100% of the Group's projects are ESE compliant.

We have continued to update and refine our ESE objectives and our ESE strategy. We have also had a regular dialogue with our stakeholders, including environmental, health and safety, social and ethical issues and development and opportunities.

We also have a reputation for good management practices, combined with innovation, high quality standards, as well as a focus on people. Indeed, during the reporting period, we have secured significant third party certification of our management systems throughout the Group including Quality Management (Environmental Management and Health and Safety).

Our management systems apply to all risks and opportunities that we face and they cover the full development process from the necessary design to construction. This means that sustainability considerations are taken into account at all stages of the design, construction and management of the risk and the opportunities.

Across using the financial and operational benefits of developing our management systems, we are also committed to the way in which we bring on board our stakeholders to help improve the efficiency of our business.

“For all development companies there is a wide range of environmental, social and economic risks and opportunities. We have identified these impacts in the ESE objectives that we set in 2001. We continue to refine them to enable us to manage the impacts, appreciate stakeholder expectations and help sustain our differential within the industry. Our ESE objectives apply to all aspects of our business and all our people are committed to sustainable development. Our Board is dedicated to maintaining the highest standards of integrity, accountability and corporate governance. The Group maintains a risk management strategy and systems to ensure that the risks to which it is exposed are clearly understood and regularly assessed, and that adequate controls relating to operations, financial and compliance matters are in place to effectively mitigate their impact. This is overseen by the Risk Management Committee. The Audit Committee in turn further reviews the internal control testing carried out by the Risk Management Committee. It reports to the Board regularly throughout the year.”

Countryside Properties 2006 Environmental, Social and Ethical Review 2006, p3

Reproduction of 'Summary of Barratt key CR Risks'

Identified risks	Barratt actions this year	Risk level	Risk level	Page No.
		2005	2006	
ENVIRONMENT				
Climate change	EcoHomes assessments extended; Ecovillage piloted; resource efficiency audit carried	High	Medium	33-35, 39-42
Water supply and use	Rainwater harvesting technologies incorporate at EcoSmart Village; water saving measures on construction sites investigated	High	Medium	34, 35, 40
Pollution incidents	ISO 14001 implemented at 15 divisions, and remaining rollout accelerated	Medium	High	14, 37
Waste legislation	Waste management procedure reinforced through ISO 14001; plasterboard recycling scheme introduced; waste segregation targets introduced	Medium	High	34, 35, 36
MARKETPLACE				
Restricted access to land for building	Land stock increased to 66,500 units	High	Medium	
Customer complaints	Personal Code of Practice and Supplier Charter issued	High	Medium	12, 18
Environmental and social impacts of supply chain	Ongoing engagement with suppliers with particular focus on timber; development of supplier sustainability charter started	High	High	17, 42
Shareholder activism	Continued engagement with institutional investors on CR issues	Medium	Medium	17
WORKPLACE				
Accidents and fatalities in workplace	Ongoing development of H&S Management System and audits; OHSAS 18001 implemented at 6 divisions; recruitment of additional health and safety staff	High	High	14, 15, 45
Access to skilled workforce in construction sector	Continued implementation of CSCS scheme; work with CITB	High	High	46, 51
Staff retention	Ongoing investment in training; expansion of HR team	High	High	46, 49, 50
Sickness absence	Expansion of HR team	Medium	Medium	49, 50
Building a diverse workforce	Advertised specifically to ethnic minorities	Medium	Medium	51
COMMUNITY				
Unfavourable exposure of brand through NGCV media campaign	Work with NGOs; participation in ongoing benchmarking survey with WWF; increased consultation with investors and other stakeholders; publication of CR report	High	Medium	17, 21
Community dissatisfaction with development	Preparation for compilation of best practice guide for community and local authority consultation and liaison	High	High	19
Poor relationship with relevant local authority	Preparation for compilation of best practice guide for community and local authority consultation and liaison	High	High	19
Failure to maximise local economic and social development through schemes	Investigation of ways to assess the impact of a Barratt development on the local community	High	High	18, 19, 20, 21, 26
Changing demographics and social trends	iPad development; parent power initiatives; Barratt Dream Start; increased social housing development	Medium	Medium	23, 29, 30
Increasing requirement to build affordable housing	Continued innovation in housing portfolio to create new and mixed products for social/affordable housing market e.g. iPad, Advance Housing; £60,000 House Competition	Medium	Medium	28, 29, 30

Risk level High 
Medium 

Barratt Corporate Social Responsibility Report 2006, p13

Barratt Developments, Countryside Properties (see Good practice example 1 for detail) and George Wimpey all lead the field in this area, providing good practice examples of detailing their approach to risk management within their core business review. There is increasing legislation in this area, particularly the requirements in the Companies Act 2006¹⁹ for quoted companies to disclose information about environmental, employee, social and community issues. To a lesser degree, large companies (as defined by Section 465 of the Act) are also required to report on such issues. This signals the direction in which the government is likely to drive corporate reporting for all companies in the future.

¹⁹ Government, Companies Act 2006, See: www.opsi.gov.uk/acts/acts2006/pdf/ukpga_20060046_en.pdf

Governance

A well-developed strategy should be the cornerstone of any company's approach to sustainability and should be:

- Designed to support the achievement of business objectives as well as to address stakeholders' concerns;
- Board-led and approved; and
- Developed in consultation with stakeholders.

Clearly, it is possible for private companies to have developed good strategies, but not to publicise them. However, the listed (or listed until recently) companies who have been developing their sustainability strategies for the past few years outperformed private companies on this criterion.

To support the development and implementation of a sustainability strategy, suitable governance structures need to be put in place to ensure sustainability issues are well-managed and that a company's approach is effectively fed down from Board to site operatives.

The evidence suggests that many companies are developing sustainability strategies, with Board-approved sustainability policies becoming mainstream. Companies are increasingly setting targets and reviewing performance through Key Performance Indicators (KPIs) often reviewed by an in-house Sustainability Committee (or similar). Miller Homes is the only home builder to set out its strategic approach to sustainability in a separate strategy document²⁰.

In developing their strategies further, many companies will need to assign responsibilities for sustainability issues through the various levels of management and ensure the correct training initiatives are in place to inform employees of the company's approach. 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.

Disclosure

Disclosing sustainability information demonstrates companies' commitments to being transparent and accountable to both their shareholders and stakeholders. Companies choosing to report transparently on their sustainability performance can potentially improve both their reputation and brand. Moreover, reporting in this way enables current and prospective employees to learn more about the company's approach to addressing sustainability issues.

Twelve of the top 20 home builders report on sustainability issues either through a printed or web-based sustainability report (see Table 2). The eight companies that do not disclose information are privately owned and have historically been less obligated to disclose. As discussed in the risk management section, this has changed for quoted and large companies with the introduction of the Companies Act 2006. Moreover, companies need to consider the competitive as well as the legislative imperative: private companies compete in the market place with listed companies, and many stakeholders – from central government to local authorities, planners and customers – will increasingly expect companies to disclose more in this area.

²⁰ See: www.miller.co.uk/pdfs/Homes%20Corporate%20Strategy.pdf

Table 2: Company reporting and assurance processes

Company	Sustainability Report	Internal assurance	Non-independent third party assurance	Independent third party assurance	AA1000 assured	GRI
Barratt Developments	Yes	Yes	-	Yes	Yes	No
Countryside Properties	Yes	Yes	-	Yes	No	No
Crest Nicholson	Yes	Yes	-	Yes	No	No
Inspace	Yes	Yes	-	Yes	No	No
Bellway	Yes	Yes	Yes	-	No	No
George Wimpey	Yes	Yes	Yes	-	No	No
The Berkeley Group	Yes	Yes	Yes	-	No	No
Bovis Homes	Yes	Yes	No	No	No	No
Miller Homes	Yes	Yes	No	No	No	No
Redrow	Yes	Yes	No	No	No	No
Taylor Woodrow	Yes	Yes	No	No	No	No
Persimmon	Yes	No	No	No	No	No
Bloor Holdings	No	No	No	No	No	No
Cala Group	No	No	No	No	No	No
Fairview	No	No	No	No	No	No
Galliford Try	No	No	No	No	No	No
Gladedale Holdings	No	No	No	No	No	No
Kier Residential	No	No	No	No	No	No
Lovell	No	No	No	No	No	No
McCarthy & Stone	No	No	No	No	No	No

Seeking assurance of disclosure, whether internally or externally, is becoming common practice across all industry sectors with the Global Reporting Initiative (GRI) and the AA1000 assurance standard being considered best practice standards in this regard. In the home building sector, a number of companies seek external assurance of their sustainability reports. However, at present this tends to be provided internally or by their sustainability consultants. Barratt Developments is the only company to have its report externally assured to the AA1000 standard (see Good practice example 2) and none of the top 20 home builders' reports fully adhere to GRI reporting principles.

As businesses in all sectors move towards more rigorous assurance processes for reporting, those in the home building sector will need to follow in order to ensure the validity of the information they are disclosing. In addition, the disclosure of targets and KPIs needs to be improved.

Barratt

Verification statement

This is the third Barratt Corporate Responsibility report, which covers the reporting period 2005-2006. It addresses the organisation's approach to sustainability through management of social, environmental and ethical issues. The purpose of the report verification process is to provide assurance that the claims and data contained in this report are based on actual and reliable information.

Barratt's approach to CR is based on the seven strategic objectives established in the previous report to address Governance and Management Systems, Stakeholders and Community, Creating Value for Society, Procurement and Design, Environment, Occupational Health and Safety and Employment and Diversity. This is the second successive year that Barratt's CR report has been verified by myself.

METHODOLOGY USED

The AA1000 assurance standard, which is internationally recognised, was used to ensure the materiality, completeness and responsiveness of the report. Financial data included with in the report was outside the scope of the assurance activity.

Claims and data published in the report have been independently verified through review of divisional performance returns, interviews, witnessing operational activities and assessment of information that is in the public domain.

I have visited over 70 sites in 22 divisions during this reporting period assessing environmental and occupational health and safety management systems as part of Ocean's ongoing certification activities with Barratt. During these assessments I have interviewed directors, managers, site personnel and subcontractors. Further interviews have taken place with the Assistant Group Secretary who is a member of the CR Steering Group.

ASSESSMENT OF REPORT

Overall, Barratt have continued to make progress towards their strategic objectives. The materiality of the information presented this year will improve stakeholder ability to make judgement on Barratt's sustainability performance. Improvements to governance and risk management have been acknowledged in the BITC CRI and WWF/Insight feedback and supported by provision of additional resource in key areas. Reasons for re-grading the levels of key CR risks are justified, and demonstrate that the review process is effective.

To illustrate improved responsiveness, Barratt have now identified the full range of stakeholders together with associated methods of engagement. Two key stakeholder groups - customers and community - have been subject to particular focus.

The approach to sustainability within construction activities is to a degree compliance driven e.g. planning authority requirements for affordable housing and section 106 agreements, but the Eco Village project and involvement in developing the Code for Sustainable Buildings indicates a forward looking approach.

Limitations and shortfalls in achievement have been recognised, with targets amended or carried forward. A few items in the report that could not be verified due to absence of, or incomplete evidence have been amended accordingly. Issues with accuracy of operational data collection systems have been confirmed through the resource efficiency projects and management system assessments. This has been acknowledged in this report through the commitment to review KPI's.

I made the recommendation in last year's report that the data used should be from live rather than completed developments. This limitation has been acknowledged and will be changed for 2006-2007. Feedback from last year's report has been reviewed and addressed in this year's report.

SUGGESTED AREAS FOR IMPROVEMENT

To ensure completeness of future CR reports, Barratt would benefit from consideration of the following:

- Accuracy of operational data – estimates of resources used at some sites are being made and sometimes do not account for those used by subcontractors.
- Areas of performance weaknesses identified by BITC and WWF/Insight criteria are not acknowledged within this CR report e.g. Impact on the environment.
- Supplier engagement and procurement strategies to deliver sustainability goals of construction process and completed developments.
- Targets to support achievement of strategic objectives are not communicated to employees until well into the reporting period. This significantly reduces the timescale available for successful completion.



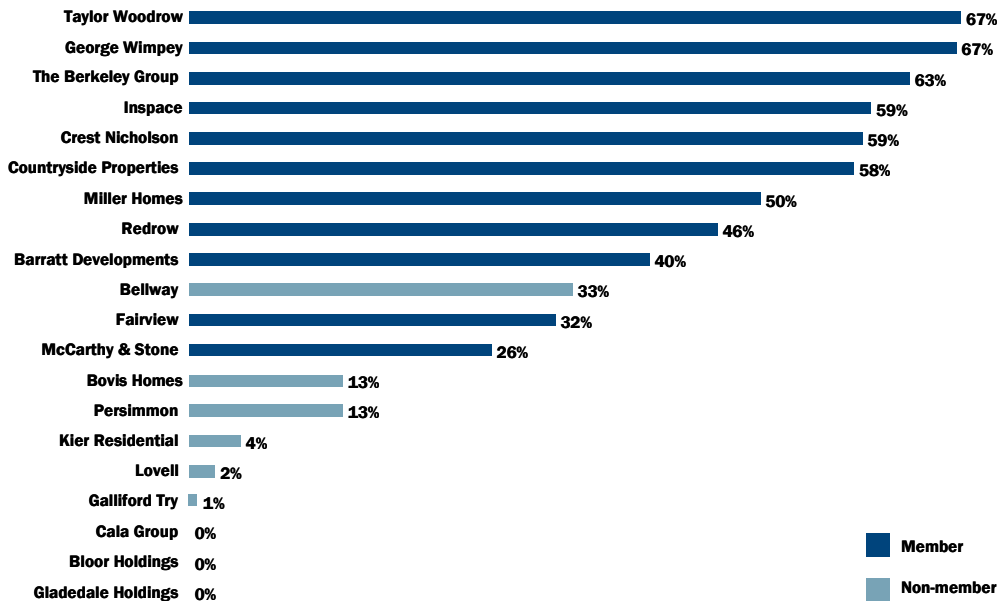
Phil Dorr
Lead Assessor, Ocean Certification

Phil Dorr is a Member of the Institute of Quality Assurance and an Associate Member of the Institute of Environmental Managers and Assessment. As a registered lead auditor he undertakes assessments of quality environmental and occupational health and safety management systems for Ocean Certification Ltd.

Results overview

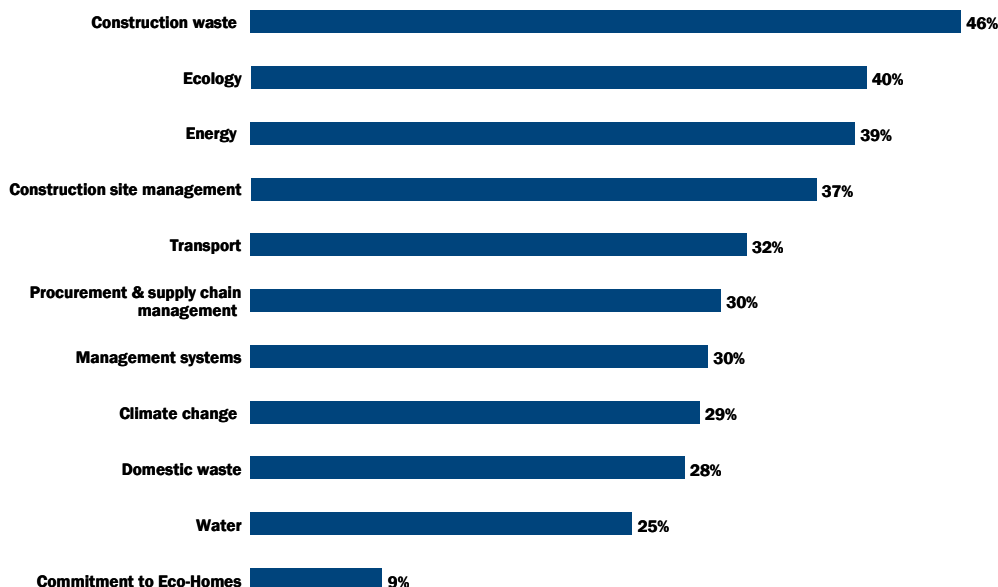
Overall – and somewhat surprisingly – companies score most poorly on how they address environmental issues. The average score was only 31.6%. Figure 7 shows that once again listed home builders outperformed private home builders with average scores of 40.2% and 23.1% respectively. NextGeneration members scored 51.4% on average against the non-members' average score of 7.5%, which is in part a reflection of the good level of reporting provided by listed companies in relation to their environmental impacts and the fact that non-members were evaluated solely on the basis of their reporting.

Figure 7: Impact on the environment - overview of individual company performance



The varied performance on the environmental criteria reflects the fact that home builders are tending to focus on a few individual environmental issues rather than developing a more holistic approach (see Appendix 1 for more detail on each of the criteria). Figure 8 shows that companies generally focus on areas for which there are strong commercial or legislative drivers – for example waste, ecology, energy and site management (including pollution).

Figure 8: Impact on the environment - overview of average company performance for each criterion



The assessment of companies' impacts on the environment shows that there is a large margin between home builders' current performance and the performance they need to achieve to meet the government's new and challenging targets and the higher levels of the Code for Sustainable Homes. While there is some evidence suggesting that the most engaged home builders are preparing for the changes required by the Code for Sustainable Homes²¹, all companies need to take a more strategic approach to environmental issues across their developments to ensure they achieve even the minimum standards and, wherever possible, benefit financially.

Over the past few years, the main focus of stakeholders' interest in home builders' sustainability performance has centred on how they address their environmental impacts. With government targets to reduce national, European and global greenhouse gas (GHG) emissions, the introduction of the Code for Sustainable Homes (seven of its nine categories are centred around environmental issues), and the implementation of Site Waste Management Plans (SWMP) legislation, it is clear that home builders are facing a more demanding regulatory environment.

In addition to stakeholder and regulatory drivers, home builders need to address several other environmental risks relating to energy and water shortages, flood risk, impact of climate change on their product and procurement issues. The highest scoring home builders are those who are already beginning to address these risks. Companies attempting to lead the sector in this area need to understand the potential commercial implications these risks pose to their core business as sustainability moves in from the periphery.

Management systems

If developers are to manage their environmental risks and impacts effectively, they need to have systems in place to set standards and management procedures, and monitor their ongoing environmental performance. Environmental management systems (EMS) enable developers to do this. Box 1 outlines two internationally recognised standards for certifying an EMS. Twelve of the top 20 home builders have formal environmental management systems, with four achieving ISO 14001 across their operations to a varying degree.

Box 1: ISO 14001 and EMAS

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.

Two formal approaches to implementing an EMS are ISO 14001 and EMAS.

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 which 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.

EMAS, the Eco-Management and Audit Scheme, is a voluntary European Commission initiative. The management system element of EMAS is based on ISO 14001. It aims to further recognise those companies that go beyond minimum legal compliance. EMAS has an additional requirement in that companies have to produce a formal and publicly available environmental statement which must be verified annually by an accredited verification body. The EMAS statement gives interested parties detailed information about the company's environmental performance, policy and objectives. For those organisations that choose it, ISO 14001 can be a stepping stone for progression to EMAS.

By implementing and keeping an EMS up to date, companies can assess their current position in terms of forthcoming legislation, including the Code, and regulatory changes. This will assist

²¹ Department of Communities and Local Government, Code For Sustainable Homes, A step change in sustainable home building practice, December 2006, www.planningportal.gov.uk/uploads/code_for_sust_homes.pdf

them in looking in a more holistic fashion at their environmental impacts and to identify areas for improvement. Clearly, a company's EMS can only drive improvements in environmental performance if meaningful targets are set and robust performance data gathering systems are put in place.

Commitment to EcoHomes

EcoHomes has been the recognised industry tool for assessing the environmental performance of homes since 1990. EcoHomes certification has primarily been driven by social housing funding and local planning requirements in the home building sector, resulting in many companies performing poorly against this criterion. The average score was 8.5%, with very little performance data disclosed across the sector and few targets being set.

Only 50% of companies disclosed any information in relation to EcoHomes certification or assessment (see Table 3). Just one home builder, Inspace, disclosed specific performance data in relation to the number of homes certified to EcoHomes Excellent, which is industry-recognised as being approximately equivalent to Level 3 of the Code for Sustainable Homes.

Table 3: EcoHomes certification and assessment data

Company	Internal information	External information	% assessed	% certified	% good or better	% very good or better	% excellent
Inspace	-	Yes	-	17.6%	-	-	17.6%
The Berkeley Group	-	Yes	-	38%	-	37%	-
Bellway	No	Yes	-	4%	-	4%	-
Bovis Homes	No	Yes	-	5.5%	-	5.5%	-
Miller Homes	-	Yes	-	9%	-	9%	-
Crest Nicholson	-	Yes	36.9%	20.2%	74.2%	20.2%	-
George Wimpey	-	Yes	-	15.9%	-	-	-
Taylor Woodrow	-	Yes	-	11%	-	-	-
Countryside Properties	-	Yes	100%	-	55%	-	-
Barratt Developments	-	Yes	4%	-	1.8%	0.1%	-
Redrow	Yes	No	-	-	-	-	-
Fairview	Yes	No	-	-	-	-	-
McCarthy & Stone	No	-	-	-	-	-	-
Persimmon	No	-	-	-	-	-	-
Kier Residential	No	-	-	-	-	-	-
Lovell	No	-	-	-	-	-	-
Galliford Try	No	-	-	-	-	-	-
Cala Group	No	-	-	-	-	-	-
Bloor Holdings	No	-	-	-	-	-	-
Gladedale Holdings	No	-	-	-	-	-	-

Most issues covered by the EcoHomes standard were integrated into the Code for Sustainable Homes. While it is understood that EcoHomes is being phased out as the standard for measuring the environmental performance of new build homes, it is nevertheless an important criterion to include in this year's benchmark if we are to understand how prepared the industry is for the introduction of the Code. While home builders are rising to the challenge of meeting EcoHomes Very Good rating on grant-funded affordable housing, evidence from the benchmark suggests that few see any commercial benefit in seeking certification on their private units.

The home building industry will need to gear up very quickly to meet the new statutory requirements related to the Code for assessing dwellings' performance. Further, as local planning authorities start using the Code as a way of setting minimum standards for all dwellings, home builders are likely to find that a consistent approach to both private and affordable housing, for all types of dwellings, may be necessary.

To achieve the targets outlined by the government in its *Building a Greener Future* policy document²² in a commercially viable way, companies will have to invest in innovating and, crucially, identifying ways in which they might save costs. Evidence suggests a number of companies are already starting to do this in order to understand what the technical, commercial and marketing implications are of reaching Code Level 3 and above. In addition, a number of companies are also beginning to set their own qualitative targets related to the Code (see Good Practice example 3).

The consultation document, *The Future of the Code for Sustainable Homes*²³, outlines proposals to introduce a mandatory Code rating from April 2008 – a move which the NextGeneration Executive Committee supports. This will ensure that all purchasers of new homes are made aware of the sustainability performance of their property. In the long term, this will only really drive market transformation if, as with the introduction of Energy Performance Certificates (EPC)²⁴ through the Energy Performance of Buildings Directive (EPBD)²⁵, this rating system is applicable across both new and existing homes.

Good practice example 3: Targets for the Code for Sustainable Homes

Miller Group

KPI	Status 2006	Target 2007
Carbon Neutral or Zero Carbon Homes	Initial research conducted and a baseline position identified	Investigate the implications of the work undertaken to date and the constraints placed upon us by the available information. This will feed into our long-term planning and our decisions about future house-types and designs

Miller Group CRS Report 2006 –page 7

Inspace

Inspace prepares for new Code with European fact-finding mission
Thursday, June 28, 2007

Inspace's social housing business was part of a delegation that has just spent a week in Northern Europe on a fact-finding trip to see new approaches to low-energy housing.

The trade mission, which also included Catalyst Housing Group, Imperial College, CIRIA and the Department of Trade and Industry, visited Sweden, Denmark and Germany to look at their approach towards air-tight construction, super-insulation in the building envelope, high-performance windows and controlled ventilation with heat recovery.

With the new Code for Sustainable Homes introduced in April setting high targets for CO₂ reduction, Inspace is aiming to migrate many of the findings into its own housing to achieve energy efficiencies that are affordable, replicable and buildable.

Innovation and sustainability director Brendan Ritchie, who represented Inspace, says, "Features that impressed me included very high levels of building fabric insulation, techniques for air-tight construction and use of new ventilation systems with heat recovery – all of which contribute to low energy demand and environmentally friendly homes which have better running costs and comfort levels for residents."

Inspace initially aims to achieve compliance with Level 3 of the Code. As part of this process, Inspace has been using SAP data to research energy improvements in the homes it has built in the last few years.

"Inspace initially aims to achieve compliance with Level 3 of the Code. As part of this process, Inspace has been using SAP data to research energy improvements in the homes it has built in the last few years."

www.inspace.co.uk/news/story/?id=125

²² See: Footnote 4

²³ Department of Communities and Local Government, *The Future Code of Sustainable Homes: Making a rating mandatory*, July 2007, See: www.communities.gov.uk/documents/corporate/pdf/Makingaratingmandatory

²⁴ See: www.homeinformationpacks.gov.uk/consumer/17_Energy_Performance_Certificate.html

²⁵ EC, *Energy Performance of Buildings Directive (EPBD)* December 2002 See: www.diag.org.uk/pdf/EPD_Final.pdf

The top 20 home builders, to a varying extent, have identified climate change as a risk to the sector and their businesses. The best example of a company referencing the risk of climate change to its business within its annual report and accounts is the Berkeley Group (see Good practice example 5). Other home builders scoring highly in this criterion have provided evidence of addressing climate change as a long-term business issue and have begun to set targets to reduce the GHG emissions of their business operations.

Good practice example 5: Climate change

The Berkeley Group



“Climate change is the singular most important environmental challenge that we are currently facing. We are continuously developing our approaches to climate change mitigation and adaptation in line with good practice in respect of the developments we build and the way in which we manage our business. In addition to our work for the Let’s Talk Energy Conference, we have recently undertaken an independent carbon footprinting exercise, which demonstrates that the carbon footprint of an inner city development is approximately one-third lower than an out of town development. Our focus on urban regeneration is therefore the most significant step towards addressing climate change. In addition, we are employing a wide range of techniques to further reduce the carbon emissions associated with our developments including improving the energy efficiency of our homes, incorporating renewable energy and Combined Heat and Power technologies and in encouraging our customers to use renewable energy tariffs.”

The Berkeley Group 2007 Annual Report, p24/25

However, there is little evidence that home builders are assessing fully or reporting on the financial risks associated with climate change, implying that these risks are not truly understood or considered to be a strategic issue. The GRI recently reported that home builders are not alone in this. In the sustainability reports of 50 FTSE500 companies, many disclose the opportunities they see arising from climate change without comprehensively covering the risks it poses²⁷. In light of the rise in utilities prices and insurance premiums related to aspects of climate change, home builders need to identify areas of their business – and which developments – could be impacted negatively in the future. Changing legislation, particularly the introduction of the Code, also poses risks to companies in terms of product design. Builders need to consider how to build homes that are adaptable to the climatic changes the UK is expected to experience in the future. The risks associated with the use and understanding of new and innovative technology to combat climate change (e.g. renewables) must also be accounted for by the home building industry.

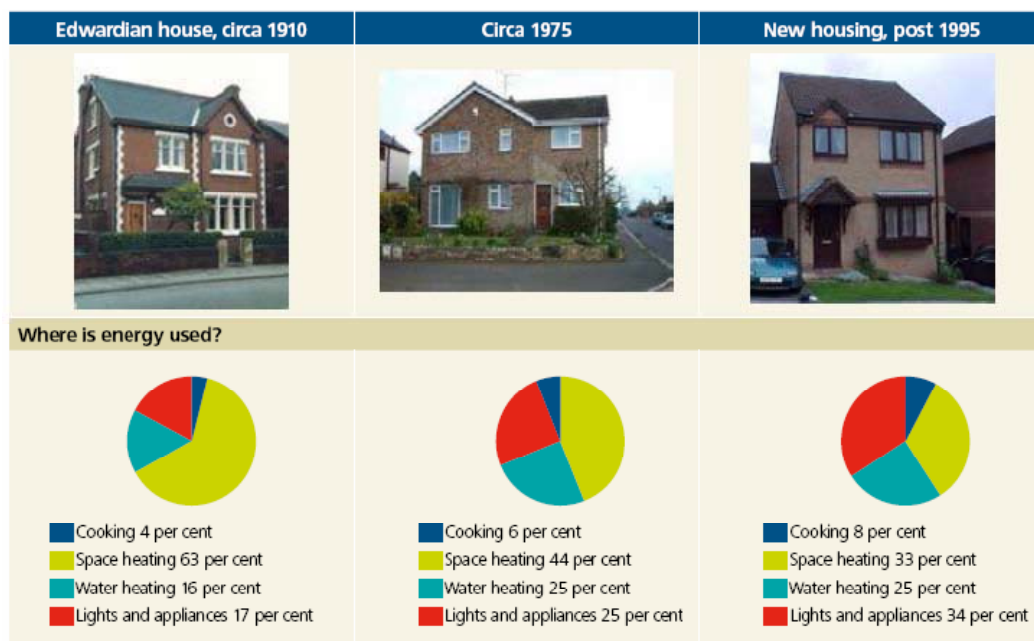
Thus, although home builders may be beginning to tackle their impact on climate change, the sector as a whole will increasingly need to assess its operational impact if it is to stay in line with the rest of industry. Looking outside the home building sector, more and more companies are setting targets to improve the energy and water efficiency of their own operations – for example, Marks & Spencer’s Plan A commitment to achieve carbon neutrality by 2012. The imperative to address climate change risks is clear, and it is important to highlight that home builders’ profit margins can benefit from cost savings if they better understand the carbon footprint, energy use and water consumption of their operations.

²⁷ Reporting the Business Implications of Climate Change in Sustainability Reports, page 5

Energy

In the eyes of the government, the media and the home building industry, reducing energy consumption is arguably the focal environmental issue of the moment. Home energy use is responsible for 27% of UK carbon dioxide emissions, and as Figure 9 shows, there are significant differences between the energy use of existing and new build housing. Notable differences include space heating (63% of total energy use circa 1910; 44% circa 1975; 33% new build) and lighting and appliances (17%; 25%; 34% respectively).

Figure 9: Typical energy use for different house types²⁸



Energy reduction requirements are also the focus of government proposals. The recently published policy document, *Building a Greener Future*²⁹, has set long-term energy targets for homes which will be implemented by ratcheting up Part L Building Regulations. Energy markets are progressively driving the need for change, too, with electricity and gas prices expected to increase significantly over the coming years.

Although many home builders are reporting average Standard Assessment Procedure (SAP) ratings (see Table 4 for detail) – the government’s procedure for assessing the energy rating of dwellings – few yet have a strategic approach to achieving energy reductions across all developments. It is recognised that changes to Building Regulations (in 2002 and again in 2006), in terms of the bands for SAP ratings, may have contributed to skewed results in this area. However, the Housing Corporation recommends that gas-heated properties (built to pre-2006 Building Regulations) achieve an SAP rating of at least 100. Table 4 shows that only one homebuilder, Countryside Properties, would be able to achieve this as an average level across its housing stock.

With legislative changes being introduced over the coming years, including Energy Performance Certificates (EPC)³⁰ rating the energy efficiency of homes, it is important for builders to understand the energy performance of their products. None provided evidence suggesting they have calculated the likely EPC level for the types of homes they build. Figure 10 indicates EPC ratings and their related SAP level.

Understanding their level of EPC performance would enable companies to judge their current status, to see where they need to improve to be legislation-compliant, and to understand the strategic risks and opportunities related to energy performance. Although new homes are much more energy-efficient than most existing homes, the need for new properties to be as energy-efficient as possible is imperative if they are to meet the UK’s goals on reducing GHGs by 60% by 2050.

²⁸ Energy Savings Trust, Domestic energy primer – an introduction to energy efficiency in existing homes, 2006, See: <http://www.energysavingtrust.org.uk/uploads/documents/housingbuildings/CE101.GPG171%20-%20Domestic%20energy%20efficiency%20primer.pdf>

²⁹ See: Footnote 4

³⁰ See: Footnote 19

Figure 10: EPC ratings vs. SAP ratings³¹

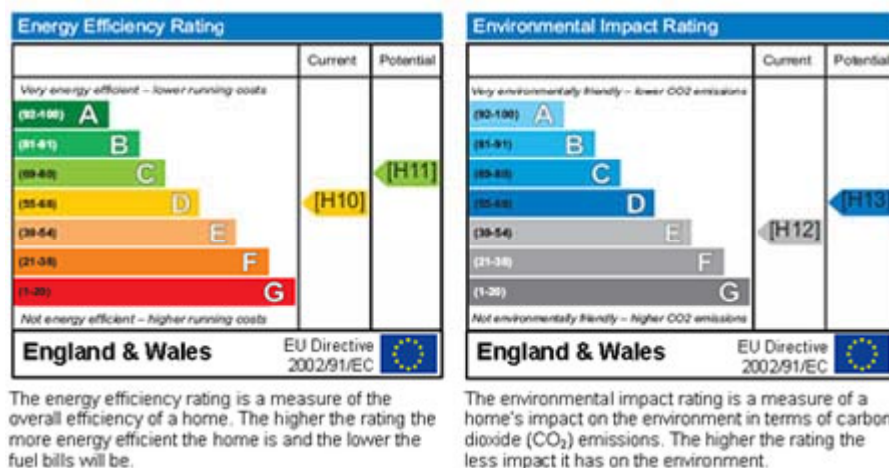


Table 4: SAP performance data for 2004-06

Company	SAP rating 2004	SAP rating 2005	SAP rating 2006
Countryside Properties	95	100	100
Bovis Homes	No	No	97
Taylor Woodrow	No	98	97
Miller Homes	No	No	95
Persimmon	94% of buildings with SAP rating above 85	98% of buildings with SAP rating above 85	94.5
George Wimpey	94	95	94
Bellway	95.6	90	90
The Berkeley Group	74.7	79.6	83.3
Crest Nicholson	83.3	79.2	81.2
Barratt Developments	No	No	No
Bloor Holdings	No	No	No
Cala Group	No	No	No
Fairview	No	No	No
Galliford Try	No	No	No
Gladedale Holdings	No	No	No
Inspace	No	No	No
Kier Residential	No	No	No
Lovell	No	No	No
McCarthy & Stone	No	No	No
Redrow	No	No	No

Energy-efficient appliances are not yet procured as a matter of course in all developments by many companies. The energy category of the Code awards additional points for incorporating energy-efficient lighting and ecolabelled white goods. Implementation of these energy-saving measures in developments needs to be looked at more strategically to ensure companies are achieving the most cost-effective procurement.

Home builders will also need to ensure that they are using the most cost-efficient renewable energy technologies to generate the (on-site) energy requirements set out by the Code. Some home builders are trialling various technologies and many were able to provide at least one example of employing renewables on site. One developer, Crest Nicholson, provided the only example of a zero-carbon development under construction (see Good practice example 6).

³¹ www.homeinformationpacks.gov.uk/consumer/17_Energy_Performance_Certificate.html

Good practice example 6: Renewable energy

Crest

Buildings specified to reduce energy demands and achieve high levels of thermal efficiency. Zero carbon strategy includes on-site renewable energy generation.

Recycling and composting made easy through the provision of on-site segregation and composting facilities. Ongoing support and guidance provided to occupants.

Access to local services and public transport, providing a car club and facilities for cyclists, provision of ongoing information and support making it easy to live without a car.

Development constructed using materials which offer high performance in use, but with reduced impacts in sourcing, manufacturing and transportation.

Opportunities for on-site food growing within a tight urban site through innovative building design, with facilities and initiatives to encourage the consumption of local and seasonal produce.

Water consumption reduced through the specification of efficient fittings and appliances. Rainwater harvested and used for irrigation and for WCs in community facility.

Building design and landscaping strategy to promote biodiversity through the selection of planting, building finishes and habitat creation.

Community trust and community extranet to be established, and Green Caretaker employed to support the ongoing sustainable management of the development. Sense of community and identity engendered.

Mixed-use community offering private and affordable homes, including a proportion of eco-studios to address the challenge of providing intermediate affordable private homes to the local market.

High levels of indoor air quality whilst optimising energy use. To provide access to outdoor space in an urban location. Ongoing sustainable management supported by commitment to monitor performance.



An impression of New England Quarter, Brighton – the zero carbon development based on the ten principles of 'One Planet Living'

Crest 2006 report p4

Taylor Woodrow



“During 2006, we carried out a detailed review of renewable energy technology particularly on our own projects:

- **Photovoltaic panels on the Earth Centre and Newcastle Great Park;**
- **Solar thermal heating on the Green Building, Macintosh Village and Newcastle Great Park;**
- **Combined Heat and Power at Greenwich Millennium Village;**
- **Biomass at the National Assembly of Wales and the Earth Centre;**
- **Wind energy at the Green Building;**
- **Ground source heat pumps at the National Assembly of Wales;**
- **Heat sink at the Earth Centre.**

A target to meet 10 per cent of the energy demand using renewable energy will be reached at our Grand Union Village Phase 1 development through the use of solar thermal heating.”

Taylor Woodrow CSR Report 2006, p20

More and more companies are now analysing sites using renewable technologies to identify the implications of rolling these out across developments. It is important for home builders to do the same if they are to gain a greater insight into the commercial implications, product reliability and customer perceptions of those technologies.

Evidence shows that 60% of home builders are setting targets in relation to improving energy efficiency in dwellings. But to ensure they are on track to achieve government requirements, they need to set performance targets that are more aligned with the requirements of the Code and the commitments outlined in *Building a Greener Future*.

Water

Summer water shortages are not new to some areas of the UK, especially the South-east – but it is now recognised that water is a natural resource that needs to be carefully managed nationwide. Average consumption increased from 150 litres per person per day in 2005 to 160 litres per person per day in 2006 – and if home builders are to achieve even the minimum requirements of the Code (as well as next year’s water efficiency changes to Building Regulations) they will need to enable their buyers to dramatically reduce their consumption levels.

The surface water run-off category in the Code also requires companies to implement Sustainable Urban Drainage Systems (SUDS) to tackle water issues across developments as well as within individual dwellings.

Although many home builders provide evidence of procuring water-minimisation measures and using rainwater harvesting, few are addressing this issue strategically. The Berkeley Group provides comprehensive evidence of looking at reducing water use across all developments (see Good practice example 7).

Good practice example 7: Water

The Berkeley Group



“Following on from the work undertaken by the Energy Forum, and in recognition of the growing importance of water efficiency, a Water Forum was established. This Forum was asked to examine current practice within Berkeley and externally and provide strategic recommendations to the Group to improve water efficiency. The Water Forum spoke to a range of external stakeholders including the Department for Communities and Local Government, DEFRA as well as our suppliers.

At Innova Park, two ultra-low water use units have been built. One includes low water use fittings and appliances and a grey water recycling system to provide water to all non potable applications. It is expected that this house will achieve a reduction of over 40% when compared with a standard house. The other unit includes all the same water efficiency measures but replaces the grey water system with a rainwater harvesting system to again feed all non potable applications. Both units will be used to help understand the effectiveness of these technologies in reducing water use.”

The Berkeley Group Sustainability Report 2007, p19

The mandatory standards for water, as set out by the Code, are arguably the hardest to achieve, especially Levels 5 and 6 which require average water consumption per person to be half what it is now (160 litres per person per day to 80 litres per person per day). Only 30% of home builders are currently measuring the performance of their dwellings in terms of water consumption, which indicates the sector is unprepared for the required changes.

To ensure they are prepared, companies need to research the water saving measures available to them. They also need to understand not only how to market more water-efficient homes to their customer base, but also the customer perception issues related to lower water consumption appliances.

Domestic waste

Between 1996/97 and 2005/06, the proportion of household waste per person collected for recycling or composting increased from 7% to 26% of total waste produced, equivalent to 135 kilograms of waste per person per year (Source: ONS). Recycling domestic waste is one of the simplest steps residents can take to reduce their environmental impact; developers can make this even simpler by providing them with recycling facilities and encouraging their use. Yet most of the home building sector is failing to do either, unless required to do so by planning authorities.

Policy in this area is driven by the government's targets to achieve national recycling rates of 40% by 2010, 45% by 2015 and 50% by 2020. This is set out in the 2007 Draft Strategy for Sustainable Construction³² which also introduces a new target to reduce the amount of household waste not re-used, recycled or composted by 29% in 2010, with an aspirational 45% reduction by 2020.

Fairview and Crest Nicholson were the only two home builders to provide evidence indicating that individual recycling facilities are placed in every dwelling. Currently, only seven of the top 20 home builders can provide evidence of incorporating recycling facilities on more than one development. The Code entry level standards for waste include the provision of household recycling facilities, and home builders can pick up additional points for incorporating home composting facilities into houses with gardens or through provision of a communal service. In addition, with increasing pressure on residents to recycle, those choosing to buy new build homes will expect the necessary facilities to be provided by the developer as part of the home. However, it is understood that the requirements placed on home builders by different local authorities, and the provision of different authority services in different areas, makes it difficult for companies to integrate recycling facilities as standard. This is an area of inconsistency between the Code and wider policymaking which the government must be clear on if the home building sector is to respond to requirements with clarity.

Transport

With a significant dependency on cars, the UK needs to adopt more sustainable forms of transport. The carbon footprint of transport and the question of accessibility are two major issues facing government, planners and home builders alike.

Apart from cycle storage provision in the energy category, transport is notably omitted from the Code for Sustainable Homes. This reflects the reality that the suitability of different transport measures often depends on the specific development, and that change in this area (as far as government is concerned) will need to be delivered through national transport policy and planning.

But transport is still an important issue for home builders to address. They performed relatively well on this criterion, largely due to car clubs and other innovative transport initiatives on sites (see Good practice example 8). Those home builders with high levels of brownfield development naturally performed better in this section as they could provide information in relation to public transport; 50% provided evidence of performance data, to varying degrees, in relation to the proximity of developments to public transport.

With the government maintaining its target for home builders to have 60% of development on brownfield land, and planning permission generally requiring a reduction in car parking, companies will need to continue implementing innovative transport initiatives to support mobility and reduce car dependency.

³² www.berr.gov.uk/files/file40641.pdf

Good practice example 8: Transport

Countryside Properties



“Beaulieu Park, Chelmsford - A sustainable transport strategy, which includes a more frequent and extended bus service, free public transport information pack and season ticket for new residents, all as part of the innovative Section 106 Agreement for the site. The use of Travel Diaries for residents to monitor the uptake of public transport on the site with the results being used to help the scheme evolve through its implementation.”

www.countryside-properties-corporate.com/case-studies-sustainable-communities/beaulieu-park-chelmsford/10348

Berkeley Group



“St James’ development at OneSE8 provided a cycle club to encourage residents to use more sustainable methods of transport. The cycles are available for the residents to use free of charge. The scheme is managed through the concierge service, and all of the cycles are regularly serviced and stored undercover in a lockable cycle store. The service is very popular (particularly during the spring and summer months) and complements the car share club also provided on site.”

Berkeley Group Sustainability Report 2006 p26

George Wimpey



“Providing alternatives to car use and encouraging our homeowners to use more environmentally friendly transport is a key theme on many of our sites. Residents of our apartments at Saltisford Gate on the remediated site of a former gasworks in Warwick received green travel packs. These packs included travel vouchers, cycle routes and public transport timetables to encourage homeowners to reduce car use. Westoe Crown Village (page 21) provides a car share club and using Home Zone principles to minimise traffic while Campbell Park (page 22) will provide complimentary bicycles and other cycle friendly measures.”

George Wimpey CSR Report 2006 p12

Barratt

AFFORDABLE HOUSING

The UK has a serious shortage of good quality affordable housing. Affordable housing can be defined as non-market housing provided to those whose needs are not met by the market. It can include social-rented and shared equity schemes and should aim to meet the needs of current and future eligible tenants or purchasers through restrictions on price, eligibility and resale¹.

We are a leading provider of affordable housing (sometimes referred to as social housing) in Britain and this year we built 2,702 units. This year 45% of our completed developments included a proportion of affordable housing. In the first quarter of 2006 alone we agreed 30 social housing partnership projects that will provide 1,200 homes with a value of £142m.

These are to be developed in cooperation with local authorities, housing associations and other bodies to provide housing for rent and shared ownership, for 'key workers' and people with special needs. The largest of these schemes is at North Brentford Quarter in West London in partnership with Acton and Apex Housing Associations where we will build 247 units, and at Bedfont Lakes in partnership with the Notting Hill Housing Group where we will build 148 homes. We are also building 112 apartments at Leamouth, London Docklands, in partnership with Genesis Housing.

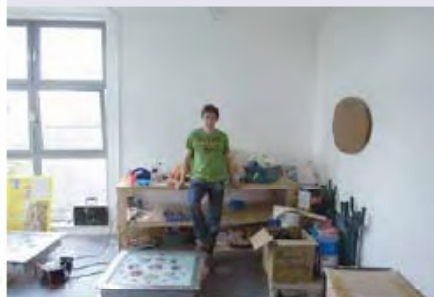
In 2005, the Housing Corporation (the Government agency responsible for investment in new affordable homes and for regulating housing associations) launched a new series of partnerships in affordable housing with private housebuilders. Barratt was the first ever private housebuilder to agree a contract with the Housing Corporation to build subsidised affordable homes in England: £4.37 million to build 153 homes in the North West and the Midlands.

We have also continued to suggest, through an 18-point plan set out by our retiring Chief Executive in November 2005, that the Government should allow house builders to by-pass housing associations and sell direct to those defined as in need of affordable housing, at substantial discounts. We believe this could free up around £500m of public money, which in turn could provide an additional 6,000 homes a year for rent by people on lower incomes who are unable to buy.

¹Draft definition in Consultation Paper on Planning Policy Statement 3, page 22.

CASE STUDY: THE GALLERIA, PECKHAM

Barratt worked with Southwark Council, The Family Housing Association and Acme Studios (a registered charity that provides workspace for London artists) to regenerate the site of a former printing works. We built 98 apartments, successfully blending new apartments for private sale, shared ownership and social rent with artists' studios. The studios are exclusively for rent by artists, at half the rent normally charged in the commercial sector.



Artist Mark Haywood at work inside a studio at the Galleria, Peckham.

CASE STUDY: PARK 21, EASTLEIGH

We are building over 650 homes on the 29-acre former Pirelli factory site at Eastleigh in Hampshire.

In partnership with Swaythling Housing Society and Atlantic Housing, there will be 120 affordable homes - a mixture of 2 bedroom flats and 2, 3 and 4 bedroom houses - all of which will be indistinguishable from non-affordable homes.

We have built 21 of the 120 affordable homes for shared ownership, the rest are for rent. In order to encourage a more pedestrian-friendly development, we have also given every house purchaser a bicycle.



Barratt CR Report 2006 - p28

Procurement and supply chain management

Adopting best practice procurement procedures and good supply chain management is another way that home builders can meet sustainability imperatives. International issues in terms of product price (e.g. the strength of developing nations' currencies – not least China's), the legality of some products (e.g. timber) and labour standards (i.e. ensuring that International Labour Organisation standards are met by suppliers) all potentially pose risks for home builders. Alongside financial risks associated with poor procurement procedures, companies might also face reputational risks if they do not know the origin of the products they use or the methods used in their production.

Homes builders' performance in this section varied greatly. Procurement procedures rarely cover all items and only a limited number of home builders have environmental/sustainable procurement policies in place (see Good practice example 9). Where developed, it is imperative that these policies are not only in place but are also audited to ensure compliance.

Good practice example 9: Sustainable procurement

Taylor Woodrow

Marketplace
Suppliers/contractors



An effective and efficient supply chain is crucial to the success of our business. Through our supply chain policies and strategies we drive our procurement precedence for:

- Materials with low embodied energy and environmental impact;
- Responsibly sourced materials e.g. FSC or ISO 14001;
- Locally sourced, recycled and reclaimed materials.

Our strategy
Taylor Woodrow has developed an ethical and sustainable supply chain strategy. The supply chain strategy is a key part of our overall business strategy and is designed to ensure that we have a sustainable supply chain that meets the needs of our customers and stakeholders. The strategy is based on the following principles:

Our commitment
Taylor Woodrow is committed to ethical and sustainable procurement. We will only source materials from suppliers who are committed to ethical and sustainable practices. We will also ensure that our suppliers are committed to ethical and sustainable practices. We will also ensure that our suppliers are committed to ethical and sustainable practices.

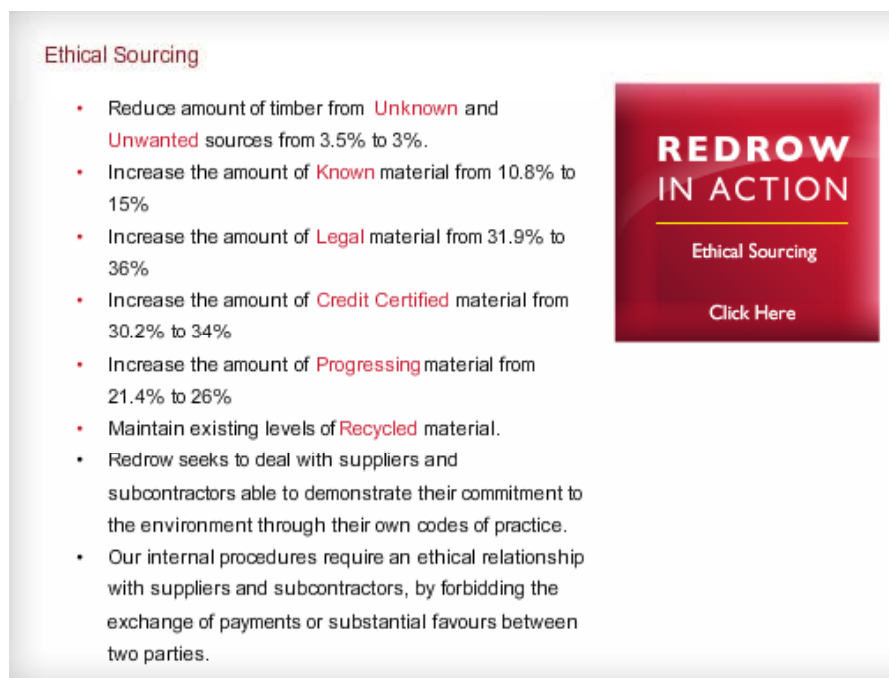
“An effective and efficient supply chain is crucial to the success of our business. Through our supply chain policies and strategies we drive our procurement precedence for:

- **Materials with low embodied energy and environmental impact**
- **Responsibly sourced materials e.g. FSC or ISO 14001**
- **Locally sourced, recycled and reclaimed materials”**

Taylor Woodrow CSR Report 2006 – p35

Sustainable procurement policies should address environmental and social issues in supply chains to ensure that financial and reputational risks are being taken into account. For example, it was recently reported that the UK is the third largest importer of illegal timber. But evidence suggests that while 12 home builders state a preference for sustainably sourced timber, only five have formalised policies and procedures in place to ensure this. Only Redrow – which is the only home builder member of the WWF Forest & Trade Network – has a fully audited timber supply chain and provided the most robust performance data related to supply chain management, as detailed in Figure 11.

Figure 11: Redrow supply chain performance data³³



Timber procurement is an element in the management category of the Code for Sustainable Homes and additional points can be scored for 80% of timber being reclaimed, reused or responsibly sourced. While the Code does not specify a timber certification scheme, the only scheme which is recognised by the WWF Forest & Trade Network is the Forest Stewardship Council (FSC). Other schemes include the Programme for the Endorsement of Forest Certification schemes (PEFC) in Europe, the Sustainable Forestry Initiative (SFI) in the US, the Canadian Standards Association (CSA) and the Malaysian Timber Certification Council (MTCC). In addition to stating a preference for a certain timber specification scheme with procurement procedures, home builders should seek Chain of Custody certification for all timber and audit their supply chains to identify any uncertified timber being procured.

³³ www.redrowcsr.co.uk/FlashVersion.htm

The Code sets out other material specification requirements which home builders will need to address and ensure their supply chain can deliver. Dealing with supply chain issues can result in tangible benefits – and not understanding the positive commercial benefits of using the company’s full buying power through specification agreements for sustainable materials, white goods, energy-efficient fittings and water saving measures is an opportunity being missed by some home builders.

There is much debate over the true cost of building homes to levels in the Code: Cyril Sweett estimates that Code Level 5 homes could increase build costs by up to £35,000 for each dwelling. A centralised procurement function is one of the most effective ways for builders to achieve operational efficiency and cost savings. The industry should also seek to address the benefits of centralising the buying power of the sector as a whole. Valuable lessons have been learned from the government’s Sustainable Procurement Strategy and initiatives such as the One Planet Products buying group.

Construction waste

Monitoring and correctly disposing of construction waste is one of the most obvious and direct ways in which builders can financially benefit from managing their environmental impact. This is reflected by companies scoring highest on average on waste management in the Impact on the Environment section – 45.8%. Waste reduction has been a focal area for regulation since 1999 when Landfill Tax was first introduced. This tax is set to increase in 2008 by £8 per tonne every year until 2010/11.

Home builders have also been anticipating Site Waste Management Plans (SWMP) legislation and many are prepared for its introduction at the end of the year; 14 home builders provided evidence of on-site waste management with 10 supplying performance data for waste across all their sites.

A good waste management strategy allows home builders to reduce their landfill tax and procurement costs; the analysis showed that 65% of home builders have waste management strategies in place (see Good practice example 10). Resource efficiency is also important and many home builders have reported significant cost savings during the construction phase as a result of monitoring and collecting waste data across their developments.

To achieve the zero net waste target set out by government in the Draft Strategy for Sustainable Construction, home builders will need to implement systems that monitor materials and waste leaving their sites and materials coming onto sites. With approximately 13 million tonnes of construction and demolition waste material being delivered to sites but never used, developers closely monitoring their design specifications and ordering procedures to eliminate inefficient procurement practices will reduce unnecessary use of natural resources and cut costs at the same time.

Good practice example 10: Construction waste management

Crest Nicholson



Key Performance Indicators	2002	2003	2004	2005	2006	2007
Waste charge to customers	0.00	0.00	0.00	0.00	0.00	0.00
Waste management cost	10,000	10,000	10,000	10,000	10,000	10,000
Percentage of recycled	10%	10%	10%	10%	10%	10%
Waste management cost	10.0	10.0	10.0	10.0	10.0	10.0



“Towards the end of 2006, Crest Nicholson established a contract with British Gypsum to collect and recycle waste plasterboard from build sites. Initial data indicates that 947 bags were collected representing 214.37 tonnes.”

Crest Nicholson CR Report 2006, p16

Taylor Woodrow

Community and environment
Environmental stewardship



Our commitment to environmental stewardship is a key part of our business strategy. We are working with the Waste and Resources Action Programme (WRAP) on a number of initiatives to exploit the commercial benefits of resource efficiency:

...we are working with the Waste and Resources Action Programme (WRAP) on a number of initiatives to exploit the commercial benefits of resource efficiency:

Year	Waste	Recycled
2005	1,200,000	1,100,000
2006	1,100,000	1,000,000
2007	1,000,000	900,000
2008	900,000	800,000
2009	800,000	700,000
2010	700,000	600,000
2011	600,000	500,000
2012	500,000	400,000
2013	400,000	300,000
2014	300,000	200,000
2015	200,000	100,000

© Taylor Woodrow Group, 2015

“We are working with the Waste and Resources Action Programme (WRAP) on a number of initiatives to exploit the commercial benefits of resource efficiency:

- **A number of our developments in the East Midlands were used as examples of good practice for segregating and recycling construction waste in conjunction with the Envirocentre;**
- **Zero Net Waste - a project funded by WRAP and led by Cyril Sweett;**
- **Measuring Net Waste and Neutrality - WRAP funded research by Davis Langdon Management.”**

Taylor Woodrow CSR report 2006, p24

Review of the year
continued



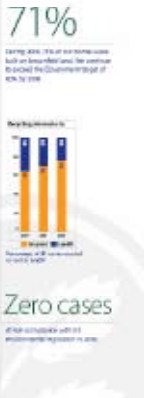
...we have made good progress in reducing both the quantity and cost of waste from our UK homebuilding operations. Volumes have reduced from 30.3m3 per home in 2005 to 24.5 m3 in 2006. Improved segregation has also allowed the cost of waste to fall despite increasing landfill charges; our 2006 cost per home was £291 (2005: £351).”

“We have made good progress in reducing both the quantity and cost of waste from our UK homebuilding operations. Volumes have reduced from 30.3m3 per home in 2005 to 24.5 m3 in 2006. Improved segregation has also allowed the cost of waste to fall despite increasing landfill charges; our 2006 cost per home was £291 (2005: £351).”

Taylor Woodrow CSR report 2006, p6

George Wimpey

The UK's largest general contractor... we have reduced our waste to landfill by a further 18% in 2006, exceeding our target of 10%. In addition, the amount of waste segregated on site for recycling increased to 74% in 2006.”



“We continue to work with our national waste broker, Wastefile, to reduce waste further. Our waste minimisation working group meets regularly to identify and explore new ways to improve waste management.

We reduced our waste to landfill by a further 18% in 2006, exceeding our target of 10%. In addition, the amount of waste segregated on site for recycling increased to 74% in 2006.”

George Wimpey CSR Report 2006, p13

Construction site management

As the world becomes increasingly interested in pricing and trading carbon, it is important for home builders to understand the carbon impact of their operations as well as their product (as discussed in the climate change section). While evidence suggests that they are taking steps towards implementing monitoring systems for the carbon emissions and water consumption associated with their construction operations, only 25% understand their full operational carbon footprint (see Table 5). Barratt Developments and Bellway Homes were the only companies to provide evidence of understanding both the carbon emissions and water consumption of all their operations. Other evidence indicates that metrics used to calculate carbon and water from site activities are used inconsistently. The industry should take advice as to the best way to measure these impacts and take steps to ensure that all companies use the same methodology.

Those companies with a formal EMS in place are better positioned to implement best practice water and air pollution controls across all developments and will score additional points in the management category of the Code. While the Code requires construction impacts to be managed on a site basis, home builders implementing systems to strategically monitor these impacts across their developments will benefit from a better understanding of their business and the potential aggregated cost savings related to reducing energy, water and pollution from their operations.

Table 5: CO₂ emissions and water usage performance data

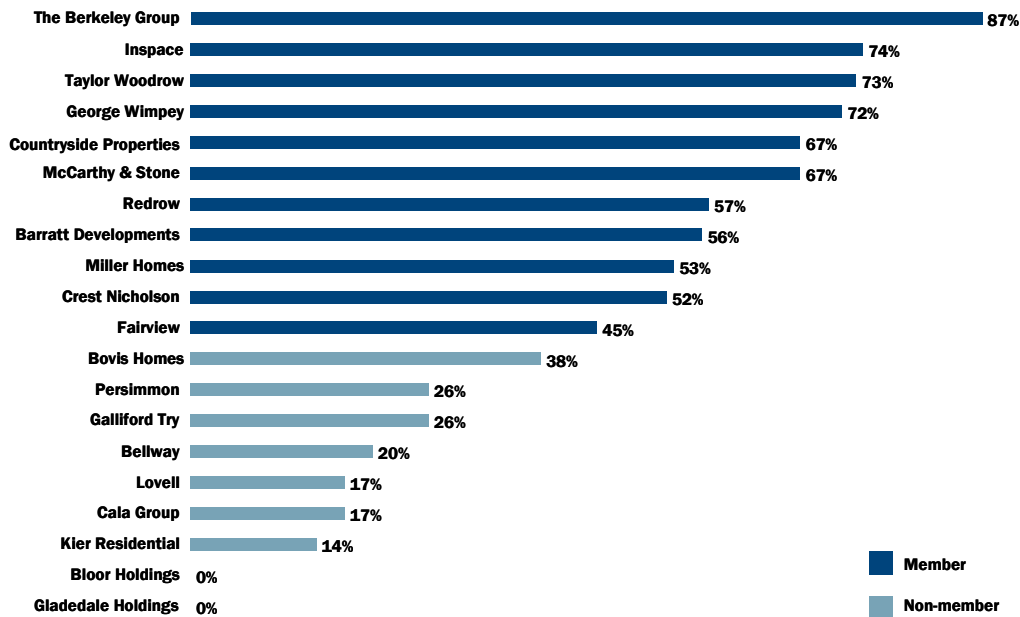
Company	CO ₂ emissions data	Water usage data
Bellway	2,269 tonnes CO ₂ from transport 580 tonnes CO ₂ from houses 5,198 tonnes CO ₂ from sites 1,166 tonnes CO ₂ from offices	37,005m ³ water use in houses 37,201m ³ water use in sites 2,258m ³ water use in offices
Barratt Developments	536kg CO ₂ /£100k of product 4,041kg CO ₂ /100m ² office buildings	14.2 m ³ /£100k of product
Kier Residential	13.74 £/m ² energy use 8,986 tonnes CO ₂ emissions	No
Taylor Woodrow	19,034 tonnes (electricity, gas, diesel, company cars and vans)	No
Bovis Homes	2,057 tonnes CO ₂ emissions	No
Bloor Holdings	No	No
Cala Group	No	No
Countryside Properties	No	No
Crest Nicholson	No	No
Fairview	No	No
Galliford Try	No	No
George Wimpey	No	No
Gladedale Holdings	No	No
Inspace	No	No
Lovell	No	No
McCarthy & Stone	No	No
Miller Homes	No	No
Persimmon	No	No
Redrow	No	No
The Berkeley Group	No	No

Results overview

Figure 12 shows that company scores for addressing their impact on society were relatively better than those for managing their environmental impacts, but not as strong as those for governance and strategy. The average score was 43% for all companies with an average score of 52.9% for listed companies compared with 33% for private companies.

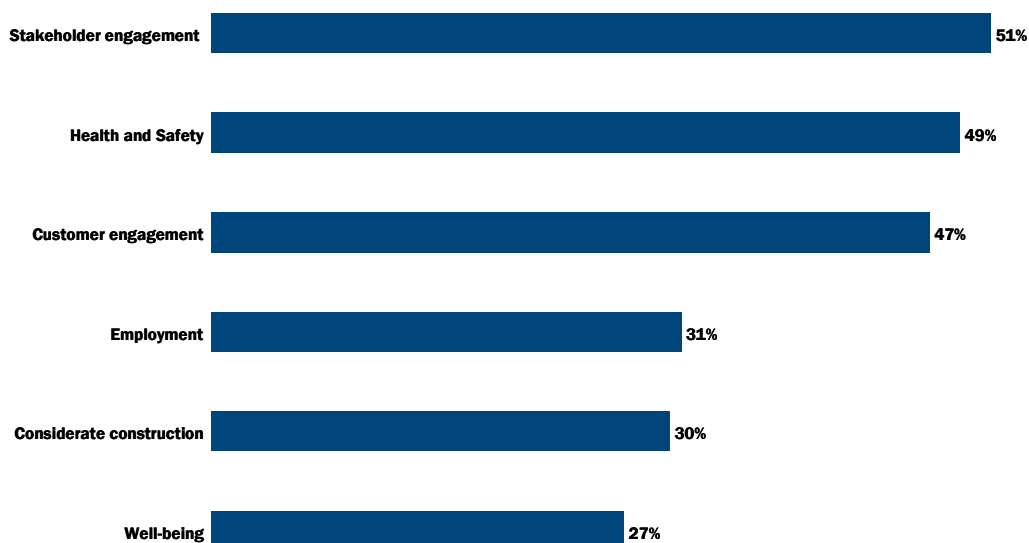
All NextGeneration members outperformed non-members in this section with average scores of 63.7% and 17.6% respectively, due in large part to non-members being evaluated solely on the basis of their reporting.

Figure 12: Impact on society – overview of individual company performance



It is clear from Figure 13 that the areas affecting financial performance such as stakeholder engagement, health and safety and customer engagement are being addressed more effectively than those which have less tangible commercial benefits (see Appendix 1 for more detail on each of the criteria).

Figure 13: Impact on society – overview of average company performance for each criterion



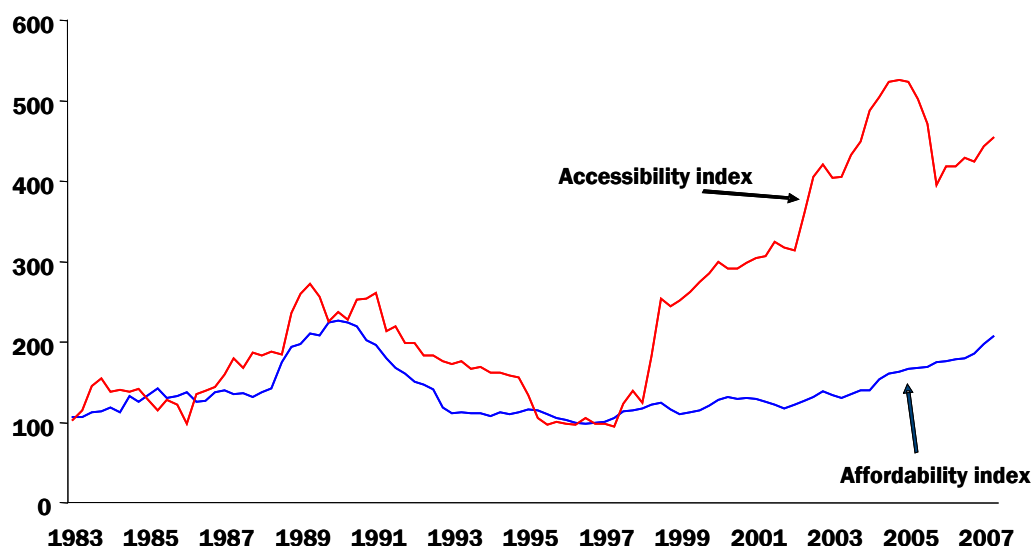
To be truly sustainable, companies need to concentrate not only on reducing their environmental impacts but also on maximising the socio-economic contribution they make to the communities in which they build. Although health and safety issues have long been high on the agenda of UK developers, other societal issues are also relevant to the sector and need to be addressed.

In its Draft Strategy for Sustainable Construction, the government has outlined its approach to driving home builders towards addressing employee issues. The industry is suffering a rising number of fatalities and injuries; and with more foreign non-English speakers working on UK sites, home builders have a strong need to continue to focus on health and safety management and reporting.

Home builders have long concentrated on customer satisfaction and are in a strong position to educate purchasers on sustainability issues in terms of the houses they are buying and their lifestyles.

Another important social issue rising up the policy agenda is that of affordability. In its *Homes for the Future* Green Paper, the government restated its commitment to building three million homes by 2020, with up to 70,000 new properties a year designated as homes for key workers and low-income families. While not directly addressed by the NextGeneration criteria, affordability of housing is certainly a growing concern in the sector. The recently released RICS report, *Housing Accessibility and Affordability Update for Great Britain*, highlights this pertinent issue in a market where average house price growth is significantly outstripping the growth in average salaries (see Figure 14).

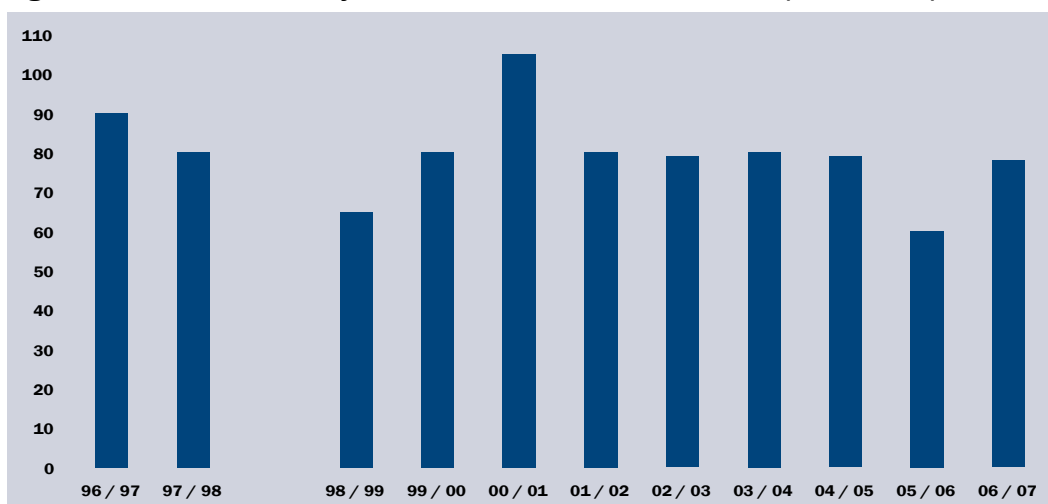
Figure 14: RICS housing accessibility and affordability update for Great Britain



Health & Safety

With a workforce of 2.2 million, the construction industry is the country's largest. Health & safety (H&S) has been pertinent for home builders since the introduction of H&S legislation, but, as Figure 15 shows, with fatalities in the housing sector rising from 217 in 2005/06 to 241 in 2006/07, companies need to continue to work hard to reduce deaths and injuries on their sites.

Figure 15: Number of fatal injuries to workers in construction 1996/97 to 2006/07



Reproduced from: *Building* magazine 3 August 2007 p10/11

Our analysis shows that 70% (see Table 6) of home builders disclose their Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) rate – the industry-recognised accident and incident measurement. A number of other companies collate this information internally. While it is encouraging that such a high number of companies are disclosing this information, it is difficult to make a fair comparison between the different RIDDOR rates – not least because of inconsistencies in the way the construction industry measures this data. NextGeneration urges the industry to develop and adopt a standard RIDDOR measurement system, and companies to have their performance in this area externally audited so that the data disclosed is robust.

Table 6: Publicly reported RIDDOR performance

Company	RIDDOR performance data
The Berkeley Group	4.5
George Wimpey	5.3
Kier Residential	5.52
Redrow	6.05
Barratt Developments	6.72
Galliford Try	7.11
Lovell	7.36
Bellway	8.86
Countryside Properties	8.95
Bovis Homes	9.4
Crest Nicholson	9.46
Taylor Woodrow	12.1
Miller Homes	12.2
Persimmon	12.95
Bloor Holdings	No
Cala Group	No
Fairview	No
Gladedale Holdings	No
Inspace	No
McCarthy & Stone	No

Most home builders demonstrated a strategic commitment and approach to H&S issues, with widespread implementation of both policies and management systems, supported by site auditing to increase robustness. Redrow reported that good H&S management reduced the cost of accidents by 10% in 2006/07 from 2005/06. However, companies could further improve performance by ensuring their workforce carries Construction Skills Certificate

Scheme (CSCS) cards. With only half the home builders providing CSCS data, the current average level of performance indicates that they are not fully prepared for the government's target of allowing only CSCS card-carrying operatives on site by 2010.

Considerate construction

By making sure that development sites minimise their negative impacts on the environment and on surrounding communities, employees and the public, home builders help to reduce the risk of breaching environmental legislation and damaging their reputations. Companies do not commonly report on the number or percentage of sites signed up to the Considerate Constructors Scheme (CCS) or an equivalent in-house considerate construction policy. Table 7 indicates that only 30% of home builders are disclosing this information. For companies with audited, formal EMSs in place, this may be because the issues are incorporated into the EMS and site employee issues are incorporated into the H&S management system. However, companies can gain additional Code points for auditing sites through the CCS which is potentially a cost-effective way of achieving points compared with other point-scoring measures.

Table 7: CCS performance data

Company	CCS performance data
Countryside Properties	100% of sites
Inspace	100% of sites
The Berkeley Group	95% of sites
Barratt Developments	86% of sites
Taylor Woodrow	10% of sites
George Wimpey	1,107 homes
Bellway	No
Bloor Holdings	No
Bovis Homes	No
Cala Group	No
Crest Nicholson	No
Fairview	No
Galliford Try	No
Gladedale Holdings	No
Kier Residential	No
Lovell	No
McCarthy & Stone	No
Miller Homes	No
Persimmon	No
Redrow	No

Employment

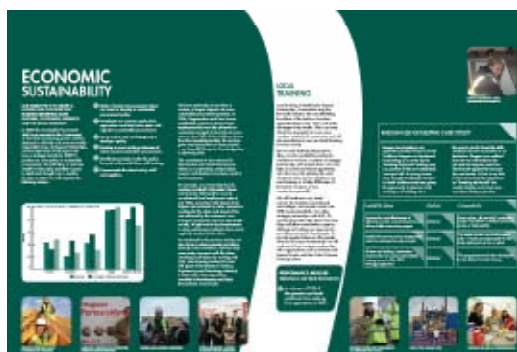
The government's Draft Strategy for Sustainable Construction outlines its intention to strengthen the construction industry's focus on employment issues. The consultation includes four targets set in relation to employee issues including:

- An increase in the number of CSCS card-carrying operatives;
- A review of industry qualifications to include sustainability issues where appropriate;
- An increase in the number of work experience placements offered; and
- A commitment to having all trained and fully competent construction workers stay in the industry for the long term.

During construction, home builders are able to provide evidence of training site operatives and many offered examples of providing employment opportunities to under-represented groups (see Good practice example 11). Many companies also showed a commitment to local employment, financially benefiting the local economy through the development process and the provision of employment.

Good practice example 11: Approach to employment during construction

Inspace



“In 2006, Regeneration and New Build established a minimum level of local employment that must be achieved on construction projects. Every job must now strive to have 20% of the workforce drawn from the immediate locality. But we’ve gone way beyond this on some projects: our SmartLife Project in Cambridgeshire is achieving 50%.”

Inspace Sustainability Review 2006, p15

Barratt



“Barratt Leeds has been working closely with Accent Community Partnerships (formerly known as the Bradford Youth Build), which is a construction-based training and employment project, to introduce local young people, many from ethnic groups, to the Barratt apprenticeship scheme. Barratt recently won an award recognising their involvement in the project and their commitment to equality and diversity in the workplace..”

Barratt CR Report 2006, p51

Few companies were able to provide examples of introducing employment initiatives beyond their own site operatives. Many developments employ workers in the short term through sub-contractors, but companies were rarely able to provide evidence of working with sub-contractors to ensure that site operatives’ employment terms met basic statutory regulations. There was also little evidence to suggest home builders have the necessary procedures in place to ensure that all employees have the legal right to work in the UK. With the recent significant increase in immigrants working on UK building sites, this poses potential legal, financial and reputational risks for home builders who do not fully understand the composition of their direct and sub-contracted workforce. Higher immigration levels will require companies to ensure that workers have the necessary training, delivered in their own languages, to understand site operations; otherwise there is the potential for many more accidents.

As the government looks more and more at long-term employment issues, home builders will need to respond by doing the same. However, only nine companies provided evidence of how they were approaching long-term employment initiatives and this was invariably limited. Those building urban mixed-use developments will need to look to long-term employment initiatives for the schemes in which they are involved. To ensure they are utilising their position as mixed-use developers and truly contributing to the development of sustainable communities, companies could begin by offering reduced rates on commercial space to business start-ups and making residents aware of local employment opportunities.

Stakeholder engagement

Effective stakeholder engagement is the basis of any good corporate strategy. Working hard to understand the interests and concerns of key stakeholders is critical to ensuring continual improvement in a company's approach to sustainability.

Fifteen home builders disclosed evidence indicating that they are taking a strategic approach to stakeholder engagement and have a sound understanding of who their stakeholders are. On a project level, 80% of companies provided examples of working with external organisations and local residents to understand site issues and ensure features of developments are aligned with the needs of the local community. Home builders wanting to lead the market in this area should look at using collaborative design techniques such as community planning forums³⁴. Companies already doing so were able to report reductions in the time taken for planning permission to be granted, which has major positive financial implications.

Customer engagement

Driven principally by the heightened awareness of and concern about climate change, people are becoming interested in the sustainability and energy efficiency of their homes. However, Savills' research revealed that while most households surveyed thought green issues were important, few were willing to pay for measures needed to reduce the environmental impact of their homes – for example, fewer than 25% would be willing to pay for energy-saving measures for their homes. So developers are in a unique position to promote energy and water efficiency, and green living in general, to their customers.

The home builders leading on this criterion provided evidence of developing various best-practice tools to promote sustainable lifestyles to their customers (see Good practice example 12) by developing innovative tools to engage with customers on sustainability issues.

Leading companies also reported high levels of customer satisfaction – but it must be noted that because they measure customer satisfaction in different ways, this performance data can only be superficially compared. Crest Nicholson provided the most detailed response to how it measures customer satisfaction. The company uses an independent telephone survey (as opposed to letter or internet) to gauge levels of satisfaction during the build, sales and after sales processes. Crest Nicholson's Customer Charter also allows purchasers to view their homes while they are being built. It is important for builders to truly understand the level of customer satisfaction – not least because this is a focal area for the OFT's forthcoming investigation of the home building sector.

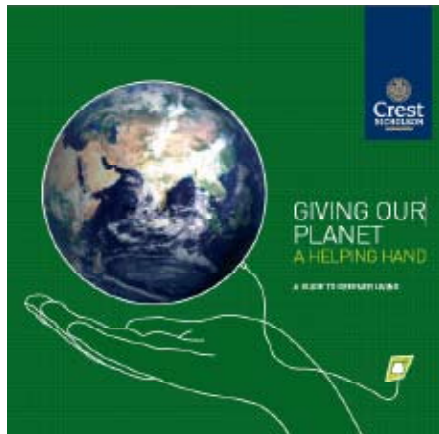
With the introduction of Home Information Packs (HIPs) containing EPCs, the transparency of the sustainability performance of housing will increase and it is likely that customers will become more aware and engaged in terms of understanding the performance of their homes. Purchasers of new homes will demand higher standards in terms of sustainability and builders will need to explain the sustainability advantages of their product.

The introduction of HIPs, EPCs and the Code all present regulatory drivers for home builders to address the level of customer engagement they are embracing. Companies wishing to fully understand the consumer implications of increased transparency and customer awareness will need to carry out market research. This will also put them in a better position to successfully market more sustainable housing.

³⁴ See: www.communityplanning.net/ for further details of different community planning methods.

Good practice example 12: Customer engagement

Crest Nicholson



www.crestnicholson.com/assets/pdfs/greenerlivingguide.pdf

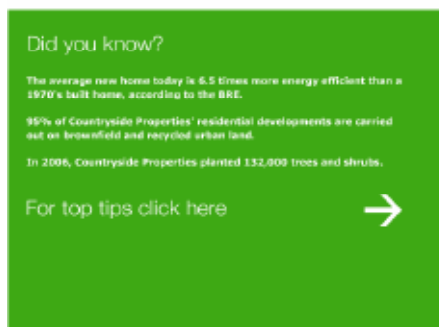
MyMillerStreet



www.mymillerstreet.co.uk

Countryside

In choosing a new home from Countryside Properties you are reducing your carbon footprint and saving money as our new houses and apartments are energy and water efficient. However it is how we lead our lives within our homes that has the greatest impact on carbon emissions. The following are useful tips on how you can reduce your ecological footprint even further



www.countryside-properties.com/environmental-tips

Berkeley Group



www.berkeleyhomes.co.uk/index.cfm?articleid=1593&WT.svl=leftnav

Wellbeing

How to design sustainable buildings that are appropriate to future environmental and social changes is another challenge facing all those in the construction industry. The recent Homes for the Future Green Paper places importance on home builders addressing the changing demographic, especially in terms of the ageing population. This involves taking a fresh look at how to design homes that are safe and adaptable for different occupancies as well as adaptable to climate change. Sixty-five per cent of companies provided examples of development initiatives to promote wellbeing.

However, evidence suggests that Lifetime Homes (see Figure 16) and Secure By Design principles are yet to be embraced and consistently used by home builders as standard. Only two companies provided evidence that Lifetime Homes principles are being used on all their schemes. In the face of a changing demographic in terms of age and societal patterns, this raises questions about the adaptability of the homes the sector is building.

Figure 16: Lifetime Homes design standards



LTH Standards

- (1) Car Parking Width**
- (2) Access From Car Parking**
- (3) Approach Gradients**
- (4) External Entrances**
- (5) Communal Stairs & Lifts**
- (6) Doorways & Hallways**
- (7) Wheelchair Accessibility**
- (8) Living Room**
- (9) Entrance Level Bedspace**
- (10) Entrance Level WC & Shower Drainage**
- (11) Bathroom & WC Walls**
- (12) Stair Lift/Through-Floor Lift**
- (13) Tracking Hoist Route**
- (14) Bathroom Layout**
- (15) Window Specification**
- (16) Controls, Fixtures & Fittings**

The Lifetime Home Standards are the result of careful study and research. They apply to both the interior and exterior of the home.

Each of the 16 design features is valuable in itself, but a Lifetime Home is incomplete without all of the standards.

A wheelchair turning circle was chosen as the benchmark for a good space requirement. This is true for parents with small children, people with bins or bags of shopping. Accessibility is for everyone, not just people who use wheelchairs.

www.lifetimehomes.org.uk/pages/16_lth_standards.html

The issue of adaptability and design extends to the needs of the changing environment as well as the changing population. It is an area addressed by the Code – but the home building sector and government will need to work together beyond these requirements to ensure that communities, and the homes being built for them, are truly sustainable.

Conclusions

This benchmark reveals that the UK housing sector has made significant strides in addressing sustainability. However, the ambitious new agenda laid out by the government, driven principally by the need to respond to the threat of climate change, has set the sustainability bar much higher than previously. Thus, while many companies in the industry have put in place the basic governance structures, policies and systems needed to address sustainability issues – and some have begun to demonstrate they take the challenge very seriously – this NextGeneration benchmark reveals that they now need to substantially raise their game if they are to achieve the required standards and deliver truly sustainable homes and communities.

Overall performance

Three leading companies deserve congratulations for achieving the top three positions in the 2007 benchmark – The Berkeley Group, Taylor Woodrow and George Wimpey (now merged to form Taylor Wimpey). These companies were in the top four in the previous benchmark, demonstrating that they have maintained their commitment and leadership position, even though the criteria used in this benchmark were more stretching than in the previous one.

The 2007 results show significant variety in the performance of the top 20, with scores ranging from 74.6% to 0% and a sector average of 38.8%. NextGeneration members outperformed non-members with average scores of 59.8% and 13.1% respectively. This is not surprising, given that members were able to provide additional non-public information to support their scoring. Listed home builders (49.0%) also performed better on average compared with private companies (28.7%).

It should also be noted that six companies chose not to fully disclose their approach to sustainability in their corporate reporting or websites, and are also not NextGeneration members. They are Kier Residential, Lovell, Galliford Try, Cala Group, Bloor Holdings and Gladedale Holdings. Their appearance as the bottom six companies does not therefore necessarily reflect their actual sustainability performance. As with any company not currently a member of NextGeneration, we encourage these developers to engage with the initiative in order to gain a more complete understanding of their approach to sustainability and performance in this area.

Room for improvement in reporting

Accountability and transparency are important elements of sustainability. While private companies are not obliged to report to their shareholders in the same way as listed companies, they have similar stakeholders, build in the same communities, sell to the same customers and are regulated by the same bodies as their listed competitors. We therefore believe it is important that these companies make much greater efforts to communicate their sustainability credentials. This does not necessarily have to take the form of a full sustainability report but it would be encouraging to see more private companies disclosing more fully their approach to sustainability and their performance in that regard.

For those already reporting on these issues, the gap between the scores for the quality of this reporting and the evidence of what is going on in practice is sizeable. In some cases, this is an indication of companies protecting information they believe is commercially sensitive. In other cases, companies appear not to be putting sufficient emphasis on reporting and are thus not achieving the reputational and other benefits that better disclosure offers.

Even the good reporters could demonstrate a higher level of sophistication in several aspects of their reporting, perhaps looking outside the sector for inspiration. This includes:

- Providing more robust performance data;
- Improving consistency in reporting measures; and
- Understanding the materiality of risks facing the business and applying a financial value to these.

Are developers on the road to delivering zero carbon homes?

Most companies have made significant headway in establishing strategies, governance and risk management systems to address sustainability issues. The improvement in this area, compared with their performance in the previous Insight Investment / WWF-UK benchmarks, is extremely encouraging. A well-developed strategy is the cornerstone of any company's approach to sustainability and those addressing these issues at this high level have been rewarded with excellent scores in this section.

However, as the saying goes, the proof of the pudding is in the eating. The critical question is whether the vision conceptualised by companies at a strategic level is being driven down effectively into day-to-day operations and delivering good sustainability performance on site.

The home builders scored better, on average, on addressing their impacts on society than their impacts on the environment; 43% and 31.6% respectively. This is somewhat surprising given that the latter has been many businesses' focus in recent years and that EcoHomes concentrated on environmental issues. This is of particular concern because it implies that home builders will struggle to achieve the government's newly stated vision to move towards achieving zero-carbon homes by 2016, let alone the massively increased volumes of 240,000 homes a year by this time.

Companies were able to show significant progress in some environmental areas, mainly those where the commercial benefits are most tangible (e.g. construction waste management) or where companies were asked to provide project-based examples (e.g. ecological issues). The analysis showed that 70% of home builders provided evidence of waste management on-site, with 50% of companies providing performance data in relation to waste across all sites.

However, a strong concern is that not one company has a corporate policy on climate change. This indicates that the home building sector is not yet addressing climate change strategically. While 60% of home builders say they recognise climate change as a significant issue for the sector, just one company provided evidence of formulating a short- to medium-term strategy addressing climate change issues. **We urge all companies to develop such strategies and make much greater efforts to understand climate-related risks and how they should be addressed.** Next year's benchmark will evaluate in more depth companies' performance in this area – therefore time is of the essence if developers are to put in place the policies and practices necessary to perform well in that exercise.

In addition, the future quality and standards of the new build housing stock is being set through the newly introduced Code for Sustainable Homes. Home builders' average score for their commitment to EcoHomes was just 8.5%. Furthermore, developers have not extended their experience in developing homes to EcoHomes standards in social housing to private dwellings. They have only done so where they were required to by planning or funding agreements. As the Code for Sustainable Homes takes EcoHomes criteria and standards as its starting point and, indeed, in many cases exceeds these standards, the industry will need to gear up very quickly to meet the statutory requirements for assessment of dwellings using the Code. One step the government could consider is introducing appropriate fiscal incentives to ensure that home builders do not have to foot the full building costs of meeting the tighter energy requirements at higher levels of the Code.

Is the focus on the energy efficiency of homes crowding out other issues?

Creating sustainable communities presents a complex challenge to government and industry, because it requires the simultaneous delivery of solutions to a wide range of interconnected challenges. It appears that both government and the industry have so far focused on a few aspects of sustainability to the detriment of others – i.e. treating the interconnected issues as if they could be de-linked and delivered in a piecemeal fashion, or ignoring certain elements as if they were not important. The reality is that sustainable development is multi-dimensional and has to be delivered as a whole.

The benchmark reveals evidence that this is the case. Several issues – such as the supply chain, materials use and the need to properly consider transport infrastructure in development decisions – appear not to have been given sufficient emphasis by government or by industry. While the government's Sustainable Procurement Taskforce is valuable and has

helped by sharing its experiences with the sector, it is essential that the construction industry supply chain evolves so that it can deliver increasing demand for renewable technologies, energy-efficient goods, water conservation and treatment technologies, credibly certified timber, and many other materials and components. Developers need to work with their own suppliers; look to become much more active in industry-wide initiatives; restructure their supply chains where necessary; and ensure that they maximise and pool their purchasing power to demonstrate a clear and long-term demand for more environmentally friendly building materials. It is hoped that the DBERR-led Sustainable Construction Strategy will force these issues to the forefront of development decisions.

More sustainable transport systems will be an essential element of achieving sustainable communities – an area not addressed in the Code for Sustainable Homes. Moreover, the government has said that its approach to sustainable transport will be covered by other policy initiatives. This, too, seems to have resulted in the industry putting little emphasis on transport. Because the necessary links between the planning system and home building regulation appear to be missing, there is a failure to ensure joined-up transport infrastructure and that developments are sited near accessible transport nodes.

In addition, several issues relating to housing design need to be given higher priority by the industry. It is becoming increasingly clear that house design needs to adapt both to the changing climate and changing demographics – but most developers seem to be giving little thought to this. There are also design issues related to place-making and community building, as highlighted by the Commission for Architecture and the Built Environment (CABE) audits, which examined levels of design aspiration and delivery in the home building sector. It is also quite likely that the drive to develop more sustainable housing will lead to different methods of construction being used, including offsite building envelope manufacture. Developers need to carefully consider how such methods can incorporate the design issues highlighted here and deliver homes in which people want to live.

Employment issues have long been recognised as important in this sector. The recent sector review by John Callcutt and the report from the Academy for Sustainable Communities both address the skills shortage in the sector. The benchmark revealed that only half of home builders provide data on the number of Construction Skills Certification Scheme card-carrying site operatives, which suggests that clear training gaps need to be filled. Moreover, companies must be careful to ensure that in their drive to recruit sufficient workers, those that they hire are legally allowed to work and are appropriately remunerated.

Worrying trends have emerged recently in health and safety – even though this issue has been at the top of the construction industry's agenda for many years. An increasing number of fatalities were reported for last year and although many companies have well-developed health and safety management systems, they need to ensure that those systems are effectively implemented and that focus is fastidiously maintained. It would be valuable for the industry to agree consistent data collection and reporting protocols.

Developers also need to be aware of the potential implications of employing non-English speaking people and ensure that their health and safety training is delivered so that they fully understand and follow safe practices. Examples of action in this area by companies covered by the benchmark have shown that they were able to reduce their insurance costs and the reputational risks related to poor health and safety records.

Addressing customer demand for sustainable houses

The nature of the sector means there is little direct competition between house builders at a site level to build more sustainable homes. This is because home-buying decisions are driven principally by location. Home buyers rarely have the luxury of choosing between several developments in the same locality and being able to directly compare their sustainability performance – which is why many developers report that their buyers 'aren't interested in sustainability issues'.

However, several recent surveys have found that most buyers do care about environmental issues, particularly climate change, that they would like (and indeed expect) a new home to be energy-efficient. They would also like advice on how to live more sustainable lifestyles and going the extra mile to promote this information to their customers should stand developers in good stead to capitalise on this emerging market of home buyers, while burnishing their reputations and building trust with policymakers and local councillors as well as the wider public.

A bright, sustainable future?

Understandably, most buyers say they are reluctant to pay extra for sustainability features in their new homes. There is therefore a heated debate at present about the costs involved in building homes to Code standards – with many in the industry assuming that they will cost more and producing theoretical studies to back up that view. There are good reasons to posit that this might be the case: until now, house prices have not reflected their true cost because the broad societal costs of their environmental impacts have been excluded. The government's policy interventions on climate change – particularly putting a price on carbon – are designed to begin to internalise those costs. As developers utilise new construction techniques and incorporate new and initially more expensive materials, costs may rise. However, some developers report that they are on track to deliver low- or zero-carbon developments at the same cost as less sustainable developments.

Herein lies the key challenge facing the industry. Clearly, it faces a potentially bright future. The government has committed to building many more homes each year than in the past, to ease a general housing shortage and particularly the dearth of key worker and affordable homes. This offers the prospect of sustained and growing revenues for the sector. But at the same time, the government has said that the industry must deliver sustainable homes to contribute to the 60% decrease in GHG emissions the UK needs to achieve by 2050 – which will be embedded in law when the Climate Change Bill is passed in 2008. This becomes even more pertinent in light of WWF and other organisations calling for the government to increase this target to 80%.

Those companies that can capitalise on the building boom and find the most cost-effective ways of building sustainable homes will be tomorrow's winners. Critical to success will be investment in innovation and a willingness to break from the past to design and deliver homes that are both efficient and adaptable to the changing but uncertain future climate.

Recommendations

While each NextGeneration member company has received a detailed set of recommendations outlining how it might improve its performance and reporting on sustainability, the following is a broad set of recommendations drawn from the findings of the benchmark that are applicable to the industry as a whole.

Recommendations to the industry

- Seek to understand and better articulate the commercial implications – both risks and opportunities – of the sustainability issues facing the sector.
- Seek to understand the commercial value of sustainability to core business operations and include commentary on this in financial presentations.
- Develop a strategic approach to climate change by introducing corporate policies and setting short- and long-term targets aligned to the government's targets to reduce carbon emissions of both operations and product.
- Innovate and experiment to understand the commercial, technical and customer implications of building homes to the levels in the Code for Sustainable Homes and publicly share best practice.
- Implement a communications strategy to address how sustainable housing can be better marketed to the customer and to promote more sustainable lifestyles among occupiers.
- Think holistically about operations to ensure that cost savings in sustainable materials specification and construction waste management are captured by the whole business.

Recommendations to the government

- Ensure that the recent plethora of policy documents and legislation provides clear guidance for home builders in terms of achieving the 2016 zero-carbon housing target; indeed, provide a consistent definition of 'zero-carbon'.
- Ensure that future iterations (for example, the proposed review in 2010) of the Code for Sustainable Homes are holistic in their approach to addressing sustainability issues.
- Ensure the Code for Sustainable Homes is consistent with standards being set in other policy documents and legislation.
- Introduce incentives/sanctions to encourage home builders to build more sustainable housing.
- Ensure fiscal measures are in place to help home builders realise the commercial benefits of building sustainable housing – notably through stamp duty exemption and council tax reductions.
- Take a leading role in marketing sustainable homes to the house buying market.

We hope the findings of this process will enable home builders to identify the key challenges and opportunities, respond to these with clarity and assist government in understanding the very practical barriers that the sector has to overcome.

Appendix 1

Detailed survey methodology

WWF-UK, Insight Investment, the Housing Corporation and Upstream drew up the draft criteria for the 2007 NextGeneration benchmark at the end of 2006. NextGeneration members were consulted on these criteria, which were amended where possible to take their views into account. An explanation of process for reviewing the criteria used for the 2004 and 2005 Insight Investment / WWF-UK benchmarks is explained in the methodology section (section 2) of the main report.

The criteria review referred to a range of standards available at the time. Principal among these was the Code for Sustainable Homes, developed by the UK government in conjunction with the Building Research Establishment (BRE). Others included the South East England Development Agency's Sustainability Checklist, the Community Planning website and various other best practice guides and benchmarks.

Companies were assessed on three sets of criteria relating to their strategy, governance and risk management, impact on the environment and impact on society. Within each section were a number of sub-sections (three for strategy, governance and risk management, 11 for impact on the environment and six for impact on society). Within the three sections were a number of individual criteria. The strategy, governance and risk management individual criteria were scored out of 10 (to reflect that there were fewer individual criteria), effectively carrying double weight; impact on the environment and impact on society criteria were each scored out of five. The three overarching sections were weighted as follows: strategy, governance and risk management 23%; impact on the environment 52%; and impact on society 25%. An overall score of 100% would indicate that a company had achieved best practice.

The table below outlines the issues addressed by each of the criteria and the performance required to score at the highest level against each issue.

Criteria	Issues addressed	Performance needed to meet best practice
Strategy, governance and risk management		
Risk management	This criterion examined home builders' approach to addressing environmental, social and governance (ESG) risks affecting the business. For listed companies to score points against this criterion for their quality of reporting score, this information needed to be in their annual report and accounts. For private companies to score, it needed to be in their business review.	The company describes how the commercial implications of ESG risks have been accounted for in its schedule of risk and has reported this through its annual report and accounts (for listed companies) or business review (for private companies).
Governance	This criterion addressed the companies' strategic approach to sustainability and the management and operational structures they have in place to deliver this strategy. Managerial and operational responsibility for sustainability need to be appropriately assigned. In terms of strategy, the relevant criteria were slightly different for listed and private companies.	The company engages with significant stakeholders to develop its approach to sustainability; has sustainability issues that form part of Board and senior management business objectives, appraisals and remuneration packages; and has site level processes in place such as checklists and training.
Disclosure	This criterion focused only on what companies put in the public domain through reporting or corporate websites. This disclosure was assessed in terms of their coverage of environmental, social and economic issues, and inclusion of Key Performance Indicators (KPIs), management and performance targets. Reporting assurance processes in place were also examined.	Company disclosure is fully independently assured and the verification statement provides detail of the completeness, materiality and responsiveness of the publicly available information. Recognised standards include the AA1000 approach.

Impact on the environment

Management systems	This criterion addressed whether home builders have formal systems and procedures in place to ensure they can effectively manage environmental issues. Specifically the criterion assessed whether companies have an environmental management system, whether there are environmental site auditing processes and how open and transparent companies are about compliance with environmental legislation.	The company has an environmental management system certified to ISO 14001 or EMAS and makes any environmental prosecution data available to external stakeholders with an explanation of processes put in place to ensure the problem does not happen again.
Commitment to EcoHomes	This criterion addressed the extent to which companies are using, and are planning to use, the EcoHomes methodology to certify the private dwellings they build.	The company has more than 50% of its completed private dwellings certified to at least EcoHomes Very Good and has set a target that all new homes should also be certified to this standard.
Ecology	This criterion examined how home builders are protecting the ecological value of their sites through policy and procedures, and the number of their sites which are implementing biodiversity action plans (or equivalent).	The company provides a good practice example of how it enhances the ecological value of a site and how it works with an external organisation to develop its biodiversity policy, action plan or initiatives. The company also has biodiversity action plans (or equivalent) on all sites.
Climate change	Home builders were asked to demonstrate their commitment to addressing the long-term challenges posed by climate change. The criterion covered a number of issues including whether companies have a public statement on climate change and if there is Board responsibility for climate change related issues.	The company has both a long-term commitment and yearly targets to reduce greenhouse gas emissions. These cover both operations and product.
Energy	In this year's benchmark there was a separate section on energy assessing the home builders against a number of issues. This included procurement of energy-efficient white goods and lighting, introduction of renewables on developments, gathering SAP data and setting targets related to improving energy efficiency.	The company provides an example of a project (under construction or completed) where at least 20% of total energy demand is supplied from local or site renewables, or at least a 20% reduction in carbon emissions has been achieved through the use of local or site renewables. The company also provides data related to SAP externally and reports quantitative targets related to improving energy efficiency.
Water	This criterion addressed whether home builders have sought to address the challenges posed by the lack of water resources in the UK and the effects of water attenuation on development infrastructure. It addressed issues such as the incorporation of water minimisation devices into dwelling designs, the use of grey water recycling and rainwater harvesting and sustainable urban drainage systems.	The company can provide examples of projects integrating grey water recycling and rainwater harvesting systems. It also integrates sustainable urban drainage systems on more than 50% of sites, has performance data related to average internal potable water consumption for all dwellings and has reported qualitative targets it has set in relation to water efficiency in dwellings.
Domestic waste	This criterion addresses whether home builders contribute to a reduction in waste sent to landfill and an increased amount of recycling by enabling and communicating with customers to recycle more effectively.	The company places recycling facilities in all dwellings completed in the past year. It works with an external organisation to understand how better to communicate with purchasers regarding waste reduction/increased recycling. It also provides an example of integrating composting facilities in a development or individual dwelling.
Transport	Home builders were asked to demonstrate that they sought to reduce the car dependency of their developments. Issues addressed under this criterion included the use of innovative transport initiatives and the integration of cycle storage on developments. The companies were also asked to demonstrate that they understood the proximity of their developments to public transport.	The company can provide examples of innovative initiatives to reduce car dependency, including the provision of cycle storage on all new projects under construction. The company also gathers data related to the proximity of all developments to public transport and provides this information externally.

Procurement and supply chain management	This criterion addressed whether home builders integrate environmental criteria into their procurement processes. Specific issues addressed included sustainable material specification, sustainable timber procurement and whether companies have engaged with their supply chain to address both environmental and social issues.	The company publishes a detailed environmental procurement policy or procedures which apply to all materials. The company states that it specifies the use of recycled/reclaimed materials, materials with low embodied energy, responsibly sourced materials and materials from suppliers who can demonstrate International Labour Standards compliance. It also has a timber policy in place stating a preference for FSC-certified timber and requires Chain of Custody Certification from all suppliers and contractors. It has its timber supply chain externally audited to trace all uncertified timber and/or paper products back to source. The company also includes environmental criteria in the selection of suppliers, monitors its supply chain in relation to environmental and social standards and provides examples of working in partnership with suppliers to address specific areas of environmental impact.
Construction waste	This criterion addressed whether home builders could demonstrate they had a waste management strategy in place, collected waste data and set targets accordingly.	The company has a DTI-compliant Site Waste Management Plan in place which it implements on all projects and can provide an example of how its waste management strategy has led to a reduction in waste/increase in recycling. It also provides performance data in relation to waste management for all projects under construction and has reported a quantitative target related to waste management during construction.
Construction site management	Home builders were asked to demonstrate how they managed their construction site activities. Issues addressed were carbon emissions and water consumption arising from site activities and the air and water pollution controls in place on developments.	The company measures carbon emissions arising from all development activities, including transport movements to and from developments. It also measures water consumption arising from development activities and is committed to best practice air and water pollution controls on all developments.
Impact on society		
Health and safety	This criterion addressed whether home builders had a comprehensive health and safety policy and management system in place and whether there were health and safety auditing processes in place. The companies were asked their average accident and incident rates and if they had set any targets in relation to this. The criterion also addressed how open and transparent home builders were about compliance with Health & Safety legislation. Companies were also asked to provide information on the number of construction site operatives (and sub-contractors) that are Construction Skills Certificate Scheme trained.	The company performs internal and external health and safety audits, and the Board member with responsibility for these issues carries out regular site visits. Health and safety performance data and targets are available externally, as is information relating to the number of construction site operatives (and sub-contractors) that are Construction Skills Certificate Scheme trained. The company makes any Health & Safety prosecution data available to external stakeholders with an explanation of processes put in place to ensure it does not happen again.
Considerate construction	This criterion addressed the use of the Considerate Constructors Scheme or an equivalent internal considerate construction policy by home builders. The scheme provides a proxy for how considerate constructors are to the needs of the local community during the development process.	The company has at least 75% of sites signed up to the Considerate Constructors Scheme or an equivalent externally audited considerate construction policy.

Employment	This criterion addressed whether companies had sought to contribute to developing skills within the industry during the construction process and through long-term employment creation.	The company provides examples of apprenticeships, assisting under-represented groups into the construction industry and works with local sub-contractors specifically targeted for employment. The company also has processes in place to ensure sub-contractors can meet basic statutory employment requirements and rights, and to ensure all site operatives have the legal right to work in the UK. In terms of long-term employment creation, the company provides examples of mixed-use projects where local employment opportunities have been communicated to residents and where reduced rates on commercial space are offered to business start-ups or small SMEs. If predominantly a greenfield developer, the company provides evidence of supplying home/office working provisions as standard and a project where links to local economic activity have been utilised.
Stakeholder engagement	This criterion addressed whether home builders had identified and engaged with their key stakeholders on both a strategic and project level.	The company provides an example of senior management participating in external industry events related to sustainability, engaging with key stakeholders about its sustainability principles, and demonstrating it has taken steps to address stakeholder interests. The company also provides evidence of its community engagement guidelines for use on all projects, and an example of best practice stakeholder engagement demonstrating collaborative design principles.
Customer engagement	Home builders were asked to provide evidence of their approach to engaging with customers on sustainability issues. It also addressed home builders' customer satisfaction levels.	The company has undertaken market research to understand customer demand for sustainable housing, provides information to all purchasers on sustainable living and can provide an example of promoting sustainable living to customers prior to purchasing. The company also provides performance data indicating it has achieved an average customer satisfaction level of at least 90%.
Wellbeing	This criterion examined whether companies built to the principles of both Lifetime Homes and Secure By Design. It also looked at initiatives home builders had undertaken to promote outdoor recreation, health and/or community interaction.	The company requires that all projects are built to both Lifetime Homes standards (if applicable) and Secure by Design principles.

Appendix 2

About the partners

WWF-UK



As part of the WWF international network, WWF-UK addresses global threats to people and nature such as climate change, the unsustainable consumption of the world's natural resources and the peril to endangered species and habitats. We do this by influencing how governments, business and people think, learn and act in relation to the world around us, and by working with local communities to improve their livelihoods and the environment upon which we all depend.

wwf.org.uk

The Housing Corporation



The Housing Corporation is the government's national affordable homes agency, responsible for investing in new affordable homes and regulating nearly 2,000 housing associations across England. The Corporation's £8 billion investment programme for 2008-11 is its biggest ever. Its previous investment programme of £3.9 billion for 2006-08 is funding 84,000 homes; 49,000 of these are for affordable rent, and 35,000 are for affordable sale through the Government's HomeBuy initiatives, helping people to get a foot on the property ladder.

The Housing Corporation is working with English Partnerships, the Audit Commission, and Communities and Local Government to establish the proposed new Homes and Communities Agency and the Office for Tenants and Social Landlords.

www.housingcorp.gov.uk

Insight Investment



Insight Investment, the asset manager of HBOS, is one of the UK's largest investment managers. As of the end of June 2007, it managed £102.1 billion in assets on behalf of millions of HBOS retail customers and nearly 300 institutional clients such as pension and insurance funds.

Insight is committed to being an active and responsible investor. Its policy is available at www.insightinvestment.com/responsibility/policy/policy.asp. The company is committed to working on behalf of its clients to encourage the companies in which it invests to adopt high standards of corporate governance and corporate responsibility. This is because Insight believes that companies that do so can protect and enhance both their reputations and their financial performance. The investment manager publishes reports on a range of issues, outlining its views on key environmental, social and ethical issues and how it expects companies to address those issues. It also engages with companies, through, for example hosting seminars or holding one-to-one meetings, to discuss their performance and encourage them to do better where it feels they fall short of best practice.

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