



10 years

of sustainability benchmarking for UK homebuilders



FAST FORWARD

THE PAST, PRESENT AND FUTURE OF SUSTAINABLE HOMES



NextGeneration is an annual sustainability benchmark of the 25 largest homebuilders in the UK



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

NextGeneration works by inspiring companies to measure themselves and report against a range of criteria, developed in collaboration with the industry over 10 years, relating to high-quality, sustainable homebuilding. The assessment is primarily based on publicly available information and has been a key driver of greater transparency and accountability within the sector.

By showcasing leading firms, NextGeneration also aims to create healthy competition amongst homebuilders and ultimately encourage them to deliver more sustainable homes and communities.

NextGeneration member companies benefit from:

- The opportunity to steer the benchmark and develop the benchmarking criteria
- Enhanced assessments and bespoke reports to help improve their performance
- Networking and knowledge-sharing events, to aid collaboration and create solutions
- Sustainability briefings distilling key sector news.

Members



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PUSH the button

Welcome to the 2014 NextGeneration Report

In this report we evaluate the progress the homebuilding sector has made during the last year in delivering sustainable development and highlight best-in-class performance within the industry. To mark 10 years of benchmarking the sector, we will also take a look at the past and fast forward to the future of sustainable homes.

Great start

Looking back, the benchmark is unrecognisable since it was first launched in 2004 in terms of its scope, coverage and ambition. Today, the benchmark is more rigorous and challenging than ever before. We offer insights on its history, evolution and highlight memorable milestones achieved so far.

Strong present

While the homebuilding industry as a whole has moved on since the first benchmark, a handful of companies have excelled and are pushing ahead of their peers. These companies are beginning to address some of today's biggest environmental, social and economic questions – how do we deliver low and zero carbon homes? How do we build enough affordable homes? How do we make the places we live outstanding and fit for future generations? By sharing the achievements and best practices of these leading companies, we hope to spark innovation and engagement within the sector.

Exciting future

Big challenges lie ahead and there is still a long way to go. The next few years will herald a critical change in the way we plan, design and deliver homes. The buildings we create now will be enduring: their impacts will stretch into the lives of many generations.

At the same time, the long-term success of a building will depend on its ability to satisfy user needs, cope with changing climatic conditions and survive the evolving expectations of residents. The sector must push itself to find answers to these big questions so it can create wonderful homes that leave a positive legacy for generations to come.

We hope that this report makes a valuable contribution to the debate concerning the future of homebuilding, the need for market transformation and for the industry to deliver long-term value for its stakeholders.

Robert Napier
Chairman
Homes &
Communities Agency

Julie Hirigoyen
UK Head of Sustainability
JLL

Paul King
Chief Executive
UK Green
Building Council



Memorable Milestones reached in 10 years

The NextGeneration benchmark has evolved significantly in the decade since the first assessment. In particular, the criteria have been regularly updated and refined in response to feedback, new legislation and changes to policy, as well as emerging frameworks and standards. More importantly, our understanding of the sector's contribution to sustainable development and how to measure progress towards this goal has become increasingly sophisticated and the benchmark has evolved to reflect this. Here we offer insights on the story of the benchmark and memorable milestones achieved so far.



"Emerging building regulations, supported by standards and increasing interest from investors has forced the sector to reconsider engrained and unsustainable philosophies and to recognise the benefits to the business of engagement."

Nigel Smith, Research & Sustainability Director, Redrow

2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014



- A major investor in the sector, Insight Investment (part of Bank of Scotland), joins forces with WWF-UK to assess the sustainability of the UK's publicly listed homebuilders
- Twin objectives: to understand investment risk and support WWF-UK's "One Million Sustainable Homes" campaign
- Upstream Sustainability Services, now part of JLL, appointed to perform the analysis

- NextGeneration officially launched to build on previous assessments
- Set up as an industry-driven initiative, bringing together homebuilders with key players from the private, public and third sectors
- Upstream Sustainability Services appointed to run the benchmark, overseen by an Executive Committee including WWF-UK, Insight Investment and The Housing Corporation

- First NextGeneration benchmark results launched by the then Housing Minister, Yvette Cooper
- The Berkeley Group led with over 70%
- With an average score of only 38%, the sector as a whole fails to grasp the commercial implications of sustainability

- NextGeneration takes an in-depth look at the sector's response to climate change, in light of the Government's goal to reduce carbon emissions by 80% by 2050
- The Berkeley Group leads with over 85% but the sector as a whole is grappling with the complexities of climate change
- Results launched by Iain Wright, then Parliamentary Under-Secretary of State for Communities and Local Government

- About 10% of NextGeneration criteria updated to reflect evolving market and regulatory forces
- Sir Bob Kerslake (the then Chief Executive, Homes and Communities Agency) delivers the keynote speech at the results launch
- The Homes and Communities Agency joins the Executive Committee

- NextGeneration takes an in-depth look at the sector's progress in delivering sustainable communities – a pivotal moment for defining and measuring the sector's overall sustainability
- The Berkeley Group (85%), Crest Nicholson (78%) and Miller Homes (69%) all emerge as leaders
- Andrew Stunell MP, then Parliamentary Under-Secretary of State for Communities and Local Government, launches the results

- NextGeneration expands to 130 criteria, spanning social, environmental and economic issues drawn from the thematic benchmarks of 2008 and 2010
- The criteria are fixed for several years to allow for tracking of trends and targeting of improvements
- In 2013 scores reach an all-time high, with Berkeley Homes exceeding 90%, highlighting the need to re-base the criteria in 2014

- Over 20 new criteria added to challenge those companies consistently leading the benchmark
- Discussions commence on how NextGeneration should evolve to meet the sector's needs over the next 10 years
- The UK-GBC joins the Executive Committee
- Results launched by Stephen Williams MP, Minister for Communities and Local Government

10 NextGeneration FACTS

2006

NextGeneration launched to build on the success of previous benchmarking exercises undertaken by Insight Investment and WWF-UK in 2004 & 2005

£23bn
TOTAL TURNOVER
of companies benchmarked



3 **ASSESSMENT CATEGORIES:**
Governance, strategy & risk management: 30%
Impact on the environment: 40%
Impact on society and economy: 30%

2 **ASSESSMENT
PHASES**

PHASE 1: Publicly available information

PHASE 2: Members may submit further information

75 000

NEW HOMES COVERED

which equates to 55% of all new homes built per annum

BENCHMARKED COMPANIES
DIRECTLY EMPLOY

20 000
PEOPLE

130
CRITERIA
ASSESSED

1 Annual sustainability
benchmark of private
sector homebuilders

25 largest private sector homebuilders
benchmarked on their sustainability
performance



2004

Then & NOW

2014

NextGeneration helps its members
fast forward, pushing ahead of the sector

47%

Average member
score

75%

companies that disclose how they identify
and manage non-financial risks

FEW

Governance & risk
management

ALL

members who disclose how they
manage non-financial riskscompanies that had a waste management
strategy in place across all sites

2

Operational waste

11%

waste reduction between 2013 and
2014 for member companiescompanies that publicly reported their
SAP ratings. Average SAP rating is 52

3

SAP ratings

MOST

members who publicly report their SAP
ratings. Average SAP rating is 78companies that committed to
purchasing timber from certified sources

FEW

Timber

ALL

members who have a policy to procure
timber with Chain of Custody certificationcompanies that disclose H&S
performance data

FEW

Health &
Safety

350

average Accident Incidence Rate (AIR)
of NextGeneration members. The Home
Builders Federation average AIR is 493companies that disclose information on
training or employment schemes

FEW

Job creation

10%

percentage of member's workforce
that is enrolled on industry training
programmescompanies that assess how their developments
contribute to the quality of life of residents

1

Quality of life

71%

percentage of members that adopt
Building for Life principles, aimed at
creating good places to livecompanies that publicly disclose their
Considerate Constructors Scheme (CCS) score

1

Considerate Constructors
Scheme (CCS)

ALL

members that disclose their CCS
scores.companies that sought external assurance for
selected issues of their reported content

2

Assurance

86%

percentage of members that gained
external assurance for one or more
sustainability issues. One company achieved
AA1000 limited assurance of all its datacompanies that could provide examples
of initiatives to reduce car dependency

2

Transport

55%

member's developments that
have secure cycle storagecompanies that disclose examples of
on-site renewable energy

3

Microgeneration

42%

percentage of member's developments that
generate renewable energy, have district
heating systems or combined heat and power

Policy Context

Housing is pivotal to achieving a sustainable future for the UK and in bringing to life the Government's vision of what a sustainable future might look like.

Since 2004, over 1.7 million homes have been built in the UK. How new homes are built can therefore significantly contribute to meeting many of the UK Government's objectives such as low carbon, zero waste, enhancing nature, improving wellbeing and fostering successful communities.

National Building Regulations have become the main instrument for raising the sustainability performance of new homes, especially water and energy efficiency.

"NextGeneration provides a good framework to analyse the gaps in our work and identify areas that could be improved on and strengthened. In this way the benchmark has helped to continually drive forward our approach to sustainability and cemented our leadership within the sector."

Chris Tinker, Executive Board Director and Chairman of Regeneration, Crest Nicholson



- UK Government planning policy outlines plans to deliver sustainable development through the planning system

- Energy Performance Certificates (EPCs) introduced as part of Home Information Packs (HIPs)

- UK Government plans to raise landfill tax by £8/tonne/year

- The Global Reporting Initiative creates guidelines to help standardise sustainability reporting in real estate

- Quoted UK companies are legally obligated to report their annual greenhouse gas (GHG) emissions in their annual reports
- UK Government announces its intention to wind down the Code for Sustainable Homes, incorporating its key aspects into Building Regulations, under The Housing Standards Review
- The Farrell Review calls for a new proactive approach to the planning system: anticipating needs and opportunities and looking at places in their entirety

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

- Sustainable Buildings Task Group recommends a single national non-statutory Code for Sustainable Buildings
- WWF-UK research reveals colossal environmental impacts of residential development
- UK Government permits changes to Building Regulations to facilitate sustainable development

- UK Government sets target that all new homes will be 'zero carbon' from 2016, with interim targets in 2010 & 2013
- The Code for Sustainable Homes (CfSH) is launched

- The UK Government's legally-binding carbon emissions targets come into force

- Changes to Part L of the Building Regulations deliver a 25% improvement in the energy/carbon performance of new homes. Changes to Part G introduce a maximum daily water usage of 125 litres per person
- The Carbon Reduction Commitment, Feed-in Tariffs (FITs) and the Renewable Heat Incentive (RHI) come into force

- National Planning Policy Framework includes presumption in favour of sustainable development
- European Union consider the economic and business opportunities for the transition to a resource-efficient and ultimately regenerative circular economy

- UK Government announces draft zero carbon home standard
- UK Government proposes new legislation via the Infrastructure Bill to enable the Allowable Solutions mechanism
- 2013 Changes to Part L of the Building Regulations came into force, meaning a 6% cut in carbon emissions for new build homes

Photo courtesy of Crest Nicholson

2014 Results

COMPANY RANKINGS

NextGeneration members continue to lead the sector, breaking new ground. With a score of 87%, The Berkeley Group leads the 2014 benchmark by 5%. Crest Nicholson are in second place and Barratt Developments a close third. With an average score of 75%, NextGeneration members clearly benefit from participating in the initiative and dominate the leadership table by a clear margin.

AWARD-WINNERS

This year, for the first time, we've introduced awards to recognise those companies who have cemented their place as sustainability leaders within the sector. Seven companies received awards, scoring above 60% (bronze award), 70% (silver award) or 80% (gold award) in the benchmark.

STRATEGY & GOVERNANCE

Members scored over 80% for this category, demonstrating strong leadership and governance, with a long term focus. The biggest opportunities for improvement in this area are in assurance and innovation.

ENVIRONMENT

Members typically scored almost 70% of the marks for this category. The data reveals effective site management, enhancements in ecology and improvements in operational energy and carbon.

SOCIETY & ECONOMY

Members achieved 74% of the marks for this category. Health and safety management, customer satisfaction and employment initiatives all emerge as key strengths. In contrast more could be done to improve the quality, security and adaptability of new homes – areas likely to be required by national Building Regulations in the near future.

DISCLOSURE & TRANSPARENCY

With a Phase 1 score of 69%, The Berkeley Group communicates more transparently with its stakeholders than other homebuilders. Members typically bolstered their scores by around 25% - and in one case almost 40% - by providing additional evidence to supplement information in the public domain. This means even the leaders could be more transparent.

"We are delighted to see the industry adopt the NextGeneration sustainability benchmark and the significant advancements made by the members over the last 10 years."

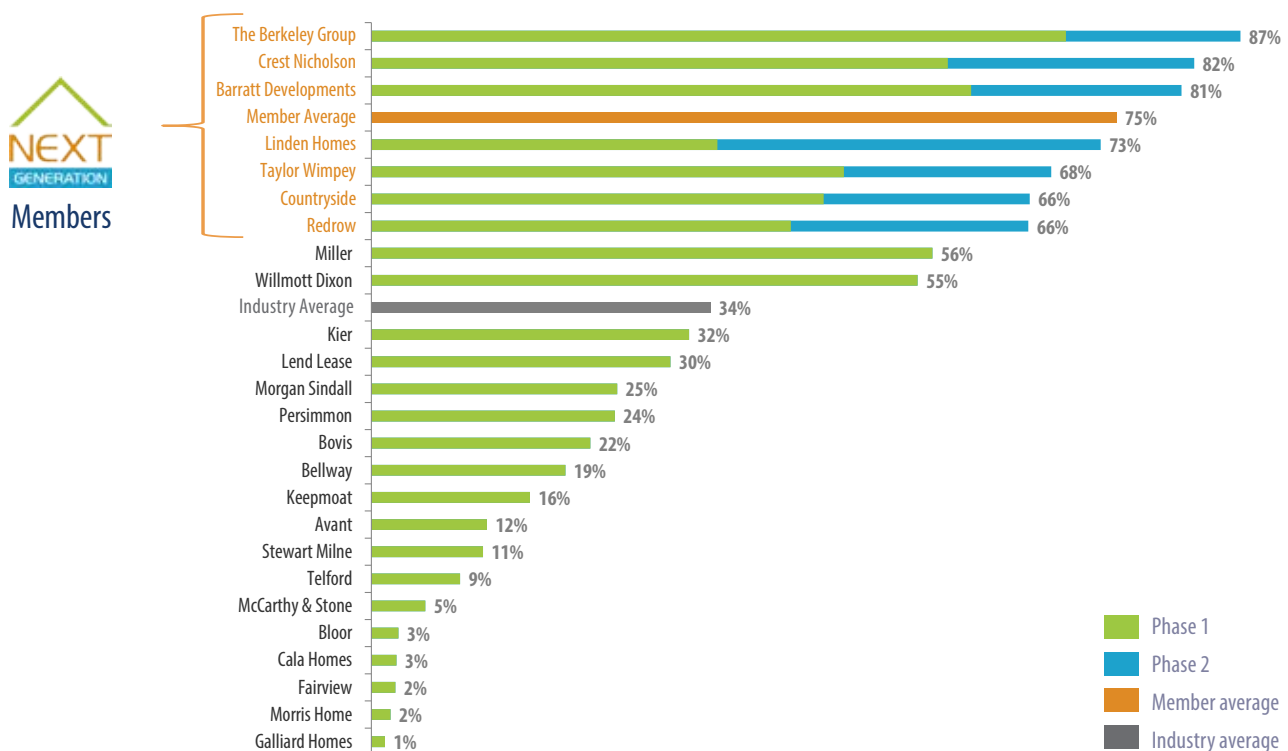
Robert Napier, Chairman, Homes & Communities Agency

Company RANKINGS

Three companies clearly lead the 2014 benchmark with scores over 80%. These are The Berkeley Group, Crest Nicholson and Barratt Developments. The Berkeley Group and Crest Nicholson have maintained their positions in first and second place when assessed against the substantially revised criteria put in place this year.

Following behind the three benchmark leaders lies the next tier of solid performers. These are Linden Homes, Taylor Wimpey, Countryside and Redrow. This illustrates that NextGeneration members are a step ahead of current standards and have embraced the learning opportunities necessary for delivering sustainable homes on a larger scale.

Figure 1: 2014 Results



While every homebuilder has moved on to a degree, the sector appears to have polarised with leaders now pushing ahead and a second tier of NextGeneration members who are moving forward, leaving a widening gap at the tail.

In practice, there are a number of factors, beyond membership, that will affect a company's ability to perform well against the NextGeneration criteria. For example, listed companies continue to dominate the top of the benchmark. However, non-listed companies like Countryside demonstrate that a company's ownership and legal status, and the additional requirements

placed on listed companies, are not the sole determinants for a company's commitment to sustainability.

The 2014 results reveal that a large number of companies are failing to adequately communicate their sustainability performance to their stakeholders. This does not necessarily mean that they are not addressing sustainability effectively; it simply means that they are not disclosing information on how they are managing it and we would encourage these companies to engage with initiatives such as NextGeneration.

AWARDS

AWARD WINNERS

This year, for the first time, we have introduced Gold, Silver and Bronze awards. These accolades are intended to recognise and reward those companies who have firmly cemented their place as sector sustainability leaders.

Photo courtesy of Countryside



Grabbing Gold 80%+

To achieve gold, companies must score over 80%. Gold winners have moved along a sustainability journey, starting with complying and de-risking and ending with measurable performance improvements, commercial benefits and reputational gains.



Congratulations to The Berkeley Group who once again lead the field this year. Since implementing Vision2020, The Berkeley Group has put in place actions to

incorporate sustainability into each part of its business to ensure that it delivers high quality, sustainable homes. The Berkeley Group achieved the highest score in nine of the fifteen areas of the benchmark. The Group's continued commitment to place making and sustainable communities was demonstrated by the recent release of its Creating Successful Places toolkit.



Crest Nicholson recently used social trends and stakeholder views to shape its priorities for achieving a sustainable future. It excels in areas like community and customer engagement and ecology where it scored over 90%. The company should also be applauded for its ground-breaking research, such as the 'Garden Village' principles with the Town and Country Planning Association (TCPA) and its AIMC4 project pioneering the volume production of low carbon homes for the future.



BARRATT
DEVELOPMENTS PLC

This year Barratt Developments transformed its approach to sustainability reporting. It is also the first homebuilder to achieve AA1000 limited assurance for its sustainability data.

Its investment in research into low carbon home design is commendable. Partnership working in the AIMC4 project (along with Crest Nicholson) and delivery of its Hanham Hall, Tattenhoe Park and Scotswood developments have illustrated that Barratt Developments is ahead of current standards and is poised to deliver sustainable homes on a larger scale.



Securing Silver 70-80%

To achieve silver, companies must score over 70%. Silver winners typically have comprehensive strategies in place but have yet to realise the operational and commercial benefits of implementing these.



Linden Homes is the only company to secure a silver award. Its effective engagement with staff, and strong governance at executive and middle management levels have helped deliver cost savings through sustainability. It collects data for an increasing number of social indicators which is driving forward performance in design and place making. Its EMS is certified to ISO 14001 for all its operations.



Breaking Bronze 60-70%

To achieve bronze, companies must score over 60%. Bronze winners typically have strategies in place to address a range of sustainability issues, often excelling in one area.



Taylor Wimpey is measuring its ecological impact with 8 standardised biodiversity KPIs. Measuring ecological impact is the newest addition to Taylor Wimpey's EMS which has this year delivered a 14% reduction in operational energy. Its ReUse initiative connects sites that need aggregate for infill or landscaping with sites which have excess excavation waste. Also, any material that cannot be used on a Taylor Wimpey site is made available for third party use.



Countryside puts design and place making at the heart of its ethos. It is the only homebuilder to win the Sterling Prize for Architecture for its Accordia development. Its Horsted Park development also won a Housing Design Award in 2014. 64% of its homes meet the Lifetime Homes Standard and 89% of its developments meet the Secured by Design standard.

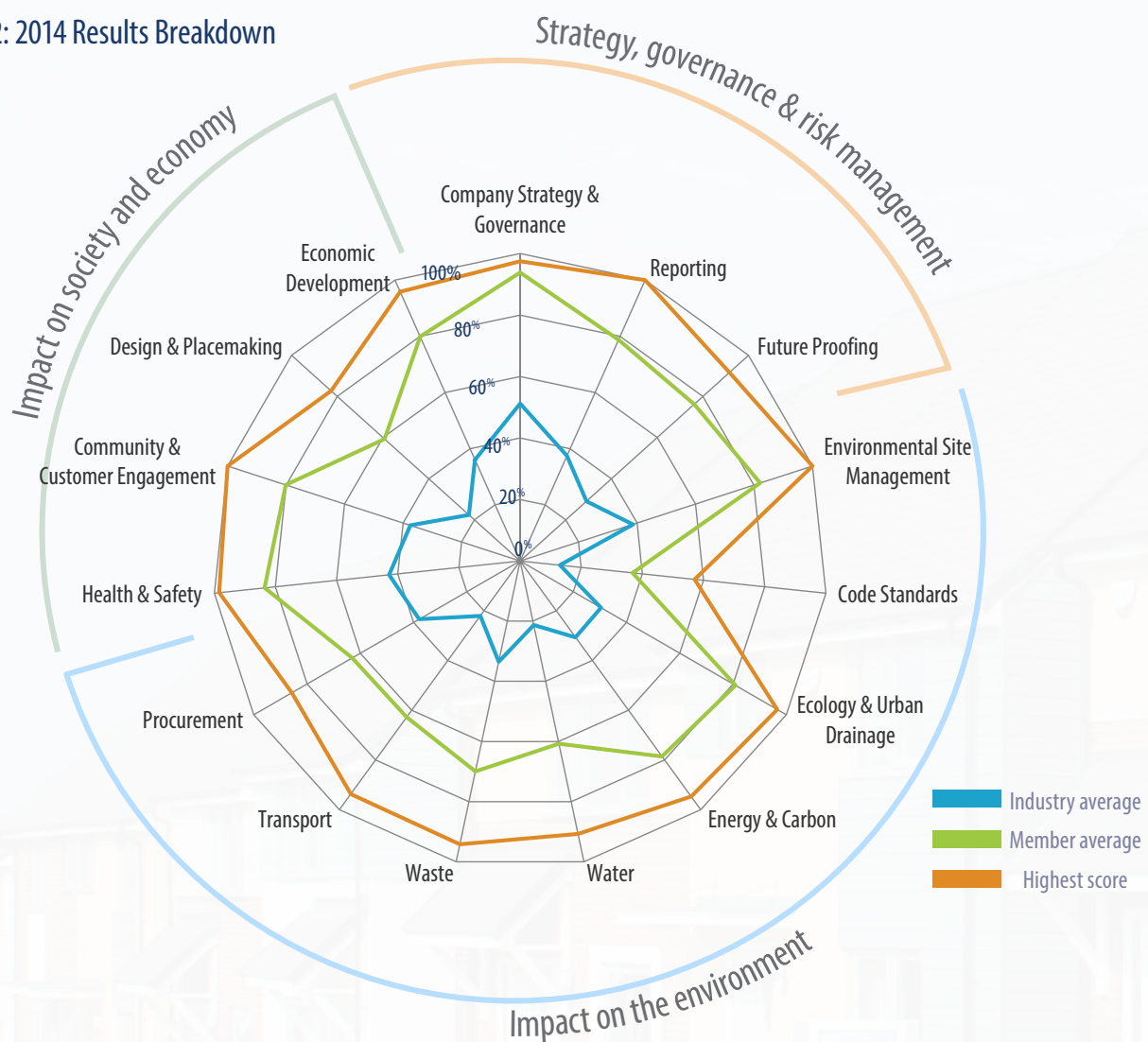


Redrow achieved the highest score (95%) in the energy and carbon section of the benchmark. It also has an ambitious target to reduce GHG emissions by a further 10%, after already reducing them by 36% in 2014. An innovative water source heat pump in the Thames is also used to provide low carbon community heating for residents of its Kingston Heights development – the first of its kind in the UK.

Detailed RESULTS

Figure 2 illustrates the highest score, member average and the industry average against all sub-sections within the benchmark. Performance within some of the individual sub-sections is explored in more detail in the remainder of the report.

Figure 2: 2014 Results Breakdown



Strengths

- Company Strategy & Governance
- Environmental Management
- Ecology & Urban Drainage
- Health & Safety
- Community & Customer Engagement
- Economic Development



Weaknesses

- Future Proofing (e.g. Research, Innovation)
- Transport Connections
- Water (Offices, Sites & Developments)
- Design & Placemaking
- Construction Waste

Section RESULTS

STRATEGY, GOVERNANCE & RISK MANAGEMENT

This was once again the highest scoring section in the benchmark. This suggests that the sustainability strategies and reports produced by homebuilders are becoming increasingly sophisticated and that some form of sustainability strategy is commonplace, although not universal.

Encouragingly, at least seven companies are on the path to Integrated Reporting by including substantial information on their sustainability performance in their Annual Reports and Accounts. However, no homebuilder has formally adopted the International Integrated Reporting Council's (IIRC's) guidelines or can demonstrate how its business model creates shared value.

The value of full external assurance to AA1000¹, or an equivalent standard, remains uncertain for most homebuilders. Even the leaders tend to assure specific elements and prefer lighter-touch approaches such as advisor statements. Significantly, in 2014, Barratt Developments became the first homebuilder to get all of its sustainability data assured to AA1000, setting an example for others to consider following.

¹ <http://www.accountability.org/standards>

CASE STUDIES



Leading Strategies

In 2014 **The Berkeley Group** launched 'Our Vision'. Its goal is to be a world class business generating long-term value by creating successful, sustainable places where people aspire to live. It has 16 stretching commitments across five areas of focus which it will work towards between now and 2016.

Crest Nicholson's strategy draws on social trends and stakeholder views to shape its priorities for achieving a sustainable future. In consultation with key stakeholders Crest Nicholson developed a ten year sustainable business framework which recognises and seeks to work within environmental limits, aims to leverage performance through partnerships and places innovation at the centre of its culture.

Photo courtesy of Barratt Developments

Section RESULTS

ENVIRONMENT

Although this is the lowest scoring section of the benchmark, it is not all bad news; on the contrary, this section also contains some of the highest scores and includes some of the toughest criteria. For example, more companies than ever before have an Environmental Management System, confirming the sector's robust approach to managing environmental risks.

Scores for criteria linked to sustainable building standards remain weak, and have consistently been the lowest scoring aspect of the benchmark for the last 10 years. In reality, the number of new homes built to the CfSH, especially the higher levels, has been driven by public sector and local authority requirements, rather than mainstream consumer demand.

Change is afoot. In 2014 the CfSH was removed from Government policy as a result of the Housing Standards Review. In future key aspects of the CfSH will be incorporated into Building Regulations. This presents challenges, as well as opportunities for the sector to take the lead on issues that fall outside Building Regulations, such as the impact of materials used in new homes – a development point highlighted by the 2014 results and a focus area of EU legislation.

The CRC Energy Efficiency Scheme and mandatory carbon reporting for listed companies seem to be taking affect: this year more companies disclosed trends in energy use and carbon emissions for their construction sites and developments. And in many cases these trends are moving in the right direction. Sadly, the same progress cannot be seen in other impacts like water, with the majority of companies still struggling to provide accurate data, particularly for construction sites.

As we shift towards a low carbon economy, planners and consumers alike will increasingly expect new homes to be highly connected and accessible by low carbon transport options. Although transport emerges as an improvement point, the overall picture is positive. Homebuilders are starting to consider both where their developments are located and how they can improve the connectivity of new homes. For example, 85% of NextGeneration members' developments are within 1km of a public transport connection and 55% have secure cycle storage.

CASE STUDY



Barratt Developments: Tattenhoe Park

Barratt Developments used learnings from its large scale zero carbon development at Hanham Hall and the AIMC4 project to drive down the designed energy demand at Tattenhoe Park. Tattenhoe Park is one of the first in the country to be constructed to the proposed Fabric Energy Efficiency Standard of the Zero Carbon Homes definition.

Amongst other design changes, Barratt Developments tested the use of Thermally Broken lintels to successfully reduce heat loss and improve SAP scores. These materials will now be included as part of the company's standard 2013 specification.

CASE STUDY



Crest Nicholson: Bath Riverside

2014 Housing Design Award Winner

Sustainable transport is an essential part of the award-winning Bath Riverside development. A new rapid bus service, a riverside towpath and bridges have been improved to provide safe and tranquil cycle and pedestrian routes.

SOCIETY & ECONOMY

This section picked up the second highest marks this year which is a reflection of improved performance across community and customer engagement and economic development.

For example, it is encouraging to see Barratt Developments engaging with customers on the sustainability of their homes and lifestyles. Focus groups with potential customers were used to better understand how homebuyers view and value sustainability features so that informative marketing materials could be designed to best communicate their value. Similarly, Crest Nicholson's Garden Village research reflects its collaborative approach to place making.

The Berkeley Group lead the sector in this area. It not only helps residents live a sustainable lifestyle, but in 2013 it also commissioned an independent Economic Impact Assessment of its contribution to the UK economy. This study revealed that Berkeley supported approximately 16,000 jobs in the UK during 2012. For every home it builds, it is estimated that 4.5 jobs are created.

This year also saw excellent examples of training schemes being developed. For example, the Taylor Wimpey Sales Academy consists of a unique 6 month training programme that helps staff to become professional sales people. Barratt Developments has also teamed up with Sheffield Hallam University to create the UK's first Residential Development and Construction foundation degree.

In the main, uptake of design frameworks like Building for Life, Secured by Design and Lifetime Homes has improved since 2010, when this data was first measured under the benchmark. Interestingly, of all the frameworks benchmarked, the lowest uptake was for Building for Life ('BFL'). However, with the revision to BFL 12 from BFL 20 and input from the Home Builders Federation ('HBF'), uptake has increased. Most NextGeneration members are now voluntarily adopting Building for Life on all their new developments.

CASE STUDY



Countryside: Horsted Park, Kent

2014 Housing Design Award winner. Horsted Park, Kent, sets the standard for creating a place of character and quality. The external design ensures that the homes are conceived as a series of "farmsteads". A series of squares and courtyards with dwellings arranged around them to provide shelter, open spaces and a comfortable, domestic environment, where people feel at home.

CASE STUDY



The Berkeley Group: Creating great places

In February 2014 The Berkeley Group published its 'Creating Successful Places: How to do it' toolkit. This offers a structured approach to place making and a way to test the social impact of the places homebuilders create. The Berkeley Group has made it freely available to help others create successful places that people are proud of.



'The evolving criteria have helped drive continuous improvements over the years. The focus on performance in 2014 is a welcome improvement, and key to driving genuine, demonstrable transformation in future.'

**Tom Keevil, Group General Counsel & Company Secretary,
Barratt Developments**

Photo courtesy of Barratt Developments

Disclosure & Transparency

As for any other sector, the lifeblood of the housing industry is finance. At a time when finance can be difficult to secure, it is particularly important for investors and shareholders in listed companies to understand their sustainability performance and how a sustainable approach can deliver value.

At the same time, the introduction of mandatory carbon reporting means the listed sector is legally obligated to meet increasingly challenging reporting requirements. In light of these trends, it is encouraging to see listed companies like Barratt Developments strengthening its public report this year (see Case Study). Despite mounting pressures, some listed firms still trail behind the rest of the sector in terms of their public sustainability reporting.

It is no surprise that in the main, non-listed companies are less transparent than their listed counterparts. While less obligated to report to investors than listed homebuilders, disclosing sustainability information does offer strong benefits. Encouragingly, some privately owned companies feature in the top ten this year and have also historically performed well in the benchmark e.g. Countryside, Miller Homes and Willmott Dixon.

Unfortunately these are the exceptions. With an average score of just 27% for transparency and reporting, the industry as a whole needs to be more transparent in its reporting. For this reason, we would encourage any developer, listed or non-listed, to engage with initiatives like NextGeneration and learn from the sector leaders in reporting.

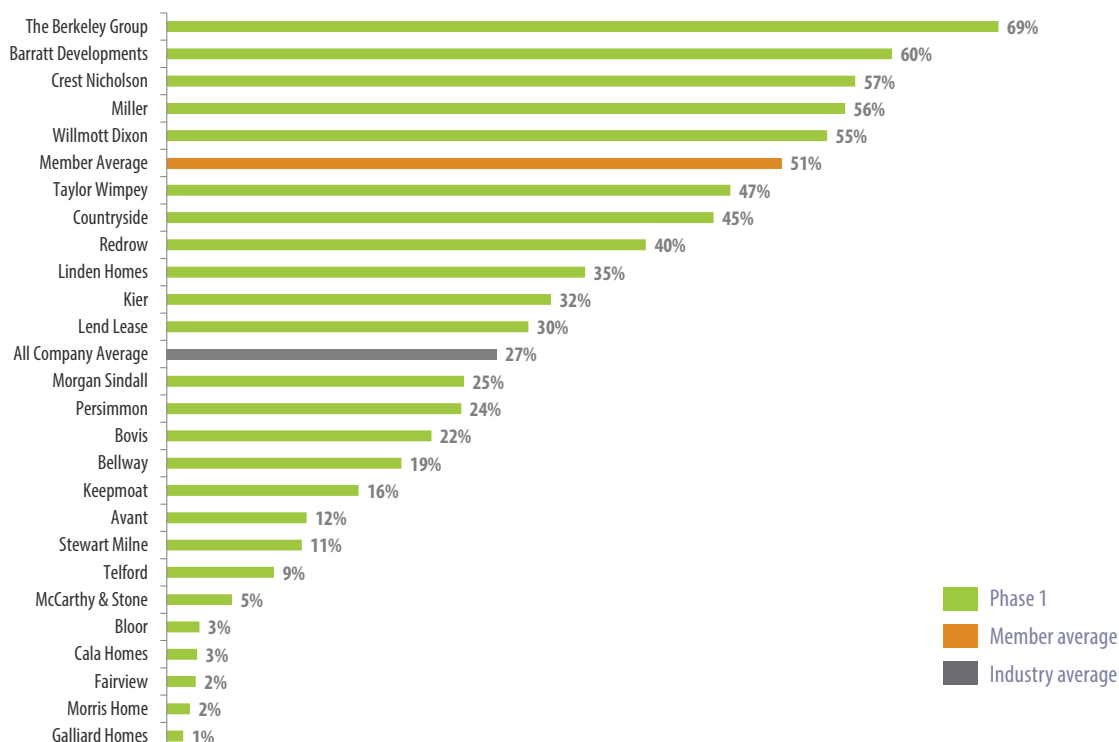
CASE STUDY



Barratt Developments

Barratt Developments' disclosure of sustainability issues has dramatically improved, drawing on a clear process of materiality and a commercially minded approach to sustainability risks and opportunities. It now integrates this information alongside its financial information in its annual report. Barratt Developments is the only UK national housebuilder to have AA1000 limited assurance of its sustainability reporting.

Figure 3: 2014 Phase 1 Scores



Inspiration & Best Practice

The examples in this section show how NextGeneration member companies are already delivering sustainable homes. This is a great opportunity to share best practice and learning where it exists and encourage more to act by offering a positive vision for the future.

Barratt Developments: Hanham Hall

With 185 new zero carbon homes, Hanham Hall is billed as England's first large-scale zero carbon development and won the 2014 Richard Feilden Design Award. To create a cohesive community, the developers transformed the Grade II listed Hanham Hall into a community centre, business space, crèche and café. A Community Interest Company has been set up to manage the Hall and open spaces such as the orchards and allotments. A novel layout takes advantage of natural daylight while shading louvres prevent overheating in summer. Residents report the design contributes to lower energy bills, more daylight and a greater neighbourliness.

The Berkeley Group: Creating great places

In February 2014, The Berkeley Group published its 'Creating Successful Places: How to do it' tool kit. This offers a structured approach to place making and a way to test the social impact of the places homebuilders create. It tries to encourage a shift in mind-set away from thinking mostly about physical development to thinking more broadly and creatively about what makes a place somewhere great to live. The Berkeley Group has made it freely available to help other developers create successful places that people are proud of.

Redrow: Thames heat

At Kingston upon Thames, Redrow is using a heat-pump system to draw heat from the River Thames for an innovative district-heating system in a dense urban environment. The river source heat pump uses a fish friendly system to extract water from two metres below the surface of the Thames where the water stays at a consistent temperature all year round. It's the first of its kind in the UK, heating 137 apartments and a 142 room hotel. Heating costs for the apartments are expected to be 20% less than would otherwise be the case, with carbon emissions reduced by 500 tonnes a year.

Taylor Wimpey: ReUse

Taylor Wimpey's ReUse initiative makes use of excess soil and aggregate, significantly reducing its landfill costs. It enables site managers with excess soil from excavation to find other Taylor Wimpey sites which require aggregate for infill and landscaping. In cases where no appropriate Taylor Wimpey site is identified, the tool identifies potential third party sites, exhausting all viable options before waste is sent to landfill.

Crest Nicholson: Community Interest Company

At Monksmoor Park Crest Nicholson has founded a Community Interest Company (CIC) and transferred the freehold of community facilities and infrastructure into its trust. The CIC is owned by residents, shopkeepers and the Registered Provider (or housing association). This means everyone has a vested interest in the upkeep of the site and the success of the community. Crest Nicholson hopes this approach will galvanise civic responsibility and interest so that Monksmoor Park becomes and remains a place where the residents want to live, work and socialise.

Countryside: Leaders in design

Countryside put people at the centre of the design. It is the only homebuilder to win the Sterling Prize for Architecture for its Accordia development. Its Horsted Park development won a housing design award in 2014 and since 2000 it has received 294 awards for design and sustainability. 64% of its homes meet the Lifetime Homes Standard and 89% of its developments meet the Secured by Design standard.

Linden Homes: Less waste to landfill

Around 6,500 m² of the Dolcoath site in Cornwall was infested with invasive Japanese Knot Weed, now resilient to pesticides. To avoid disposal costs of £14 million, Linden Homes brought to bear its ISO14001 accredited EMS and developed a way of separating and decontaminating the soil so it could be reused on site. Over a five month period all Knotweed was removed and the excavated soil was used for infill.



"NextGeneration has enabled us to compare our work against our peers and has certainly influenced the direction of travel of its membership and the wider industry."

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

Photo courtesy of Linden Homes



"NextGeneration's main strengths are that it is specific to house builders, it is rigorous, it evolves and has credibility."

Ian Heasman, Director of Sustainability, Taylor Wimpey

Photo courtesy of Taylor Wimpey

What's Next for NextGeneration

It is now 10 years since the first sustainability benchmark of the homebuilding sector. This is a watershed moment for NextGeneration; the success of the initiative has always been based upon its continuous evolution in line with political, environmental, social and technological challenges. 2015 is no exception, in the coming year we will be looking to expand the reach of the initiative, increase its impact and ask the all-important question: How can we link performance in the NextGeneration benchmark with long-term value creation?

Sharing the benefits

Every homebuilder has moved on since 2004, although the sector appears to have polarised with leaders now pushing ahead of the rest of the sector. Members of NextGeneration have clearly benefitted from their participation in the initiative and in 2015, NextGeneration will be seeking to broaden the membership and find ways to engage smaller and more specialist homebuilders and the wider homebuilding community. In this way we hope the significant progress that has been made by NextGeneration members can be replicated.

Extending our impact

The homebuilding industry has evolved, with companies that focus on regeneration, volume homebuilders, regional homebuilders and specialist homebuilders all responding to different market demands. Creating a benchmark that is relevant and appropriate for all types of homebuilders is key. In addition, where sustainability was once the sole responsibility of a particular individual or department, we now see sustainability becoming truly embedded in many different organisational functions from land-buyers to construction teams and sales staff. In 2015, NextGeneration will be working hard to ensure that its membership reflects the scope of companies that make-up the homebuilding sector and the range of individuals tasked with implementing practical sustainability initiatives.

Evolving our criteria

Looking back, the benchmark is hardly recognisable since first launched in 2004. It's more rigorous and challenging than ever before and this evolution adds to its credibility. NextGeneration will continue to review its criteria and in 2015, we will be focusing on the way in which sustainability contributes to long-term value creation. Each criterion will be evaluated in relation to its contribution to value for a wide

range of stakeholders – investors, owners, employees, local authorities, communities and residents.

Supporting innovation

Over the years, NextGeneration membership has helped forward-thinking companies gain competitive advantages through sustainability. We will continue to provide an insight into innovative practices and encourage collaborative learning. This includes looking at some emerging and innovative concepts such as Net Positive² and the Circular Economy³, considering what these might mean for the homebuilding industry and supporting pilot projects that continually push the boundaries of sustainability forward.

Raising our profile

As an industry benchmark, NextGeneration has provided a vital tool for homebuilders to assess and compare their performance with one another. We will be exploring ways to communicate with a wider range of audiences, from investors to local authority planners and customers, and using a variety of formats including investor briefings, marketing materials and social media. In this way we hope to create mainstream appeal for the benchmark, develop customer awareness and enable members to capitalise on their participation in the initiative.

Engaging with our stakeholders

NextGeneration's multi-stakeholder approach has been enormously successful. The initial development of the initiative by WWF-UK and Insight Investment, the subsequent involvement of the HCA and more recently the UK-GBC have all been critical to the benchmark's success. Over the next year, we will be actively engaging with a wide range of stakeholders to help shape the initiative's future development.

² A Net Positive approach – is where businesses demonstrate positive environmental or societal impacts in key areas of their operations

³ A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.
<http://www.wrap.org.uk/content/wrap-and-circular-economy>

The next 10 YEARS

Big challenges lie ahead in the next 10 years. To serve homebuilders into the future, the NextGeneration criteria will need to take account of socio-economic, climatic, cultural, political, demographic and technological drivers shaping tomorrow's world. In 2015, NextGeneration will be working in collaboration with a wide range of stakeholders, including the HCA, UK-GBC and its members to explore how these trends will affect the homebuilding sector and how NextGeneration can monitor and support the sector's response to these.

Here we highlight some of the key factors and trends which may shape the design and development of new homes over the next decade. These are the 'ones to watch' as they have the potential to impact on a building's ability to satisfy user needs, cope with changing climatic conditions and survive the evolving expectations of its residents.

Social

"What's next" in housing often focuses on the obvious: supply and price – but we are increasingly recognising that people are integral to shaping the future of our built environment, which in turn greatly affects their physical and mental wellbeing. Looking at places in their entirety, rather than just as individual buildings, will be vital in years to come. Building more and better homes remains essential, but creating better places that people want to live in and that existing communities will embrace is a perpetual ambition. Increasingly, homebuilders will have to:

- Design & locate homes to suit modern wants and needs such as home-working, flexible working cultures, shared spaces, mobility, connectivity and sustainable lifestyles.
- Understand the impact of key demographic and societal trends on housing demand and design and ensure homes are flexible and adaptable to changes in living patterns and household structure. For example, factors like rising house prices and fuel price inflation will continue to affect housing demand and people's ability to pay their bills.
- Design for an aging population – a substantial majority of new households will be over 65 years old, with specific needs and requirements. Integrating community facilities into new developments can foster a sense of community and wellbeing amongst residents.
- Make measurable contributions to society, achieving gains in human health and prosperity. Developers will play an ever-increasing role in providing community facilities, catalysing economic regeneration and creating long-term employment in an area.

Environmental

Current policies centre on strengthening the energy and water efficiency requirements for new homes. In future, other sustainability challenges facing the development industry, such as health, waste and material use are likely to take the political limelight. With growing pressures on resources and the environment, the transition to a low carbon, resource-efficient, net positive and circular economy will look more likely.

- New homes will need to be adaptable to extremes in weather and flooding e.g. hotter summers and wetter winters as a result of climate change.
- Homebuilders must prepare for the challenge of delivering zero carbon homes, which will contribute to national emission reduction targets and help to lower people's fuel bills.

- Expect continuous improvements to the energy efficiency of new buildings and the performance of technological components, such as photovoltaic cells or batteries.
- Developers should consider the effects of an increasingly resource-constrained world. Anticipate price hikes in key natural resources and construction materials and ensure flexibility in the supply chain.
- In the advent of zero carbon homes, developers will need to establish ways to help residents to understand and use new technologies – both to facilitate well-being in the home, but also to reap maximum sustainability benefits and discourage counterproductive retrofitting.
- Developers need to be confident that the homes they are selling meet the stated energy efficiency ratings. This means closing the current performance gap between ‘design performance’ and ‘performance in use’. Without this, consumers may increasingly challenge what they are getting and damage the reputation of the industry.

Economic

The transition to low/zero carbon, zero waste and a focus on well-being outlined above will all fundamentally alter the structure of the economy. In addition, house prices have spiralled out of reach for many, leading to a decline in home ownership after a century of growth and increasing interest in the private rental sector (PRS). The number of people in need of social housing has grown and younger people are increasingly living longer with their parents, particularly in areas of high property prices such as the south-east. These trends have far-reaching economic impacts, such as affecting employers’ ability to attract young workers and achieving economic inclusivity.

- Homebuilders will need to work with councils, private investors and other partners to create innovative new finance and development models designed to unlock and deliver schemes for a wider range of tenures.
- More developers will need to link up with investors looking to generate regular income from privately-rented residential property and deliver affordable housing which encourages inclusivity within communities.
- An increasing number of homebuilders will play a role in managing sites after they are built and will therefore also have an expanded role in a community’s environmental, social and economic success.
- More techniques for incorporating sustainability factors into investment decisions will emerge, all with a common goal of improving our understanding of social, natural, human, and economic value.

- Tools such as green bonds and investment benchmarks, which help investors allocate funds to investments which meet certain ethical or sustainability criteria, will become increasingly common.

Technological

The ways in which technology can be applied at the building and city-level are endless, with the potential to revolutionise every aspect of our lives. Several cities across the UK are already trialling technologies to make their communities more sustainable by monitoring cycling lanes, street lighting, energy used in buildings and much more. Future homes and homebuilders will need to connect with and benefit from these initiatives, whilst also offering consumers choice in terms of which technology is used within their homes and how it is used.

- Innovation within the sector will increasingly need to keep pace with technological change.
- The benefits of innovation through collaborative research will be something that homebuilders will increasingly need to understand and report.
- Intelligent metering devices are being rolled out already and will enable the development of a smart grid which can manage demand and avoid the risk of blackouts.
- Smartphone apps will increasingly control a wide range of devices – alarm systems, thermostats, light bulbs, home appliances, wall plugs and garage doors – and will provide feedback on health-related aspects of the indoor environment such as daylight, ventilation, humidity and noise.
- Digital monitors and sensors will increasingly enable patients to receive medical care at home, saving healthcare costs whilst also allowing people to live more independently.
- ‘Big data’ captured from more connected devices and people will provide a wealth of information from which to develop competitive edge and additional revenue streams.



“The evolution of the criteria over the past ten years has helped to broaden the sector’s understanding of sustainability and has challenged members to improve their performance.”

Lorraine Fursland, Head of Sustainability, The Berkeley Group

Recommendations

Government policy has had a powerful influence on sustainable development within the homebuilding sector over the last ten years and will continue to do so. However, for homebuilders who are pro-actively taking a lead, we make the following recommendations, aimed at accelerating the shift towards a more sustainable homebuilding sector.

- Address areas of weaker performance in the NextGeneration benchmark including:
 - On-site water efficiency
 - Take-up of design standards
 - Data verification and assurance
 - Accurately measuring operational water and waste
 - Investment in research, innovation and future proofing
 - Connecting new homes with low carbon forms of transport
 - The embodied energy and environmental impacts of materials used to build new homes
- Anticipate the regulatory shift in emphasis from 'design performance' to 'performance in use' and take steps to meet customers' expectations.
- Better embed sustainability benefits e.g. lower energy bills in marketing to raise awareness and increase demand for new efficient and sustainable homes.
- Invest in pilot projects and research initiatives that continue to push the boundaries and innovate to achieve market transformation.
- Work towards integrated reporting, incorporating sustainability performance into financial reporting and making the link between sustainability and value, building on best practice in the wider property and construction sector.
- Use the NextGeneration benchmark to raise awareness of sustainability performance with investors, planners, employees and customers.
- Work with NextGeneration to help shape the development of the benchmark and share insights into future trends, opportunities and threats/risks.



"NextGeneration is instrumental in driving sustainability into the residential sector and I'm delighted to formally endorse it on behalf of the UK-GBC."

Paul King, Chief Executive, UK Green Building Council

Photo courtesy of The Berkeley Group



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