

# Welcome to your CDP Climate Change Questionnaire 2019

## C0. Introduction

### C0.1

#### **(C0.1) Give a general description and introduction to your organization.**

Crest Nicholson is a leading residential developer in the UK, building homes across the southern half of the UK. Ranked as one of the top 10 listed house-builders, we aim to improve the quality of life for individuals and communities by providing better homes, workplaces, retail and leisure spaces in which people aspire to live, work and play – now and in the future.

To deliver that ambition, we have been on a journey of innovation and transformation to position the Group for profitable growth. Whether carrying out systematic scientific research into low-carbon housing solutions, partnering with our supply chain to drive out waste, or developing our product for a rapidly evolving market, the focus is on delivery, quality and choice for our customers and sustainable business value for our shareholders.

Our operational focus remains concentrated in the southern half of England with an emphasis on creating well-designed, high-quality homes in sustainable communities. Our portfolio meets the needs of a wide range of purchasers, from first time buyers to investors, with a product range that includes houses, apartments and commercial units on mixed-use developments.

### C0.2

#### **(C0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Row 1	November 1, 2017	October 31, 2018	No

### C0.3

#### **(C0.3) Select the countries/regions for which you will be supplying data.**

United Kingdom of Great Britain and Northern Ireland

### C0.4

#### **(C0.4) Select the currency used for all financial information disclosed throughout your response.**

GBP

## C0.5

**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.**

Operational control

## C1. Governance

### C1.1

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

#### C1.1a

**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual(s)	Please explain
Other, please specify Interim Chief Executive Officer	Our Interim Chief Executive Officer is responsible for climate-related issues

#### C1.1b

**(C1.1b) Provide further details on the board's oversight of climate-related issues.**

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding risk management policies Overseeing major capital expenditures, acquisitions and divestitures	The impacts of climate change have the potential to significantly impact our business operations. This includes influencing the choice of sites for development, the construction and specification of our homes, as well as security and stability of our materials' supply chain.  An environmental, social and governance (ESG) risk assessment, which includes climate-related risks, is completed on an annual basis. The most material ESG risks to the business are incorporated within our group-wide risk management framework and assessment.

		<p>All potential development projects must be reviewed and signed off by the Executive Management Team and members of the Board at our Project Committee meetings. Climate related risks, such as flood risk of the site, overheating risk of the homes and ecological impact will be reviewed and considered – and form part of the decision to proceed or not.</p> <p>We also have a Technical Committee that meets bi-monthly. This is a sub-committee of the Board and is chaired by a Non-Executive Director. Future policy and initiatives regarding technical requirements of the homes we build, such as the risk of overheating and indoor air quality, are agreed and plans put in place to address. The development and rollout of our new range of house designs and the trialling of offsite manufacturing (OSM) is also discussed in detail, including the strategy to review the business benefits, the planning for further trials and necessary budgets.</p> <p>The Climate Change, Sustainability, Sustainable Procurement and Sustainable Timber policies are all reviewed annually and signed off by the CEO. A new sustainability governance framework has been agreed with our Executive Management Team and Board. Under this new framework, updates on sustainability and ESG matters, including climate-related risks, will be discussed or reviewed at our Board-level on a quarterly basis. We are also developing a new company-wide sustainability strategy, which includes initiatives relating to climate change with our Executive Management Team and members of the Board.</p>
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## C1.2

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Environment/ Sustainability manager	Both assessing and managing climate-related risks and opportunities	Quarterly

## C1.2a

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

The Group Governance and Sustainability Manager sits within the Company Secretariat, and reports to the Company Secretary (who sits on the Board). As a Group function this position has oversight of any major issues relating to sustainability throughout our operations. They have in-depth knowledge of climate-related issues, as well as current and potential future policy. It is within their remit to engage with the relevant personnel across the business, including Board members and the Executive Management Team as required, to ensure that climate-related risks are reviewed and managed and climate-related business opportunities are seized. This position is responsible for completing an annual ESG risk assessment, which feeds into the group-wide risk management framework and assessment to ensure robust management measures are in place.

During 2018, the Group Governance and Sustainability Manager has managed the development of a new, company-wide sustainability strategy, which includes initiatives relating to climate change. The strategy continues to be developed and has been debated by our Executive Management team and members of the Board. Under the new strategy, the Manager will meet with the interim CEO on a quarterly basis to review sustainability initiatives, including climate-related risks. This Manager also meets with our Chief Financial Officer on an annual basis to review the Group's detailed climate-related risks and opportunities assessment.

Key responsibilities include:

- Keeping abreast of all current and potential future legislation, ensuring business compliance
- Feeding environmental, social and governance risks into the group-wide risk management framework
- Developing strategy and action plans with targets and KPIs to minimise risks and take advantage of opportunities
- Engaging with key internal and external stakeholders to implement projects and initiatives
- Developing internal and external communication, including the Annual Integrated Report and corporate website
- Providing training to employees on climate-related matters and wider sustainability issues.

Climate-related issues are monitored through attendance at relevant events, webinars, seminars and networking with peers. Newsletters, information from law firms and online reading also provide the latest updates on climate-related issues relevant to both the industry and wider society. Key senior Executives sit on industry collaboration networks and feedback any important matters relating to climate change to the Group Governance and Sustainability Manager.

## C1.3

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

Yes

## C1.3a

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

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**Who is entitled to benefit from these incentives?**

All employees

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction project

**Comment**

In 2018, employees received a 20% uplift in their company car benefit if they chose a low emission vehicle ( $\leq 120\text{gCO}_2/\text{km}$ ), either through the company car scheme or if they have a car allowance. In 2019, the threshold at which an uplift is received was reduced to  $110\text{gCO}_2/\text{km}$  to further incentivise employees to choose low emission vehicles. The new % uplift has been set at 15%.

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**Who is entitled to benefit from these incentives?**

All employees

**Types of incentives**

Monetary reward

**Activity incentivized**

Efficiency project

**Comment**

Employees are eligible to purchase a tax-free bike under the Government's Cyclescheme.

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**Who is entitled to benefit from these incentives?**

Other, please specify  
Site teams

**Types of incentives**

Monetary reward

**Activity incentivized**

Efficiency project

### Comment

Piloting a waste reduction incentive scheme for forklift drivers and labourers. Monthly rewards are provided subject to achieving certain targets, including good segregation and decreasing levels of waste.

## C2. Risks and opportunities

### C2.1

**(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.**

	From (years)	To (years)	Comment
Short-term	1	3	Short term is considered to be under 3 years. This covers the current operating climate, where existing legislation is likely to be in place for much of the time horizon.
Medium-term	3	10	Medium term is considered to be between 3 and 10 years. This covers the period where legislation currently under consideration is likely to take effect and have an impact on the business. It also covers much of the expected output from Brexit.
Long-term	10	30	Long term is considered to be anything over a 10-year time horizon. This period is challenging to predict, but the macro environment can be used to understand certain trends.

### C2.2

**(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.**

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

### C2.2a

**(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.**

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	At Group level, our Group Governance and Sustainability Manager keeps abreast of emerging climate-related risks and Government policy on an ongoing basis. The most relevant climate-related risks are reported to the Board on at least a six-monthly basis as part of our integrated

			<p>approach to risk management. The climate-related risks form part of our annual ESG risk assessment, which feeds into the group-wide risk review. The most pertinent risks are presented in our risk management framework.</p> <p>A detailed climate change risks and opportunities assessment is also completed on an annual basis, with input from our Group Finance Director.</p> <p>Other departments within the group also consider climate-related risks. For example, the Technical and Quality team monitor building regulations and policy that can impact the homes we build as well as research to improve homes' resilience to a changing climate. Examples include research of offsite manufacturing and reviewing emerging government policy.</p>
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## C2.2b

### **(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.**

Climate-related risks and opportunities are identified at three levels: group-wide, divisional, and project level. We define climate-related financial impact as substantive or meaningful when it has an impact (now or in the foreseeable future) on:

1. Our business's revenue, profit, or ROCE,
2. Our build programme or productivity,
3. Our business partnerships and reputation,
4. Our employees' health and well-being and productivity.

At a group-wide level, climate-related risks and opportunities are identified on an ongoing basis by our Group Governance and Sustainability Manager. These risks are fed into an annual ESG risk assessment, which forms a part of our integrated risk management framework as well as our materiality assessment — both of which are used to inform our corporate business strategy, as published in our 2018 Integrated Report (IR) and on our corporate website. The IR and the About Us section of our website demonstrate that Crest Nicholson pursues many of the climate change related business opportunities, while ensuring key risks are reviewed, mitigated and managed. These include: flood risk, overheating risk, severe weather, energy security, cost of energy/carbon, and consumer demand-side energy consumption, and efficiency gains from offsite manufacturing and more standardised build programmes.

The full materiality assessment is conducted on a regular basis and includes input from key internal stakeholders, such as our Executive Management Team, Group Procurement, Group Health, Safety and Environment, and HR Directors, and external stakeholders, including investors, business partners, central and local government, industry bodies, mortgage providers, and suppliers. It is led by the Group Governance and Sustainability Manager. Annually, the materiality assessment is reviewed by the Executive Management Team and

CEO to ensure it is still accurate and relevant. The impacts of climate change on our operations are noted clearly (under the title Environmental Impact) as one of our key material issues.

The risk management framework is led by our Group Finance Director. The risk management framework consists of managing and monitoring risks through risk registers that are maintained at divisional (covering division and asset level risks) and Group level (covering significant division-level and company-wide risks). Other employees (including the Group Governance and Sustainability Manager) are asked to review and input into the framework. At the divisional level each management board undertakes an annual assessment of its division's exposure to financial, operational and strategic risks, including climate change, and the measures that have been put in place to manage those risks. The significant risks highlighted within each divisional register are incorporated in the group-wide risk management framework, which is reviewed and monitored by the Board-level Audit and Risk Committee. The Committee is responsible for reviewing the effectiveness of the Group's internal controls and risk management systems including the Group's control framework; this is then reflected in the risk matrix. The Committee approves the internal audit programme and monitors the implementation of recommendations.

Risk management and future opportunities are also regular agenda items for all parts of the business with emphasis on continuous improvement and differentiation.

At a project level, risks are identified and assessed prior to site acquisition. Risks such as flooding, overheating and local authority requirements are reviewed with our consultants and mitigation measures are implemented. The risks and associated mitigation measures are factored into the cost of the land.

## C2.2c

### (C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	<p>As a housebuilder in the UK, our organisation must ensure we meet all relevant current regulations in order to operate. Our ability to respond to current regulation is, therefore, a critical consideration in our climate-related risk assessment. For example, our Group Governance and Sustainability Manager regularly reviews our procedures to respond to current emission reporting obligations. This ensures that we respond effectively and efficiently, while also avoiding non-compliance and potential fines or damage to reputation. For example, we are required to comply with the Government's Energy Savings Opportunity Scheme and are currently completing our energy efficiency audits in response to Phase 2 of the scheme.</p> <p>Both our Group Sustainability and Technical and Quality teams also keep track of forthcoming legislation through membership of industry bodies such as the Home Builders Federation (HBF), subscription to</p>

		industry newsletters, sharing knowledge with peers and attending relevant events.
Emerging regulation	Relevant, always included	<p>Emerging regulation has the potential to significantly impact our operations, build costs and supply chain requirements. Given the potential impact of emerging regulation, it is always included in the climate-related risk assessments. For example, any potential building regulations are monitored closely by the Group Sustainability team and Technical and Quality Director, who engage actively in industry bodies and with central government. This level of engagement ensures that our business is well-positioned to engage in the consultation process and respond to the resulting outcomes of the regulation in a pro-active manner.</p> <p>The Group Sustainability team participated in the government's 2019 consultation regarding net biodiversity gain on developments to help shape future policy. Another example is the recent streamlining of energy and carbon reporting requirements (SECR), which was included as a potential risk on our climate change risks and opportunities assessment. The Group Sustainability team have reviewed the SECR requirements to ensure business compliance. Government papers and strategies, such as the Clean Growth Plan, 25-year Environment Plan, and the Resources and Waste Strategy are also reviewed, monitored and used to help predict potential future regulation and inform our strategy. An example of emerging policy that has come from this is the Government's ambition for all new homes to be heated by alternatives to gas powered boilers. This is currently being reviewed by our Group Sustainability team, Group Technical and Quality Director and Group Director of Operations.</p>
Technology	Relevant, always included	<p>The potential impact that new lower-carbon products and technologies have on our operations and our customers is considered by the Group Sustainability team and Group Technical and Quality Director and highlighted in the climate-related risk assessment. While there are opportunities to help reduce both our customers' home running costs as well as the lifetime emissions/impact of the homes by introducing new lower-carbon products and technologies, there is also a risk of product failures or customers being unfamiliar with the technology and its proper use. This can result in both increased after-sales costs as well as customer dissatisfaction. For example, when we first piloted a new lower-carbon ventilation system, a significant proportion of customers didn't know how to maintain them. Over time, the ventilation system's performance was affected, resulting in customer dissatisfaction. This resulted in a series of ongoing communications and customer support to resolve the issue.</p> <p>Working together, the Group Sustainability and Technical and Quality teams have conducted research into the embodied carbon of our pilot</p>

		<p>offsite manufacturing (OSM) construction scheme, allowing the business to understand how these modern methods compare against traditional methods of construction. Post-occupancy research, including monitoring the use of energy, air quality and overheating, are also being conducted to better understand the impact of OSM on customers.</p>
Legal	Relevant, always included	<p>Relevant legal decisions are monitored and reviewed to ensure our operations remain compliant and free from the risk of fines or other regulatory intervention. The Company Secretariat and the Sustainability team attend relevant events and receive newsletters from industry bodies and law firms to ensure the business is kept up-to-date on legislation and legal cases that can help inform our work to minimise risks. Pertinent risks are added to the climate-related risk assessment by the Group Sustainability team.</p> <p>An example of compliance with climate-related legal requirements in the last year has been work to comply with both the Energy Savings Opportunity Scheme (ESOS) and the Streamlined Energy and Carbon Reporting (SECR).</p>
Market	Relevant, always included	<p>During 2018, we continued to gain feedback from the customer satisfaction surveys, which contain a wealth of information on the customer experience and quality of the home. This information is used to enable continuous improvement. Led by the Group Governance and Sustainability Assistant Manager and Group Technical and Quality Director, the business is also completing in depth building performance and post-occupancy evaluation of homes built using both offsite manufacturing techniques and homes built using our new housing range. This has included analysis of the thermal performance of the homes, internal comfort levels and the usability of technology within the home. Information has been obtained through customer interviews and data on air quality, temperatures and risk from overheating. Learning will be utilised in future projects where OSM and the new house designs will be used.</p> <p>Our Group Design Executive has continued to gain feedback from Crest Nicholson staff, as well as key suppliers, consultants and customers on our new house types to build a picture of how they are perceived within the market. Feedback regarding design, usability, and other key areas has been taken on board and amendments made with future designs.</p>
Reputation	Relevant, always included	<p>Climate-related issues, such as air quality, flooding and water shortages are becoming increasingly known to the public, and society is looking to businesses to respond decisively and effectively. Our reputation as a responsible business is predicated on our ability to do so. Our reputation as a responsible business and sustainable</p>

		<p>housebuilder could also impact our ability to purchase land and move our developments through the planning process with local authorities. It also has an impact on our ability to attract and retain employees as people are increasingly looking to work for ethical businesses that take environmental and societal issues seriously.</p> <p>A clear example here is the fact that there is an increasing public awareness of health risks associated with climate change, e.g. air quality. Whilst it is unlikely to be at the top of the checklist for most house purchasers, if we are not putting in place effective adaptation methods in the homes we build, it could have a future negative impact on our reputation and reduce customer satisfaction.</p> <p>For these reasons, the reputational impact of climate-related risks and opportunities is always considered by our Group Sustainability team in the climate-related risk assessment.</p>
<p>Acute physical</p>	<p>Relevant, always included</p>	<p>Increasing occurrences of severe weather and their associated impact on the construction of homes, as well as the sale of homes is considered in the climate-related risk assessment. During the prolonged heatwave in July 2018, the number of drop-in show-home visits decreased. This could be a result of potential customers preferring to spend their time outdoors. We are also likely to see an increased frequency of heavy rainfall events. This impacts on our ability to build, slowing sites down (e.g. unable to lay bricks) and can lead to damage of existing work and materials on site. To combat this, we are trialling the use of offsite manufacturing, in which more elements of the home can be completed in a factory environment and homes on site are weather tight more quickly. Heavy rainfall events can also lead to flash flooding events, having a knock-on impact to the build programme and a negative impact on customers once sites are complete. Our development teams are responsible for assessing flood risk on site and ensuring robust drainage strategies are in place to minimise the risk from both pluvial and fluvial flood events.</p> <p>Severe weather can also increase health and safety risk on site and can have an impact on our supply chain, leading to constraints in material availability and increased lead times and costs.</p>
<p>Chronic physical</p>	<p>Relevant, always included</p>	<p>Chronic physical climate-related risks are always included in the climate-related risk assessment. For example, increasing temperatures could lead to a higher risk of overheating in our homes, which impacts comfort levels and air quality for our customers. Our Group Technical and Quality team and Design Executive consider the risk from overheating and potential changes in policy to ensure we can respond appropriately.</p> <p>Our development teams monitor updates to flood risk maps and</p>

		<p>monitoring protocols as a consequence of changing precipitation patterns, which impact on where we build and the required flood mitigation measures.</p>
Upstream	Relevant, always included	<p>Supply chain security and reliability is a key risk for the business, including the potential for supply chain disruption by events or circumstances relating to climate change, such as biodiversity loss, water shortages, and severe weather events. For these reasons, it is included in the climate-related risk assessment.</p> <p>For example, a long-term climate-related risk for our business is the potential for unstable timber supply through the loss of forests from biodiversity loss and increasing temperatures. We have a robust set of timber procurement procedures in place, along with a Sustainable Timber Procurement Policy to mitigate this risk and drive sustainable procurement decisions across the group. Our Group Sustainability and Procurement teams are responsible for monitoring and managing this risk.</p>
Downstream	Relevant, always included	<p>A significant proportion of the total emissions from a new-build home are emitted once the customers have moved in (the in-use phase). UK building regulations include measures for energy efficiency in the home, but these are constantly being monitored and reviewed as part the UK government's response to climate change. With the most recent parliamentary declaration of a climate emergency and the Government's ambition to reach net zero emissions by 2050, the energy efficiency and in-use performance of new build homes is only likely to increase. Our Group Technical and Quality team monitor the risk and ensures that the business is able to respond effectively and efficiently with these ever-improving building regulations. The Group Sustainability and Technical and Quality teams are conducting Building Performance and Post Occupancy Evaluation on some of our homes to better understand the in-use home performance in terms of air quality, overheating, comfort levels and energy efficiency. The learning from these evaluations will be fed into future design amendments.</p> <p>We also recognise the positive climate-related and customer health benefits that biodiverse green spaces can have. Our development teams make sure that we maximise the opportunities to create public open spaces and other green infrastructure that will have a positive impact on health, wellbeing, flood risk and air quality.</p>

## C2.2d

**(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.**

The Climate Change Policy, which considers both transitional and physical climate-related issues, sets out how the business assesses and manages climate change impacts. At a group-level, the Sustainability team (who report to the Company Secretary) oversee the implementation of this Policy and monitor and measure the business's carbon footprint. This includes continuously working to improve data capture and rolling out initiatives to drive down our emissions. For example, the Company Secretary is the group's Fleet Manager and is responsible for ensuring that the cars offered through our company car scheme are efficient and that employees are able to select from a wide variety of fuel-efficient and lower carbon emitting vehicles. The Group Governance and Sustainability Assistant Manager worked closely with the Company Secretary during 2018 and 2019 to review and update the low-carbon vehicle policy, ensuring the employees on the car scheme are incentivised to drive low-emission vehicles. The Sustainability team also issue carbon footprints to all sites, which detail the amount and type of energy consumed, its related tCO<sub>2</sub>e equivalent and its cost. This helps to raise awareness among site staff and production teams of the impact of our operations on climate change, while also encouraging them to put in place measures to reduce their energy use and costs. The Sustainability team also works with these teams and others to manage energy and diesel use on sites and implement measures to reduce these during our build process.

Transitional and physical climate-related risks and opportunities that impact our supply chain security are managed by the divisional Commercial teams, with involvement from the Group Sustainability and Procurement teams. The corporate policies that underpin our procurement, namely our Sustainable Procurement Policy and Sustainable Timber Procurement Policy, are overseen and implemented jointly by these two teams, as are the core terms and conditions set out within our contracts and Supply Chain Code of Conduct. These T&Cs and Code of Conduct make explicit reference to environmental matters.

Where required, the Group Sustainability team provides training to commercial teams to ensure they fully understand the risks and opportunities to their supply chain from environmental matters like climate change. The Sustainability team also conducts supply chain audits, including for our timber procurement.

Specific example of transitional risk management: The Sustainability team, together with other relevant departments, including Group Technical and Quality, review current and emerging policy and respond to government consultations on an ongoing basis. Pertinent government policies that are likely to impact the business are reported to the appropriate Directors and Executive Management Team and added to the climate-related risks and opportunities assessment. An example in the last year has been phase 2 of the Energy Savings Opportunity Scheme and ensuring the business is well positioned to comply with the requirements.

Specific example of physical risk management: Increasing occurrences of severe weather events can lead to programme delays and increases the risk of damaged material on site. In response, the business has been trialling modern methods of construction, including offsite manufacturing (OSM). OSM can lead to improved production efficiency, achieving a weather tight building more quickly and as more building components are developed in a factory environment, it can be less susceptible to severe weather. The business is also conducting Building Performance and Post-Occupancy Evaluation to ensure that new lower-carbon

technologies and building processes being introduced in our homes or at our sites meets the outcomes and performance required.

## C2.3

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

## C2.3a

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

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### Identifier

Risk 1

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type

Transition risk

### Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

### Type of financial impact

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

### Company- specific description

There is a clear understanding that the built environment can have a significant role in helping to minimise the impacts of climate change. In the recent Spring Statement, the Chancellor confirmed that the UK aims to achieve world leading levels of energy efficiency and in 2018 the government committed to halving energy use in new buildings by 2030. With these ambitions, together with the government's commitment to achieving net zero carbon emissions by 2050, we are likely to see an increase in on-site carbon reduction requirements beyond current levels, which could lead to increased operational costs.

It is also important that new homes built are climate resilient and comfortable to live in whilst temperatures continue to rise. As a result, UK Building Regulations, including Part L (conservation of energy and power) are likely to be progressively updated.

New lower-carbon products and technologies that are implemented to respond to changing regulatory requirements could be unfamiliar to customers. If their use is unpopular or not communicated adequately (such as why it is important and how they

are to be used), it could influence their choice of new home and/or their occupancy experience, as well as our reputation.

With any changes to regulations, there is a risk of potential disruption in production capacity due to the availability of skills and labour that can effectively build to the new requirements. There could also be increased build costs experienced by the business, through both the supply chain introducing new technologies and the need to acquire more skilled labour, to comply with any regulations.

**Time horizon**

Medium-term

**Likelihood**

More likely than not

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

4,500,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

It is uncertain as to what extra costs would be associated with research, design and build. However, if we estimate that increased consultancy fees would be required at design stage and then additional performance testing of homes built takes place, we could see a £1,500/plot increase. At current plot numbers (3,000), the cost equals £4,500,000. This increased plot cost would be deductible from the land value.

There would also be other costs to consider, such as the cost of any new technologies and the training required to upskill the workforce on their use, which are not included in this figure. As an example, if electric vehicle charging points are required to be installed in all homes, this could be an extra cost of £800 per home, equating to a total of £2,400,000 per year at current plot numbers. Use of new technologies could impact customer experience and if used incorrectly, may increase after sales costs. Unpopular technologies could also make homes more challenging to sell.

**Management method**

Potential regulatory changes and consultations are reviewed closely by our Group Technical and Quality team as well as our Board-level Technical Committee.

We regularly communicate with stakeholders such as the Ministry of Housing,

Communities and Local Government (MHCLG), Department for Business, Energy and Industrial Strategy (BEIS), Home Builders' Federation (HBF), UKGBC, and Homes England to understand and influence future changes in regulation. We also partner with Planning Authorities and skilled consultants to achieve consensual cost-effective outcomes.

We already have mitigation measures in place to reduce the risk of overheating in our homes. Overheating assessments take place on all developments and dynamic modelling and associated mitigation measures are implemented for plots with a medium or high risk of overheating. In the design of our new house type range, we carried out overheating testing and we are also trialling off site manufacturing (OSM) methods.

We are conducting Building Performance and Post Occupancy Evaluation (BPE and POE) on a selection of our new house designs that were built using OSM methods. This will gather information on building comfort and air quality within the home and the findings will be used to inform future designs.

### **Cost of management**

250,000

### **Comment**

Keeping abreast of new regulations is part of our normal business practice. We are also working to drive innovation across the business through research and development of OSM, Building Performance and Post Occupancy Evaluation (BPE and POE). The cost is a conservative estimate of consultant fees and time spent on R&D.

### **Identifier**

Risk 2

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Transition risk

### **Primary climate-related risk driver**

Market: Changing customer behavior

### **Type of financial impact**

Reduced demand for goods and/or services due to shift in consumer preferences

### **Company- specific description**

As stakeholders, including customers, society, investors and employees (including potential employees) become increasingly aware of the negative impacts of climate change, they are likely to increasingly favour companies that are working to mitigate against and adapt to climate change risks.

Failure to meet stakeholder expectations could lead to:

- Increased local government pressure and requirements to implement costly adaptation measures.
- Challenges to secure planning permission.
- Increased customer demand for in-home and development-wide mitigation and adaptation measures. Failure to adapt could result in a decrease in sales.
- More challenges to attract and retain staff, particularly younger generation employees, who are seeking to work with companies that demonstrate high levels of social and environmental responsibility.

There are now increased expectations from the investment community to demonstrate performance in this area and increasing reporting requirements (e.g. Streamlined Energy and Carbon Reporting (SECR) and recommendations from the Task Force on Climate-related Financial Disclosures).

### **Time horizon**

Medium-term

### **Likelihood**

About as likely as not

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

12,000,000

### **Potential financial impact figure – minimum (currency)**

### **Potential financial impact figure – maximum (currency)**

### **Explanation of financial impact figure**

Awareness of climate-related issues is increasing across the UK population, with climate change a regular feature in the media. Sustainability and climate change also feature extensively in school syllabuses. However, the business has yet to feel a significant impact from this increasing awareness, and therefore the potential impact on new-build home purchases is very uncertain. To date, only energy efficiency (and sometimes water consumption) are queried by prospective customers in our showhomes.

Whilst this is not expected to happen in the immediate future, if our revenue from Open Market sales were to fall by 5%, this would have an impact of approximately £12,000,000, which is the difference between the loss of sales and reduction in cost of sales.

### **Management method**

1, Effective technical procedures are in place, including flood and overheating risk assessments. In 2018, 81% of our developments incorporate sustainable urban drainage systems (SUDS). Approximately 11% of homes we built in 2018 were initially assessed as having a medium or high risk of overheating. These plots were then subject to dynamic heat modelling to allow mitigation measures to be implemented to avoid the risk from overheating.

2, Core sustainability features are built into sales' pitch as well as on our corporate website. We ensure that our corporate reporting and website content is transparent about our response to climate change and clearly communicates our leadership, good practice and responsiveness.

3, The business demonstrates innovation in build construction to respond to changing consumer behaviours towards climate change through our new range of house type designs and trials of offsite manufacturing (OSM).

4, Our policies and procedures relating to environmental management, climate change, biodiversity, sustainable procurement, diversity, modern slavery are all available in the public domain and are reviewed annually by our Executive Management Team.

5, We engage and consult with local communities and the local planning authority throughout the development planning process to ensure the development provides an attractive environment that is resilient to a changing climate.

### **Cost of management**

250,000

### **Comment**

Robust environmental policies and related technical and development procedures are normal course of business. We are also working to drive innovation across the business through research and development of OSM, Building Performance and Post Occupancy Evaluation (BPE and POE). The cost is a conservative estimate of consultant fees and time spent on R&D.

### **Identifier**

Risk 3

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Transition risk

### **Primary climate-related risk driver**

Market: Other

### **Type of financial impact**

Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatment)

### **Company- specific description**

We use a significant amount of energy as part of our construction work on site, including to power the site compounds and for plant and machinery around site. Global fuel price fluctuations do have an impact on our energy and fuel costs, including electricity and diesel.

Statistics from the Department for Business, Energy and Industrial Strategy (BEIS) show that average prices of red diesel increased by around 20% between 2017 and 2018 and this was also reflected in our spend on diesel.

Global fuel prices also impact costs to our business for waste management on site. In 2018, we produced 150,000yd<sup>3</sup> of construction waste, equating to around £3.5m in total waste disposal. When fuel prices increase, waste service providers must increase the cost of their skips to cover their increasing transportation costs. Therefore we are likely to continue to see the cost of waste disposal per yd<sup>3</sup> increase over time.

### **Time horizon**

Short-term

### **Likelihood**

Very likely

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

1,750,000

### **Potential financial impact figure – minimum (currency)**

### **Potential financial impact figure – maximum (currency)**

### **Explanation of financial impact figure**

According to the Department for Business, Energy and Industrial Strategy, the estimated fossil fuel price increase (using their central figures) is around 25% by 2025 and approximately 50% by 2030. Using the 2025 forecast and assuming we maintain our current levels of consumption and spend (approximately £3,000,000 per year), this cost would increase to £3,750,000 per year by 2025.

Increasing fuel costs are also impacting our waste collection costs and based on previous years, this could increase by up to 5% per year. If waste generated remains at the same level, the cost in 2025 would be £4,500,000 compared to the current cost of

£3,500,000 with a 5% increase year on year. This cost excludes the potential impact from increasing material costs.

### **Management method**

We work to minimise and manage increasing construction costs by identifying operational energy efficiency measures on sites through our Make Waste History (MWH) initiative.

We participate in the Energy Savings Opportunity Scheme (ESOS), and seek to implement the most beneficial recommendations from the energy audits conducted on our sites as part of the Scheme. ESOS Phase II is underway, and we are awaiting recommendations from our externally appointed auditors. Key actions will likely include improved management of diesel generators on site and the efficiency of our site compounds.

Through our MWH initiative, waste dashboards are issued to our site teams that highlight anomalously high waste streams and their associated cost. We run divisional initiatives (trade tool-box talks, site visits and Site Management Academy training delivered during 2018) that help improve resource efficiency and awareness of the importance of reducing waste.

We are updating our range of house designs and testing the use of off-site manufacturing (OSM) in their build. Expanding the use of OSM over time could lead to less energy consumed on site through the reduced need for equipment (e.g. diesel generators), and reduced transport movements to and around site as more materials are put together offsite.

We minimise the impact of rising energy costs for our customers by increasing the potential energy efficiency of new homes through efficient building fabric and services.

### **Cost of management**

0

### **Comment**

Reviewing and implementing resource efficiency opportunities is normal course of business.

### **Identifier**

Risk 4

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Transition risk

### **Primary climate-related risk driver**

Policy and legal: Increased pricing of GHG emissions

### **Type of financial impact**

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

### **Company- specific description**

As part of our direct operations and use of offices, we use energy and water. Potential changes to taxes and regulations will have an impact on our energy and water costs. For example, the Climate Change Levy (CCL) for electricity and natural gas increased by 45% and 67% respectively between 2018 and 2019. The CCL is paid through our energy bills, and directly impacts our margins and operational costs.

### **Time horizon**

Short-term

### **Likelihood**

Virtually certain

### **Magnitude of impact**

Low

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

36,500

### **Potential financial impact figure – minimum (currency)**

### **Potential financial impact figure – maximum (currency)**

### **Explanation of financial impact figure**

Based on the energy consumption data in 2018 and the increased rates of the Climate Change Levy (CCL) from 1st April 2019, the CCL will equate to a cost of over £110,000 per year. This is based on the same consumption of energy as in the 2018 financial year. Compared to the rates in 2018, this is a cost increase of £36,500. The CCL rates are forecast to increase for gas, but reduce for electricity.

### **Management method**

We are working to minimise the risk of higher operational costs by implementing measures in both our offices and sites to reduce energy use. For example, in 2016 we introduced LED lighting in our Head Office (which was our most inefficient office at the time). We are also exploring the use of more efficient site cabins to reduce our electricity, diesel and water use.

Our corporate business strategy has a strong focus on increasing operational efficiency across the organisation, with significant work being put into the new range of house

designs and off-site manufacturing (OSM). The new house types have also been designed with improved material management in mind, such as the use of standard plasterboard sizes and bathrooms designed to standard tile sizes.

### **Cost of management**

0

### **Comment**

Reviewing and implementing resource efficiency opportunities is normal course of business.

### **Identifier**

Risk 5

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Physical risk

### **Primary climate-related risk driver**

Acute: Increased severity of extreme weather events such as cyclones and floods

### **Type of financial impact**

Other, please specify

Increased operating costs (e.g. damage to materials on site, cost increase in material supply chain)

### **Company- specific description**

More frequent heavy rainfall events mean that it is crucial to put in place robust water run-off management measures on our sites. Working in particularly wet weather can lead to a greater risk of damaged materials and lost time on site (e.g. when a bricklayer cannot work due to mortar not setting) leading to increased operational costs and delayed build programmes. It can also increase the risk of health and safety accidents and other negative environmental incidents (such as inappropriate runoff into local watercourses).

More frequent flooding events, extreme droughts and water scarcity also challenge us to design homes that are increasingly water-efficient and flood resistant.

These events can also impact our supply chain, leading to increased lead times and material supply costs.

### **Time horizon**

Short-term

### **Likelihood**

More likely than not

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1,200,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The potential cost of lost working time and production delays vary depending on the impact and circumstances.

If there was an increase in damaged material on site from extreme weather events, we have conservatively estimated the impact to be a 2% increase on our direct material spend to replace the materials, which equates to approximately £1.2m per year.

**Management method**

Our environmental management system is designed in accordance with the principles set out in ISO 14001. Our health and safety standard sets out procedures designed to minimise risk and is based on OHSAS 18001.

Risk assessments are undertaken on every site, and include criteria for potential hazards due to inclement weather conditions. Specific risk management measures relating to extreme temperatures and storm events are incorporated within our Health, Safety and Environmental management procedures and standards.

The business has updated its house type range and is prototyping them using off site manufacturing (OSM) techniques. Manufacturing in a factory environment will mean that production is less susceptible to adverse weather.

**Cost of management**

0

**Comment**

Environmental management measures are part of the normal course of business.

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**Identifier**

Risk 6

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type**

Physical risk

**Primary climate-related risk driver**

Acute: Increased severity of extreme weather events such as cyclones and floods

**Type of financial impact**

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

**Company- specific description**

The frequency and intensity of severe weather events is increasing, which includes heavy rainfall, strong wind events and drought conditions. Climate scientists believe this trend will continue and it will increase the risk of disruption in production on sites. For example, there could be project delays due to inability for tradespeople to work on site (e.g. cranes unable to operate in strong winds). Extreme weather can also lead to a greater chance of damage to existing work and materials that are not suitably protected.

There is also the potential for disruption within our supply chain (e.g. supplier manufacturing plants located in areas subject to high physical risk from climate change), which could impact both the availability and delivery of materials to our sites. This could lead to significant project delays.

**Time horizon**

Medium-term

**Likelihood**

More likely than not

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

22,722,000

**Potential financial impact figure – minimum (currency)****Potential financial impact figure – maximum (currency)****Explanation of financial impact figure**

More frequent occurrences of severe weather could cause delays to build programmes, which could impact our revenues. For example, our suppliers' ability to deliver materials to site can be impacted. Certain conditions also prevent work taking place on site. Delays to the build programme will negatively impact customer satisfaction, and potentially our ability to sell homes (as it provides an added constraint as to when the

homes are available for sale), which impacts revenue.

Due to the unpredictable, and often site-specific nature of these occurrences, it is challenging to provide a financial impact. However, if it caused a 2% reduction in revenue, this would equate to over £22m.

### **Management method**

The business has a Sustainable Procurement Policy in place that specifies low-carbon and locally sourced products where possible. There are also group-wide framework agreements in place for key materials to guarantee a quantity and quality of supply. Our Group Procurement Director regularly communicates with our supply chain to understand their major challenges in order to help us mitigate any potential impacts. Local suppliers are used where possible and in 2018, 26% of our procurement spend was with suppliers and sub-contractors within 20 miles of site operations.

Through our Make Waste History campaign, our site teams are encouraged to provide adequate weather protection for our materials to avoid risk of damage.

We are also trialling methods of offsite manufacturing (OSM). If more elements of our homes are manufactured in a factory environment, and the time in which our homes become weather-tight shortens, our production process and build programmes will be less susceptible to adverse weather.

### **Cost of management**

250,000

### **Comment**

Resource efficiency and supply chain management is part of normal course of business. We are also working to drive innovation across the business through research and development of OSM, Building Performance and Post Occupancy Evaluation (BPE and POE). The cost is a conservative estimate of consultant fees and time spent on R&D.

### **Identifier**

Risk 7

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Physical risk

### **Primary climate-related risk driver**

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

### **Type of financial impact**

Increased capital costs (e.g., damage to facilities)

### **Company- specific description**

Changing precipitation patterns and more frequent heavy rainfall could lead to changes to the flood risk of the land bank and to potential future land purchases.

Increasing frequency of both periods of precipitation and drought conditions challenges us to design appropriate sustainable drainage systems and homes that reduce water demand.

**Time horizon**

Medium-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

0

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The majority of land is secured on option. Flood risk is re-assessed at point of purchase and cost/risk factored into the land value purchase price.

**Management method**

Flood risk assessments are conducted across all developments at the pre-acquisition stage. Where flood risks are identified, appropriate flood mitigation measures are designed, such as the use of SUDs, and the costs will be factored into the land purchase price.

With an increasing likelihood of water scarcity, particularly in south east England, it is important we consider measures to reduce water demand in our homes. All of our homes are designed to exceed the building regulations with a water consumption of 105 litres per person, per day.

**Cost of management**

0

**Comment**

Flood risk assessments are part of the normal course of business.

**Identifier**

Risk 8

**Where in the value chain does the risk driver occur?**

Customer

**Risk type**

Physical risk

**Primary climate-related risk driver**

Chronic: Rising mean temperatures

**Type of financial impact**

Other, please specify

Increased operating costs (e.g. implementing solutions to reduce overheating risk)

**Company- specific description**

Increasing temperatures raise the likelihood of overheating in homes. If homes are subject to overheating, this could cause discomfort and potentially poor air quality for our customers.

The business conducts overheating assessments across all developments and implements the necessary requirements to reduce the risk. There could be challenges to project economics and market affordability if further future-proofing of new homes against risk of overheating is required.

**Time horizon**

Medium-term

**Likelihood**

More likely than not

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1,750,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

If overheating causes new homes to be uncomfortable to live in or effect the air quality, this could have a financial impact on our operating profit and the costs of after-sales remediation. It is challenging to calculate an accurate financial value, but in 2018,

approximately 350 homes were initially assessed as having a medium or high risk of overheating, before mitigation measures were implemented. If no mitigation measures were included, and issues only came to light post occupation, the mitigation cost is estimated to be around £5,000 per plot. This cost would include consultant fees to model the overheating, together with remedial solutions put in place. If the £5,000 is multiplied by 350, this equals £1,750,000.

### Management method

Training around reducing the risk of overheating is provided to our development teams and concept design architects. Overheating can be designed out at the concept design stage for negligible extra cost. Overheating risk assessments are then conducted across all developments during the detailed design stage. Where homes are identified at the detailed design stage as having a medium or high risk of overheating, they will undergo full dynamic overheating modelling. This second analysis is not a requirement of building regulations, but it provides us with a hierarchy of solutions to mitigate the overheating risk. To further combat overheating risk across our future portfolio of homes, our new range of house designs has been modelled for the worst case scenario of overheating, allowing us to mitigate the risk through design.

### Cost of management

330,000

### Comment

In 2018, the cost of completing the dynamic modelling was around £50,000. The modelling identifies mitigation measures to combat the risk of overheating. The cost to implement these measures at the detailed design stage is approximately £800 per plot. With 350 plots initially assessed at the design stage as having a medium or high risk, the mitigation costs were approximately £280,000.

## C2.4

**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

## C2.4a

**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

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### Identifier

Opp1

### Where in the value chain does the opportunity occur?

Direct operations

### Opportunity type

Resource efficiency

**Primary climate-related opportunity driver**

Use of more efficient production and distribution processes

**Type of financial impact**

Reduced operating costs (e.g., through efficiency gains and cost reductions)

**Company-specific description**

The business spends approximately £6,500,000 per year on waste skips, energy and red diesel consumption. The true cost of waste will be much higher when the original cost of the material is factored in. There is scope to reduce waste and energy and save a significant amount of money.

**Time horizon**

Medium-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

325,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The combined waste and energy spend is approximately £6,500,000. If a 5% saving is achieved, this would equate to a saving of £325,000. This would be a conservative saving as it does not take into account the saving on materials purchased.

**Strategy to realize opportunity**

Increasing operational energy efficiency through our Make Waste History campaign. This has seen us launch a Pallet Return Scheme, continue to benchmark and report site performance and increase our use of renewable energy.

The business is also implementing new house designs that will incorporate design features to reduce waste during production. Prototyping the new designs using off site manufacturing techniques will also contribute towards less waste and diesel use on site.

**Cost to realize opportunity**

250,000

**Comment**

Resource efficiency is part of business as usual. We are also working to drive innovation across the business through research and development of OSM, Building Performance and Post Occupancy Evaluation (BPE and POE). The cost is a conservative estimate of consultant fees and time spent on R&D.

**Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Type of financial impact**

Reduced exposure to future fossil fuel price increases

**Company-specific description**

The cost of fossil fuels is likely to increase through both diminishing natural resources and Government policy to reduce the reliance on fossil fuels. Substituting the use of fossil fuels with renewable energy will reduce the business exposure to these increases. Indeed, as the renewable energy capacity increases, and energy storage technologies improve, we could see cost savings through the use of renewable energy.

**Time horizon**

Medium-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

750,000

**Potential financial impact figure – minimum (currency)****Potential financial impact figure – maximum (currency)****Explanation of financial impact figure**

The increase in the cost of oil and gas is forecast to be at least 25% by 2025 (based on BEIS central estimates). This excludes increases in CCL and other potential taxes on fossil fuels. A 25% increase in our energy and diesel costs would equate to an annual cost increase of approximately £750,000. The opportunity to save this cost is based on moving away from fossil fuels and does not include the further opportunity to reduce consumption of energy and fuel.

### Strategy to realize opportunity

The business is currently purchasing renewable electricity and biogas for both the Chertsey (HQ) and Bristol offices. Renewable energy is also being purchased on a selection of construction sites for our site compounds.

### Cost to realize opportunity

0

### Comment

There is a negligible cost difference between the renewable and non-renewable energy tariffs.

### Identifier

Opp3

### Where in the value chain does the opportunity occur?

Direct operations

### Opportunity type

Products and services

### Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

### Type of financial impact

Other, please specify

Cost effective compliance with evolving building regulations

### Company-specific description

It is crucial that new homes built are climate resilient, comfortable to live in and have low running costs through efficient use of energy and water. As a result, UK Building Regulations, including Part L (conservation of energy and power) are likely to be progressively updated.

By considering potential impacts of climate change in our home designs and evaluating the building's performance, the business can increase the skills, knowledge and expertise of employees and supply chain partners; continually improve the homes' in-use performance; and be well placed to find cost effective methods to meet future regulatory requirements.

### Time horizon

Medium-term

**Likelihood**

More likely than not

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The business could reduce the potential design, build and time costs of meeting new building regulations. It could also help to achieve planning consents by demonstrating to local councils and communities that we are proactively considering climate change in the homes and developments we build, and efficiently meeting any planning requirements they set.

**Strategy to realize opportunity**

We regularly communicate with stakeholders such as the Ministry of Housing, Communities and Local Government (MHCLG), Department for Business, Energy and Industrial Strategy (BEIS), Home Builders' Federation (HBF), and Homes England to understand and influence future changes in regulation. We also partner with Planning Authorities and skilled consultants to achieve consensual cost-effective outcomes.

We have in place a number of effective technical procedures to assess the risks of climate change on the homes and developments we build, including flood risk assessment and dynamic overheating modelling.

We are demonstrating innovation in build construction through the launch of our new range of house designs and testing the use of off-site manufacturing (OSM) techniques.

Both our new house type range and the use of OSM could potentially help us to:

- reduce waste and improve the efficient use of materials
- reduce energy consumed on site
- reduce transport movements
- reduce build disruptions and delays

We are conducting Building Performance and Post Occupancy Evaluation (BPE and POE) on a selection of our new house designs that were built using OSM methods. This

will gather information on building comfort and air quality within the home and the findings will be used to inform future designs.

### **Cost to realize opportunity**

250,000

### **Comment**

Consulting with stakeholders and industry bodies is normal course of business. We are also working to drive innovation across the business through research and development of OSM, Building Performance and Post Occupancy Evaluation (BPE and POE). The cost is a conservative estimate of consultant fees and time spent on R&D.

### **Identifier**

Opp4

### **Where in the value chain does the opportunity occur?**

Direct operations

### **Opportunity type**

Products and services

### **Primary climate-related opportunity driver**

Shift in consumer preferences

### **Type of financial impact**

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

### **Company-specific description**

With an increasing societal awareness of the importance to mitigate and manage climate change, as well as the importance of living healthy lifestyles, a shift in consumer preferences is likely, but the likelihood that it impacts house purchasing decisions is currently uncertain. While we have yet to see a direct impact on the purchase of new-build homes, this is definitely notable in other industries, such as Fast Moving Consumer Goods (FMCG).

With increasing temperatures, more extreme weather events, and the general increasing awareness of individual responsibility for climate change, we expect to see the demand for homes that are designed to mitigate and adapt to climate change effectively and efficiently increase. Thermal comfort, air quality, water efficiency and health and well-being are likely to be key selling points, as energy efficiency is now. The business could gain a competitive advantage from this future increase in demand by delivering homes that respond to these needs.

### **Time horizon**

Medium-term

### **Likelihood**

More likely than not

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

There could be increased demand for new build homes and developments that effectively mitigate and adapt to the impacts of climate change (like overheating, water scarcity and flooding) and help customers to reduce their own carbon footprints. Providing these kinds of homes could lead to increased sales and a reputation as a housebuilder of choice for sustainable homes.

**Strategy to realize opportunity**

Existing sustainability features of the homes and developments we build are incorporated into sales information and sales pitches (e.g. energy and water efficiency, large green open spaces, walkable developments, cycle paths, electric vehicle charging points, etc.), as well as on our corporate and customer websites.

We ensure that our homes are built to respond to the most pressing climate change impacts through effective technical procedures, such as flood risk assessment and dynamic overheating modelling. We are conducting Post Occupancy Evaluation (POE) on a selection of our new house designs that were built using OSM to ensure that the thermal comfort and air quality, along with build quality meet our customers' needs and effectively meet our design commitments to respond to climate change. The findings will be used to inform future designs and build techniques.

Through our masterplanning, we actively seek to design our developments to encourage residents to walk and cycle to local amenities. Our Garden Village principles, which we use across a number of our larger, long-term sites, encourage healthy living and engagement with nature.

We work to ensure that we are transparent about how we embed sustainability into our business practices and in the developments we build. Our corporate website, external communications and reporting all reference our core policies and initiatives, and we aim to clearly communicate our leadership and good practice in these areas.

**Cost to realize opportunity**

0

**Comment**

Embedding sustainability within our business and across our developments is part of our normal course of business.

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**Identifier**

Opp5

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Resilience

**Primary climate-related opportunity driver**

Other

**Type of financial impact**

Other, please specify

Retaining and attracting talented employees

**Company-specific description**

Employees are increasingly looking to work for organisations that demonstrate high levels of environmental and social awareness. Therefore, by successfully managing our climate-related issues, we can enhance the business's ability to attract and retain employees.

This is particularly the case for younger generations, as research indicates a strong preference to work where they can make a positive difference to the environment and society and where the organisation aligns to their expectations for positive corporate purpose. In fact, our internal recruitment team monitors what influences graduates' choice when selecting a company to work for. Around 64% of the applicants to our latest graduate programme stated that they want to work for a business that is environmentally aware and prioritises sustainability.

**Time horizon**

Short-term

**Likelihood**

More likely than not

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

200,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

Improving our ability to retain talent can lead to a reduction in staff turnover. If our turnover reduced by 20%, our hiring costs could be cut by approximately £200,000 per year.

**Strategy to realize opportunity**

We ensure that our homes are built to respond to the most pressing climate change impacts through effective (and sometimes leading) technical procedures, such as flood risk assessment and dynamic overheating modelling. We are conducting Post Occupancy Evaluation (POE) on a selection of our new house designs to ensure that the thermal comfort and air quality, along with the build quality meet our customers' needs and meets our design commitments to respond to climate change. The findings will be used to inform future designs and build techniques.

Through our masterplanning, we actively seek to design our developments to encourage residents to walk and cycle to local amenities. Our Garden Village principles, which we use across a number of our larger, long-term sites, encourage healthy living and engagement with nature.

We work to ensure that we are transparent about how we embed sustainability into our business practices and in the developments we build. Our corporate website (including our careers page), external communications and reporting all reference our core policies and initiatives, and we aim to clearly communicate our leadership and good practice in these areas.

**Cost to realize opportunity**

0

**Comment**

Embedding sustainability within the business and communicating our performance is part of normal business practice.

**C2.5**

**(C2.5) Describe where and how the identified risks and opportunities have impacted your business.**

	Impact	Description
Products and services	Impacted	Our range of products have been impacted by climate-related risks and opportunities. One such instance is the increasing risk from overheating in the homes we build. The potential impact of overheating is significant.

		<p>If not alleviated appropriately, it can negatively affect comfort levels and air quality in the home, as well as customers' health.</p> <p>In response to this risk, all homes undergo an initial overheating risk assessment during the design stage. Homes that are at medium or high risk of overheating are then subject to full dynamic overheating modelling. This second analysis is not required by building regulations, but it provides a hierarchy of solutions to mitigate the risk from overheating. To further combat the potential risk of overheating in our future builds, our new range of house designs has been modelled for the worst-case scenario of overheating, allowing us to mitigate this risk through design today.</p> <p>There are also a number of opportunities that arise from climate change, including driving the business to innovate and become more operationally efficient. One example of this is our research into off-site manufacturing (OSM). This innovative method of construction can drive significant efficiencies for the business as well as drive modernisation in our building techniques. These efficiencies could include producing less waste per plot, reducing transportation movements of materials to and around site, as well as significantly increasing build speed. The magnitude of this impact is medium.</p>
<p>Supply chain and/or value chain</p>	<p>Impacted</p>	<p>The business has not yet experienced direct effects from deforestation, but we understand the huge importance this has on the environment and climate change, as well as on our methods of construction and supply chain reliability. In response, we have developed a rigorous procurement process for our Commercial teams to procure sustainable timber as well as set clear expectations for our suppliers and subcontractors through our Supply Chain Code of Conduct, Sustainable Timber Procurement Policy, and contractual terms and conditions.</p> <p>While embodied carbon assessments are not mandatory, we understand that the embodied carbon involved with building homes can be high. We undertook an embodied carbon assessment to understand what impact the materials we use in offsite manufacture (both timber and steel frame), as well as the techniques used, would have on the environment versus traditional construction methods. The results of this assessment were considered by the Group Technical and Quality Director in the design of our new housing range.</p> <p>We monitor the locations of our supply chain partners, reporting the % purchased from local suppliers annually. We actively encourage our commercial teams to work with companies within a 50-mile radius, and a preference for local companies and products is stated in our Sustainable Procurement Policy. In 2018, 58% of our procurement spend with</p>

		suppliers and sub-contractors was within 50 miles of site operations. The magnitude of this impact is medium.
Adaptation and mitigation activities	Impacted	<p>The business has implemented measures to adapt to more frequent extreme weather events, such as floods, potential overheating, and severe localised weather. For example, we have significantly increased the use of Sustainable Urban Drainage Systems (SUDs) on our developments. In 2014, 50% of our developments featured a SUDs system, rising to 81% in 2018. We also apply appropriate Flood and Water Management Plans, together with overheating risk assessments to our developments.</p> <p>We are also trialling the use of offsite manufacturing (OSM). A key benefit of OSM is that part of the build process happens inside a factory. This will help us to minimise disruptions to our build programme and site operatives' safety on site during severe, localised weather events (such as the severe winter storms experienced in the UK in February and March 2018). Although severe weather events are very uncertain and challenging to predict, the scientific consensus is that they will happen on a more frequent basis. The delay to build programmes can have a significant impact on margins and ROCE.</p> <p>Sustainable transport options, such as cycling lanes and storage, as well as "green travel incentives" are implemented on our developments to encourage home owners to select sustainable transport options. Low energy lighting and low water consuming appliances are installed in the homes, along with water butts. The magnitude of this impact is medium.</p>
Investment in R&D	Impacted	Following the outcome of a collaborative research project with other UK house-builders, which examined alternative methods of construction, our business has decided to launch a research and development project into the use of offsite manufacturing (OSM) in our build process. The use of OSM is likely to improve quality, reduce waste and embodied carbon, and result in a more efficient use of resources, including water and raw materials. We have also received funding from Innovate UK to research and develop a new non-combustible insulation solution.
Operations	Impacted	<p>To reduce our operational impact, it is important to consider opportunities to reduce our carbon footprint. Over the course of 2018, renewable energy was purchased for two offices to reduce the business's carbon footprint. The business has also started to procure renewable energy contracts for some of our site compounds. Site cabins are upgraded with energy efficient technologies where feasible and are connected to a Temporary Builders' Supply as soon as possible to minimise time spent using a diesel generator and the associated emissions.</p> <p>Changes in the frequency and severity of weather events can also impact</p>

		our ability to build homes. The magnitude of this impact is medium.
Other, please specify		

## C2.6

**(C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.**

	Relevance	Description
Revenues	Not yet impacted	Physical risks from climate change, such as an increased frequency of severe weather, are expected to cause increasing disruption at building sites in the medium term timeframe. The knock-on impacts can result in build programme delays and temporary loss of revenue. It is challenging to predict such occurrences, but if one week was lost (around 2% of revenue) it equates to the significant sum of over £22m at current revenue. Building homes that are energy efficient and well adapted for a changing climate could also lead to increased revenue. For example, green mortgages are likely to become increasingly available. These can allow customers to obtain better mortgage rates for energy efficient homes.
Operating costs	Impacted	Increasing operating costs are noted in our climate-related risks and opportunities assessment and the magnitude of this impact is medium. This is due to a number of factors: <ul style="list-style-type: none"> <li>- the rising cost of energy, with fossil fuel prices expected to increase by 50% by 2030</li> <li>- Greater frequency of severe weather resulting in damage to materials on site.</li> <li>- Increased use of consultants for overheating modelling and requirements to put extra measures in place, to reduce overheating and flood risk.</li> </ul> The costs are reviewed regularly by the project teams within each division of the business.
Capital expenditures / capital allocation	Impacted	Changing precipitation patterns are leading to changes in the flood risk of land. Flood risk assessments are conducted prior to purchasing sites and the cost of flood management measures are factored into land values. Flood risk management measures within the business are robust and the magnitude of the impact is currently low.
Acquisitions and divestments	We have not identified any	

	risks or opportunities	
Access to capital	We have not identified any risks or opportunities	
Assets	We have not identified any risks or opportunities	
Liabilities	We have not identified any risks or opportunities	
Other		

## C3. Business Strategy

### C3.1

**(C3.1) Are climate-related issues integrated into your business strategy?**

Yes

#### C3.1a

**(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?**

No, but we anticipate doing so in the next two years

#### C3.1c

**(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.**

Our corporate business strategy, as set out in our Annual Integrated Report 2018, includes five key areas of focus. One of these areas of focus is to continually improve our environmental and social performance. We have undertaken numerous initiatives since 2016, which have resulted in climate-related issues being integrated into our corporate business strategy through this “area of focus”. For example, in November 2016 we carried out a detailed materiality assessment with key internal and external stakeholders to review existing material issues, risks and opportunities faced by our business, including those relating to climate change and other ESG issues. The internal stakeholders included Board members, as well as directors in charge of procurement and supply chain, Health, Safety and Environment and Customer Service. The external stakeholders included representation from major shareholders, local and central government, an SME builder, industry bodies and several of our key supply chain partners. In the final materiality assessment, “Environmental Impact” was included, which we defined as

“managing and minimising the negative environmental impacts to, and from, our operations and taking advantages of opportunities to support and drive environmental improvements. This includes: enhancing biodiversity and natural habitats; reducing our operational footprint; and managing, mitigating and adapting to more frequent and powerful flooding events, droughts, overheating in homes, disruptions to supply chains, and increased poor weather conditions affecting work on site.”

Further to this, during 2018, our Group Governance & Sustainability Manager participated in the preparation of the annual Group Risk Register process, incorporating risks and opportunities identified through a separate comprehensive ESG risk assessment, including those relating to climate-related issues on the developments we build and our operations. The Group Risk Register is reviewed and monitored by the Audit and Risk Committee. The Board and Executive Management team also reviewed and refined the principal risks identified in the Group Risk Register, mapping them against our material issues. The strategy and our material issues were published in our Annual Integrated Report 2018 and on our corporate website.

Beyond these initiatives, our senior executives participate in numerous industry and government collaborations. Their participation helps us to stay informed of current and emerging issues related to climate change and their impact on our business, supply chain and customers in the short- and longer-term. The insights gained help inform our business strategy, ensuring it is responsive and effective. Some of our collaborations include: membership of the National House Building Council, representation on the HBF National Technical and Sustainability Committee and the HBF Future New Homes Standard subgroup, along with dialogue with government departments, including BEIS and MHCLG.

The primary aspects of climate change that have influenced our strategy have been:

- Responding to increasing government focus on climate change and biodiversity, including the Chancellor’s announcement regarding all new-build homes from 2025 to be heated without gas boilers and the new requirements to create a net biodiversity gain on all developments
- The impact of climate change on our operations, primarily through inclement weather that disrupts our build programmes and increases the risks to workers on site from slips and trips
- The impact of climate change on the homes and developments we build for our customers, and the need to introduce effective adaptation strategies to potential increases in flooding and overheating.
- Our reputation and stakeholders, including potential young recruits to the business, who expect to see better and more effective methods to reduce our contributions to climate change.

The most substantial business decision made during the year that was, in part, influenced by the impact of climate change on the organisation was our decision to continue our programme of research, development and testing into modern methods of construction, particularly off-site manufacturing. The off-site manufacturing prototypes built during 2017 confirmed our ability to create weather-tight homes 90% faster than using traditional methods. This will help us to mitigate the significant impact that increasing inclement weather will have on our build programmes. The steel frames for the prototype homes were developed in a factory, where the windows and insulation were also installed. This meant that we were able to reduce the number of forklift truck movements on site as well as the material deliveries to the site by our

suppliers. Waste was also significantly reduced during the trial, resulting in the homes producing 6.6 tonnes/1000 sqft, compared to our Group-wide average of 9.7 tonnes/1000 sqft. With these benefits and others, the business decided to expand its testing of off-site manufacturing across the business with more trials rolling out in 2018 and 2019 on four other sites.

## C3.1g

### (C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?

Climate-related scenario analysis is not currently used to inform our business strategy. Instead, the likely impacts of future climate change are factored into our strategy and operational procedures. This includes the risks associated with overheating on our developments as warmer summer temperatures become more likely, as well as the risk from flooding due to more frequent occurrences of severe weather. Flood risk assessments are conducted prior to purchasing sites and the cost of flood mitigation measures are factored into the land value. We recognise the value of forward-looking scenario analysis and plan to review its use within the business.

## C4. Targets and performance

### C4.1

#### (C4.1) Did you have an emissions target that was active in the reporting year?

No target

### C4.1c

#### (C4.1c) Explain why you do not have emissions target and forecast how your emissions will change over the next five years.

	Primary reason	Five-year forecast	Please explain
Row 1	We are planning to introduce a target in the next two years	Emissions over the next five years are expected to reduce. The business is increasing the procurement of renewable energy contracts.	In 2018, the business began working with a specialist utilities management company. This has improved the robustness of our data and we plan to set a new baseline year prior to reviewing the work required to set science-based targets.

### C4.2

#### (C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

## C4.3

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

### C4.3a

**(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO<sub>2</sub>e savings.**

	Number of initiatives	Total estimated annual CO <sub>2</sub> e savings in metric tonnes CO <sub>2</sub> e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	2	318
Implemented*	2	140
Not to be implemented	0	0

### C4.3b

**(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

#### Initiative type

Low-carbon energy purchase

#### Description of initiative

Other, please specify  
Low carbon energy purchase

#### Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)

135

#### Scope

Scope 2 (location-based)

#### Voluntary/Mandatory

Voluntary

#### Annual monetary savings (unit currency – as specified in C0.4)

0

#### Investment required (unit currency – as specified in C0.4)

0

**Payback period**

&lt;1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Our Bristol and Chertsey offices are on renewable electricity tariffs. We are also introducing renewable tariffs across some of our construction sites. The cost difference between renewable and non-renewable tariffs is currently negligible.

**Initiative type**

Energy efficiency: Processes

**Description of initiative**

Other, please specify  
Upgrading IT equipment

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

5

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

3,250

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

&lt;1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

The energy consumption per laptop and desktop has fallen as old equipment has been replaced throughout the year. No extra investment required as this is part of rolling improvements in IT equipment.

**C4.3c**

**(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Compliance with regulatory requirements/standards	Compliance with, and where possible exceeding, current Building Regulations, which are designed to drive down carbon emissions of new homes. Crest Nicholson also meet, and where possible exceed, local planning requirements which means that many of our developments exceed Building Regulations by a considerable margin. In FY18, Crest achieved 12% lower average carbon emissions from our new homes than current regulations demand (based on SAP 2012). Crest Nicholson are also undertaking work to comply with the Energy Savings Opportunity Scheme (ESOS) phase 2.
Dedicated budget for energy efficiency	Projects identified as having potential for yielding cost and carbon savings are assigned specific budgets and resources. We are piloting modern methods of construction that will lead to a reduction in material waste and embodied carbon, as well as improved use of natural resources.
Employee engagement	Construction-related environmental issues, including waste minimisation and efficient energy and diesel use, form part of the subcontractor induction. A Make Waste History campaign is in place to drive divisions to generate innovative ideas on energy, water and waste reduction. Employees receive regular sustainability focused communication via the Group intranet, emails, workshops and noticeboards. Trainee site managers are given bespoke training by the organisation's sustainability team in reducing waste, energy and diesel use on our construction sites.
Financial optimization calculations	Our waste and energy costs are monitored on a regular basis, both at a group-level and by divisional teams. This provides a useful baseline when considering resource reduction projects. Each project or initiative to reduce waste, energy or water is reviewed on a case-by-case basis and will include a cost-benefit analysis. Among the issues reviewed are: payback period, maturity of technology, and ease of implementation across the business.
Internal incentives/recognition programs	Employees who receive car benefit are incentivised to reduce their vehicle emissions through a financial bonus for driving a low-emission vehicle. Employees are also encouraged to include cycling in their regular commute through the Cycle-to-Work Scheme.

## C4.5

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

Yes

## C4.5a

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.**

### Level of aggregation

Group of products

### Description of product/Group of products

All of our homes are designed and built to enable sustainable lifestyle choices and a lower environmental footprint for our customers. This includes design features to minimise energy and water use, maximise daylight and shading, as well as other elements within the homes and across the development that make what we produce a low-carbon product. Some of our homes also utilise low-carbon technologies, such as solar photo-voltaic and mechanical ventilation with heat recovery (MVHR).

### Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product

### Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify

SAP rating of homes

### % revenue from low carbon product(s) in the reporting year

100

### Comment

At a minimum, we meet the Building Regulations that require a minimum energy performance standard for new buildings, in the form of Target CO2 Emission Rate (TER) and Target Fabric Energy Efficiency rate (TFEE). However, when compared to other buildings, our new homes are designed to produce lower carbon emissions. The average SAP rating (based on SAP 2012) of our dwellings built in 2018 was 83.77, compared to an average SAP of a home in England of 62 (as reported in the MHCLG English Housing Survey 2017-2018), and an average of 81 for new-build homes in England (as reported in the 2015 DECC Energy Efficiency Statistical Summary report, page 19). The result of these high design standards is a 9,603 tCO<sub>2</sub>e saving per year by Crest Nicholson customers, when compared to average UK homes (for regulated consumption only).

27% of our completed homes in 2018 benefit from at least one renewable energy source, minimising the use of fossil fuels and reducing the homes carbon footprint. Our communities are well connected with 98% of our completed homes in 2018 within 1,500m of a bus service and 84% within 1,500m of local amenities. Furthermore, 45% of our completed homes have access to safe cycle storage and 45% of our developments have cycle lanes. Placing less reliance on cars will help homeowners to reduce their carbon footprint.

## C5. Emissions methodology

### C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

#### Scope 1

---

**Base year start**

November 1, 2006

**Base year end**

October 31, 2007

**Base year emissions (metric tons CO<sub>2</sub>e)**

467

**Comment**

#### Scope 2 (location-based)

---

**Base year start**

November 1, 2006

**Base year end**

October 31, 2007

**Base year emissions (metric tons CO<sub>2</sub>e)**

732

**Comment**

#### Scope 2 (market-based)

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

## C5.2

**(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.**

Defra Voluntary 2017 Reporting Guidelines

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

## C6. Emissions data

### C6.1

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO<sub>2</sub>e?**

**Reporting year**

---

**Gross global Scope 1 emissions (metric tons CO<sub>2</sub>e)**

7,285

**Start date**

November 1, 2017

**End date**

October 31, 2018

**Comment**

### C6.2

**(C6.2) Describe your organization's approach to reporting Scope 2 emissions.**

**Row 1**

---

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We are reporting a Scope 2, market-based figure

**Comment**

Scope 2 emissions reported as both market based and location based in our Annual Integrated Report 2018.

### C6.3

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO<sub>2</sub>e?**

## Reporting year

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### Scope 2, location-based

2,403

### Scope 2, market-based (if applicable)

2,408

### Start date

November 1, 2017

### End date

October 31, 2018

### Comment

## C6.4

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

## C6.5

**(C6.5) Account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.**

### Purchased goods and services

---

#### Evaluation status

Relevant, calculated

#### Metric tonnes CO<sub>2</sub>e

40.5

#### Emissions calculation methodology

GHG Protocol / Defra voluntary reporting guidance. Metered activity data from offices and sites. Emissions calculated using Defra 2018 conversion factors. GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Total water consumed (117,662 m<sup>3</sup>) multiplied by the Defra 2018 conversion factor 0.344 = 117,662 x 0.344 = 40.5tCO<sub>2</sub>e.

#### Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

#### Explanation

Water usage for offices and sites included. Other goods and services purchased from our suppliers and sub-contractors are relevant to our GHG footprint but not yet calculated.

## Capital goods

---

### Evaluation status

Relevant, not yet calculated

### Explanation

Fuel consumption associated with site cabins, plant and machinery on site is included within the Scope 1 and 2 emissions. There is currently insufficient readily available data being produced by our supply chain in order to accurately report on emissions associated with materials used in production.

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

---

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

1,722.3

### Emissions calculation methodology

GHG Protocol / Defra voluntary reporting guidance. Metered electricity and gas data from offices and sites. LPG supplier data and site purchase records for diesel. Emissions calculated using Defra 2018 conversion factors. GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). This includes the Transmission and Distribution and Well to Tank (WTT) emissions associated with electricity and gas consumption for offices and sites and the LPG and diesel consumption on site.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

### Explanation

Transmission and Distribution and Well to Tank (WTT) emissions for electricity and gas consumption for offices and sites and LPG and diesel consumption on site.

## Upstream transportation and distribution

---

### Evaluation status

Relevant, not yet calculated

### Explanation

Currently insufficient data but will be considered in future years.

## Waste generated in operations

---

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

2.9

**Emissions calculation methodology**

GHG Protocol / Defra voluntary reporting guidance. Activity data from waste contractor for offices and sites. Emissions calculated using Defra 2018 conversion factors. GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Includes construction waste sent to landfill (942 tonnes), office waste sent to landfill (7 tonnes), recycled office waste (29 tonnes) and waste to energy (10 tonnes) multiplied by the relevant Defra 2018 conversion factor = (942, 7, 29, 10 multiplied by 1.28, 99.77, 21.38 and 21.38 respectively)/1000 = 2.9tCO2e

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Explanation**

Recycled, landfilled and incinerated office waste and landfilled construction waste.

**Business travel**

---

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

1,161.3

**Emissions calculation methodology**

GHG Protocol / Defra voluntary reporting guidance. Based on employee expenses and fuel card records. Emissions calculated using Defra 2018 conversion factors. GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Includes the Scope 3 Well to Tank (WTT) emissions for business travel, company owned vehicles and employee owned vehicles, multiplied by the relevant Defra 2018 conversion factors.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Explanation**

This figure includes Scope 3 and Scope 3 Well to Tank (WTT) emissions for business travel, company owned vehicles and employee owned vehicles.

**Employee commuting**

---

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

909.9

**Emissions calculation methodology**

GHG Protocol / Defra voluntary reporting guidance. Employee survey was carried out to ascertain distances travelled and type of transport used. Emissions calculated using Defra 2018 conversion factors. GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Includes Well to Tank (WTT) emissions associated with employee commuting, multiplied by the relevant Defra 2018 conversion factor.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

100

**Explanation**

This figure includes Well to Tank (WTT) emissions. Commuting data from the annual survey was extrapolated based on the response rate to give 100%.

**Upstream leased assets**

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**Evaluation status**

Not relevant, explanation provided

**Explanation**

Upstream emissions from leased assets are included in our reported Scope 1 and Scope 2 emissions.

**Downstream transportation and distribution**

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**Evaluation status**

Not relevant, explanation provided

**Explanation**

Downstream transportation and distribution is not relevant to our operations.

**Processing of sold products**

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**Evaluation status**

Not relevant, explanation provided

**Explanation**

Processing of sold products is not relevant to our operations.

**Use of sold products**

---

**Evaluation status**

Relevant, not yet calculated

**Explanation**

Currently insufficient primary data but will be considered in future years.

### **End of life treatment of sold products**

---

**Evaluation status**

Relevant, not yet calculated

**Explanation**

Currently insufficient data but will be considered in future years.

### **Downstream leased assets**

---

**Evaluation status**

Not relevant, explanation provided

**Explanation**

Not relevant, explanation provided

### **Franchises**

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**Evaluation status**

Not relevant, explanation provided

**Explanation**

Our operations do not include any franchises.

### **Investments**

---

**Evaluation status**

Not relevant, explanation provided

**Explanation**

Investments that are under our operational control are reported under our Scope 1 and 2 emissions.

### **Other (upstream)**

---

**Evaluation status**

Not relevant, explanation provided

**Explanation**

Not applicable

### **Other (downstream)**

---

**Evaluation status**

Not relevant, explanation provided

**Explanation**

Not applicable

**C6.7**

**(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

No

**C6.10**

**(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO<sub>2</sub>e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

---

**Intensity figure**

8.53

**Metric numerator (Gross global combined Scope 1 and 2 emissions)**

9,688

**Metric denominator**

Other, please specify

Unit total revenue (£m)

**Metric denominator: Unit total**

1,136.1

**Scope 2 figure used**

Location-based

**% change from previous year**

14.5

**Direction of change**

Increased

**Reason for change**

Our carbon emissions intensity increased by 15%. While revenue increased by £92.9m year on year, our emissions rose significantly due to an increase in scope of our fuel and electricity coverage.

## C7. Emissions breakdowns

### C7.1

**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

### C7.1a

**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO <sub>2</sub> e)	GWP Reference
CO <sub>2</sub>	6,934	IPCC Fourth Assessment Report (AR4 - 100 year)
CH <sub>4</sub>	7	IPCC Fourth Assessment Report (AR4 - 100 year)
N <sub>2</sub> O	344	IPCC Fourth Assessment Report (AR4 - 100 year)

### C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO <sub>2</sub> e)
United Kingdom of Great Britain and Northern Ireland	7,285

### C7.3

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By activity

### C7.3c

**(C7.3c) Break down your total gross global Scope 1 emissions by business activity.**

Activity	Scope 1 emissions (metric tons CO <sub>2</sub> e)
Offices	190
Construction sites	5,893
Business travel	1,202

## C7.5

**(C7.5) Break down your total gross global Scope 2 emissions by country/region.**

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
United Kingdom of Great Britain and Northern Ireland	2,403	2,408	8,449	475.6

## C7.6

**(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.**

By activity

### C7.6c

**(C7.6c) Break down your total gross global Scope 2 emissions by business activity.**

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Offices	209.4	74.7
Construction sites	2,193.2	2,333.2

## C7.9

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Increased

### C7.9a

**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year.**

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
--	--	---------------------	------------------------------	----------------------------

Change in renewable energy consumption	135	Decreased	1.7	Emissions value calculated as follows: Emissions reduction activity/2017 Scope 1 & 2 emissions = 135/7772 = 1.7%
Other emissions reduction activities	5	Decreased	0.1	Emissions value calculated as follows: Emissions reduction activity/2017 Scope 1 & 2 emissions = 5/7772 = 0.1%
Divestment	0	No change		
Acquisitions	0	No change		
Mergers	0	No change		
Change in output	0	No change		
Change in methodology	579	Decreased	7	This figure of 579 tonnes CO <sub>2</sub> e represents the carbon reduction associated with the reduction in UK grid emissions factors from 2017 to 2018. We have taken the amount of electricity consumed in this reporting year and compared the resulting carbon emissions using the 2017 grid factor and the 2018 grid factor.
Change in boundary	1,441.7	Increased	25	A number of metered supplies of electricity, gas and water have been included in this year's footprint for which we previously did not have data for.
Change in physical operating conditions	0	No change		
Unidentified	0	No change		
Other	0	No change		

## C7.9b

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Location-based

## C8. Energy

### C8.1

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 0% but less than or equal to 5%

### C8.2

**(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

### C8.2a

**(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	71.63	30,153.37	30,224.99
Consumption of purchased or acquired electricity		1,576.21	6,872.95	8,449.16
Total energy consumption		1,647.84	37,026.32	38,674.15

### C8.2b

**(C8.2b) Select the applications of your organization's consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

## C8.2c

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

---

### Fuels (excluding feedstocks)

Natural Gas

### Heating value

HHV (higher heating value)

### Total fuel MWh consumed by the organization

10,464.86

### MWh fuel consumed for self-generation of electricity

### MWh fuel consumed for self-generation of heat

94.91

### Comment

---

### Fuels (excluding feedstocks)

Diesel

### Heating value

HHV (higher heating value)

### Total fuel MWh consumed by the organization

18,669.43

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**Comment**

---

**Fuels (excluding feedstocks)**

Motor Gasoline

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

752.21

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**Comment**

---

**Fuels (excluding feedstocks)**

Liquefied Petroleum Gas (LPG)

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

338.5

**MWh fuel consumed for self-generation of electricity**

**MWh fuel consumed for self-generation of heat**

**Comment**

## **C8.2d**

**(C8.2d) List the average emission factors of the fuels reported in C8.2c.**

## Diesel

---

**Emission factor**

2.62694

**Unit**

kg CO2e per liter

**Emission factor source**

UK government greenhouse gas reporting: conversion factors 2018.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/715426/Conversion\\_Factors\\_2018\\_-\\_Full\\_set\\_for\\_advanced\\_users\\_\\_v01-01.xls](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/715426/Conversion_Factors_2018_-_Full_set_for_advanced_users__v01-01.xls)

**Comment**

## Liquefied Petroleum Gas (LPG)

---

**Emission factor**

0.21448

**Unit**

kg CO2e per kWh

**Emission factor source**

UK government greenhouse gas reporting: conversion factors 2018.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/715426/Conversion\\_Factors\\_2018\\_-\\_Full\\_set\\_for\\_advanced\\_users\\_\\_v01-01.xls](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/715426/Conversion_Factors_2018_-_Full_set_for_advanced_users__v01-01.xls)

**Comment**

## Motor Gasoline

---

**Emission factor**

2.20307

**Unit**

kg CO2e per liter

**Emission factor source**

UK government greenhouse gas reporting: conversion factors 2018.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/715426/Conversion\\_Factors\\_2018\\_-\\_Full\\_set\\_for\\_advanced\\_users\\_\\_v01-01.xls](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/715426/Conversion_Factors_2018_-_Full_set_for_advanced_users__v01-01.xls)

**Comment**

## Natural Gas

---

**Emission factor**

0.18396

**Unit**

kg CO2e per kWh

**Emission factor source**

UK government greenhouse gas reporting: conversion factors 2018.  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/715426/Conversion\\_Factors\\_2018\\_-\\_Full\\_set\\_for\\_advanced\\_users\\_v01-01.xls](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/715426/Conversion_Factors_2018_-_Full_set_for_advanced_users_v01-01.xls)

**Comment**

## C8.2f

**(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.**

---

**Basis for applying a low-carbon emission factor**

Energy attribute certificates, Guarantees of Origin

**Low-carbon technology type**

Solar PV  
 Wind

**Region of consumption of low-carbon electricity, heat, steam or cooling**

Europe

**MWh consumed associated with low-carbon electricity, heat, steam or cooling**

1,576.21

**Emission factor (in units of metric tons CO2e per MWh)**

0

**Comment**

The electricity supplied to our Chertsey and Bristol offices is 100% renewable, backed up with Renewable Energy Guarantees of Origin (REGOs). The site renewable energy contracts are also purchased from suppliers with Renewable Energy Guarantees of Origin (REGOs).

## C9. Additional metrics

### C9.1

**(C9.1) Provide any additional climate-related metrics relevant to your business.**

## C10. Verification

### C10.1

**(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

### C10.1a

**(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.**

---

#### Scope

Scope 1

#### Verification or assurance cycle in place

Annual process

#### Status in the current reporting year

Complete

#### Type of verification or assurance

Limited assurance

#### Attach the statement

 Verco GHG 2018 verification statement\_v2 Signed.pdf

#### Page/ section reference

Pages 1 and 2.

#### Relevant standard

ISO14064-3

#### Proportion of reported emissions verified (%)

100

---

#### Scope

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verco GHG 2018 verification statement\_v2 Signed.pdf

**Page/ section reference**

Pages 1 and 2.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

---

**Scope**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

 Verco GHG 2018 verification statement\_v2 Signed.pdf

**Page/ section reference**

Pages 1 and 2.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

## C10.1b

**(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

---

### Scope

Scope 3- all relevant categories

### Verification or assurance cycle in place

Annual process

### Status in the current reporting year

Complete

### Attach the statement

 Verco GHG 2018 verification statement\_v2 Signed.pdf

### Page/section reference

Pages 1 and 2.

### Relevant standard

ISO14064-3

## C10.2

**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

No, we are waiting for more mature verification standards and/or processes

## C11. Carbon pricing

### C11.1

**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

No, and we do not anticipate being regulated in the next three years

### C11.2

**(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

No

## C11.3

### (C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

## C12. Engagement

### C12.1

#### (C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers

### C12.1a

#### (C12.1a) Provide details of your climate-related supplier engagement strategy.

---

##### Type of engagement

Compliance & onboarding

##### Details of engagement

Code of conduct featuring climate change KPIs

##### % of suppliers by number

100

##### % total procurement spend (direct and indirect)

100

##### % Scope 3 emissions as reported in C6.5

25

##### Rationale for the coverage of your engagement

We have developed a Supply Chain Code of Conduct to which all our suppliers and subcontractors must adhere. Our contractual terms and conditions also include a requirement for compliance with our Code of Conduct. The Code of Conduct makes specific reference to environmental matters, such as climate change and the use of energy, water and diesel on our sites. It also reiterates the need for our supply chain to adhere to our Climate Change Policy.

##### Impact of engagement, including measures of success

The Code of Conduct was published in July 2018, therefore its impact and success has not been determined yet. We are currently assessing how we can measure the Code's impact on our business.

##### Comment

Based on previous embodied carbon research, we estimate that emissions associated with our supply chain equate to at least 25% of the total carbon footprint. Whilst scope 3 supply chain emissions are not currently reported, we are exploring opportunities to collate data associated with our supply chain.

### **Type of engagement**

Compliance & onboarding

### **Details of engagement**

Other, please specify

Waste, energy, timber and fuel consumption data

### **% of suppliers by number**

1

### **% total procurement spend (direct and indirect)**

1

### **% Scope 3 emissions as reported in C6.5**

### **Rationale for the coverage of your engagement**

We engage with our suppliers regularly to obtain robust data on a variety of environmental data, such as waste, operational diesel usage and % of certified timber used. Much of this data is used to respond to the GHG reporting requirements and other benchmarks. The data is also used to help us identify areas for resource efficiency and innovation.

### **Impact of engagement, including measures of success**

Robust and clear data from our supply chain provides greater transparency as to where the business can focus on reducing its carbon footprint and identify potential future risks. Over the course of 2017 and 2018, we have been working closely with our supply chain to improve our understanding of how diesel is used on site and why consumption is increasing. For example, we are working with our suppliers who provide forklift trucks to use telematics to assess driving efficiency measures and on-site behaviours that can be improved.

### **Comment**

## **C12.1b**

**(C12.1b) Give details of your climate-related engagement strategy with your customers.**

### **Type of engagement**

Education/information sharing

### **Details of engagement**

Share information about your products and relevant certification schemes (i.e. Energy STAR)

### **% of customers by number**

100

### **% Scope 3 emissions as reported in C6.5**

### **Please explain the rationale for selecting this group of customers and scope of engagement**

The majority of the lifecycle emissions of a home arise from the in-use stage. It is therefore important to engage with our customers to ensure they understand the functionality of their home and how they can minimise their emissions, water and energy use.

Multiple methods are used to engage with our customers. Information on reducing energy and water use (lowering carbon emissions) is available in our Home Owner's Guides that are provided to each customer. Our employees on site provide home demonstrations to our customers. During these demonstrations we inform customers of how to maximise the performance of various pieces of technology within the home. For example, we show customers how to optimise use of the boiler, while at home and while they are away.

We worked with our ventilation manufacturers to design easy-to-read one page documents that explain to customers, in plain English, how to best use the system to optimise comfort and efficiency. These are also now included in our Home Owner's Guide.

Any further queries our customers have can be discussed with our customer service teams.

### **Impact of engagement, including measures of success**

A measure of success is our customer satisfaction scores and comments on our home demonstrations and quality of the home.

In our most recent satisfaction survey, over 88% of our customers were positive about their home demonstration experience.

## **C12.3**

### **(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

Direct engagement with policy makers

Trade associations

## C12.3a

**(C12.3a) On what issues have you been engaging directly with policy makers?**

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Energy efficiency	Support	Energy efficiency of new build homes (Part L Building Regulations, England). One of our Directors sits on the HBF Future New Homes Standard subgroup and we have representation on the HBF National Technical and Sustainability Committee.	Development of practical, cost-effective, customer friendly solutions ensuring that new regulations can be delivered effectively on site whilst having a positive impact on the operational emissions of homes.
Adaptation or resilience	Support	Regular communication and engagement with stakeholders such as the Home Builders' Federation (HBF) and relevant government departments.	Development of practical, cost effective performance standards that ensure homes are resilient to a changing climate.

## C12.3b

**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

## C12.3c

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

### Trade association

Home Builders Federation (HBF)

### Is your position on climate change consistent with theirs?

Consistent

### Please explain the trade association's position

The HBF keeps abreast of evolving standards and regulations. They engage with the housing industry and the UK Government to ensure that policy requirements with regards to climate change are effective, fair and proportionate.

### How have you influenced, or are you attempting to influence their position?

Crest Nicholson interacts with the HBF in a variety of ways: Our former CEO (now Chairman) is a non-executive director on the Board of the HBF. When he was appointed to this position with the HBF, it observed that: "His wealth of experience and appetite to improve the climate in which the industry operates – particularly with regards to the sustainability agenda - will supplement and enhance the skills of the existing

board members”. A Crest Nicholson Director sits on the HBF Future New Homes Standard subgroup and we have representation on the HBF National Technical and Sustainability Committee: assisting in providing expert feedback to Government on the technical aspects and tools required to deliver comfortable low-carbon homes. The Group Governance and Sustainability Manager sits on the HBF Waste Group, which shares best practice on operational waste, energy and fuel efficiency.

## C12.3f

### **(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

The Sustainability team (which sits within the Company Secretariat) are responsible for developing and managing the organisation’s sustainability strategy and response to climate change. The Interim Chief Executive Officer has overall responsibility for sustainability, including climate-related issues.

The Sustainability team members liaise closely with appropriate Directors and Executive Management Team members (including those that sit on industry-wide boards or who liaise with government on policy) to both ensure that the sustainability strategy remains fit for purpose and that our influence and work at the government and industry level is consistent with our commitments to sustainability and climate change.

The Crest Nicholson development process is required to incorporate the Group’s policies and aspirations in respect of sustainability, including Climate Change, Sustainable Procurement, and other environmental matters. These matters are part of the scheduled review and sign-off processes.

Innovation and strategic policies are incorporated by both our Technical Committee (which reports to the Board) and our Business Improvement Workgroups (BIWs). The BIWs are working groups made up of directors from across our divisions working in a particular area, e.g. commercial, technical or customer service. The BIWs meet quarterly to discuss emerging and current business issues and to assist in the effective roll-out of initiatives. The BIWs are overseen by the Executive Management Team.

To help ensure that our onsite activities are consistent with our climate change strategy, various training courses are delivered during the course of the year. Examples include the sustainability workshop for our Site Managers on the Site Management Academy and our video inductions.

## C12.4

### **(C12.4) Have you published information about your organization’s response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

 IR 2018\_FINAL.pdf

**Page/Section reference**

Managing our Impacts section: 57-62  
Greenhouse Gas Emissions Report: 115.

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

**Comment**

---

**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

 Climate change policy 2018.pdf

**Page/Section reference**

Pages 1 and 2

**Content elements**

Governance  
Strategy  
Risks & opportunities

**Comment**

## C14. Signoff

### C-FI

**(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

### C14.1

**(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Interim Chief Executive Officer	Chief Executive Officer (CEO)

## Submit your response

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

**Please confirm below**

I have read and accept the applicable Terms