2019 NEXTGENERATION SUSTAINABILITY BENCHMARK REPORT

OUR CLIMATE IS CHANGING

What are the drivers for homebuilders in a warming world?

THE UK HOMEBUILDING SECTOR'S CONTRIBUTION TO A SUSTAINABLE FUTURE

NEXT GENERATION™

Homes England

UK GBC

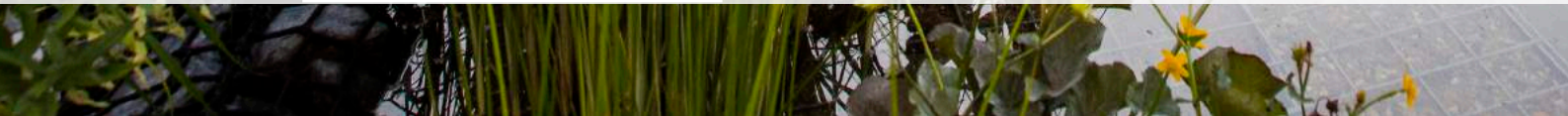
JLL

PHOTO COURTESY OF

TELFORD HOMES

NEW GARDEN QUARTER, STRATFORD

Contents



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

NextGeneration enables homebuilders, Government, registered providers, investors, employees and the public to understand the sustainability of homebuilders' operations and the new homes they build.

NextGeneration works by inspiring companies to report against a range of criteria - developed in collaboration with the industry for over 15 years - relating to high-quality sustainable homebuilding. The NextGeneration benchmark criteria cover the following 15 areas: company strategy and governance, reporting, future proofing, environmental site management, minimum sustainability standards, ecology and urban drainage, energy and carbon, water, waste, transport, procurement, health and safety, community and customer engagement, design and placemaking and economic development.

These focus areas are weighted based on their overall impact in terms of industry best practice and future trends, with design & placemaking currently forming the largest weighted section of the benchmark. The criteria are re-evaluated and updated on a three-year rolling period to remain pertinent to the ever-evolving sustainability sector, but to still allow homebuilders to benchmark their progress over time.

Phase 1 of the benchmark is based on publicly available information and it has been a key driver of greater transparency and accountability within the sector. Phase 2 of the benchmark allows members of NextGeneration to present any further evidence of their sustainability performance that is not in the public domain.

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

NextGeneration member companies benefit from:

- Detailed insight into market trends.
- A clear understanding of industry best practice.
- Enhanced assessments and bespoke reports to help improve their performance.
- Networking and knowledge-sharing events, to aid collaboration and create solutions.
- The opportunity to steer the benchmark and develop the benchmarking criteria.
- Demonstrating their commitment to sustainability to stakeholders, including local authorities and Homes England.

Our members:

BARRATT DEVELOPMENTS PLC

lendlease

REDROW A BETTER WAY TO LIVE

Taylor Wimpey

telfordhomes A TRAMMELL CROW COMPANY DEVELOPER

NEXTGENERATION FACTS

£33bn
annual turnover of benchmarked companies

114,117
new homes completed by benchmark companies, equalling 56% of UK homes completed

63,692
people directly employed by benchmarked companies

80
criteria assessed

15
sustainability focus areas assessed

15 years
of benchmarking

FOREWORD

Climate change is, quite literally, the hot topic of the moment, not just in the UK but across the globe. Over 7.6 million people participated in September's worldwide Climate Strike, including 350,000 in the UK, to highlight the importance of climate change and demand action.[1,2] However, climate change is not a new issue for the homebuilding sector. In fact in the 2008 NextGeneration report it was stated as being "the most important individual sustainability issue developers need to address".[3] Despite this, over the past decade the impacts of extreme weather events (e.g. droughts and floods) caused by climate change are increasingly being felt globally and locally. The summer of 2018 was the hottest ever recorded in England[4] and caused an additional 625 heatwave-related deaths.[5] There is now an overwhelming impetus to tackle the global climate crisis, with rapid changes to the financial and regulatory environment already happening.

Changing climate

As both investors and consumers take a firmer stance on the climate emergency, forward thinking homebuilders are addressing the issue head on. By taking a proactive approach to mitigating against the risks climate change poses and by anticipating future policy changes, homebuilders can place themselves in a strong position to succeed during this tumultuous time.

This report highlights the key investor (pg 3) and regulatory drivers (pg 4) that homebuilders need to consider "to beat the heat" and identifies key technologies that support the decarbonisation of homes from the outset (pg 6).

Analysis and awards

Detailed results and analysis of the benchmark can be found on pages 8 and 9, highlighting areas of strength as well as opportunities for improvement. The awards section on pages 10 to 12 recognises the ongoing efforts of industry leaders to promote sustainability in homebuilding.

Paul McGivern
Modern Methods of Construction (Specialist)
Homes England

John Alker
Director of Policy and Places
UK Green Building Council

Sophie Walker
UK Head of Sustainability
Building a Better Tomorrow
JLL

PHOTO COURTESY OF
BARRATT DEVELOPMENTS
RIVERSIDE QUARTER, ABERDEEN

DRIVEN BY INVESTORS

Investors care about climate change. In June of this year, 477 investors from around the world, representing over £27 trillion in assets, called for governments to act to help achieve the goals of the Paris Agreement.[6] Furthermore, investors are acting: in 2018 The Forum for Sustainable and Responsible Investment reported that investment in ESG has been growing rapidly since 2016 and climate change is the top ESG issue considered by money managers.[7] According to the London Stock Exchange, a record number of exchange traded funds with environmental or social goals have listed on the LSE during the year to date.[8] Climate-related risks alongside consumer demand and more stringent legislation are driving these changes and homebuilders need to respond robustly to remain an attractive prospect to investors. Details of these drivers are provided below alongside examples of the specific requirements by major real estate investors.

New risk on the block

Policy changes, supply chain disruption, overheating, flooding, reputational damage… there are numerous climate-related risks that directly affect homebuilding and they are being taken seriously by investors. The Bank of England predicts up to £16 trillion of assets could be lost if the climate emergency is not addressed effectively.[9] Almost three quarters of UK banks are treating climate risks the same as other financial risks.[10] Investors have even more reason to assess climate-related risks: The Green Finance Strategy released in July 2019 by HM Treasury and the Department for Business, Energy and Industrial Strategy mandates Britain's leading companies, investment funds and pension schemes to demonstrate by 2022 how the climate emergency could jeopardise their finances.[11] Meanwhile in the 2019 World Economic Forum's Global Risks report, climate change was identified to be one of the most significant global risks to economic growth.[12] The Governor of the Bank of England, Mark Carney, has predicted that "firms ignoring climate crisis will go bankrupt" - a stark warning to all investors and businesses.[9]

Homebuilders need to acknowledge and mitigate against climate related risks. A first step can be to align with evolving investor requirements by having a robust and transparent risk review process to identify how climate change will impact their business. This can be augmented by complying with frameworks that focus on reporting climate-related risks, such as the Taskforce on Climate-related Financial Disclosures (TCFD) framework or the Carbon Disclosure Project (CDP). Investor compliance with the Green Finance Strategy is in the near future, and a growing number of homebuilders (including our members) are considering implementing the framework.

Millenial impact

Homebuilders would also be wise to consider their cause-driven future customers. Millennials are set to inherit £23 trillion from their parents and they expect more from their investments, with 86% of respondents in a recent survey of this age group by JPMorgan stating sustainability is a priority.[13] This penchant for sustainability goes beyond investment choices: in a recent survey of millennials by Redrow Homes, 82% of respondents reported a willingness to pay more for an environmentally friendly home.[14]

Actions speak louder than words

While having a strong ESG policy that acknowledges climate change may increase the attractiveness of a company to investors, in many cases investors will not become involved with a company that fails to act on these important issues: 35% of investors globally require private real estate firms to have ESG initiatives implemented prior to involvement.[15] Some of the specifically climate-related requirements of the largest investors can be found below.

- Divested from eight companies due to lack of action on climate change.[16]
- Developed an asset Sustainable Management Programme with targets to reduce waste, energy and carbon.[17]
- Use in-house and third-party climate-related assessments to inform investment decisions.[18]
- Will support climate-focused shareholder resolutions.[18]
- Expect investee companies to develop climate policies, set targets in line with the Paris Agreement and apply TCFD recommendations to their climate-data reporting.[19]
- Take GHG emissions data, climate-risk management, strategies and targets into consideration when making investment decisions.[19]

Furthermore, formalised sustainability standards for investment products are likely to introduced soon: ISO 14097[20], which will be for "assessing and reporting investment and financing activities related to climate change", is expected to be published in 2020.[21]

As climate change and risk mitigation become mainstream criteria for giving investments the green light, all else being equal, those companies who have been slow to react to this quickly changing landscape are likely to find themselves overtaken by proactive companies.

SHAPED BY POLICY

The global shift in climate-awareness is recognised by government and policy makers. In February 2019, The Committee on Climate Change published the UK housing: Fit for the future? report.[22] Findings suggest that near complete elimination of greenhouse gas emissions will be required if the UK is to meet its legally-binding climate change targets.[23] Key actions identified to mitigate greenhouse gas emissions include:

We are starting to see commitments on both a national and regional scale, from the UK Government introducing a net zero emissions target into law[24] to 230 councils in the UK declaring climate emergencies including Manchester, Bristol and London.[25,26,27] Policies to deliver a built environment that is good for people and the planet are quickly following; the Future Homes Standard framework is currently out for consultation, the National Design Guide has been released and the Environment Bill was recently introduced by government to Parliament.[28] To date, 51% of local authorities have implemented standards above the current building regulations.[29]

Homebuilders need to be nimble in this rapidly evolving environment. Here we highlight some of the current and future regulations relevant to UK homebuilders alongside actions taken by local authorities. Additionally, we identify government investment to support tackling the climate crisis.

Recent policy

Constructing an average UK home causes over 50 tonnes of CO_2 to be emitted[30], which is the equivalent of heating an average UK home for 21 years.[31] To tackle carbon emissions in home building the Industrial Strategy (2018) allocated more than £15 billion of new financial support for over the next five years, focusing on modern methods of construction and digitisation.[32] This funding is supported by a guaranteed pipeline from five government departments who pledged to move to offsite construction by 2019.[33]

The Clean Growth mission, one of the four Grand Challenges of the Industrial Strategy, further supports innovation in modern methods of construction by pledging to invest over £400 million in new construction products, technologies and techniques.[34] These market and funding incentives combined with increasing concerns about skills shortages, are driving the switch to modern methods of construction in homebuilding. For more information on the benefits of MMC, please refer to the 2018 NextGeneration report.

Change is coming

On the heels of the UK housing: Fit for the future? report, the Future Homes Standard[35] was announced in Spring 2019 and is currently out for consultation, with the aim for it to be introduced in 2025. One expectation is for homes to produce 75-80% less carbon emissions compared to homes built to the 2013 Building Regulations. The first step will be an uplift to energy efficiency standards in Part L alongside updates to ventilation requirements in Part F. The current recommended options are either:

- A 20% improvement delivered through increased fabric standards (estimated £2.5k build cost uplift).
- A 31% improvement delivered predominantly through low-carbon heating and/or renewables (e.g. solar PV), with a minor increase in fabric standards (estimated £4.8k build cost uplift).

The increased expenditure required to meet the uplifted standards may be mitigated if homebuilders are ready for the anticipated requirements: by upskilling their employees, undertaking research to identify cost-efficient methods to decarbonise their developments and engaging with their supply chain on the anticipated increased demand for energy efficient building elements such as low-carbon heating options and PV systems.

The Environment Bill, announced in the Queen's Speech, was introduced to Parliament on 15th October, with the aim to protect, maintain and improve the natural environment as the UK leaves the EU.[28] Legislation will create legally-binding environmental improvement targets with the aim to: improve air quality by reducing fine particulate matter, protect water resources, tackle plastic pollution and restore habitats through biodiversity net gain. The biodiversity net gain feature was codesigned with the MHCLG to allow the government to deliver the increases in housing the country needs, whilst enhancing nature.

By championing nature-based solutions, the Bill, the Government said, demonstrates commitment and support to tackle climate change as well as create a world-leading system for environmental governance.

Different places, different plans

While there are substantial updates to national regulations in the pipeline, local councils are also updating their planning policies in line with their commitments. By outlining some of the policies local councils have introduced or are out for consultation, we can identify regulatory requirements likely to affect homebuilders in the future.

Those homebuilders who are thinking ahead and testing out delivery models in response to these changes will have a distinct competitive advantage.

To explore more examples of emerging and adopted local policies, please see the UKGBC Policy Playbook.[36]

An uplift to design standards

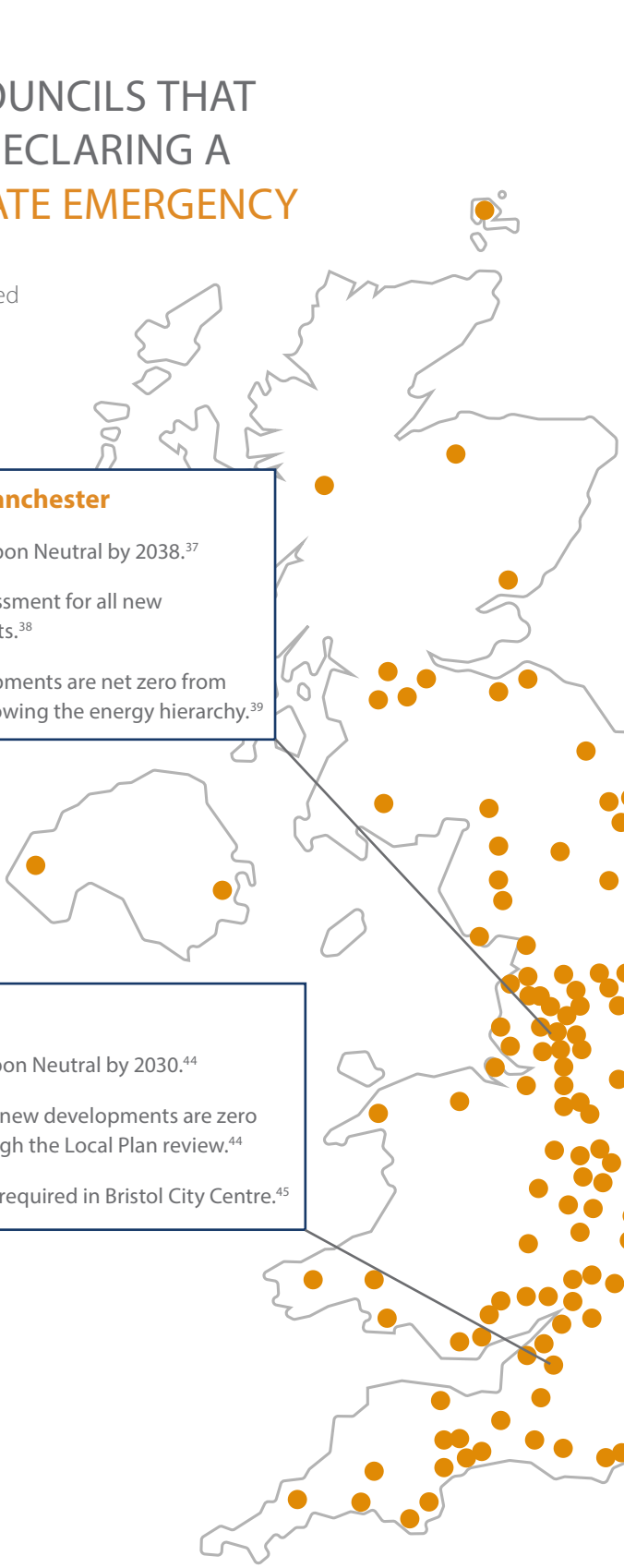
Addressing urgent funding gaps for low-carbon technologies

Upskilling design, construction and installation workers in new technologies

Retrofitting existing homes and building new homes to be climate resilient, low-carbon and energy and water efficient

UK COUNCILS THAT ARE DECLARING A CLIMATE EMERGENCY

Declared



> "Constructing an average UK home causes over 50 tonnes of CO_2 to be emitted[30], which is the equivalent of heating an average UK home for 21 years.[31]"

Greater Manchester

- Target – Carbon Neutral by 2038.[37]
- Carbon assessment for all new developments.[38]
- New developments are net zero from 2028, by following the energy hierarchy.[39]

Milton Keynes

- Target – Carbon Neutral by 2030, Carbon negative by 2050.[40]
- Five year energy performance gap assessment for 10% of new builds.[41]

London

- Target – Net Zero by 2050.[42]
- 35% reduction on CO_2 emissions from Part L (2013).[43]
- Zero-carbon strategy for all new developments.[43]

Bristol

- Target – Carbon Neutral by 2030.[44]
- Proposed all new developments are zero carbon through the Local Plan review.[44]
- CfSH Level 5 required in Bristol City Centre.[45]

* underlying data from climateemergency.uk

ENHANCED BY TECHNOLOGY

Our investor and policy sections have identified plenty of drivers for homebuilders to make their homes and operations less carbon intensive. To achieve these decarbonisation goals, the industry can build on the research and experience created in pursuit of the Zero Carbon Homes policy over the prior decade. The initiative stimulated a huge amount of decarbonisation research, with much of the technological findings still relevant to today's efforts. However, over the past ten years technological innovation has also significantly advanced providing a far more viable environment for decarbonising new build housing. Here we reflect on a couple of technologies that are not new but homebuilders should be considering alongside three innovative technologies that could be having a significant impact in the future.

A blast from the past

Changes in policy and technological innovations are allowing technologies such as Air Source Heat Pumps (ASHPs) and Modern Methods of Construction (MMC) to return to the limelight. With the Chancellor stating that gas heating for new homes would be banned by 2025,[46] the electrification of domestic heating seems the next logical step. ASHPs due to their high coefficient of performance are a great option for well insulated new-builds and can be used for cooling in summer alongside heating in winter. In terms of constructing a dwelling, MMC has benefited from increased government funding and with a further £200 million of funding earmarked for 2020/2021 through the National Productivity Investment Fund, capacity for MMC is growing in the UK.[47] MMC benefits from the material having a lower embodied carbon due to more efficient construction conditions amongst other benefits included within the 2018 NextGeneration Report.

> "Over the past ten years technological innovation has significantly advanced providing a far more viable environment for decarbonising new build housing."

Three to watch

1 ISOBIO board

This new entirely bio-based (hemp and lime render) structural panel has a modular design and is set to hit the market in 2020.[48] It offers homebuilders the opportunity to provide a highly energy efficient insulation product in their homes which can reduce heating requirements by 45% compared to a standard UK house, and can provide fabric U-values that comply with the Passivhaus standard.[49] There are 27.5 $kgCO_2e$ per m^2 of panel, which is about a quarter of the emissions associated with the production of a standard UK new-build wall, and furthermore due to the biogenic origin of the material forming the panel, atmospheric carbon is stored within the panels. Impressive insulating properties and low embodied carbon – this is surely a winning combination!

2 Dark power

While it may seem counter intuitive, we may be entering the dark ages. Researchers have developed a device that uses radiative cooling to generate electricity.[50] At night, heat loss from the surface of the device causes a difference in temperature, that the thermoelectric module can then use to generate electricity. The prototype produced $25mW/m^2$, lighting up a small LED bulb. Made from low-cost and readily available materials, this product is scalable, if there is market demand. While it is not yet commercially available, it has the potential to be an effective source of low carbon light.

3 Chromogenic windows

In Europe, excessive heat loss and gain through windows is estimated to account for 4% of all energy consumed.[51] The benefits of energy efficient windows in terms of double and triple glazing have been widely publicised, although, chromogenic windows go even further by responding to outdoor temperature, solar radiation or electric currents and then limiting the levels of light or thermal radiation entering the home.[52] This is a dual benefit solution as thermochromic windows (a type of chromogenic window) can both reduce the risk of overheating by minimising solar radiation during hot weather, while also improving energy efficiency by reducing air-conditioning requirements.[53] Furthermore, as a passive technology, it doesn't require any energy for its operation after installation. While this technology is still comparatively expensive to construct and install compared to other options, it's expected that prices will decrease as the market grows: the smart window market is predicted to be valued at over £550 million by 2024.[51]

PHOTO COURTESY OF
TAYLOR WIMPEY
ETLING VIEW, DEREHEM

NEXTGENERATION: VALUE FOR STAKEHOLDERS

NextGeneration **enables** homebuilders to:

- Compare performance against peers
- Demonstrate sustainability credentials to local authorities, investors, staff and customers
- Capture cost-saving opportunities

NextGeneration **encourages** companies to:

- Reduce household energy bills through energy-efficient homes
- Improve quality of life through quality housing
- Provide exemplary levels of customer service

NextGeneration **rewards** homebuilders who:

- Build a range of housing types and mixed tenure communities to serve local people
- Create jobs, improve skills and provide training
- Engage with communities through proactive engagement and consultation

NextGeneration **helps** investors to:

- Identify companies who are managing short and long term risks
- Create opportunities to generate long-term value
- Discern innovative sector leaders with good management and potential for future growth

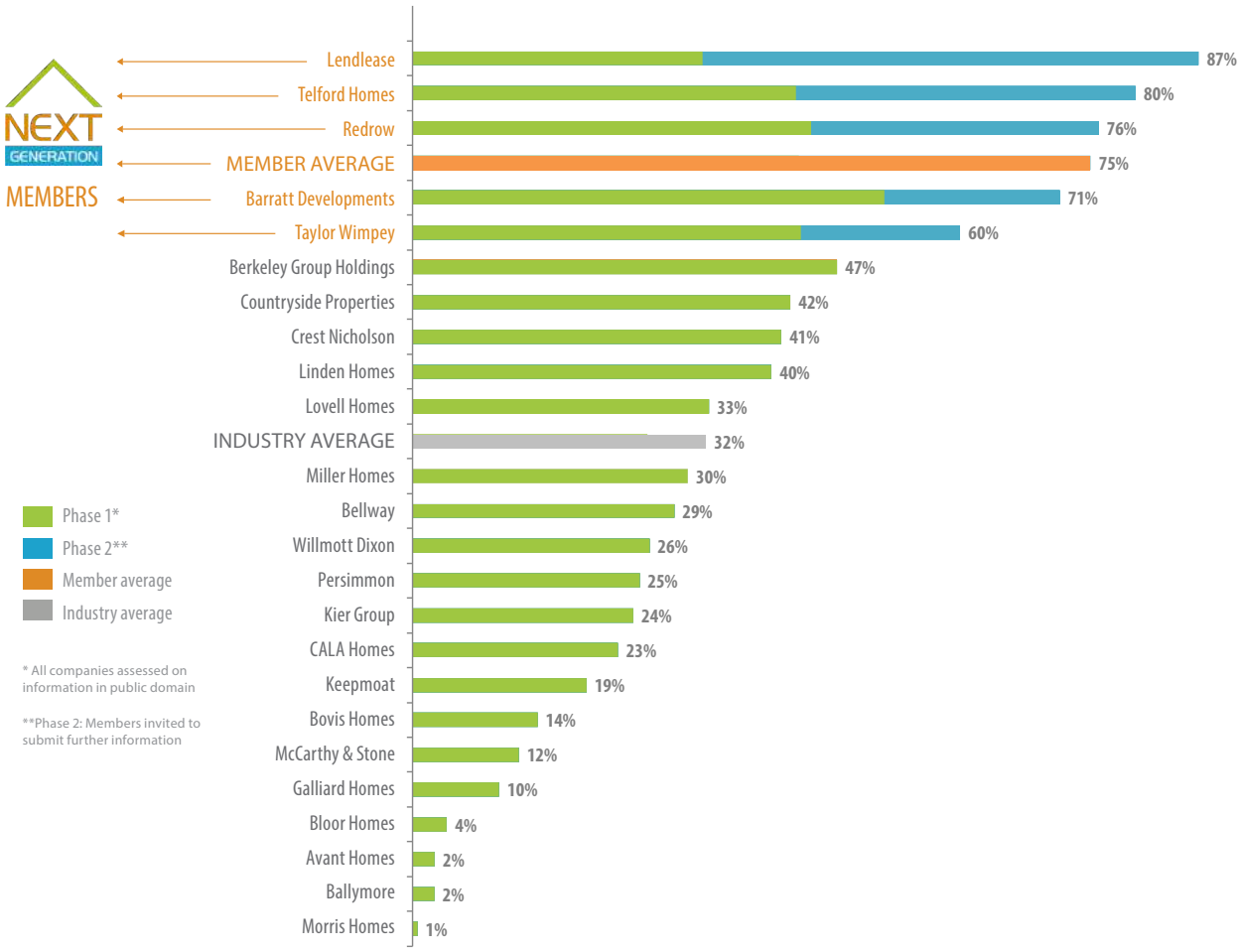
OVERALL ANALYSIS

Lendlease retain the top position on the NextGeneration benchmark for the fourth year in a row. Telford Homes also show exceptional performance in 2019, having ascended from fourth place in 2018 to second place. Redrow complete the top three, having maintained their third place. Barratt Developments should also be commended for their transparency regarding their sustainability activities, having achieved the highest Phase 1 score which is based on publicly available data. Taylor Wimpey retain their fifth place standing.

COMPANY RANKINGS

NextGeneration's 2019 rankings highlight a significant disparity between the transparency, impact and efforts of homebuilders to improve the sustainability of their businesses. NextGeneration members continue to lead with a member average nearly double the overall industry average (74.7% to 32.3%), reflecting both the benefits of expert advice and peer learning, and the greater disclosure of sustainability information by members to the benchmark. Furthermore four out of five members are within the five highest scoring homebuilders in Phase 1, based off publicly available information. This highlights the extent to which our members embrace and communicate their sustainability journeys. A lack of transparency leaves external stakeholders in the dark about how well homebuilders are managing sustainability risks and opportunities. We would encourage any developer, listed or non-listed, to engage with initiatives like NextGeneration to learn from industry leaders and enjoy the benefits of membership.

Figure 1: 2019 Results



While there has been an overall decrease in score across the board, this does not relate to a decrease in sustainability performance, quite the opposite. To remain relevant, the criteria are updated on a three-year rolling basis to account for measurable impacts of implemented initiatives and to focus on current and future issues which are most pertinent to the homebuilding industry.

DETAILED PERFORMANCE

STRONGER PERFORMANCE

Economic Development
Homebuilders are tackling the construction skills gap by supporting opportunities for trainees, including running graduate programmes and employing apprentices, either directly or through contractors and/or sub-contractors.

Strategy
NextGeneration members are leading the industry with their strategic approaches to sustainability. Providing training for key roles and including sustainability objectives in board and senior manager appraisals instills a strong sustainability ethos throughout the business.

We found two areas where the industry is improving on last year's performance and is also showing a strong performance generally:

Reporting
More companies are recognising sustainability risks and their impact on their operations. However climate change is still a highly under-represented risk and while some pioneering homebuilders are disclosing their climate-related risk through the Carbon Disclosure Project, only two homebuilders are embracing TCFD.

Procurement
Homebuilders and particularly NextGeneration members are ensuring they are minimising their extended social and environmental impact by engaging with their supply chain, particularly through their sustainable procurement policy. A sustainable procurement policy was found for 68% of homebuilders. Meanwhile some industry leaders are undertaking whole-life carbon or waste generation analyses of their homes and while this is currently limited to the highest performing homebuilders, it is a practice that should be more widely practised.

WEAKER PERFORMANCE

Water
This remains an area that homebuilders should address further, having been identified as an area of weaker performance for the third year in a row. Only 36% of homebuilders reported on their operational water consumption over the past year. With predicted increases in water stress, more companies need to be integrating infrastructure into their developments to reduce water consumption, such as rain-water harvesting or grey-water recycling.

Energy/Carbon
52% of companies have targets to reduce energy consumption or GHG emissions, and overall companies are reducing their operational emissions. However, there is insufficient action being taken to decarbonise their homes. This can be achieved by integrating low carbon community energy infrastructure or on-site renewables. With expected higher requirements to be stipulated within the building regulations (see pg 4), now is the time to take action.

Net Gain for Biodiversity
While homebuilders have embraced green-blue infrastructure across their developments, few measure their impact on local ecology. Meanwhile DEFRA is consulting as to whether biodiversity net-gain should be mandated, which may require homebuilders to measure the ecological impact of their developments. By engaging with biodiversity net-gain and its measurement, homebuilders can provide a better environment for their customers while preparing for the proposed updates to the planning system.

Placemaking and Infrastructure
While more homebuilders are developing their own systems for integrating sustainable communities considerations into their developments, this is still not widely embraced across the industry. Fostering community relationships post-development is vital for creating communities where people feel like they belong, and is an area that homebuilders need to address.

AWARD WINNERS

Top performing companies in the Benchmark are awarded Gold, Silver, and Bronze awards. Beyond helping companies communicate their efforts and accomplishments to customers, these awards enable stakeholders to identify sustainability leaders in the residential sector. This year there are no Bronze award winners.

NEXT GENERATION GOLD 2019

NEXT GENERATION SILVER 2019

NEXT GENERATION BRONZE 2019

NextGeneration also presents awards for innovation and transparency.

NEXT GENERATION INNOVATION AWARD

NEXT GENERATION CRYSTAL AWARD

NEXT GENERATION GOLD 2019

NEXT GENERATION SILVER 2019

PHOTO COURTESY OF
LENDLEASE
ELEPHANT PARK, LONDON

"Sustainability is a strategic priority and it is at the heart of our vision to create the best places. We will continue to work closely with our partners on raising both our sustainability standards and those of our projects."

Justin Davies
Head of Residential Europe
Lendlease

"We continue to shape and refine the direction of our Building a Living Legacy strategy to better understand the materiality issues when balanced against the evolving policy landscape and societal shifts in attitudes. Accordingly, we are delighted that our progress has once again been recognised by the NextGeneration sustainability benchmark, whilst achieving a 99% customer recommendation rating."

Andrew Day
Head of Sustainability
Telford Homes

"At Redrow we create thriving communities that are carefully designed to enhance nature and contribute to the wellbeing of the people living in and around them. This year we were delighted to receive Next Generation's Innovation award for our work in assessing how our developments create social value. We have continued our partnership with The Wildlife Trusts, developing a new strategy that will enhance biodiversity and enable people to enjoy the benefits of doorstep access to nature. We do all this within our established approach to Valuing People – continuing our industry leading approach to training and development as well as our partnership with the Supply Chain Sustainability School. Our ethos of Building Responsibly has seen us focusing on further reduction of our carbon emissions and construction waste, as well as continuing our Partnership of the Considerate Constructor Scheme."

Will Heath
Group Development Director
Redrow

"Barratt Developments is committed to being the leading national sustainable housebuilder.

Our commitment to set a science-based carbon emission target by the end of 2019 will see engagement in low carbon homes research, including low carbon heating solutions to respond to Government's Future Homes Standard, and the AIMCH research project which includes assessment of the route to better low embodied carbon in the homes we build. We have reduced carbon intensity by 22% since 2015 and will continue to push energy and carbon efficiency, using current ESOS audit findings, to play our part in meeting the challenge of the UK's net zero carbon by 2050 target.

We are seeking to create a net positive impact for biodiversity across those of our developments without prior planning permission from 2020, and continue to prioritise our industry leading Great Places design guide."

Sarah Pratt
Head of Corporate Sustainability
Barratt Developments

"A healthy environment is essential to economic prosperity, to thriving communities and to everyone's health and wellbeing. At Taylor Wimpey we acknowledge the serious threat posed by climate change and biodiversity loss and the need for urgent action to address these challenges. We want to play our part and to make a positive difference."

Ian Heasman
Director of Sustainability
Taylor Wimpey

Innovation Award

This year, the Innovation Award was given to Redrow for their Social Value Calculator which offers a robust, academic, industry leading tool which focuses on quantifying a part of sustainability that NextGeneration recognises is of growing importance in the homebuilding sector. By developing this tool, Redrow not only promotes positive change on a large scale across their own business but also to the wider industry.

Crystal Award

This year we are excited to introduce the new Crystal Award that recognises the highest performing homebuilder during Phase 1 of the benchmark, where homebuilders' publicly available information is assessed. The winner of the Crystal Award places clearly stated sustainability targets, performance data and case studies in the public realm, giving stakeholders a detailed understanding of the company's strategic approach and the positive change they are delivering on the ground. The winner of the first annual Crystal Award is Barratt Developments. At a time when companies' impact on the planet and society is subject to increasing scrutiny, crystal clear communication to external stakeholders is critical.

PHOTO COURTESY OF

REDROW

CASTLE FIELDS, BARTON SEAGRAVE, NORTHAMPTONSHIRE

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"In 2019, the UK government made an historic step and became the first major economy to commit to net zero carbon by 2050. Responsible for nearly 40% of carbon emissions in construction and use, the built environment has a massive role to play. The UK housing: Fit for the Future? report by the Committee on Climate Change states that all new homes need to be made low-carbon heat ready by 2025 for the UK to meet its climate change targets, and fundamentally, according to the World Green Building Council all new housing globally will need to operate at net zero carbon by 2030. NextGeneration leaders are at the forefront of driving this agenda, and we at JLL are proud to be a part of their ambition."

Sophie Walker
UK Head of Sustainability
JLL

"This was the year that the climate crisis rocketed back up the agenda for UK businesses. House building is very much on the front line of this battle, needing to deliver volume without adding to the carbon problem. NextGeneration members are demonstrating a desire to tackle this challenge head on, but we shouldn't under-estimate the scale and speed of what is required. 2020 will be a pivotal year for both Government policy and industry leadership, with an urgent need to move quickly towards net zero carbon new homes."

John Alker
Director of Policy and Places
UK Green Building Council

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* Front cover data source: NASA's Goddard Institute for Space Studies (GISS). Data illustrates the change in global surface temperature relative to 1951-1980 average temperatures.

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