

Full Report December 2013

The Green Ceiling?

Where next for benchmarking sustainable homes?



The UK homebuilding sector's contribution to a sustainable future

Homes & Communities Agency



Real value in a changing world



The benchmark enables homebuilders, Government, investors and the public to understand the sustainability of the homebuilders' operations and the new homes they build.

For companies who participate in an enhanced level of assessment and engagement, the benchmark also acts as a forum to share ideas, discuss challenges, test concepts and learn from expert speakers.

2013 Facts





Where next for sustainable homes?

This report sets out the results of the NextGeneration benchmark assessment for 2013.

For the benchmark this is an important year in terms of analysing trends, as it has been run with the same criteria for three years. This means that we can discuss industry trends in sustainability with the greatest level of confidence since NextGeneration was created in 2006.

Homebuilding is a long term activity; the nature of the product and the length of time taken to deliver a development from site acquisition to completion means that the industry must plan well in advance to make changes in its product or processes. Yet looking back over three years, we are very encouraged to see that performance in sustainability has increased significantly and this is the first year where a company has scored over 90% in the benchmark, approaching the "green ceiling" of the existing criteria.

The Government have announced the winding down of the Code for Sustainable Homes as it believes it has served its purpose. Consequently, we shall see the embedding of sustainability into core Building Regulations which is a positive and important step.

As well as looking back over interesting trends, we also take time in this report to look forwards to the emerging challenges in sustainability, and ask; where next for sustainable homes?

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"Sustainable development is in the DNA of our business; a long-term commitment that ensures we have the very highest standards of performance as a responsible development and construction business. From becoming a carbon neutral business to diverting 95% of our waste from landfill and investing over £1 million each year in the community, sustainability is at the heart of everything we do. That's why it is important to us that organisations like NextGeneration can provide an independent benchmark of our progress and I'm delighted that we are the most improved company in this year's survey; it will inspire us to achieve even greater outcomes next year."

Rick Willmott, Group Chief Executive Willmott Dixon



Overall Sector Performance

2013 has been an exceptionally competitive year for benchmark participants. Overall sector results have increased more in 2013 than they did in 2012. This is also the first year any company has scored over 90% in the benchmark.



This improvement is supported by increasing investment in sustainability and an increasing body of research demonstrating the value that it adds.

Member companies continue to lead the industry, and within this group a few companies have formed a distinct leading pack, ahead of a second cluster of strong performing companies. This suggests that improvements in sustainability performance are not linear, but that there are key stages of change which companies must negotiate. The leading companies are gaining advantage by integrating sustainability into their business strategy across all of their operations and homes.

Industry Context

2013 has witnessed a notable shift in the direction for sustainable homes in the UK. The volume of legislation and policy developed this year which relates to sustainable homebuilding shows that it is to the forefront of the Government agenda.

The Housing Standards Review is the most notable of these, but other policy documents include the consultations on allowable solutions and biodiversity offsetting, and the Taylor Review. The Farrell Review on Architecture and the Built Environment is also expected to contribute to how we envisage designing sustainable communities.

Such a radical review of policy and legislation will perhaps inevitably court contention, and many differing views have been offered on this work. The winding down of the Code for Sustainable Homes has, perhaps, been the most contentious aspect.

Future commitment to sustainability has been affirmed through the allowable solutions consultation, as part of the continued progress towards zero carbon homes in 2016, but as with many approaches to sustainability, progressing beyond energy to encompass a more holistic vision of what sustainability means, remains a challenge for the industry.

"Continually striving to improve our approach to sustainability and environmental best practice is integral to our whole business model, and maintaining our high ranking in the benchmark is testament to the success of this strategy. It is encouraging to see the great strides being made right across the industry, but the fact that Crest Nicholson is leading the sector in socio-economic sustainability demonstrates our commitment to delivering high quality, well-designed communities where people want to live, and which support a more sustainable lifestyle."

Chris Tinker, Executive Board Director Crest Nicholson

Strengthening Areas

Areas for Development



Procurement, community engagement and risk management have all seen significant increases in score this year. In addition, several companies are showing new and innovative approaches in these areas.

Policy and strategy areas continue to be stronger than implementation and performance, though both have improved. Promisingly, impact on the environment is the most improved section in the benchmark, with a definite focus on increased data quality and coverage.

Public reporting has also been a particular strength this year, with the industry average mark significantly up, several companies making big transformations in their sustainability communications strategies, and for the first time Miller Homes have secured the highest mark for Phase 1 of the benchmark.

This is reflective of broader trends towards increased importance being placed on standardisation of sustainability reporting, and the influence of the introduction of mandatory reporting of GHG emissions for listed companies.



Research and Development scores have worsened this year, a trend that is potentially linked to regulatory uncertainty. This is of particular concern, as it is critical to fostering future improvements and building on current achievements.

It is also disappointing that high quality design remains a weakness as it enables the integration of sustainable strategies in the most effective manner. However, this indicates that there is scope to further enhance the delivery of sustainable communities.

Another weakness is sustainable building standards; whilst this is improved considerably this year there is still a relatively limited supply of private homes built to Code level 4. Developments are the greatest impact that homebuilders have and it is important that new standards created by the review can continue to drive high environmental performance in private homes.

The Way Ahead

In many areas of the benchmark, there are several companies demonstrating best practice. There are however, several areas where new mechanisms are required to ensure effective strategies, and that top performers continue to be recognised.

Within environmental performance data, many companies can no longer achieve large annual percentage reductions in energy water and waste, having already implemented 'quick-win' strategies. However, there is a lack of industry benchmark data to compare performance against. Research is developing in this area and it is hoped this will enable a more informative approach to performance analysis to be adopted.

Additionally there are complex areas of analysis such as supply chain life cycle analysis, ecological impact and socio-economic impact where methodologies are at an early stage and there is limited understanding of how to benchmark performance.

Creating a sustainable built environment is a long term goal. Whilst huge progress has been made in the past number of years, there are further challenges ahead. Demonstrating the value of sustainability and developing integrated strategies which provide an in-depth understanding of the broader impacts of development activities will be key to this future direction.



Executive Committee & Secretariat

NextGeneration is supported and directed by the Homes and Communities Agency through their role on the Executive Committee. The Committee's role is to ensure the integrity and transparency of the initiative's governance. Upstream Sustainability Services at Jones Lang LaSalle act as the secretariat to the initiative; carrying out the analysis and providing a range of services to homebuilders who participate in the benchmark.

Executive Committee





History NextGenerat

NextGeneration was launched in 2006 to drive best practice into the heart of the residential development sector. Since 2006, the benchmark has been run annually. During that time it has developed and grown in its scope of assessment. Having focussed on thematic issues from 2008 to 2010, a decision was made in 2011 to run a full annual benchmark to enable it to capture robust and comparable trend data. 2013 is the third year of this full benchmark which examines over 250 criteria and encompasses a triple bottom line approach to sustainability.

What we benchmark

Capturing an accurate picture of sustainability performance requires a robust set of criteria which fully reflect the issues facing the industry, and enable comparability over time. In 2013 there are more than 250 criteria in the following categories:



Approximately 75% of the points are awarded for a company's 'performance' with a lesser amount available for its 'commitment', to ensure a focus on what companies actually do, rather than what they say they will do.

While the benchmark has remained mostly consistent since 2011, some criteria were amended in 2013 to keep up to date with legislation and best practice¹. These amended criteria represent about 5% of the total marks, and these changes were made through consultation with member companies and the Executive Committee.

¹ Amended criteria include tougher standards on assurance in line with best practice, splitting out of criteria relating to energy and carbon to capture data on both independently, tougher standards on landfill diversion rates and a move to more performance based data rather than case studies in sustainable communities.

Why we benchmark

NextGeneration enables homebuilders to understand and improve their performance in managing environmental, social and economic sustainability by comparing their performance to their peers and competitors.

This enables homebuilders to clearly communicate their sustainability performance to investors, Government and consumers. It also acts as a mechanism to drive performance in the industry by offering a template for best practice and setting a future vision.

How we benchmark



Assessment of Public Information

The NextGeneration sustainability benchmark assesses the top 25 homebuilders in the UK. All were subject to Phase One of the benchmarking process which evaluates publicly available information as of 31 May 2013. This includes:

- Sustainability/Corporate Responsibility reports
- Annual reports and accounts
- Sustainability information on corporate websites (but excluding marketing websites and press releases)

All companies were given a copy of their Phase One analysis and the opportunity to respond to the analysis, query scores and highlight any additional publicly available information not captured.

Enhanced Member Assessment

This reviews information which is not disclosed publicly and is only undertaken with NextGeneration member companies. It provides a fuller assessment of a company's performance and allows NextGeneration to build up a more detailed picture of performance in the industry.

Face-to-face meetings are held with members to discuss the benchmark criteria and they are then able to submit further evidence to demonstrate performance. A final report is then produced and companies are benchmarked according to their final score.





Presentations and Launch Event

Member companies are given their results in a detailed presentation which is open to all staff. This includes an overview of sector trends and detailed analysis of NextGeneration data. It also provides an opportunity to discuss the company's progress and strategy, highlight strengths and discuss the potential to address weaknesses. The results are made public at an annual launch event.

Membership

2013 Membership

All top 25 companies have the option to become NextGeneration members and participate more closely with the benchmark. This year, ten companies have joined.

Membership Benefits

- Enhanced level of assessment taking into account internal information
- Access to detailed criteria
- Advice and guidance on how to improve performance
- Participation in Member workshops and events
- Results presentation including insights into industry trends
- Marketing and public relations opportunities
- Regular e-newsletters and briefings
- Consultation on development of criteria



Picture courtesy of Crest Nicholson

Advocacy

NextGeneration also acts as a voice on sustainability within the industry through events, consultations and collaborations.

Early in the year NextGeneration met representatives from the Department of Communities and Local Government to deliver a presentation of the 2012 results. The benchmark's profile was also raised though engagement with the housing minister Mark Prisk MP.

NextGeneration have also been actively involved in industry discussions on several Government consultation papers this year through the UK Green Building Council.

In October NextGeneration spoke at an event hosted by the Wildlife Trusts on the Value of Planning where the key note speaker was Planning Minister, Nick Boles MP. NextGeneration presented a developer perspective on approaches to the ecological enhancement of developments. Other speakers included Stephanie Hilborne OBE, CEO of the Wildlife Trusts, and John Box, President of CIEEM, the Chartered Institute of Ecology and Environmental Management. "Our sustainability strategy involves us embedding sustainability principles into our overall business model. This means getting the balance right between social, economic and environmental factors. The NextGeneration benchmark enables us to review this strategy against industry best practice. This sits alongside broader engagement work which we undertake with stakeholders to ensure our strategy is as relevant, holistic and innovative as possible."

Mark Clare, Group Chief Executive Barratt Developments PLC

Engagement, Workshops & Webinars

As well as being a benchmark, NextGeneration also acts as a forum for collective industry engagement on sustainability. This enables members to share ideas, discuss challenges and learn from expert speakers. Events this year have included:

Designing for Ecological Enhancement

Ecology Workshop | March 2013

Speakers:

Paul Wilkinson, Head of Living Landscapes, The Wildlife Trusts

Joanne Wheeler, Senior Policy Advisor, UK Green Building Council

Nick Droy, Head of Conservation Management Advice, Royal Society for the Protection of Birds This event explored how homebuilders can adopt more holistic strategies for ecological protection and enhancement. This is a key challenge for homebuilders who have ambitions in this area, but lack methodologies to demonstrate performance. Uncertainty as to the effectiveness of various measures is a key barrier to greater investment in ecological strategies. The outcomes of this workshop were used to feed into the on-going work of the Taylor Review and Housing Standards Review.





Materiality in Sustainability Reporting

GRI G4 Seminar | July 2013

Speakers:

Tom Branczik, Senior Sustainability Consultant, Jones Lang LaSalle This year the GRI (Global Reporting Initiative) issued revised guidelines, G4, placing 'materiality' at the heart of sustainability reporting. Materiality describes issues which are most important to a particular industry. In addition, the G4 guidelines place a new focus on supply chain which is of considerable importance in homebuilding as construction is a very resource-intensive industry. Increased rigour and transparency in sustainability reporting standards is a positive development for companies who are committed to delivering real performance.





Understanding Environmental Performance Data

Benchmarking Workshop | October 2013

Speakers:

Andrew Tucker, Water Strategy Manager, Energy Saving Trust

David Weatherall, Housing Strategy Manager, Energy Saving Trust This workshop explored the development of industry standard benchmarks for energy, carbon, water and waste in homebuilding. Availability of this data would give homebuilders further potential to analyse their own performance and inform strategies for improvement. Having made huge improvements in diversion rates from landfill in recent years, homebuilders are actively pursuing greater resource efficiency and waste reduction.





Company Rankings in 2013

The Berkeley Group have secured first place in the 2013 benchmark, with the first ever score over 90%. Crest Nicholson have placed second with a very impressive 87%. That this score would have been enough to secure first place in 2012 is strong indication of the competitiveness of this year's benchmark. Two other members have scored over 80%; Miller Homes and Willmott Dixon.

All of the top four companies have achieved improvements in scores which are in excess of the average member increase, which continues a trend seen last year that strong performers are pulling ahead and illustrates that even among top performing companies there is the potential and ambition to improve.

Building on observations in previous years, company results are tending to occur in clusters. The results can be considered in four quartiles; a leading group above 80%, strong performers above 60%, non-members with a good amount of public information on sustainability and non-members with limited sustainability information scoring under 10%. This is reflective of the fact that the transition to a sustainable company is not a linear process but is a process requiring several stages of change.

Berkeley Group 91% **Crest Nicholson** Miller Homes Willmott Dixon 75% GENERA **Members Barratt Developments** 70% **Taylor Wimpey** 70% Countryside Properties Redrow 61% Industry Average 39% Kier 38% Morgan Sindall 36% Bovis Homes 28% Persimmon 27% Keepmoat 22% **Bellway Homes** 15% Telford Homes 13% Gladedale **13**% Stewart Milne 12% McCarthy & Stone 4% Fairview New Homes 3% Cala Homes 3% **Bloor Holdings** 2% Galliard Homes 1% Morris Homes 0%

Figure 1: 2013 Results

Both the industry and member averages have increased this year. While some companies have made significant improvements, the general trend is one of broad industry change towards greater sustainability.

Encouragingly there are now only six companies under 10% compared to nine in 2012. Non-members are assessed on public information only, and while these scores may not reflect the true extent of their sustainability performance, it is positive to note that there are fewer companies with no public information on sustainability.

Morgan Sindall have re-entered the top 25 as one of the top performing non-members, while Keepmoat have increased their score from 0% to 22% this year.

Top Performers

First Place | The Berkeley Group

Congratulations to the Berkeley Group for again taking first place in the 2013 NextGeneration benchmark. The Berkeley Group's success can be attributed to the longterm approach of their 'Vision2020' business framework which has provided the company with a framework which drives innovation along a set path with clearly defined goals. This commitment to running a sustainable company is underpinned by investment in the health and well-being of their employees and the quality of their product, and has been carefully aligned with their business strategy. Early recognition of the importance of socio-economic sustainability is another reason why the Berkeley Group continue to be recognised as an industry leader in sustainability.

Second Place | Crest Nicholson

Crest Nicholson have placed second in this year's benchmark with a score of 87%.

Crest Nicholson are leading the way in socio-economic sustainability, achieving the highest overall mark in this section and in four of its seven sub-sections. Particular strengths include Design Quality, Post-Occupancy Evaluation, Environmental Infrastructure, and Secure Design; in all of these areas Crest Nicholson considerably out-perform the member average. This focus on sustainable communities and place-making is also evident in some innovative work on ecology, notably at the Bolnore Village development in West Sussex.

Highest Score in Phase 1 | Miller Homes

Miller Homes has consistently been a top performer in the NextGeneration benchmark. This year they achieved the highest Phase 1 score in the benchmark, demonstrating a leading position in public transparency. The company has achieved an impressive increase in their Phase 1 score from 53% in 2012, to 71% in 2013, illustrating a renewed commitment to disclosure within the company.

Their sustainability report combined a cohesive, transparent account of sustainability risks and opportunities that reflect Miller Homes' business model with a broad range of KPIs and targets encompassing economic, environmental and social sustainability.

Most Improved Result | Willmott Dixon

Willmott Dixon are the most improved company in this year's benchmark increasing their score from 71% in 2012 to 82% in 2013.

A renewed sustainability strategy has been supported by investment in R&D and extensive stakeholder engagement. It is complemented by a more transparent approach to reporting and solid improvements in performance data. Willmott Dixon are a great example of how significant change can be achieved when an effective and engaging strategy is implemented.



miller homes







Detailed Results

Figure 2 illustrates the highest score, member average and the industry average against all sub-sections within the benchmark.

Performance in some of the individual sub-sections, for example procurement & supply chain, sustainable communities and risk management, is explored in the remainder of the report.

Figure 2: 2013 Results Breakdown



Strengths and weaknesses are calculated on the basis of overall performance as well as improvement relative to 2012

Section Results

Strategy, Governance and Risk Management

1 Berkeley 2 Croup

3

As with previous years this is the strongest scoring section of the benchmark. This is unsurprising as setting a strategy for sustainability is a key first step to achieving longer term results.

The Berkeley Group have scored nearly full marks, essentially indicating that they are achieving best practice in this area.

Another notable performer was Willmott Dixon who moved from 7th to 3rd place.

A key aspect of this section is a company's research and development activities, which are critical to ensuring an effective long-term strategy on sustainability. This has been identified as an area of weakness in the benchmark this year, and continued investment in R&D is one of the key factors setting top performers apart.



Strategy, Governance & Risk Management highest scores

Impact on the Environment

WILLMOTT DIXON

SINCE 1852



Following a decrease in the industry average score last year, there has been a general upward trend in performance in this section this year, though it remains the weakest in the benchmark.

2 WILLMOTT DIXON

There have been advances at the top; where last year the top 3 companies were tied on 80%, this year four companies scored over 80%. There have been considerable improvements in procurement and supply chain, water and commitment to sustainable building standards.

Another notable trend is an increase in the scope and accuracy of data reporting. This may be linked to companies preparing for mandatory greenhouse gas reporting (see page 18). This is a very positive trend as more accurate data enhances understanding and enables more effective reduction strategies to be developed.



Number of companies scoring over 80%

Impact on Society and Economy

millerhomes



While in previous years, no companies scored very highly in this section and many companies were closely clustered around the average, this year has seen a divergence in the range of scores.



Crest Nicholson and the Berkeley Group have both scored over 90% in this section and are very much leading the way in this area.

This increase is led by exceptionally strong results from both companies in the area of sustainable communities, which remains a general area of weakness in the benchmark.



Impact on Society & Economy member average scores

? miller homes

The major strengths in this area are health & safety and economic development



Phase 1 Results

This has been a very strong year for public disclosure, with all but two companies increasing their Phase 1 score. This is in stark contrast to the findings in 2012, where public reporting scores seemed to have stagnated.

This may be influenced by the introduction of mandatory greenhouse gas reporting, but is it also reflective of broader industry trend of greater standardisation of sustainability reporting, which is discussed further on page 18. Additionally the beginnings of a potential economic upturn may be enabling greater investment in sustainability.

Figure 3 : Phase 1 Scores



This is the first year where the overall highest performer has not secured the highest result in Phase 1. Miller Homes have scored the highest mark with 71%, while Berkeley Group achieved 68%. Willmott Dixon are placed third for Phase 1 with 65%. In 2012 they scored only 39%, showing that a strong emphasis has been placed on public reporting this year.

Notable improvements have been achieved by a few companies including Willmott Dixon, Keepmoat, Miller Homes and Kier, who have all taken a fresh approach to their transparency.

There has been an increase in the quality of graphic presentation including effective use of infographics. Some of the most successful reports in Phase 1 have been among the most graphically engaging because the use of infographics is a very concise means of conveying a lot of information. It also coincides with a trend towards increased presentation of performance data and a move away from a reliance on one-off case studies or examples.

Listed & Private Companies

While listed companies continue to out-perform private companies in the benchmark, this difference has narrowed in 2013. This is driven mainly by Crest Nicholson's return to status as a listed company and the re-entry of Morgan Sindall into the top 25. In total the benchmark features 12 private companies and 13 which are listed.

Listed homebuilders out-perform private ones due to their greater obligation to communicate their performance outside of the company. However, private status is not necessarily a barrier to public disclosure of sustainability information; the highest performer in Phase 1, Miller Homes, is a private company.

Willmott Dixon and Countryside Properties are other notable private companies who score very highly for public disclosure, while Crest Nicholson's performance has remained strong for many years both as a listed and as a private company.



Private Companies



Average result for Listed Companies

"We are delighted to have continued our high standard of attainment within the NextGeneration benchmark. Sustainability is a key part of the way we do our business and we





continually strive to exceed the minimum standards. Our commitment to this level of transparency gives a strong assurance to all our stakeholders that our business operates in the best possible way."

Keith M Miller CBE, Chief Executive of The Miller Group, of which Miller Homes is a division





Procurement and Supply Chain

An emerging trend of a more holistic incorporation of sustainable specifications into standard tendering documentation is supporting high performance increases in this area.

For most companies this improvement is driven by broader ambitions, which have traditionally focussed heavily on timber. More companies are looking to reduce the impacts of other materials, and including preferences for lower carbon, recycled or sustainably sourced products in their specifications.



Recent research produced by McKinsey & Company has shown that the energy intensity of commodities is strongly linked to price volatility² providing further evidence of why an understanding of supply chain sustainability will be increasingly important to ensuring effective procurement planning.

A key barrier in this area has been the lack of industry standards, and the BRE Green Guide has to some extent filled this gap. However, this is also being addressed at EU level with the introduction of the Construction Products Regulation and development of harmonised EU standards on life cycle analysis of construction products³.

Despite improvements, auditing of procurement policies remains a weakness within this section. While many companies have some level of policy in place, few subject this to internal or external auditing. In this area the average industry mark is 28%, and amongst members it is 56%.

So while specifications are taking in broader ambitions, a concern is that this is often still confined to stating a general preference for certain products, but with limited information on how this is evaluated or assessed in practice. This also means there is limited potential to test a policy's effectiveness.

The next challenge for industry is to follow the example of some of the leading companies, who are subjecting policies to robust processes and external review. This will provide a platform to enable companies to rationalise, embed and expand their sustainable procurement ambitions.

Lend Lease have a proven commitment to responsible sourcing. Their approach integrates



sustainability measures into procurement decisions which are aligned with recognised industry standards including BES6001⁴, CARES⁵ and ETI⁶. Suppliers are strongly encouraged to meet these standards, and certification is monitored through 'Building Confidence'. These measures, combined with engagement with suppliers, encourage and facilitate sharing best practice as well as providing additional support to SME's.

Lend Lease's work with the UK Contractors Group has helped increase Responsible Sourcing certification uptake in a number of industries, for example, plasterboard manufacturers, concrete products and aluminium. The uptake of CARES and Eco-Reinforcement certifications for steel reinforcement is increasing and good progress is being made with glass and stone.

In addition to reducing negative impacts, the collaborative approach adopted by Lend Lease provides opportunities to enhance relationships with specific suppliers, which drives quality and efficiency. Such benefits are fully realised in procurement strategies that integrate closed-loop systems into design processes.

- 'Towards the Circular Economy' 2012, McKinsey & Company, published by the Ellen MacArthur
- Foundation, http://www.ellenmacarthurfoundation.org/ CEN 350 Sustainability of Construction Works standards, http://www.cen.eu/cen/Sectors/
- Sectors/Construction/EPB/Pages/CEN_TC350.aspx BES6001 is a BRE independent, third party certification for responsibly sourced construction products, http://www.bre.co.uk/page.jsp?id=1514 UK Certification Authority for Reinforcing Steels, http://www.ukcares.com/
- Ethical Trading Initiative, http://www.ethicaltrade.org/ https://www.gov.uk/government/news/government-on-track-to-provide-land-for-100-000new-homes

Stakeholder Engagement

Project level stakeholder engagement was flagged as a weakness last year, but is one of the most improved sections in 2013, driven by Government policy and growing industry awareness of the positive value of this work.

A particular weakness in 2012 was community engagement at the pre-planning stage, and there are strong signs that this is improving, while corporate level stakeholder engagement remains strong.



Government policy is a key initiator of this trend, fuelling homebuilders' appetite to adopt planning strategies that embrace the spirit as well as the letter of the National Planning Policy Framework (NPPF) by making engagement a central component of planning proposals. Such policy drivers include the sale of public land⁷ and the relaxation of restrictions on greenfield developments, subject to high levels of scrutiny and demonstration of high quality design. These have had the effect of increasing the number of developments that are contingent upon Government and community buy-in.

Building on this, leaders in engagement are increasingly advocating that a positive attitude towards a development from the local community makes it more attractive to prospective buyers. There has been an increased recognition of the mutual benefits that project level community engagement can yield for both the developer and the local area. It offers the local community a platform for discussion and a role in shaping their local area, while reducing the risk of lengthy planning delays for the developer.

Risk Management

Strengthening approaches to risk management are a strong indication of the greater integration of sustainability into company operations and its increasing importance at Board level.

NextGeneration examines the extent to which sustainability risks are identified and evaluated, and whether they are incorporated into broader company risk assessments. This integration is also a strong driver for embedding sustainability considerations into the day-today running of the company and can help it to focus on the most material challenges.



Overall, listed companies out-perform private companies in this area. Listed companies scored an average of 56% while private companies averaged 24%. Despite this, several privately owned companies, including Miller Homes, Countryside Properties and Willmott Dixon, have performed very strongly in this area. Willmott Dixon produced no sustainability risk analysis last year but this year have produced a comprehensive review increasing their score from 0% to 90%.

Among the most common of sustainability risks identified by member companies are:

- Energy and carbon emissions
- Health and safety
- Flood risks
- Reputational damage
- Failure to meet expectations of delivering sustainable communities.

Taylor Wimpey

At Saxon Heath Taylor Wimpey adopted a best practice two-way engagement strategy. This included consultation with local residents, a youth group and the local council, which led to the incorporation of community ideas in the final development plan. The result of this saw an increase in public space, a reduction in the number of larger dwellings and the procurement of additional land for a community woodland.

In adopting this strategy Taylor Wimpey were complimented by the Cheshire West strategic planning committee, Parish Council and community groups on their community engagement process. The incorporation of the community's aspirations gave residents a sense of ownership, resulting in swift agreement during the planning process.



Design Quality

High quality design enables the integration of sustainable strategies in the most effective manner, so it is disappointing that this section remains a weakness, and indicates that there is scope to further enhance the delivery of sustainable communities.



Low take up of the Building for Life guidelines remains a concern, and it will take time to see if the revised BfL 12 guidelines can achieve more traction in the industry. Another barrier to improved performance is continued reluctance in some parts of the industry to use architects and other qualified design professionals. It is not clear to what extent this can be attributed to economic circumstances, or if the current upturn can prompt a refocus on design quality.

Despite the above, a notable achievement in the area of design quality has been Galliford Try's work with Alison Brooks Architects at Newhall Be which was nominated for this year's RIBA Sterling Prize, the UK's most prestigious architecture award⁸. This is one scheme within a broader development, and it is clear that the ethos which the client, as developers, brought to the entire project has generated the conditions for quality design.

The developer's family had owned the site as a farm for generations and were strongly committed to the creation of a community that enjoyed the highest quality of planning, design and construction⁹. This historic involvement placed the client in the position of being a local community stakeholder. The ambition that was realised when these two roles overlapped is a powerful indicator of the potential outcomes of strong project level engagement and design ambition.

This scheme is very much an exemplar development but

highlights the potential from putting design quality at the heart of development.

The Government's role in promoting high quality design in the built environment is currently being reviewed under the Farrell Review; results from NextGeneration would suggest increased support for design is needed.

Countryside Properties are an example of a homebuilder where commitment to design quality has always been very strong. Countryside Properties' developments



have won a total of 149 design awards since 2001, including the Accordia development in Cambridge which won the RIBA Sterling Prize for Architecture in 2008. This commitment to design is central to the company's strong brand association with quality homes.

Post Occupancy Evaluation

Limited progress beyond post occupancy evaluation (POE) of energy use is stalling results in this area. New industry approaches to handover may provide the key to overcoming current barriers and creating future success.



Whilst overall performance remains weak, some positive signs have emerged which may signal future improvements. There has been an increase in the number of companies with policies on POE, and also an increased sharing of POE data with other bodies, mainly the Zero Carbon Hub. There is, however, limited expansion of this work outside of energy data.

Aspects that can usefully be researched include; how well used public spaces are, how happy homeowners are with water saving fittings & appliances, what sustainable design features homeowners find most successful, how well have ecological features been maintained and to what extent has the development integrated with and enhanced local communities. Completed developments offer a potentially valuable source of information for homebuilders in reviewing the success of designs and using this to refine and maximise their effectiveness.

The soft-landings approach being developed by BSRIA¹⁰ and the Useable Buildings Trust¹¹, offers an alternative way of approaching POE which may help overcome some of the traditional barriers to data collection. It advocates an elongated handover approach, with extended after care to support homeowners in refining system set ups and gaining maximum benefit from their home and local amenities.

Research & Development

NextGeneration results continue to support broader industry findings that construction lags behind other industries in R&D. Economic conditions, reduced Government support for exemplar projects and regulatory change are likely to be the main causes of a slight fall off in industry investment this year.



The currently evolving regulatory framework is a major reason why homebuilders need to radically change their traditional low-investment in R&D.

The 2013 EU Industrial R&D Investment Scoreboard places the Construction and Materials industry as having one of the lowest investment levels in R&D. It invests less than 1% of net sales in R&D, which is in contrast to industries like pharmaceuticals and healthcare which invest over 5%¹².

As part of the AIMC4 project, a part funded Technology Strategy Board (TSB) consortium initiative, Barratt Homes, in collaboration with the BRE, have begun a study into the



in-use energy and water consumption of a sample of homes at their Hatton Meadows development. This post occupancy evaluation will help to bridge the knowledge gap between predicted and actual environmental performance of a range of Barratt homes. This research will provide important insight into a buildings performance through the product lifecycle, and will inform future design.

- ⁸ http://ribastirlingprize.architecture.com/ http://the.newhallproject.co.uk/ethos/design.html
- ¹⁰ Building Services Research and Information Association ¹¹ BSRIA and Useable Buildings Trust, Soft Landings, https://www.bsria.co.uk/services/design/ soft-landings/
- ¹² 2013 EU Industrial R&D Investment Scoreboard, http://iri.jrc.ec.europa.eu/scoreboard13.html

Sector Trends & Future Innovation

Investment in Sustainability

The average sustainability team size of NextGeneration member companies has increased significantly this year, signalling renewed investment in sustainability as the industry sees a strong return to growth.

There have also been three appointments of a dedicated sustainability person at a senior level.

Average sustainability team size in NextGeneration Member companies



This trend coincides with an increasing amount of evidence of the value of sustainability to companies.

The Department of Energy and Climate Change's research¹³ indicating there is a 14% price premium for homes with an A or B EPC rating, over those with a G rating, is one of the most compelling of a series of recent studies demonstrating the value of sustainability.

While it is not clear that this premium applies to measures beyond energy efficiency, there is evidence that it is also apparent at a corporate level. The Carbon Disclosure Project's 2013 report comments:

"Our analysis of corporate carbon disclosure supports the view that high-quality companies provide investors with transparent information on sustainability and climate change.

We found that industry leadership on climate engagement is linked to higher performance on three financial metrics that reflect overall corporate quality: return on equity, cash flow stability, and dividend growth."¹⁴

climate-engagement-to-financial-performance.pdf ¹⁵ https://www.gov.uk/measuring-and-reporting-environmental-impacts-guidance-for-

Reporting

Stakeholder confidence in sustainability initiatives is dependent on transparent, trustworthy and comparable data. Investors, in particular, need to be able to approach this data in the same way they can approach financial data.

This can only be achieved against a background of standard industry guidelines, and 2013 has seen some important developments in this regard.

Since October this year, all publicly listed companies will be required to report on greenhouse gas emissions in their annual Director's Report¹⁵, which will enhance both the availability and robustness of this data.

As with many areas of sustainability, energy and carbon analysis is most advanced but a Department for Business, Innovations & Skills consultation on corporate responsibility¹⁶ is exploring how the Government can encourage greater uptake of broader sustainability reporting to internationally recognised principles.

The Global Reporting Initiative has also issued revised guidelines, G4¹⁷, which focus on a rationalised approach to sustainability and "material issues".

The future of reporting lies in the complete integration of reporting on sustainability and financial data. Guidelines on achieving this are currently being developed by the International Integrated Reporting Committee (IIRC), and were opened for consultation globally earlier this year¹⁸.

While these changes may present a challenge, for those companies that have experience in sustainability reporting, they offer the potential to enhance the value of that work through greater recognition and understanding.

In October 2013, Redrow Homes launched their first dedicated Sustainability

REDROW

Report which sets out an ambitious five-year vision for the company which is aligned to its business plan and corporate identity. This long-term approach is a strong commitment and sets the company on a clear path with demonstrable results. This work is not yet reflected in their NextGeneration results, but illustrates their future ambition and potential to improve.

¹³ An Investigation of the Effect of EPC Ratings on House Prices, DECC, https://www.gov.uk/ government/news/energy-saving-measures-boost-house-prices ¹⁴ Carbon Disclosure Project Report 2013 https://www.cdproject.net/CDPResults/linking-

businesses ¹⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209219/bis-

¹³⁻⁹⁶⁴⁻corporate-responsibility-call.pdf ¹⁷ https://www.globalreporting.org/reporting/g4/Pages/default.aspx

¹⁸ http://www.theiirc.org/consultationdraft2013/
¹⁹ Creating Strong Communities, The Berkeley Group, Social Life and University of Reading, http://www.berkeleygroup.co.uk/reports-opinions

Ecology

While NextGeneration results for ecology in 2013 remain similar to last year, there is real ambition emerging for exploring more holistic strategies which aim to engage with ecological networks outside of a particular site.



NextGeneration ran a very successful member's event in March of this year (see page 7), and spoke at a Wildlife Trusts event on the value of planning. What emerged from these discussions was that uncertainty about how to achieve ecological enhancement, and a lack of guidelines or performance measurements, remained a barrier to investing in ecological design strategies in developments.

Forging successful and constructive relationships between ecological organisations and homebuilders is a potential alternative approach, and it is positive to see many NextGeneration members entering into partnerships with ecological organisations, often at a regional and national level.

Ecology is an area that evades easy analysis or measurement, yet developers still need to be able to review the success of design decisions to ensure they can have confidence in investment decisions.

Changes in approach to ecology can be paralleled to changes that have taken place in energy efficiency analysis. Energy efficiency used to focus on elemental U-Value analysis, but this has moved to holistic building analysis, through energy ratings, as performance increased and aspects like air-tightness and thermal bridging became more important.

Approaches to ecology have traditionally focussed on individual aspects such as use of brownfield land and provision of habitats for specific species. Understanding how to make the transition to holistic analysis of ecology is a major future challenge for the industry.

Socio-Economic Sustainability

This is an area NextGeneration has strongly advocated since 2010 when the benchmark focused on this as a central theme. This involves the analysis and examination of the contribution a development makes to the local economy and society. It is an emerging area of research and different approaches exist.

With new areas of research where there are limited comparable results, caution must be exercised to ensure that research isn't being done with particular results in mind, or that only positive results are disclosed. Nevertheless when robustly done, these forms of analysis can enable a new depth of understanding on the influence of developments, and in time, help ensure that the development's contribution to the local area can be maximised.

There are obvious benefits to this research both for the local community, but also the developer as it has the potential to support efficient planning applications.

A particularly effective way of undertaking such an analysis is seen in the 'Creating Strong Communities' work the Berkeley Group have undertaken where completed developments were revisited¹⁹. This enabled an understanding to be gained as to how developments had matured and which aspects worked most successfully and provides a model for future research by homebuilders in this area.

Linden Homes has started to assess the economic benefits of their developments. The pilot research work being carried out at Ogwell Brook, Newton Abbot is developing a



standardised methodology that can be used on all their developments, providing a valuable analytical tool.

At Ogwell Brook, Linden Homes has quantified the number of jobs and apprenticeships created during the construction of the development and the number of local suppliers used. In addition they assessed the take-up of housing in accordance with the local demographic and measured contributions in developing the public realm. A combination of these and other factors represented a £19.4 million investment for the local economy.

"Measuring the additional value created through our house building investment enables us to clearly demonstrate the benefits of new homes within local communities and how this stimulates employment, training and economic growth."

Stephen Teagle, Managing Director Affordable Housing & Regeneration Division, Linden Homes



2013 has seen the industry arrive at something of a crossroads for sustainability; while huge change has been made in the industry in the past years, there is still progress to be made in the future. The industry needs a vision for that future that it can collectively work towards and go beyond the current "green ceiling". Based on the 2013 NextGeneration results, our key recommendations would be:

...to the homebuilding industry

Establish a long term vision for sustainability

The most successful companies have long term cohesive strategies for sustainability and use tools such as benchmarking to enable them to effectively manage future changes and measure progress against meaningful targets.

Re-focus on research & development

This is critical to driving long term effective progress. There are many emerging areas of research which offer huge potential value to homebuilders, for example, ecological enhancement, socio-economic analysis of developments and supply chain impacts.

Use ecology to enhance sustainable community design

Understanding and optimising the secondary benefits of ecological enhancement can help in the creation of sustainable communities. The natural environment offers rich potential for increasing community interaction and enhancing well-being.

Measure environmental data as robustly as financial data

Enhanced quality of data provides a leading edge for top companies in the benchmark. Mandatory carbon reporting is a first step to greater integration of environmental and financial data. Robust approaches and auditing of data will ensure companies stay ahead of this trend.

Examine new approaches to post occupancy evaluation

Thinking beyond monitoring energy performance can open up new approaches to post occupancy evaluation and offer enhanced value from research and innovation, as well as improved customer engagement.

Invest in high quality design

High quality design enables the integration of sustainability strategies in the most effective manner, enhancing the delivery of sustainable communities.

...to the Government

Offer recognition to high performing companies

The Government should offer recognition to high performing companies in the industry to support progress on sustainability.

Continue to bring clarity to regulartory change

In a rapidly evolving regulatory environment the Government should offer as much certainty as possible to homebuilders in relation to proposed changes, particularly in respect of timeframes.

Signalling a long-term vision for sustainable homes, as is available for zero carbon homes, will also support developers to make this transition more efficiently and with greater confidence.

Offer guidelines and resources on ecological enhancement

Ecological enhancement of developments requires integration with ecological networks beyond the boundary of the site. While biodiversity off-setting is one part of this approach, a collective resource providing guidelines on how to achieve ecological enhancement and connect with local networks is also needed to support this ambition.

Picture courtesy of Berkeley Homes

"Sustainability is at the heart of Berkeley. This is as true in Berkeley's corporate strategy and commitments to shareholders as it is in the day-to-day running of a business in which our people are driven, across every discipline, to deliver long-term, sustainable success. We are aware of the need to balance our aim to be successful with a will to operate sustainably and with a social purpose. Creating exceptional places that stand the test of time is at the forefront of this, as is our role in creating new jobs, working in partnership with local communities and contributing to the communities in and around each of our developments.

We are pleased that our efforts to be one of the most successful and sustainable businesses in Britain have once again been recognised by the NextGeneration benchmark."

Rob Perrins, Managing Director The Berkeley Group





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Front cover picture: Courtesy of Linden Homes, Newhall Be development nominated for 2013 RIBA Sterling Prize for architecture