

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	Select the number of past reporting years you will be providing emissions data for
Row 1	November 1 2016	October 31 2017	No	<Not Applicable>
Row 2	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 3	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 4	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

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) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board/Executive board	Our Company Secretary 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
Sporadic - as important matters arise	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. 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 and ecological impact will be reviewed and considered – and form part of the decision to proceed or not. We also have a Technical Committee that meets quarterly. 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, are agreed and plans put in place to address. The use of offsite manufacturing (OSM) is also discussed in detail, including the strategy to review the business benefits and the planning for further trials and necessary budgets. The Climate Change, Sustainability, Sustainable Procurement and Sustainable Timber policies are all reviewed annually and signed off by the CEO. A new company-wide sustainability strategy, which includes initiatives relating to adapting to and mitigating against climate change, will also be reviewed and debated by our Executive Management Team and members of the Board.

C1.2

(C1.2) Below board-level, provide the highest-level management 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	As important matters arise

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.

The Group Governance and Sustainability Manager sits within the Company Secretariat, and reports to the Company Secretary of the Board. As a Group function this position has oversight of any major issues 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 seize climate-related business opportunities.

Key responsibilities include:

- Keeping abreast of all current and potential future legislation and ensuring the business complies.
- Feeding environmental, social and governance risks into the group-wide risk management framework, and developing strategy and action plans with targets and KPIs to minimise risk and take advantage of opportunities.
- Engaging with key internal and external stakeholders to implement projects to deliver initiatives and respond to risks and opportunities.
- 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.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Employees receive a 20% uplift in their car benefit if they choose a carbon-efficient car ($\leq 120\text{gCO}_2/\text{km}$), either through the company car scheme or if they have a car allowance.

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.

Who is entitled to benefit from these incentives?

Other, please specify (Site teams)

Types of incentives

Monetary reward

Activity incentivized

Efficiency project

Comment

Employees are incentivised to reduce waste through a group-wide league table. The winning site team receive a monetary reward and trophy. The winning division also receives a trophy.

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 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 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 between 10 and 30 years. This period is challenging to predict, but it broadly covers the period to 2050.

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.

A specific climate change risk identification, assessment, and management process

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	Annually	>6 years	At Group level, climate-related risks are reviewed annually. At project level, risks are reviewed prior to the acquisition of new development projects. Risks that impact our developments, such as flood and overheating risks, are considered over six years into the future.

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, we first identify climate-related risks and opportunities to our business through our risk management framework as well as our materiality assessment. Both of which are used to inform our corporate business strategy, as published in our 2017 Integrated Report (IR) and on our corporate website. The IR and the About Us section of our website demonstrates that Crest Nicholson is pursuing 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 every three years 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 17 material issues.

The risk management framework is led by our Chief Finance Officer. 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 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 risk matrix, which is reviewed and monitored by the 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 provided. 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	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, we regularly review 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 were required to comply with the Government's Energy Savings Opportunity Scheme in 2015, and we are preparing to participate again in 2019. We also keep track of forthcoming legislation through subscription to industry newsletters and attending relevant events.
Emerging regulation	Relevant, always included	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 Technical and Quality Director, who engages 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. Another example is the current review of the National Planning Policy Framework (NPPF). While it is a pre-existing document, this review may impact the adaptation and/or mitigation measures required by local government in new-build homes and developments. At the heart of the NPPF is a presumption in favour of sustainable development, and there are specific sections dedicated to climate change and conserving and enhancing the natural environment. Government consultations, including the plans for streamlining energy and carbon reporting and strategies, such as the Clean Growth Plan, 25 year Environment Plan, together with the forthcoming Clean Air and Resources and Waste Strategy are also reviewed, monitored and used to help predict potential future regulation and inform our strategy.
Technology	Relevant, always included	The potential impact that new lower-carbon products and technologies have on our operations and our customers is considered. 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 communication and customer support to resolve the issue. Embodied carbon research has been conducted on our pilot 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.
Legal	Relevant, always included	Relevant legal decisions are monitored and reviewed to ensure our operations remain compliant and free from the risk of fines or other regulatory intervention. An example of this has been fines through non-compliance with the waste Duty of Care regulation. News of fines is passed onto the business's waste management providers to ensure the contractors working on our sites are compliant with law.
Market	Relevant, always included	In 2017, we invited Crest Nicholson staff, as well as key suppliers and consultants to feedback on our completed pilot offsite manufactured plots to build a picture of how they are perceived within the market. Feedback regarding design, use-ability, and other key areas has been taken on board and amendments made for future designs.
Reputation	Relevant, always included	Climate change 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 could also impact on our ability to purchase land and move our developments through the planning process with local authorities. For these reasons, the reputational impact of climate-related risks and opportunities is always considered. For example, 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 negative impact on reputation.
Acute physical	Relevant, always included	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 most recent 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. These type of extended heatwaves are predicted to continue, and the potential impact on drop-in sales visits and potential resulting sales is being considered. Severe weather can increase health and safety risk on site, damage assets and delay the build programme.
Chronic physical	Relevant, always included	Chronic physical climate 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 for our customers. The business must consider this risk and potential changes in policy to ensure it can respond appropriately.
Upstream	Relevant, always included	Supply chain security is a key risk for the business. This includes the potential for the supply chain to be impacted by climate change, including biodiversity loss, water shortages, and severe weather events. For these reasons, it is included in the climate-related risk assessment. For example, a long-term risk for our business is an unstable timber supply through the loss of forests from biodiversity loss and increasing temperatures due to climate change. Our Sustainable Timber Procurement Policy and procedures are key to our mitigation strategy for this risk.
Downstream	Relevant, always included	The downstream use of homes by our customers captured in both current regulations and potential future legislation. The business must comply with ever-improving building regulations, including, for example, the energy efficiency of homes, which has the knock on effect of reducing customers' emissions. Building Performance and Post Occupancy Evaluation of homes is conducted to understand how the homes perform in relation to air quality, overheating and energy efficiency. The learning is fed into future design amendments.

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 Company Secretariat 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 Company Secretariat also issue monthly carbon footprints to all sites, which details the amount and type of energy consumed, its related tCO2e equivalent and its cost. This helps to raise awareness of the impact of our operations on climate change, while also encouraging site teams to put in place measures to reduce their energy use and costs.

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 sustainability team members from the Company Secretariat and the Group Procurement team. The corporate policies that underpin our procurement, namely our Sustainable Procurement Policy and Sustainable Timber Procurement Policy are overseen and implemented by the Company Secretariat, while the core terms and conditions set out within our contracts and Supply Chain Code of Conduct are also jointly managed by the Company Secretariat and the senior Commercial Directors. These T&Cs and Code of Conduct make explicit reference to environmental matters.

Where required, the Company Secretariat 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 Company Secretariat also conducts supply chain audits, including for our timber procurement.

Policy around physical and transitional climate-related risks that potentially impact our sites and the homes we build are managed by our Group Technical and Quality department. This department also manages the development and roll-out of any initiatives that relate to the homes we build, including how we manage flood and overheating risk or our pilot offsite manufacturing scheme. The current Building Performance and Post-Occupancy Evaluation being conducted on our pilot offsite manufacture plots is an example of how this team works to ensure that any new lower-carbon technologies or building processes being introduced in our homes or at our sites meets the outcomes 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.

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: Enhanced emissions-reporting obligations

Type of financial impact driver

Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

There is the potential for more stringent emissions reporting obligations to be put into place, such as the Government's plan to review a Streamlined Carbon and Energy Reporting approach in the UK. This could increase the time spent internally on emissions reporting and spent externally on consultants to assist with our compliance. Even if reporting obligations are changed to be less stringent, the time and cost required in the short and medium term to become familiar with the new framework represents a transitional risk.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Low

Potential financial impact

0

Explanation of financial impact

The potential cost to amend current reporting processes is expected to be minimal.

Management method

Year-on-year improvements in our data capture, analysis and reporting. The carbon footprint is assured by a third party.

Cost of management

0

Comment

Data capture, analysis and reporting is normal course of business.

Identifier

Risk 2

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 driver

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

Company- specific description

Energy is used to power our offices and as part of our construction work on site – for example, to power the site compounds and for plant and machinery around site. Potential changes to taxes and regulations will have an impact on our energy costs.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Potential financial impact

24188

Explanation of financial impact

Based on the energy consumption data in 2017 and the increasing rates of the Climate Change Levy (CCL), from 1st April 2019, the

increase in CCL will equate to an increased energy cost of over £24,000 per year. This is based on the same consumption of energy as in the 2017 financial year.

Management method

We are minimising the risk of higher operational costs by increasing our operational energy efficiency (offices, site use, business travel and commuting) through our Make Waste History initiative. Sustainability training was provided to all members of our Site Management Academy in 2017. The business is currently updating its core house type range and is prototyping them using off site manufacturing techniques. This will lead to less energy consumed on site with reduced need for equipment such as diesel generators and reduced transport movements to and around site as more materials are put together offsite. We are minimising the impact of rising energy costs for our customers by increasing the potential energy efficiency of new homes through building fabric and services.

Cost of management

0

Comment

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

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 driver

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

Company- specific description

Energy is used to power our offices and as part of our construction work on site – for example, to power the site compounds and for plant and machinery around site. Fuel price fluctuations could have an impact on our energy tariffs.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Potential financial impact

500000

Explanation of financial impact

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 levels of consumption, current spend of close to £2,000,000 per year could become £2,500,000 per year, representing an increase of £500,000 per year.

Management method

We are minimising the risk of higher operational costs by increasing our operational energy efficiency (offices, site use, business travel and commuting) through our Make Waste History initiative. Our Make Waste History site waste benchmarks and divisional initiatives (trade tool-box talks, site visits and Site Management Academy training delivered during the course of 2017) help improve the businesses resource efficiency. In 2017 the business completed the installation of new LED lights at the Head Office. The cost for this was approximately £80,000. Participating in the quadrennial Energy Savings Opportunity Scheme (ESOS), and implementing key recommendations from energy audits. The business is currently planning for ESOS phase 2. The business is updating its core house type range and is prototyping them using off site manufacturing techniques. This will lead to less energy consumed on site with reduced need for equipment such as diesel generators and reduced transport movements to and around site as more materials are put together offsite. We are minimising the impact of rising energy costs for our customers by increasing the potential energy efficiency of new homes through building fabric and services.

Cost of management

80000

Comment

Approximate cost of the LED lighting installation provided.

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: Mandates on and regulation of existing products and services

Type of financial impact driver

Technology: Costs to adopt/deploy new practices and processes

Company- specific description

Although we are yet to see how leaving the European Union will impact upon future policy, there is a clear understanding that the built environment is a significant player in minimising the impacts of climate change. We could therefore see an increase in on-site carbon reduction requirements beyond current levels, which could lead to increased operational costs. There is also a risk of potential disruption in production capacity due to availability of skills and labour to build under any new requirements.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Potential financial impact

4500000

Explanation of financial impact

It is uncertain as to what extra consultancy fees would be required at design stage and then testing the performance of homes built, but if we estimate a £1,500/plot increase and multiply by the current number of homes built (3,000), the cost equals £4,500,000. This increased cost per site 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.

Management method

Working with stakeholders such as the Department for Community and Local Government (DCLG), Department for Business, Energy and Industrial Strategy (BEIS), Home Builders' Federation (HBF), UKGBC, and the Homes and Communities Agency (HCA) to ensure good knowledge of future regulatory environment. Effective partnering with Planning Authorities and skilled consultants to achieve consensual cost-effective outcomes.

Cost of management**Comment****Identifier**

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Shifts in consumer preferences

Type of financial impact driver

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

Company- specific description

As stakeholders, including customers, investors and employees (incl. potential employees) become increasingly aware of the negative impacts of climate change, they will likely favour companies that are working to mitigate against and adapt to climate change risks. This 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. Potential decrease in sales. Increased expectations from investment community to demonstrate performance in this area; increased scrutiny of report; increased reporting requirements (TCFDs).

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Medium-high

Potential financial impact

Explanation of financial impact

Awareness in climate-related issues is increasing. Reasons for this include the fact these issues are becoming a prominent feature in the media and they are forming a greater part on the school syllabuses - this is having a significant impact on consumer's purchasing preferences. The impact this change may have on home purchasing is very uncertain.

Management method

Effective and sometimes leading technical procedures, including flood risk assessment and dynamic heat modelling. Core sustainability features built into sales' pitch (energy efficiency). Demonstrating innovation in build construction through OSM. Additionally, there is a potential that OSM will: - reduce waste - reduce energy consumed on site - reduce transport movements Good corporate reporting and website content, communicating our leadership, good practice and responsiveness. Policies and procedures relating to environmental management, climate change, biodiversity, sustainable procurement, diversity, modern slavery - all available in the public domain. Engage and consult with local communities and the local planning authority throughout the development planning process.

Cost of management

Comment

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 driver

Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)

Company- specific description

More frequent heavy rainfall events means that it is crucial to put in place robust water run off management measures. Working in particularly wet weather can slow the build programme. More frequent extreme droughts and water scarcity challenges us to design homes that are increasingly water efficient. Greater risk of damaged materials and lost time on site leading to increased operational costs Increased risk of pollution incidents leading to fines and damage to reputation.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Medium

Potential financial impact

1000000

Explanation of financial impact

The challenge to consider efficiency measures in the design of the homes is part of the normal course of business and we are normally well aware of regulatory requirements in advance so they can be planned for. If there is an increase in damage to products of 2% of our direct material spend, this would equate to approximately £1m.

Management method

Our Environmental management system is designed in accordance with the principles set out in ISO 140001. 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 and poor visibility. Specific risk management related to extreme temperatures and storm events incorporated within Health, Safety and Environmental management procedures, as well as standards for material storage in adverse weather. The business is updating its core 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. Homes are designed so that our customers can be efficient with their water use. Our homes are designed to use an average of 105 litres of water per person, per day, which is 16% less than current Building Regulation requirements.

Cost of management

Comment

Identifier

Risk 7

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 driver

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

Company- specific description

Reduction and/or disruption in production on sites due to increasing frequency of heavy rainfall events and droughts. For example, there could be project delays due to inability for tradespeople to work on site (e.g. bricklayers cannot work in wet conditions, and increased flooding on site) Potential disruption within our supply chain (e.g. supplier manufacturing plants located in areas subject to high physical risk from climate change), which could lead to project delays. This could also lead to an increase in material supply costs due to scarcity of natural resources.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Medium

Potential financial impact

20864000

Explanation of financial impact

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 can also prevent work taking place on site. Delays to the programme can then negatively impact sales as it provides an added constraint as to when the homes are available for sale. Due to the unpredictable 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 £20m based on revenue reported in 2017.

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. Local suppliers are used where possible and in 2017, 30% of our procurement spend was with suppliers and sub-contractors within 20 miles of site operation. OSM will also make production less susceptible to adverse weather.

Cost of management

Comment

Identifier

Risk 8

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 driver

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

Company- specific description

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

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Low

Potential financial impact

0

Explanation of financial impact

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. Any flood mitigation measures, such as the use of SUDs, will be factored into the land purchase price.

Cost of management

0

Comment

No additional cost based on current business activity.

Identifier

Risk 9

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Rising mean temperatures

Type of financial impact driver

Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)

Company- specific description

Increasing temperatures could increase the likelihood of overheating in homes. The business already conducts overheating analysis 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

About as likely as not

Magnitude of impact

Medium

Potential financial impact

1575000

Explanation of financial impact

Dynamic modelling of overheating risk takes place when the risk is high, currently around 25% of our sites. The cost of this is approximately £5,000 per site. Mitigation measures could be around £2,000 per plot. Using the 25% of sites with additional mitigation requirements, the impact could be £1,575,000.

Management method

During land acquisition and design stage, an overheating risk assessment is carried out. Where necessary, a full dynamic overheating assessment of new homes is also undertaken with a hierarchy of solutions implemented to mitigate the impacts. The cost of this is approximately £5,000 per site. Based on 25% of our sites conducting dynamic modelling, the cost is around £75,000. To further combat overheating risk, our new range of Group house types has been modelled for the worst case scenario of overheating, allowing us to mitigate the risk through design.

Cost of management

75000

Comment

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.

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 driver

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

Company- specific description

The business spends approximately £5,000,000 per year on waste skips and energy consumption. The cost of waste will be much higher when the cost of material is factored in. There is significant scope to reduce waste and energy and save a significant amount of money.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Potential financial impact

250000

Explanation of financial impact

The combined waste and energy spend is approximately £5,000,000. If a 5% saving is achieved, this would equate to a saving of £250,000. 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, introduce a baler on site and introduce better communication on site. In 2017, the installation of efficient LED lighting at Head Office was completed. The approximate cost was £80,000. Monthly waste and energy reports are produced and issued to site that include cost and consumption metrics. A group-wide league table that measures sites' waste reduction performance is published annually with financial incentives. 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 on site.

Cost to realize opportunity

80000

Comment

Reviewing and implementing resource efficiency opportunities is normal course of business. LED lighting upgrade approximately £80,000.

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 driver

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 even see cost savings through the use of renewable energy.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Potential financial impact

500000

Explanation of financial impact

The increase in 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 costs would equate to an annual cost increase of approximately £500,000. 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.

Cost to realize opportunity

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 climate adaptation and insurance risk solutions

Type of financial impact driver

Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)

Company- specific description

There is a greater requirement for homes and development sites to adapt to climate change. New build developments that have climate proof measures in place could increase in popularity versus the secondary market of existing homes that are more challenging to adapt.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Potential financial impact**Explanation of financial impact**

Awareness in climate-related issues is increasing and there is an opportunity to increase revenue due to greater interest in new build homes and developments that are already resilient to climate change. The financial impact this change may have on home purchasing is very uncertain.

Strategy to realize opportunity

The business works with stakeholders such as the Department for Community and Local Government (DCLG), Department for Business, Energy and Industrial Strategy (BEIS), Home Builders' Federation (HBF), UKGBC, and the Homes and Communities Agency (HCA) to ensure good knowledge of future regulatory environment. It also works with policy makers and local planning authorities to develop practical, commercially viable solutions to adapt to a changing climate.

Cost to realize opportunity**Comment****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 driver

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

Company- specific description

With an increasing awareness among society of the importance to mitigate and manage climate change, as well as the importance of living healthy lifestyles, a shift in consumer preferences is occurring. This is more notable in fast moving consumer products and

we are yet to see a clear impact on home buying. It is also important to note that good management of climate-related issues can enhance the businesses ability to attract and retain employees. This is particularly the case for younger generations, as research indicates a preference to work where they can make a positive difference to society. The way the business manages climate related issues can also differentiate us when competing to secure new sites.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Potential financial impact

Explanation of financial impact

Awareness in climate-related issues is increasing and there is an opportunity to increase revenue by delivering efficient, low carbon homes that can help customers live healthy, sustainable lifestyles. The financial impact this change may have on home purchasing is very uncertain.

Strategy to realize opportunity

Effective and sometimes leading technical procedures, including flood risk assessment and dynamic heat modelling. Core sustainability features built into sales' pitch (energy efficiency). Demonstrating innovation in build construction through OSM. Additionally, there is a potential that OSM will: - reduce waste - reduce energy consumed on site - reduce transport movements Good corporate reporting and website content, communicating our leadership, good practice, and responsiveness. Policies and procedures relating to environmental management, climate change, biodiversity, sustainable procurement, diversity, modern slavery -- all available in the public domain.

Cost to realize opportunity

Comment

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 response to this risk, an overheating risk assessment is carried out during land acquisition and design stage. Where necessary, a full dynamic overheating assessment of new homes is also undertaken—with a hierarchy of solutions implemented to mitigate the impacts. To further combat the risk of overheating, our new range of Group house types has been modelled for the worst case scenario of overheating, allowing us to mitigate the risk through design. The potential impact of overheating is significant. If not alleviated appropriately, it can negatively affect comfort levels in the home, as well as customers' health. The business is piloting the use of offsite manufacturing (OSM) techniques with a view to roll out further trials. Less waste is produced in the factory environment with less materials stored on site. OSM will also help to reduce the number of transport movements for supplies to and from sites, as well as on-site movements.
Supply chain and/or value chain	Impacted	The business has not yet experienced direct effects from deforestation, but we understand the huge importance this has on the environment. We have therefore taken pro-active steps and developed a rigorous procurement process for our Commercial teams to procure sustainable timber and clear expectations set out for our suppliers and subcontractors in our Supply Chain Code of Conduct. While the development of 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, 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 a new standard set of house designs. We monitor the locations of the supply chain, 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 2017, almost 60% of our procurement spend with suppliers and sub-contractors was within 50 miles of site operations.
Adaptation and mitigation activities	Impacted	Adapting 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 78% in 2017. We also apply appropriate Flood and Water Management Plans, together with overheating risk assessments to our developments. 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 March and April 2018). Although severe weather events are very uncertain and challenging to predict, the scientific consensus is they will happen on a more frequent basis. The delay to build programmes can have a significant impact on revenue, margins, and ROCE. Sustainable transport options, such as cycling lanes and storage, as well as "green travel incentives" are implemented to encourage home owners to opt for sustainable transport options. Low energy lighting and low water consuming appliances are installed in the homes, along with water butts. Between 2014 and 2017, we increased the number of electric car charging points on our developments from 2% to 10%.
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 invest in the development of a new range of house designs that meet changing customer needs, as well as to pilot 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.
Operations	Impacted	Renewable energy is purchased for two offices to reduce the business's carbon footprint. On 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.
Other, please specify	Please select	

C2.6

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

	Relevance	Description
Revenues	Not yet impacted	Physical risks of climate change, such as an increased frequency of severe weather, are expected to cause increasing disruption at building sites. 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 £20m at current revenue.
Operating costs	Impacted	Increasing operating costs are noted in our climate-related risks and opportunities assessment. This is due to a number of factors: - the rising cost of energy, with fossil fuel prices expected to increase by 50% by 2030 - Greater frequency of severe weather resulting in damage to materials on site. - Increased use of consultants for overheating modelling and requirements to put extra measures in place, to reduce overheating and flood risk. 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.
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	Please select	

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.

In November 2016 we carried out a detailed materiality assessment with key internal and external stakeholders to ensure that our business strategy accurately responds to the material issues, risks and opportunities faced by our business, including those relating to climate change and other environmental/social issues. The internal stakeholders included Board members, as well as directors in charge of procurement and supply chain, Health, Safety and Environment, Customer Service and Investor Relations. 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 June 2017, as part of the Executive Management Team's review of its business strategy and risks, the materiality assessment was reviewed and refined. The strategy and our material issues were subsequently published in our Annual Integrated Report 2017.

Our senior executives participate in a number of industry and government collaborations. Their participation in these helps us to stay informed of current and emerging issues related to climate change and their impact on our business 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, an employee acting as Vice-Chair of the HBF National Technical and Sustainability Committee, our representation on the Construction Leadership Council's Innovation in Buildings Workstream, along with dialogue with government departments, including BEIS and DCLG.

The construction industry generates over a half of the total waste generated in the UK. The business is mindful of its impact on the environment and of the importance of using resources efficiently. Examples of how the business strategy has been influenced include the following key decisions:

1. Under our strategic pillar "Operating Responsibly": We have developed and successfully established the Make Waste History (MWH) campaign, aiming to drive out unnecessary waste of raw materials, energy and water across the business. The recommendations resulting from energy-saving audits (as required by the ESOS regulations), have been integrated into our operations. We are currently planning for ESOS phase 2. The MWH campaign helped to achieve our carbon emission intensity target, which saw us reduce our emissions from office electricity and gas consumption by 45% per person between 2013 and 2017.
2. Under our strategic pillar "Delivering to Customers and Communities": We participated in a collaborative research project with industry colleagues that examined various alternative and modern methods of construction in 2016. Following the outcome of this research, we decided to invest in a new long-term strategic project to develop a new range of house designs that would be used across the Group and to trial non-traditional construction methods. The offsite manufacture route we are trialling is likely to improve quality, reduce waste and result in a more efficient use of resources including energy, water and raw materials.

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 included the likelihood that the UK will experience more varied weather patterns and extreme weather events, including warmer summers and more frequent heavy rainfall events. We plan to review the use of forward-looking scenario analysis.

C4. Targets and performance

C4.1

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

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Scope

Scope 1+2 (location-based) +3 (upstream)

% emissions in Scope

4

% reduction from baseline year

10

Metric

Metric tons CO2e per unit FTE employee

Base year

2013

Start year

2014

Normalized baseline year emissions covered by target (metric tons CO2e)

0.91

Target year

2017

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

% achieved (emissions)

100

Target status

Expired

Please explain

A target was set to reduce our carbon emissions associated with office gas and electricity. This included scope 1, scope 2 (location based) and scope 3 upstream emissions. The initial baseline, set in 2013 was 0.91tCO2e/person. The target was a 10% reduction by the end of 2017. In 2017, our tCO2e/person was 0.5, which outperformed our target by over 35%. This target has now expired and we will review setting new targets.

% change anticipated in absolute Scope 1+2 emissions

32

% change anticipated in absolute Scope 3 emissions

32

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 projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*		
Implemented*	4	235.42
Not to be implemented		

C4.3b

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

Activity type

Energy efficiency: Building services

Description of activity

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

21.63

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

6595

Investment required (unit currency – as specified in CC0.4)

40000

Payback period

4 - 10 years

Estimated lifetime of the initiative

11-15 years

Comment

The remainder of our lighting upgrade took place on the 1st and 2nd floors of our Head Office. This has been a key reason for us achieving our intensity target.

Activity type

Energy efficiency: Processes

Description of activity

Other, please specify (Upgrading IT equipment)

Estimated annual CO2e savings (metric tonnes CO2e)

23.98

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

7314

Investment required (unit currency – as specified in CC0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

This initiative falls into the same scope as our intensity target. 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.

Activity type

Low-carbon energy purchase

Description of activity

Other, please specify (Renewable electricity)

Estimated annual CO2e savings (metric tonnes CO2e)

172.17

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

0

Investment required (unit currency – as specified in CC0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

Bristol and Chertsey office electricity consumption is purchased from renewable sources. Cost difference between renewable and non-renewable tariffs was negligible.

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

17.64

Scope

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

260

Investment required (unit currency – as specified in CC0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

Greater control of the boiler, including switching the heating system off during the warmer months. No investment was required.

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 FY17, Crest achieved 18% lower average carbon emissions from our new homes than current regulations demand (based on SAP 2009 calculation, 12% reduction based on plots recorded against SAP 2012). Crest Nicholson are also planning for 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

Product

Description of product/Group of products

All of our homes are designed and built to enable sustainable lifestyle choices and a lighter environmental footprint for our customers. This includes design features to minimise energy and water use, maximise daylight and shading, use of low-carbon technologies, as well as other elements within the homes and across the development that make what we produce a low-carbon product.

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 2017 was 83.94, compared to an average SAP of a UK home of 61 (as reported in the UK Housing Review 2017), 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 8,524 tCO2 saving per year by Crest Nicholson customers, when compared to the average UK home (for regulated consumption only). • 34% of our completed homes in 2017 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 94% of our completed homes in 2017 within 1,500m of a bus service and 81% within 1,500m of local amenities. Furthermore, 52% of our completed homes have access to safe cycle storage and 48% of our developments have cycle lanes. Placing less reliance on cars will help home owners 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 CO2e)
467

Comment

Scope 2 (location-based)

Base year start
November 1 2006

Base year end
October 31 2007

Base year emissions (metric tons CO2e)
732

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

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.

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 CO2e?

Row 1

Gross global Scope 1 emissions (metric tons CO2e)
5760.56

End-year of reporting period
<Not Applicable>

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 2017.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO₂e?

Row 1

Scope 2, location-based

1957.88

Scope 2, market-based (if applicable)

1457.25

End-year of reporting period

<Not Applicable>

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 CO₂e

30.6

Emissions calculation methodology

GHG Protocol / Defra voluntary reporting guidance. Metered activity data from offices and sites. Emissions calculated using Defra 2017 conversion factors. GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Total water consumed (88,856 m³) multiplied by the Defra 2017 conversion factor 0.344 = 88856 x 0.344 = 30,566kgCO₂e.

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

Metric tonnes CO₂e

Emissions calculation methodology

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

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 CO₂e

1443

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 2017 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

Metric tonnes CO₂e

Emissions calculation methodology

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

Explanation

Currently insufficient data but will be considered in future years.

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

2.1

Emissions calculation methodology

GHG Protocol / Defra voluntary reporting guidance. Activity data from waste contractor for offices and sites. Emissions calculated using Defra 2017 conversion factors. GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Includes construction waste sent to landfill (674 tonnes), office waste sent to landfill (9 tonnes) and waste to energy (11 tonnes) multiplied by the relevant Defra 2017 conversion factor = (674, 9, 11 multiplied by 1.4, 100.07, 21.8 respectively)/1000 = 2.1tCO₂e

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

1054.6

Emissions calculation methodology

GHG Protocol / Defra voluntary reporting guidance. Based on employee expenses and fuel card records. Emissions calculated using Defra 2017 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 2017 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

901

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 2017 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 2017 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

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

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

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Downstream transportation and distribution is not relevant to our operations.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

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

Explanation

Processing of sold products is not relevant to our operations.

Use of sold products

Evaluation status

Relevant, not yet calculated

Metric tonnes CO₂e

Emissions calculation methodology

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

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

Metric tonnes CO₂e

Emissions calculation methodology

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

Explanation

Currently insufficient data but will be considered in future years.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

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

Explanation

Operations do not include downstream leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

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

Explanation

Our operations do not include any franchises.

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

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

Other (upstream)

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Other (downstream)

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

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 CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

2.44

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

7718.44

Metric denominator

Other, please specify (1000 square feet)

Metric denominator: Unit total

3167.36

Scope 2 figure used

Location-based

% change from previous year

0

Direction of change

No change

Reason for change

Our location based scope 1 and 2 emissions per 1000sqft is equal to what it was in 2016.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?

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 CO2e)	GWP Reference
CO2	5760.56	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	0	IPCC Fourth Assessment Report (AR4 - 100 year) <i>Scope 1 emissions are reported in tCO2e, which includes CH4. We will review breaking the figures down into the respective GHGs in 2018.</i>
N2O	0	IPCC Fourth Assessment Report (AR4 - 100 year) <i>Scope 1 emissions are reported in tCO2e, which includes N2O. We will review breaking the figures down into the respective GHGs in 2018.</i>
Please select		Please select

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
United Kingdom of Great Britain and Northern Ireland	5760.56

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 CO2e)
Offices	112.34
Construction sites	4543.98
Business travel	1104.23

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	1957.88	1457.25	5569.13	489.72

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	252.28	80.11
Construction sites	1705.61	1377.14

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	0	No change	0	
Other emissions reduction activities	0	No change	0	
Divestment	0	No change		
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	1295.32	Increased	26	Build completions increased by 3.2%, from 2,930 in 2016 to 3,024 in 2017. However, our Scope 1 and 2 emissions across our sites increased by a greater % = 26% (increase of 1295.32/4954.27 (last year's total)). This is largely down to a significant increase in diesel consumption on site.
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

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)	0	23355.02	23355.02
Consumption of purchased or acquired electricity	<Not Applicable>	489.72	5079.41	5569.13
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	489.72	28434.43	28924.15

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 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

6186.98

MWh fuel consumed for the self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

16523.95

MWh fuel consumed for the self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Motor Gasoline

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

415.84

MWh fuel consumed for the self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

228.25

MWh fuel consumed for the self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

C8.2d

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

Diesel

Emission factor

2.6

Unit

kg CO2e per liter

Emission factor source

UK government greenhouse gas reporting: conversion factors 2017

Comment

Liquefied Petroleum Gas (LPG)

Emission factor

214.5

Unit

kg CO2e per metric ton

Emission factor source

UK government greenhouse gas reporting: conversion factors 2017

Comment

Motor Gasoline

Emission factor

2.2

Unit

kg CO2e per liter

Emission factor source

UK government greenhouse gas reporting: conversion factors 2017

Comment

Natural Gas

Emission factor

184.16

Unit

kg CO2e per MWh

Emission factor source

UK government greenhouse gas reporting: conversion factors 2017

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

Wind
Hydropower

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

489.72

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).

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 2017 verification statement - ALL SCOPES - WTT Outside 17-12-12.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 2017 verification statement - ALL SCOPES - WTT Outside 17-12-12.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 2017 verification statement - ALL SCOPES - WTT Outside 17-12-12.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 2017 verification statement - ALL SCOPES - WTT Outside 17-12-12.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 do not verify any other climate-related information reported in our CDP disclosure

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

0

Rationale for the coverage of your engagement

We have developed a Supply Chain Code of Conduct to which all our suppliers and sub-contractors must abide. This requirement is included in our contractual terms and conditions.

Impact of engagement, including measures of success

The Code of Conduct was first published this year (2018) and therefore its impact has not yet been determined. This is something we are looking at for next year.

Comment

Type of engagement

Compliance & onboarding

Details of engagement

Other, please specify (Collect consumption data)

% of suppliers by number

1

% total procurement spend (direct and indirect)

1

% Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Engaged with suppliers in order to obtain robust data for our GHG reporting and to assist with our resource efficiency drive.

Impact of engagement, including measures of success

Better data from our supply chain provides greater transparency as to where the business can focus on reducing its carbon footprint. A measure of success in 2017 was improved data returns from our site diesel suppliers.

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)

Size of engagement

100

% Scope 3 emissions as reported in C6.5

0

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 Owners Guides that are provided to each customer. Our employees on site provide home demonstrations to our customers. During these demonstrations we teach customers how to maximise the performance of various pieces of technology within the home. For example, we teach 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 is Vice Chair of the National Technical and Sustainability Committee.	Development of practical, cost-effective, customer friendly solutions ensuring that new regulations can be delivered effectively on site.
Adaptation or resilience	Support	A Director is a member of the DCLG's 'Overheating in New Homes' research group.	Development of practical, cost effective performance standards that minimise the risk of overheating in homes.

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

There is much uncertainty relating to how we exit the European Union and the impact this will have on regulation. Therefore the stance is a 'wait and see' position.

How have you, or are you attempting to, influence the position?

Crest Nicholson interacts with the HBF in a variety of ways: Our former CEO (now Executive 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 is Vice Chair of 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.

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 Company Secretariat are responsible for developing and managing the organisation's sustainability strategy and response to climate change. 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

Annual Integrated Report_FINAL.pdf

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Publication

In voluntary communications

Status

Complete

Attach the document

Climate change policy 2018.pdf

Content elements

Governance

Strategy

Risks & opportunities

Publication

In voluntary communications

Status

Complete

Attach the document

Annual Integrated Report Summary_FINAL.pdf

Content elements

Strategy

Emissions figures

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	Company Secretary	Board/Executive board

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