Taylor Wimpey Plc - Climate Change 2021

C0. Introduction

C0.1

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

Taylor Wimpey plc is a customer-focused residential developer building and delivering homes and communities across the UK and in Spain.

We are one of the UK's leading residential developers. We do much more than build homes - we add social, economic and environmental value to the areas in which we operate. We are first and foremost a local business and an important contributor to local communities.

We are comprised of 23 business units (BUs) that operate across the UK (except Northern Ireland) and a business in Spain. Our approach to the environment is shaped by our Environment Strategy, which was developed over the course of 2020. The Environment Strategy has three main pillars: climate change, nature and resources and waste. We have set challenging targets within each of these pillars. For climate change, our principal target is a science-based carbon reduction target that has been verified by the Science-Based Targets Initiative (SBTi). For nature, our principal target is to increase natural habitats on all new sites 10% from 2023 and to deliver our priority wildlife enhancements from 2021. These enhancements include hedgehog highways, bug hotels and bee bricks, and from 2022 onwards bat boxes, bird boxes, wildlife ponds, and hibernation sites for amphibians and reptiles. For resources and waste, our principal target is to reduce construction waste intensity 15% by 2025 and to use more recycled materials. We also will publish a 'toward zero waste' strategy by 2022.

We invest significant sums in research and development projects that will help us become a greener, more resource efficient builder. Through our 'Functional Interface Group' (R&D Committee), we assess and monitor trials of new construction products, processes and approaches that can improve our operations. We also engage with our trade body, the Home Builders Federation (HBF), and with the UK Government on forthcoming changes to Building Regulations and the net zero carbon agenda.

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
Reporting year	January 1 2020	December 31 2020	No	<Not Applicable>

C0.3

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

Spain
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 chosen approach for consolidating your GHG inventory.

Financial control

C-CN0.7/C-RE0.7

(C-CN0.7/C-RE0.7) Which real estate and/or construction activities does your organization engage in?

New construction or major renovation of buildings

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	The Chief Executive Officer and the plc board are ultimately responsible for climate change within the organisation. The CEO sits on both the Group Management Team (GMT – the UK board) and the plc board. The CEO makes key decisions on climate related issues, for example the adoption of Science Based Targets. The CEO also ensures the personnel structures and governance are in place on climate related issues. For example, our Director of Sustainability reports directly to the CEO on climate change and other sustainability matters and our Sustainability and Corporate Communications teams ensure that greenhouse gas emissions are reported in the Annual Report and Sustainability Report and that they are complete and accurate.
Director on board	Taylor Wimpey's Divisional Chair (DC) for our London and South East Division, a representative of the Group Management Team, chairs the Legacy, Engagement and Action for the Future (LEAF) committee (our strategic committee on sustainability) and so holds responsibility for climate-related issues. They also chair the Environment Strategy Group, and so hold responsibility for climate within the environment strategy. They regularly brief the Group Management Team, and the plc board as required, on climate related issues. As a Divisional Managing Director for one of the Group's divisions and with a background in operational delivery, the DC has vast experience of the operational activities undertaken pre, during and post the development process, and how climate change impacts these both in terms of mitigation and adaptation. The DC is responsible for using this in-depth operational experience to work with and advise the Sustainability Team in developing appropriate commitments and actions to address climate change risks and opportunities as part of the Group's Environment strategy. As an example, the DC approved the delivery of Scenario Analysis workshops in 2020.

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	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	The Chief Executive Officer and the plc board are ultimately responsible for environmental matters within the organisation. The CEO makes key decisions on climate related issues, for example the adoption of Science Based Targets. The CEO ensures the personnel and governance structures are in place to properly manage climate-related issues. For example, our Director of Sustainability reports directly to the CEO on climate change and other sustainability matters and our Sustainability and Corporate Communications teams ensure that greenhouse gas emissions are reported in the Annual Report and Sustainability Report and that they are complete and accurate. Responsibility cascades down from the CEO to the Divisional Chair of our London and South East Division, a representative of the Group Management Team who chairs the Legacy, Engagement and Action for the Future (LEAF) committee, and the Environment Strategy Group. Climate-related issues are reported to the board on a monthly basis in the form of an internal Sustainability Report, which is reviewed by the board in meetings. In addition, our Annual Report and our Sustainability Report includes disclosures reflecting the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). Key elements of this include emerging regulation, updates on progress against goals and targets and financial planning in relation to resources. Setting performance objectives: Our extensive carbon reduction proposals are reviewed and approved by our Executive Board (Group Management Team) and by our plc Board, which includes Non-Executive Directors. For example, our science-based targets have been approved by both the Executive Board and plc Board, as well as the Science Based Targets initiative (SBTi). Reviewing and guiding strategy and major plans of action: As required our Group Management Team hold dedicated sessions on climate and sustainability matters. For example, in February 2020 a workshop was called which kick started the development of an environment strategy, including much stronger focus on Science Based Targets and Scenario Analysis. Our Environment Strategy has been reviewed and approved by our Group Management Team and by our plc Board. Monitoring implementation and performance of objectives; and overseeing progress against goals and targets for addressing climate-related issues: Our Legacy, Engagement and Action for the Future (LEAF) group meets once a quarter to monitor and review progress against our SBTs. The LEAF group is chaired by the Divisional Chair of our London and South East division includes senior executives from procurement, technical, production and design functions, our regional businesses and our external sustainability consultant. In addition, our Environment Strategy group meets once a fortnight to discuss and monitor progress of climate-related issues. The Environment Strategy group is also chaired by our Divisional Chair, London and South East division.

C1.2

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

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Other, please specify (Director of Sustainability)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Other committee, please specify (LEAF Group (Legacy, Engagement and Action for the Future))	<Not Applicable>	Assessing climate-related risks and opportunities	<Not Applicable>	Quarterly
Other committee, please specify (Environment Strategy Group)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly

C1.2a

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

POSITION WITHIN THE ORGANISATIONAL STRUCTURE

Below board-level the Director of Sustainability is responsible for climate-related issues at Taylor Wimpey. The Director of Sustainability reports to the board on climate-related issues on a monthly basis and leads a team to ensure items highlighted are cascaded down throughout the organisation.

The Director of Sustainability also sits on the Legacy, Engagement and Action for the Future Committee, which coordinates sustainability activities at operational level. The LEAF committee includes senior executives from procurement, technical, production and design functions, our regional businesses and our external sustainability consultant. The Director of Sustainability also sits on the Environment Strategy Group, which has responsibility for the development and delivery of our environment strategy.

WHY RESPONSIBILITY LIES WITH THIS INDIVIDUAL + COMPANY-SPECIFIC DESCRIPTION OF RESPONSIBILITIES

The Director of Sustainability is responsible for a broad range of climate-related issues at Taylor Wimpey, including corporate responsibility, environmental reporting, the implementation of energy and carbon reduction initiatives, and developing, reviewing and guiding climate strategy. The Director of Sustainability has over 30 years' experience in industry, consultancy and academia within the area of environmental and sustainability assessment and management. The Director of Sustainability supports the production of Taylor Wimpey's annual Sustainability Report that includes sections on building sustainable homes and communities, managing land, protecting the environment, sourcing responsibly and governance, management and performance. Having oversight of the design and implementation of sustainability activities at operational level ensures that the Director of Sustainability is well placed to provide the Board with relevant information to take into account climate-related risks and opportunities in strategic decision making.

PROCESS FOR MONITORING CLIMATE-RELATED ISSUES

Climate-related issues are monitored throughout Taylor Wimpey. Specifically, the Director of Sustainability monitors climate-related issues as part of the overall risk management process. Climate-related issues including any climate change and sustainability risks on the Sustainability and Climate Change Risk and Opportunity Register are discussed at quarterly LEAF Group Meetings, chaired by the Divisional Chair of our London and South East Division and attended by the Director of Sustainability. The Director of Sustainability also is responsible for developing and delivering the business's Environment Strategy, which was launched in 2021. Climate-related issues including climate change and other sustainability risks are included on the Company Risk Register. The Company Risk Register is discussed and updated twice a year by the Executive Board (Group Management Team) at workshops hosted by the Head of Risk.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	No, not currently but we plan to introduce them in the next two years	

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	Our board completes an annual risk review with our Head of Risk. The Corporate Risk Register is updated at these meetings. In addition, we have a Climate Change and Sustainability Risk Register which is updated at quarterly LEAF meetings.
Medium-term	3	10	Our Environment Strategy sets stretching targets for the business over the medium-term, out to 2030. These targets include a scope 1 and 2 science-based carbon reduction target deliverable by 2025 and a scope 3 science-based carbon reduction target deliverable by 2030.
Long-term	10	100	We are engaging with the wider housebuilding industry on the long-term net zero carbon agenda. In addition, we have carried out climate change scenario analysis in line with the recommendations of the TCFD. This analysis examined climate change scenarios that could have a material financial impact on the business and associated risks and opportunities.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Our Company Risk Register defines impact to the business in terms of % profit before tax (PBIT). Over five years, an impact to PBIT of greater than 20% is defined as a moderate impact. An impact to PBIT of greater than 50% is defined as a major impact. An event is considered 'very likely' if the probability of occurring is more than 80%, and 'likely' if the probability of occurring is greater than a 50% chance.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
Group level The Sustainability and Climate Change Risk and Opportunity Register looks at short, medium and long-term risks and opportunities and was developed by senior members of staff who sit on the Legacy, Engagement and Action for the Future (LEAF) committee. The register is a standing item on the LEAF committee agenda. The LEAF committee comprises senior executives from procurement, technical, production and design functions, our regional businesses and our external sustainability consultant. Inputs into the Sustainability and Climate Change Risk and Opportunity Register therefore come from across the business. Our LEAF committee is chaired by our Divisional Chair for London and the South East, who is a member of the GMT (Group Management Team) and who raises sustainability issues at board level. Risks are assessed based on key criteria that rank risks in relation to their impact on the business and the required level of involvement by management to limit the effect of the risk. This is assessed over several categories, including financial impact, brand impact, health, and safety and environment. The risks assessments take account of all stages of the value chain and time horizons. Physical risk case study: The risk from flooding is still deemed to be our biggest climate change adaptation risk and was a major focus in 2017. We conducted a review of key processes around land acquisition, planning and environmental management, and have strengthened the processes where needed. We conducted additional work on emergency procedures for flooding and communication with customers. In 2020 we completed a consultation response into overheating to help inform up and coming building regulations. Transition risk case study: In 2020 we explored how the financial impact and likelihood of potential climate-related risks & opportunities might change in the future to reflect market, technological, and regulatory changes over the next decade and beyond. We considered potential impacts on the housebuilding sector and covered the range of responses from a relatively orderly transition aligned with the Paris Agreement, to insufficient action and a failure to act, leading to climate breakdown and chaos. The risk assessment focussed primarily on a 'disorderly transition' scenario to a low carbon economy; to examine and quantify risks and opportunities across the business and value chain, and how homes and developments will need to be designed differently to take changes in climate into account. This allowed us to update the Risk and Opportunity Register and set new priorities for business planning purposes. A specific transition risk identified during the scenario analysis was forthcoming regulation on home energy use and electric vehicles. This transition risk is monitored by our Group technical team, which has assessed its impact on build methodologies and cost.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	EXAMPLE OF RISK TYPE It is vital that we stay on top of environmental legislation. A failure to meet current regulations could result in fines or delays to building developments. The Future Homes Standard will transform the way homes are heated and generate hot water, with all electric homes free from the direct use of fossil fuels becoming the standard by 2025, with an intermediate step enacted from 2022. This requires action now as many of our developments will be built out well beyond these dates. Work is ongoing on detailed design, technical integration, production, supply chain, customer communication and other areas. The majority of our operations are in the UK. We are therefore required to report on our carbon emissions as part of the UK Mandatory Carbon reporting and SECR (Streamlined Energy and Carbon Reporting) regulations. We also fulfill our requirements under ESOS (Energy Savings Opportunity Scheme) regulations through our existing measurement processes, identifying opportunities and sending in a declaration to the Environment Agency. We have used the ESOS process to drive additional emissions reductions. An increase in red diesel tax in March 2022 will lead to increased operational and supply chain costs. HOW IT IS INCLUDED IN CLIMATE-RELATED RISK ASSESSMENTS Regulatory Standards, including Building Regulations and Local Government requirements through planning, all drive improvements in the energy efficiency of the homes we build. Three quarters of Local Planning Authorities (LPAs) have declared climate emergencies and climate and carbon reduction is increasingly featuring in LPA planning requirements. On 1 October 2016 the Mayor of London applied a zero-carbon standard to new residential development in the GLA (Greater London Authority) area. This means developers make an 'offset payment' to the local authority for every home built in Greater London. In January 2019 the Greater Manchester Combined Authority (GMCA) pledged to ensure that all new buildings erected in the city region will be 'net-zero' carbon by 2028. This follows pledges by Manchester City Council (2038) and Bristol City Council (2030). Risks associated with regulation and compliance are monitored and assessed by heads of functions and are always considered as part of risk assessments. These heads of function cascade notes on forthcoming regulatory changes through the rest of the business. This risk assessment process is continuous.
Emerging regulation	Relevant, always included	EXAMPLE OF RISK TYPE It is vital that we stay on top of environmental legislation. A failure to anticipate and plan for emerging regulations could result in much higher build costs or delays to future building developments. New regulations are pending which may require an EV (electric vehicle) charging point on every new home. The Future Homes Standard (FHS) combined with the EV changes will change the ways homes are designed and run and will require a step change in the electrical infrastructure needed for housing developments, to housing developments, and nationally. Other government policy and regulation relating to housing and building includes the UK Government's 25-year Environment Plan which has the potential to impact on Taylor Wimpey's operations for example through biodiversity net gain in the pending Environment Act. The UK Government's Industrial Strategy sets out Grand Challenges to put the UK at the forefront of the industries of the future. This includes maximising the advantages for UK industry from the global shift to clean growth. For homes this will mean halving the total use of energy compared to today's standards for new build. This will include a building's use of energy for heating and cooling and appliances, but not transport. HOW IT IS INCLUDED IN CLIMATE-RELATED RISK ASSESSMENTS Risks associated with emerging regulation and compliance are monitored and assessed by heads of functions and are always considered as part of risk assessments. Our design and technical team specifically works with industry bodies such as the Home Builders' Federation (HBF) and the Construction Leadership Council to identify and specify changes to our homes in line with regulatory requirements.
Technology	Relevant, always included	EXAMPLE OF RISK TYPE Technology has already transformed the way we live and work, and this will continue. Failure to research, test, and plan for new technologies would leave us at a competitive disadvantage in the market if this led to customer dissatisfaction, or higher build costs. We are looking at a range of technologies to help us meet the requirements of the Future Homes Standard (FHS) in the UK, including air source heat pumps and wastewater heat exchangers. Smart technology is starting to have an impact in our homes and this looks set to increase. Changes in other sectors can have an impact too. For example, increases in electric and hybrid car ownership or a switch to driverless cars could affect how we plan our developments and electrical supplies and connections. Off-site construction of homes with a greater proportion of timber provides opportunities for construction methods with less embodied carbon. Technology is also helping us improve Taylor Wimpey's customer service and giving customers more personalised information and support throughout the homebuying processes. HOW IT IS INCLUDED IN CLIMATE-RELATED RISK ASSESSMENTS One of the aspects of technology that is considered within our company risk assessments is information security. Risk impact is considered in line with our company-wide risk assessment procedures and ranked on a scale ranging from insignificant risks (1) to catastrophic risks (5).
Legal	Relevant, always included	EXAMPLE OF RISK TYPE A failure to meet legal requirements would result in fines or delays to building developments. There are a number of legal risks associated with environmental legal compliance that Taylor Wimpey must comply with (e.g. Streamlined Energy and Carbon Reporting (SECR), and Energy Savings Opportunity Scheme (ESOS) regulations in the UK), changing and more extreme weather patterns (e.g. water pollution, health and safety), and engineering works failures (e.g. slope stability, flooding, drainage and remediation). HOW IT IS INCLUDED IN CLIMATE-RELATED RISK ASSESSMENTS We routinely liaise with law firms, consultancies, professional bodies, trade associations and other bodies to understand the legal landscape in which we operate. Our health and safety and environmental management systems cover construction site risks. Our land, technical, planning, commercial and production processes cover engineering risks. For example, we annually reviewed compliance with our supply chain policy and confirm that timber chain of custody evidence is in place for all our key suppliers, accounting for around 95% of timber used on our sites. This ensures that the timber we purchase complies with the European Union's Timber Regulations and has been harvested legally and sustainably. Legal and regulatory compliance is considered in line with our company-wide risk assessment procedures and ranked on a scale ranging from insignificant risks (1) to catastrophic risks (5). This risk assessment procedure is carried out by our Group Management Team twice a year.
Market	Relevant, always included	EXAMPLE OF RISK TYPE There is potentially a shift in consumer preferences around low carbon homes, energy efficiency and environment in general. A failure to anticipate and plan for changing market needs and consumer preferences would leave us at a competitive disadvantage. With the Extinction Rebellion Protests and School Strikes inspired by Swedish schoolgirl Greta Thunberg, climate change has moved up the political agenda. The UK government has declared a 'climate emergency', which while largely symbolic, is the portent for tougher action. Three quarters of the UK's greenhouse gas emissions are either directly or indirectly attributable to consumer actions. Seven out of ten people already feel a sense of responsibility to do something about climate change. We need to understand what this means for consumer choice and spending and adapt our business accordingly. Another risk is that customers may find the controls and maintenance of energy technologies such as heat pumps, solar photovoltaics and solar thermal problematic or costly. A lack of familiarity with these technologies may exacerbate these risks. HOW IT IS INCLUDED IN CLIMATE-RELATED RISK ASSESSMENTS We issued a questionnaire to 1000 prospective house purchasers to identify their climate and environmental preferences. We are investigating the green mortgages market where there may be benefit for new build homes with low energy bills over the second-hand market. We have adopted a customer centric 'fabric-first' approach to home energy efficiency to minimise complexity and maintenance liability for energy management in the home.
Reputation	Relevant, always included	EXAMPLE OF RISK TYPE Failure to mitigate climate risk impacts on Taylor Wimpey's brand, reputation, and licence to operate, and may ultimately result in reduced demand for our products and services. Conversely proactive brand differentiation and enhanced marketing presents opportunities for our climate programme to be aligned with our stakeholders' values. Since the Paris Conference of Parties (COP) agreement there is a higher international profile and greater onus on organisations that do not manage climate risks effectively . The Paris Agreement has reaffirmed our commitment to promoting sustainability and influences the context in which business decisions are made. Our prototype house project, named 'Project 2020', (see section C-CN9.6a/C-RE9.6a) is an example of how we are addressing this risk. In Project 2020, we built seven prototype houses across three of our business units. We used novel construction materials and techniques such as cross-laminated timber. We also ran a competition for the design of the houses with a number of architectural practices. HOW IT IS INCLUDED IN CLIMATE-RELATED RISK ASSESSMENTS We are increasingly embedding climate change into our brand values, and include detailed information for investors, customers and other stakeholders on our external website. Project 2020 includes research into alternative build methodologies that promote resource efficiency as well as our increasing preference for renewable energy installations. This type of project demonstrates our commitment. Our Climate Policy and Sustainability Policy, and our environment strategy and Science Based Targets, help to demonstrate a robust approach to climate change and sustainability issues internally. They also help to align our governance with the standards expected of a FTSE 100 company.
Acute physical	Relevant, always included	EXAMPLE OF RISK TYPE Changing precipitation may alter the conditions at our construction sites, including geology, the risk of slope instability, soil shrinkage, erosion and water table height. There are design risks around guttering capacity, building material permeability, and sealants . There are site specific risks around flooding, drainage, and water pollution. There are production risks around extreme weather, especially for earthworks and bricklaying. HOW IT IS INCLUDED IN CLIMATE-RELATED RISK ASSESSMENTS We are highly selective with regard to the types of sites that we buy, focusing on the quality of the land rather than the number of plots acquired. We employ dedicated Land Teams in each of our 23 regional businesses who use their expertise and local knowledge to identify potential high-quality, sustainable sites. We have other processes in place to control design, production, procurement and health and safety risks. For example, we carry out a flood risk assessment on all our sites and prioritise site-based mitigation (e.g. raising site levels) over property-specific measures such as waterproof doors. Our LEADR process (Land & Environmental Assessment for Development Risk) enables us to identify and manage risks and technical issues at land purchase and site management stages, and will play an increasing role as the effects of climate change are experienced. LEADR is a bespoke, start of the art, digital technical risk management tool that identifies constraints on site, and the methodologies and costs to deal with them. It also produces SSEAPs (Site Specific Environmental Action Plans) to manage risks during the construction process.
Chronic physical	Relevant, always included	EXAMPLE OF RISK TYPE Adaptation requirements relating to climate change such as overheating, 'heat island effect', extreme weather, and mitigation requirements such as low and net zero energy buildings mean that it is essential that we ensure that the homes and developments we build are fit for the future. Air tight buildings can over-heat and suffer from air quality problems including condensation, mould and the build-up of toxic substances. Other examples of chronic physical risks that could affect Taylor Wimpey are dehydration of clay soils due to drought and long-term water shortages. Our Land Assessment and Management Process (LAMP) enables us to identify and manage risks and technical issues and will play an increasing role as the effects of climate change are experienced. HOW IT IS INCLUDED IN CLIMATE-RELATED RISK ASSESSMENTS The way we design our homes and neighbourhoods can influence the health and wellbeing of future residents, for example, landscaping water bodies and shadowing can cool public spaces. Our design and placemaking processes help us to manage solar gain and ventilation, and to manage thermal comfort and air quality in the indoor environment. As part of our environment strategy we are conducting a pilot study on indoor and outdoor air quality and we will integrate the results into technical guidance. Our LEADR process (Land & Environmental Assessment for Development Risk) enables us to identify and manage risks and technical issues at land purchase and site management stages, and will play an increasing role as the effects of climate change are experienced. LEADR is a bespoke, start of the art, digital technical risk management tool that identifies constraints on site, and the methodologies and costs to deal with them. It also produces SSEAPs (Site Specific Environmental Action Plans) to manage risks during the construction process.

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 & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
We currently pay a discounted rate of fuel tax of £0.11p per litre of diesel we purchase. Value Added Tax (VAT) is also charged. From March 2022, the rate of tax will increase to £0.5795p per litre and therefore will lead to a rise in our operational costs. Increased carbon taxes on energy intensive materials and activities will be reflected in increased costs of materials and services through the supply chain. Taylor Wimpey did not take part in the UK Government CRC Energy Efficiency scheme (CRC) after Phase 1, however now the government has abolished the CRC the Climate Change Levy (CCL) has increased. During 2020 our consumption of electricity, natural gas and LPG was ~ 52,312 MWh, which will be impacted by the increase in CCL. This will also be felt throughout Taylor Wimpey's supply chain. The carbon emissions resulting from the consumption of this electricity, natural gas and LPG were 10,741 tonnes CO2e. Under the IEA's Sustainable Development Scenario, a tonne of carbon will be worth $140/ per tonne in 2040. The cost to Taylor Wimpey of these carbon emissions therefore will approach $1.5m.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
4000000

Potential financial impact figure – maximum (currency)
4137000

Explanation of financial impact figure
Our 2020 red diesel consumption was 8,530,090 litres, taxed at £0.11p per litre. The taxation rate will increase to £0.5795p per litre in March 2022. Assuming our diesel consumption is flat, this tax increase will cost us approximately £4m. If diesel consumption rises 3% to 8,758,992 litres, then the tax increase will cost us £4,137,526. Total cost of tax at £0.11p per litre = 0.11 * 8,530,090 = £938,309 Total cost of tax at £0.5795p per litre = 0.5795 * 8,530,090 = £4,943,187 Total cost of tax at £0.5795p per litre if diesel use rises 3% = 0.5795 * 8,758,992 = £5,075,835 Total increase in tax costs - £4,943,187 - £938,309 = ~£4m Total increase in tax costs if diesel consumption rises 3% = £5,075,835 - £938,309 = £4,137,526

Cost of response to risk
0

Description of response and explanation of cost calculation
EXAMPLE/CASE STUDY: We have been exploring other opportunities to reduce energy use, looking at energy reduction programmes in areas such as building sites, sales areas, and plots before sale. We have been developing an energy efficient cabin specification with a cabin manufacturer, A V Danzer. We also use more efficient plant machinery and are reducing the fuel efficiency of our car fleet. Around 30% of our car fleet now comprises electric or hybrid vehicles. We anticipate having an entirely electric fleet by 2030. One example is that we have been adjusting thermostats in our show homes, previously left on factory settings to reduce show-home gas consumption by about 40%. We promote car sharing and provide a higher mileage rate to members of staff that travel with one or more passengers. We are working with suppliers to reduce the carbon impact of our value chain. This includes designing our homes to be energy efficient, selecting materials with lower embodied carbon and piloting off-site construction techniques. The cost of management is included in the overall management of energy, which is part of business as usual and is thus difficult to define, so we have estimated no additional cost of response to risk.

Comment

Identifier
Risk 2

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

Risk type & Primary climate-related risk driver

Chronic physical	Other, please specify (Climate change-induced changes in the range of pest species)

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
The increased severity and frequency of extreme weather events can hit our materials supplies. Build cost inflation, including materials, was elevated in 2020. Prices for lumber in the United States (an exporter of timber to the UK) have increased 180% since March 2020. This is primarily due to tight supplies for lumber arising from coronavirus-related lockdowns. However, in some parts of the world (e.g. Canada) supply issues have been exacerbated by the spread of mountain pine beetle, which kills pine trees used to produce lumber. Mountain pine beetle has spread northwards as a result of climate change.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
4500000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Our spend on timber and timber products in 2020 was approximately £ 45,000,000. This figure excludes products such as fencing that typically are supplied by micro-enterprises. Assuming an average across the board 10% increase in prices the total financial impact would be £4,500,000.

Cost of response to risk
0

Description of response and explanation of cost calculation
We saw elevated construction material cost inflation in 2020, including for timber products. We have addressed these cost increases by adopting a partnership approach to our key suppliers, managed by Category Managers who work in our Supply Chain function. We also ensure that the timber we supply is from sustainable sources by committing to procuring FSC, PEFC and Sustainable Forestry Initiative certified timber. This commitment is disclosed publicly in our Supply Chain Policy. We scored 'B' in our 2019 CDP Timber submission. The cost of management is included in overall procurement and supply chain management, which is part of business as usual and is thus difficult to define, so we have estimated no additional cost of response to risk.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

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

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
We recognise the need to address physical climate risks through the design of our homes and developments. This is assessed through our land acquisition, development design and build processes and includes engineering, groundworks, infrastructure, landscaping, environment, drainage, utilities, foundations and superstructure. We also carry out flood risk assessments on all our sites.

Time horizon
Long-term

Likelihood
About as likely as not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
127000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
A potential 2.5% decrease in market value caused by physical climate change impacts would mean a negative £127m financial impact (Market Capitalisation as of July 14th, 2020, 18:00 PM).

Cost of response to risk
0

Description of response and explanation of cost calculation
We have management methods and processes in place for the above. EXAMPLE/CASE STUDY: We are managing this risk through our land acquisition, development design and build processes including engineering, groundworks, infrastructure, landscaping, environment, drainage, utilities, foundations and superstructure. We will need to ensure that these are kept relevant and up to date as the physical consequences of climate change become increasingly apparent. Changing precipitation may alter the conditions at our construction sites, including geology, the risk of slope instability, soil shrinkage, erosion and water table height. There are design risks around guttering capacity, building material permeability, sealants etc. There are site-specific risks around flooding, drainage, and water pollution. There are production risks around extreme weather, especially for earthworks and bricklaying. There are supply chain risks e.g. flooding of roads. There are health and safety risks e.g. around the geographical range of certain insect-borne diseases. Our Land Assessment and Management Process (LAMP) enables us to identify and manage risks and technical issues and will play an increasing role as the effects of climate change are experienced. The cost of management is included in the overall management of developments, which is part of business as usual and is thus difficult to define, so we have estimated no additional response cost.

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
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Approximately 18.7% of our housing completions in 2020 were timber frame and therefore the second most common build method after conventional brick and block. Use of timber encourages sustainable forestry which has the capability to sequester carbon at scale. Currently embodied carbon is not directly regulated, but this could change in the future, as could the cost of carbon from materials such as steel and concrete. Our sector faces a serious skills shortage, especially in trades such as bricklaying, and we are taking action on several fronts to help address this. Timber frame presents an opportunity to reduce reliance on critical trades such as brick layers which can prevent project delay. It also has the benefit of faster construction times. Both can impact ROCE (Return On Capital Employed). Moreover, because timber frame kits are factory built there will be potential quality benefits, including greater air tightness and better insulation. More sustainable build methods also enhance our reputation as a responsible homebuilder. We set an internal target to complete 20% of our homes in timber by 2020, but marginally missed this target, although the target remains in place.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
0

Potential financial impact figure – maximum (currency)
7036000

Explanation of financial impact figure
In 2020 we built c. 1,759 timber frame homes at an extra cost of £2-4,000 per homes. There are advantages of timber frame (e.g. reduce skills bottlenecks, speed of construction, reduced foundation requirement) such that proponents believe it is cost neutral with traditional building methodologies. However, this does not appear to be the case in all circumstances. Therefore, we have stated the minimum potential financial impact figure as zero, the maximum impact as £7,036,000 (1,759 * £4,000) and the single figure estimate as £3,518,000 (1,759 * £2,000). There is no evidence that more revenue is generated from a timber frame house above a traditionally built one.

Cost to realize opportunity
7036000

Strategy to realize opportunity and explanation of cost calculation
CASE STUDY/EXAMPLE: Our goal to increase the proportion of homes built using timber frame will reduce greenhouse gas emissions as wood from renewable sources sequesters carbon from the atmosphere and replaces more carbon intensive materials such as bricks and blocks. Timber frame is therefore a lower carbon construction option than traditional brick and block, Taylor Wimpey's primary construction method. We are increasing the proportion of homes built using timber frame and are targeting 20% of completions in timber frame. We trialled the use of cross-laminated panels and timber frame in 2019 through our Project 2020 pilots. We built five cross-laminated timber homes at our Great Western Park site in Oxfordshire and two timber frame homes at our Bishopton site near Glasgow. We are working closely with several timber frame providers such as Stewart Milne so that we can embed their products into our standard house type range. We also are using learnings from our Scottish businesses who have built predominantly in timber frame for many years. Our design, technical, commercial and production functions centrally and regionally are contributing to this work. We would anticipate extra costs to reduce over time. Our design, technical, commercial and production functions centrally and regionally are contributing to this work. In 2020 we completed a detailed review of all major timber frame providers in the UK. In 2020 we built c. 1,759 timber frame homes at an extra cost of £2-4,000 per homes. We have stated the cost to realise the opportunity as maximum cost at £7,036,000 (1,759 * £4,000). We would anticipate extra costs to reduce over time.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Shift in consumer preferences

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Detailed polling commissioned by the Home Builders' Federation (HBF) in December 2019 on home buyers and the environment identified that 20% of people put environmental concerns in their top three issues of concern (higher than terrorism, education, taxation or transport); that 67% think new builds are more energy efficient; and that 37% of people said they would be willing to pay more for a 'zero carbon' new home (56% to save money and 39% for the environment). Over two thirds of people are positive about the Government's net zero emissions target, and 29% think mortgage providers should factor in energy bills when assessing a mortgage application. This and other research is challenging the claim that consumer demand for greener living is limited. We look at this including through our new Environment Strategy, which considers brand, customer communication and construction technologies. The Environment Strategy was launched across the business in early 2021. We are also considering green options such as solar panels, solar thermal and air source heat pumps, ahead of the introduction of the Future Homes Standard in 2025.

Time horizon
Short-term

Likelihood
More likely than not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
2438000

Potential financial impact figure – maximum (currency)
7313000

Explanation of financial impact figure
We have been exploring (but are not yet committed to) green options for customers including: • Eco driver light (external power point) c. £100 (Opportunity for £75K revenue) • Eco driver (Electric car charging point) c. £1,000 (Opportunity for £750K revenue) • Eco home – light (Integrated recycling bins, Water butt, Smart thermostats, Cycle storage, Green electricity contract) c. £400 (Opportunity for £300K revenue) • Eco home (as above plus PV panels and battery storage and smart shower) c. £5,000 (Opportunity for £3,750K revenue) Assuming 5% market penetration for each category and a build of 15,000 homes this represents an opportunity of £4,875K revenue per annum. The minimum and maximum values were calculated at 2.5% and 7.5% market penetration respectively.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
CASE STUDY/EXAMPLE: Project 2020 is a long-term initiative looking at trends and industry innovations to future-proof our product range for 2020 and beyond. It reflects evolving customer lifestyles and expectations. Several Project 2020 work streams have been influenced by climate related policy and regulation including the Clean Growth Strategy, the Climate Change Act and the Paris Climate Agreement. This has influenced research into alternative build methodologies that promote resource efficiency as well as our increasing preference for renewable energy installations. Development of new technology presents an opportunity for Taylor Wimpey, for example we have reviewed: shading systems; glazing and film technologies for solar exclusion; reflective building materials to reflect heat from building surfaces; night time ventilation systems to allow buildings to be purged of hot air; better use of ground and air for temperature mitigation; and acoustically attenuated natural and mechanical ventilation systems. Realising this opportunity would be included in our overheads. We have been working with our sales and marketing colleagues to identify which options might best appeal to customers. The next stage would be working with our procurement colleagues to identify suppliers and the feasibility, costs and benefits of offering these options.

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resilience

Primary climate-related opportunity driver
Other, please specify (Increased market valuation through resilience planning (e.g., infrastructure, land, buildings))

Primary potential financial impact
Other, please specify (Increased market valuation through resilience planning (e.g., infrastructure, land, buildings))

Company-specific description
Staying ahead of climate regulation and guidance has future proofing, financial and reputation benefits. Early action on climate change adaptation issues will help address the physical risks climate presents to the design of our homes and developments. We have already reduced the direct carbon intensity of our business by 31% since 2013 and have set a science-based carbon reduction target to reduce our scope 1 and 2 carbon emissions intensity 36% by 2025. We have conducted a review of TCFD and a scenario analysis. Action on mitigation and adaptation will make us a more robust and resilient business. It also will make us more attractive to key stakeholders such as investors, customers and employees. This will impact our financial performance which in turn could impact share price.

Time horizon
Long-term

Likelihood
About as likely as not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
100000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
There is some evidence to suggest that the share prices of companies with strong ESG management outperform companies with weaker ESG processes. For example, between January and August 2020 the share prices of companies focused on ESG returned 5.3% versus 3.6% for an index of wider companies. (Source: Trustnet.com - ESG funds beating their conventional rivals in most sectors this year.) Therefore our focus on climate and ESG issues may have positively contributed to our share price. A theoretical calculation based on the Trustnet findings indicates an approximately £100m increase in our share price.

Cost to realize opportunity
100000

Strategy to realize opportunity and explanation of cost calculation
Action on climate change requires tackling multiple issues across many parts of the business. We have already commenced with a number of initiatives and have others planned. We have reduced the direct carbon intensity of our business by 31% since 2013 and have set a science-based carbon reduction target to reduce our scope 1 and 2 carbon emissions intensity 36% by 2025, and our scope 3 carbon emissions intensity by 2030 We have conducted a review of TCFD and a scenario analysis. We have developed a methodology for measuring all the key scope 3 emissions categories including the carbon emissions from our products in use. CASE STUDY/EXAMPLE: We have designed an eco-specification portacabin and we trialled these cabins in 2020/2021. We have completed a detailed materiality assessment with all our key stakeholder groups including interviews covering issues such as energy bills, carbon emissions, efficient homes and renewable technologies. We have completed an adaptation review and some detailed work on flooding. The flood work covered a review of several processes, an analysis of 47 sites in relation to Climate Change Allowances, and training of our technical personnel. At the start of 2019, we launched a network of Sustainability Champions who are responsible for energy usage reduction and other sustainability initiatives within their regional businesses. We would envisage that climate change resilience measures will ultimately touch every part of the business. We have invested £24,000 in the Sustainability Champions network in the form of an annual salary increment. We have not estimated the other elements but it is envisaged they will be low in comparison. Order of magnitude cost to realise opportunity of £100,000 (including cumulative costs).

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?
Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, but we intend it to become a scheduled resolution item within the next two years	

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
Other, please specify (WB2D, 3-4D, 6D)	In June 2020 Taylor Wimpey worked with external consultants to complete a high-level scenario analysis reviewing three scenarios as follows: • Paris aligned WB2D 'Orderly Transition' • 3-4D 'Disorderly Transition' • 6D climate breakdown 'Failure to Act' The analysis focussed primarily on a 'Disorderly Transition' scenario to a low carbon economy. Disorderly transition was defined as the UK taking stronger regulatory action than much of the rest of the world, and so a UK based business such as ours would need to account for high regulatory plus adaptation costs, risks and opportunities. There was less focus on the 'Orderly Transition' scenario, as the evidence does not indicate that the world is on track to meet the commitments made in Paris. There was also less focus on the 'Failure to Act' scenario as there is significant international effort on climate change. The process was internal stakeholder led. Senior managers and executives, heads of departments and operational representatives completed analyses of climate-related risks and opportunities in two categories: • Pre-defined • Self-defined perceptions The impacts of climate-related physical and transition risks & opportunities were categorised under the following headings and ranked for importance: • (Changes in) regulation • Technological (changes) up and down your value chain • (Changes in) customers/stakeholders (behaviours and needs) • Physical (impacts of climate change) We reviewed short, medium- and long-term timescales (to 2100) to account for immediate priorities, strategic priorities, and the longevity of the homes we build. Risks and opportunities across the business and value chain were examined and quantified. We also considered how homes and developments will need to be designed differently to take changes in climate into account. The analysis considered customers, investors and other stakeholders, and business functions including Planning, Land Purchase, Design, Production, Supply Chain, Commercial and Sales. Risk and opportunity assessments were carried out using survey inputs and cross-functional team workshop analysis. The results were used to help develop the business's Environment Strategy. It also was used to explore Taylor Wimpey's business model resilience to the different climate change scenarios, and how it can proactively respond to the various risks and opportunities.
Other, please specify (Environment Agency based assessments plan for flood and coastal risk up to 2065)	Based on changes the Environment Agency made to climate change allowances Taylor Wimpey appointed specialist flooding consultant BWB to conduct a detailed review of the implications for flood risk assessments, net developable area and flood mitigation works scope and costs. The Environment Agency based assessments plan for flood and coastal risk up to 2065. They use climate change, population and mapping data to set out future flood risk scenarios and an economic assessment to aid planning flooding and coastal management resources for the next 50 years. These time-scales are well within the typical lifetimes of Taylor Wimpey built housing developments. The scenario analysis reviewed 44 flood risk assessments and conducted a more detailed assessment on 16 of these. The project found that Taylor Wimpey is not currently significantly exposed to the risk of increased fluvial flood levels or extents in future climate change scenarios. As a result of this scenario analysis, during 2017 we updated our land-buying processes to reflect the new climate change allowances. We also held a series of training webinars on flood risk for all our technical teams as well as colleagues in our land and planning departments.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	As a UK-focused residential developer, both physical risks and transition risks associated with climate change have impacted on our housing products, with impacts across medium to long-term time horizons. One of the key transition risks and opportunities are changes to the design of our homes and developments due to energy efficiency or renewable energy requirements These can arise through Building Regulations, the planning system and other routes. Requirements can include a more efficient building fabric, the application of renewable technologies or district heating schemes. The Future Homes Standard (FHS) and UK Government's Industrial Strategy will, for example, halve the total use of energy compared to today's standards for new build. Pending regulation on EVs (electric vehicles) may require a charging point in every home. EV and FHS regulation combined will substantively increase the electrical infrastructure needed on development sites. Case Study: One of the key physical risks that we have investigated were the changes to the Climate Change Allowances which altered, amongst other things, the peak river flows in Flood Risk Assessments. This meant changes to developments such as raising the site levels so they cannot flood or providing additional areas for flood compensation so other areas of land are not impacted.
Supply chain and/or value chain	Yes	Addressing deforestation is important for meeting our environmental ambitions over the short to medium-term. We use a lot of timber on our developments and we expect this will increase further in the coming years. Case Study: We have committed to building more timber frame homes which have multiple benefits. This includes carbon sequestration, speed of construction, reducing reliance on trades with skills shortages, and build quality. We aimed to build 20% of completions in timber frame by 2020 and narrowly missed this target by building 18.7% of completions in timber frame. We require all suppliers to provide timber from legally logged sources in line with our Supply Chain Policy and the EU Timber Regulation. We are committed to buying timber from responsibly managed forests certified by recognised certification schemes such as the Forest Stewardship Council (FSC), Programme for the Endorsement of Forest Certification (PEFC) or Sustainable Forestry Initiative (SFI). This has impacted our supply chain as it dictates who we do business with. There are also supply chain risks from energy cost increases due to climate regulation increasing material costs and hence build costs.
Investment in R&D	Yes	Medium to long-term investment in R&D is driven by Taylor Wimpey's strategy around sustainable homes. Case Study: As part of our continued work on Project 2020 we have invested in research and development relating to sustainable build technologies. In 2019, we built prototype houses in both timber-frame and cross-laminated timber (CLT). Both timber frame and CLT have lower embodied carbon than standard brick and block houses. In addition, we are using wood fibre insulation in the CLT houses. Smart and sustainable technologies applicable to homes have been investigated in some detail. For example, several of the Project 2020 houses use mechanical ventilation and heat recovery (MVHR) systems; one prototype house built by our West Scotland business contains SunAmp thermal battery technology. Both of these technologies increase the energy efficiency of the home compared to houses with standard gas central heating, all other things being equal. Our Research and Development Department routinely reviews new technologies, and promising technologies are run through our FIG (Functional Interface Group) for piloting and again prior to adoption.
Operations	Yes	Our operations in the short-term are also impacted by transition risks that manifest themselves in the form of increased tax and regulation associated with climate change. From March 2022, UK fuel tax will equate to a cost of 57.95p for every litre of diesel we purchase. Value Added Tax at 20% is also charged on the price of the fuel. It is the biggest element of the price we pay at the pumps. The increase in the fuel tax will lead to increased operational costs if everything else were to remain constant. We estimate the cost increase will amount to ~£4m. Changes in the frequency and magnitude of extreme weather events can also impact on our ability to build homes, for example, extreme cold or hot weather can lead to reduced building activity. Case Study: Taylor Wimpey decided to put Sustainability Champions in place across its UK operations in 2019. They have implemented initiatives including a process to dry out buildings more effectively and to change heating settings in show rooms. We have also promoted car sharing and provide a higher mileage rate to members of staff that travel with one or more passengers, and we are exploring opportunities to improve the fuel efficiency of the Taylor Wimpey car fleet. We are exploring opportunities to reduce energy use, looking at areas such as efficient plant machinery. We've worked hard to reduce direct carbon emissions intensity by 31% since 2013. 97% of our construction waste in 2020 was diverted from landfill.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Access to capital Assets Liabilities	Revenues are largely determined by the health of the housing market, which itself depends on factors like employment, the economy, mortgage availability and interest rates. Site specific factors such as location and transport connectivity are important and related to site selection. There are some opportunities to increase revenue through design and place making, which is linked to climate change adaptation and mitigation. There is revenue generating potential through selling green options such as renewable energy technologies, but this is modest compared with the other factors. The main focus is on revenue generation in the short and medium term. Direct and Indirect Costs Risks associated with the transition to a low-carbon economy including uncertainty around environmental legislation and energy taxation can also impact on operating costs. These can be amplified through the supply chain. In addition, changes in Building Regulations or planning, driven by environmental requirements, have the potential to increase operating costs. These are managed by staying abreast of the changes, ensuring they are embedded in our processes, and factoring them into the land value when purchasing sites. These costs have a short to medium term time horizon. Capital Expenditures Almost all our spend is operational, predominantly on land, goods and services, and construction. In recent years we have been buying regional offices and refurbishing them or building new offices (to good energy and environmental standards). This is the main area of capital expenditure and is modest compared with our development activities. These expenditures have a short to medium term time horizon and take into account flood risk, environmental impact risks and other risks within the development planning phase. Access to Capital Investors are increasingly interested in the climate performance of companies and will increasingly look for 'investor grade' climate information to inform their investment decisions. We have been contacted by both ethical and mainstream investors on the topic. Our pro-active approach to climate means that we believe we are currently satisfying investor needs, and our scenario analysis work means that we have moved closer to TCFD requirements. We have not identified problems associated with access to capital due to climate change. The main focus is on the short and medium term. Assets The main asset we purchase is land. Changing precipitation may alter the conditions of our construction sites, including geology, the risk of slope instability, soil shrinkage, erosion and water table height. We are highly selective with regards to the types of sites that we buy, focusing on the quality of the land rather than the number of plots acquired. We employ dedicated Land Teams in each of our 23 regional businesses, who use their expertise and local knowledge to identify potential high-quality, sustainable sites. We have instigated an asset data base so that we can capture the key characteristics of our assets. The main focus is on the medium term. Liabilities The risk from flooding is still deemed to be our biggest climate change adaptation risk and has been a major focus. The implications of this risk will be to individual sites. Without proper assessment it could result in decreased developable areas, increased flood mitigation costs and could potentially result in a decreased land value. We do not buy land unless we can mitigate any flood risk, and flood risk will be factored into the land value. The main focus is on medium and long term time horizons. Case Study: Changing precipitation may alter the conditions of our construction sites, including geology, water table height, the risk of slope instability, soil shrinkage, erosion, and may compromise remedial measures for contaminated soil. If there are subsequent problems with homes, the usual arrangement is for the developer to pick up liabilities in years 0-2, and insurance for years 3-10. We appointed specialist flooding consultants to conduct a detailed review of the implications for flood risk assessments, net developable area and flood mitigation works scope and costs. The Environment Agency based assessments plan for flood and coastal risk up to 2065. They use climate change, population and mapping data to set out future flood risk scenarios and an economic assessment to aid planning flooding and coastal management resources for the next 50 years. These time-scales are well within the typical lifetimes of Taylor Wimpey built housing developments. We are highly selective with regard to the types of sites that we buy, focusing on the quality of the land rather than the number of plots acquired. We employ dedicated Land Teams in each of our 24 regional businesses, who use their expertise and local knowledge to identify potential high-quality, sustainable sites.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

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 11

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Intensity metric

Other, please specify (Tonnes CO2e per 100m2 completed build)

Base year

2019

Intensity figure in base year (metric tons CO2e per unit of activity)

1.62

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure

100

Target year

2025

Targeted reduction from base year (%)
36

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
1.0368

% change anticipated in absolute Scope 1+2 emissions
25

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
1.96

% of target achieved [auto-calculated]
-58.2990397805212

Target status in reporting year
New

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Please explain (including target coverage)
2019 intensity figure = 24,581/15,216 = 1.62 2020 intensity amount = 18,503/9,439 = 1.96

Target reference number
Int 12

Year target was set
2020

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 3 (upstream & downstream)

Intensity metric
Other, please specify (Tonnes CO2e per 100m2 completed build)

Base year
2019

Intensity figure in base year (metric tons CO2e per unit of activity)
254.31

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
100

Target year
2030

Targeted reduction from base year (%)
24

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
193.2756

% change anticipated in absolute Scope 1+2 emissions
0

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
207.8

% of target achieved [auto-calculated]
76.2029281847614

Target status in reporting year
New

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Please explain (including target coverage)
2019 intensity figure =3,869,582/15,216 = 254.31 2020 intensity figure = 1,961,431/9,439=207.80

Target reference number
Int 1

Year target was set
2018

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 2 (market-based)

Intensity metric
Other, please specify (Tonnes CO2e per 100m2 completed build)

Base year
2013

Intensity figure in base year (metric tons CO2e per unit of activity)
2.82

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
100

Target year
2023

Targeted reduction from base year (%)
50

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
1.41

% change anticipated in absolute Scope 1+2 emissions
18

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
1.96

% of target achieved [auto-calculated]
60.9929078014184

Target status in reporting year
Underway

Is this a science-based target?
No, but we are reporting another target that is science-based

Target ambition
<Not Applicable>

Please explain (including target coverage)
In 2014 we introduced an intensity reduction target for direct carbon emissions (scope 1 and 2) of 25% by 2018 on a 2013 baseline. We met and exceeded this goal in 2017, achieving a 38.8% reduction. In 2018 we committed to an intensity reduction target for direct carbon emissions (scope 1 and 2) of 50% by 2023 on a 2013 baseline By 2019, we had reduced our emissions intensity by 42.6% since 2013 In 2020, we set a science-based carbon reduction target. We have also reduced absolute emissions by 38.9% since 2013. We achieved our reduction in our carbon emissions intensity a year ahead of schedule thanks to an increase in the proportion of electricity we buy from renewable sources and an improvement in energy efficiency on our sites and offices. Impacted by Covid, our energy use intensity increased by 21% over the last year.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
No other climate-related targets

C4.3

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

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	1	3.98
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	5	79205.31
Not to be implemented	0	0

C4.3b

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

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)
965

Scope(s)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
40598

Investment required (unit currency – as specified in C0.4)
10405

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment
Purchase of REGO-backed electricity tariffs, with attendant carbon and cost savings. Cost savings are achieved by actively managing tariffs rather than automatically selecting standard tariffs.

Initiative category & Initiative type

Energy efficiency in buildings	Maintenance program

Estimated annual CO2e savings (metric tonnes CO2e)
0.04

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
240

Investment required (unit currency – as specified in C0.4)
107500

Payback period
No payback

Estimated lifetime of the initiative
6-10 years

Comment
Refurbishment of South East business unit's office. This involved installing LED lighting and electric convection heaters.

Initiative category & Initiative type

Company policy or behavioral change	Resource efficiency

Estimated annual CO2e savings (metric tonnes CO2e)
10.27

Scope(s)
Scope 1

Voluntary/Mandatory
Please select

Annual monetary savings (unit currency – as specified in C0.4)
12768

Investment required (unit currency – as specified in C0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
11-15 years

Comment
Carbon and monetary savings achieved by improving on-site practices when ordering gas oil; in particular, better managing the volume of fuel ordered to site to prevent charges associated with fuel left on-board the tanker. Our scope 1 footprint uses data on the volume of fuel invoiced to our business units, so this fuel 'left on board' was included in the scope 1 footprint even though it was never actually burnt by Taylor Wimpey.

Initiative category & Initiative type

Non-energy industrial process emissions reductions	Process material substitution

Estimated annual CO2e savings (metric tonnes CO2e)
45305

Scope(s)
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
7036000

Payback period
No payback

Estimated lifetime of the initiative
Ongoing

Comment
Homes built using timber frame as an alternative to traditional ‘brick and block’ construction techniques. This reduces greenhouse gas emissions as wood from renewable sources takes carbon from the atmosphere, and replaces more energy intensive materials such as cement and concrete. It also enables greater use of off-site construction techniques which can reduce carbon emissions and wastage. Investment required is based on average on-cost of £4K per plot and c. 2,114 timber-framed build. Our design, technical, commercial and production functions centrally and regionally are working on reducing the costs of timber build. We would anticipate extra costs to reduce over time. Approximately 13.6% of our housing completions (c. 15,519 total homes built, excluding Joint Ventures) in 2019 were timber frame. Estimate based on percentage of homes built using timber frame which accounted for around 18.6% of completions in 2020. Estimated total avoided emissions is based on research by the EU that suggests timber framed houses with brick cladding embody 21% less carbon than a house built with traditional masonry techniques. We estimate that if we had not used timber frame for 18.6% of completions our scope 3 emissions for purchased goods and services would have been 4.1% higher in 2020. This equates to avoided emissions of 45,305 metric tonnes of CO2 For EU research see http:// ec.europa.eu/ environment/ integration/ research.

Initiative category & Initiative type

Low-carbon energy generation	Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
32925

Scope(s)
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
4708000

Payback period
No payback

Estimated lifetime of the initiative
Ongoing

Comment
14% of completions included photovoltaic panels or other on-site renewables enabling our customers to avoid GHG emissions. Estimate based on percentage of completed homes that include photovoltaic panels, enabling customers to avoid GHG emissions. The Energy Saving Trust states that: A typical home solar PV system could save around one tonne of carbon per year: https://energysavingtrust.org/advice/solar-panels/ The figure is calculated based on an expected lifetime of 25 years for a PV panel

array. In reality, most panels are likely to last longer.. There is no payback period for Taylor Wimpey as the customer gets the benefit. The cost was calculated through assuming £3,500 cost for the 14% dwellings built in 2020 with photovoltaic panels or other on-site renewables.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Regulatory Standards including Building Regulations and Local Government requirements through planning all drive improvements in the energy efficiency of the homes we build. In 2014 we completed our responsibilities under the Carbon Reduction Commitment (CRC) and did not qualify for Phase 2 and so there was no requirement to participate in 2017. From 2018 we continued to fulfil the requirements of Mandatory Carbon reporting, and from 2019 SECR (Streamlined Energy and Carbon Reporting). We also fulfilled our requirements under ESOS (Energy Savings Opportunities Scheme), submitting our second ESOS report to the Environment Agency in December 2019. This included collating data from our existing measurement processes, completing site energy audits and identifying energy saving opportunities. We have used the ESOS process to drive additional direct emissions reductions.
Financial optimization calculations	In 2018 we continued a number of projects to reduce the direct use of energy (Scope 1 and 2) that was influenced by financial optimisation. These included decisions made during the purchase and refurbishment of new offices; that all new porta-cabins on building sites must be fitted to an energy efficient 'eco' specification; and that existing building sites with a significant time to run must be retrofitted to an energy efficient standard. We continue to work on an 'eco plus' porta-cabin specification that is even more energy efficient that the existing 'eco' specification. By improving the thermal efficiency and heating technologies of onsite cabins, canteens and drying rooms, we can save an estimated 80-90% of energy use, and will order our first eco plus cabins for pilot in 2021/2022.
Other (Raising the profile of climate through our Environment Strategy)	Policy and strategy: Within our Environment Strategy, we identify that sustainability is both good for business and the right thing to do. The Strategy has been developed around a vision of 'building a better world'. .
Compliance with regulatory requirements/standards	Regulatory Standards including Building Regulations and Local Government requirements through planning drive improvements in the energy efficiency of the homes we build. ESOS (Energy Savings Opportunities Scheme) helped to provide data to make the case for reduction in emissions, and this was enhanced by Mandatory Carbon reporting and SECR (Streamlined Energy and Carbon Reporting) requirements. Three quarters of local planning authorities have declared climate emergencies, and this is starting to result in more stringent planning requirements for our developments.

C4.5

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

Yes

C4.5a

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

Level of aggregation

Group of products

Description of product/Group of products

Taylor Wimpey builds homes that achieve high levels of energy efficiency, allowing homeowners to reduce their own emissions by using less energy in their homes. In addition, the location of houses near to public transport nodes, cycle routes and increased cycle storage facilities means that our customers can also lead to savings on our Scope 3 transportation emissions. The UK Government stopped the 'The Code for Sustainable Homes' policy in 2015, but we still build some due to historic commitments on longer term sites. In 2020 we completed 617 homes to Code level three (2019: 1,154) and 138 homes to Code level four (2019: 598). Taylor Wimpey is actively participating in policy development to facilitate positive changes in this area. Improvements made to current building regulations include improved insulation and air tightness, and the use of more thermally efficient products and linear thermal bridging designs. Taylor Wimpey also carries out work with our manufacturing partners which has led to the introduction of new, easy-to-use products into the marketplace. These help to prevent heat loss and reduce energy demand in homes. Taylor Wimpey employs a 'fabric first' approach to energy efficiency, concentrating on highly efficient walls and windows. We make all of our homes airtight and use mechanical ventilation to maintain good air quality and comfort. Finally, where appropriate, we use low carbon and renewable technologies. We completed construction on our Project 2020 research and innovation initiative in 2019. Project 2020 has helped us future-proof our product for our next generation of customers. Amongst the Project 2020 houses, five were built using cross-laminated timber panels and two have been built with timber-frame. The CLT houses also have wood fibre insulation, while one of the timber-frame houses has been built to be 'Gold compliant' under Scottish Building Standards.

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 (Industry research)

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

1.5

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

1.5% is an estimate based on % of low carbon homes built. In 2020 we completed 138 homes to Code level four.

C5. Emissions methodology

C5.1

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

Scope 1

Base year start
January 1 2013

Base year end
December 31 2013

Base year emissions (metric tons CO2e)
16107

Comment

Scope 2 (location-based)

Base year start
January 1 2013

Base year end
December 31 2013

Base year emissions (metric tons CO2e)
10526

Comment
Under the GHG Protocol Scope 2 Guidance, organisations wishing to report their carbon emissions are now required to publish two numbers for their Scope 2 emissions. The first of these is calculated under the location-based method, using a national or regional emission factor, as in previous years. The second is generated using the market-based method. This method enables organisations to report the carbon emissions of the electricity they have chosen to purchase based on specific supplier's fuel mix disclosure, and/or on the emissions from specific tariffs and/or based on a residual grid mix. Both the 'location based' and 'market-based' Scope 2 emissions are published in our Annual Report and Accounts and our Sustainability Report. The calculation methodology for the market-based Scope 2 emissions is given below. For 2020, in addition to the usual model, we have extracted all actual consumption by supplier and included where known the specific tariff name. These are included on the Taylor Wimpey Carbon Reporting Methodology Statement 2020 available on our corporate website .

Scope 2 (market-based)

Base year start
January 1 2013

Base year end
December 31 2013

Base year emissions (metric tons CO2e)
14229

Comment
Under the GHG Protocol Scope 2 Guidance, organisations wishing to report their carbon emissions are now required to publish two numbers for their Scope 2 emissions. The first of these is calculated under the location-based method, using a national or regional emission factor, as in previous years. The second is generated using the market-based method. This method enables organisations to report the carbon emissions of the electricity they have chosen to purchase based on specific suppliers fuel mix disclosure, and/or on the emissions from specific tariffs and/or based on a residual grid mix. Both the 'location based' and 'market-based' Scope 2 emissions are published in our Annual Report and Accounts and our Sustainability Report. The calculation methodology for the market-based Scope 2 emissions is given below. For 2020, in addition to the usual model, we have extracted all actual consumption by supplier and included where known the specific tariff name. These are included on the Taylor Wimpey Carbon Reporting Methodology Statement 2020 available on our corporate website.

C5.2

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
16522

Start date
<Not Applicable>

End date
<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

C6.3

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

Reporting year

Scope 2, location-based
5272

Scope 2, market-based (if applicable)
1981

Start date
<Not Applicable>

End date
<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?
Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source
Fugitive emissions (refrigerant gases)

Relevance of Scope 1 emissions from this source
Emissions are not evaluated

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
Currently excluded on the basis of expected immateriality and difficulty in acquiring.

Source
Gas and electricity of part-exchange properties

Relevance of Scope 1 emissions from this source
Emissions are not evaluated

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
Currently excluded on the basis of expected immateriality and difficulty in acquiring.

Source
Certain joint venture properties

Relevance of Scope 1 emissions from this source
Emissions are not evaluated

Relevance of location-based Scope 2 emissions from this source
Emissions are not evaluated

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not evaluated

Explain why this source is excluded
This source of emissions was excluded where Taylor Wimpey was not part of the handover process. In these cases other house builders have captured MCR-related data.

Source
Certain emissions from District Heating Schemes

Relevance of Scope 1 emissions from this source
Emissions are not evaluated

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
Certain emissions from District Heating Schemes where we are receiving a rebate from customers prior to handover to the long term operator.

C6.5

(C6.5) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1114587

Emissions calculation methodology
Emissions estimated using multiplying spend with environmental extended input-output (EEIO) method. A product/service split is now applied to some categories to increase accuracy. Purchased goods and services is broken down into two categories: overheads and construction materials. Overheads: Each business unit in Taylor Wimpey enters their financial figures monthly onto a centralised portal. The total annual spend for each overhead category is multiplied by the relevant environmentally extended input-output (EEIO) factor to calculate Scope 3 emissions. Construction: Taylor Wimpey takes the actual spend on construction materials across the business from COINS, an enterprise software solution, which provides actual spend on construction materials for 49 building material categories, plus some additional categories. The overall spend for each of the COINS categories is then multiplied by environmentally extended input output (EEIO) emission factors to calculate the Scope 3 emissions of construction materials. e.g. 1.52 kg CO2e/£ spent on Brickwork/Blockwork; 1.75 kg CO2e/£ spent on Roads and Sewers; 0.48 kg CO2e/£ spent on Plumbing and Heating.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Extended Input Output (EEIO) analysis is a pragmatic method for identifying emission hotspots, and leverages Taylor Wimpey's financial procurement records.

Capital goods

Evaluation status
Relevant, calculated

Metric tonnes CO2e
0

Emissions calculation methodology
Included in 'Purchased goods and services'. Emissions estimated using multiplying spend with environmental extended input-output (EEIO) method. Each business unit in Taylor Wimpey enters their financial figures monthly onto a centralised portal. The total annual spend for each overhead category is multiplied by the relevant environmentally extended input-output (EEIO) factor to calculate Scope 3 emissions. e.g. 1.75 kg CO2e/£ spent on Roads and Sewers.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Included in 'Purchased goods and services'

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

Evaluation status
Relevant, calculated

Metric tonnes CO2e
4503

Emissions calculation methodology
These emissions have been estimated on the basis of energy consumption data and BEIS emissions factors. Source - UK Government GHG Conversion Factors for Company Reporting: WTT- UK electricity (generation) 0.03565 kg CO2e/kWh; WTT- UK electricity (T&D) 0.00303 kg CO2e/kWh

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Recommended methodology for GHG reporting companies (GHG Protocol)

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
29815

Emissions calculation methodology
Partially estimated from Taylor Wimpey Logistics data - e.g. 0.86654 kg CO2e/ km Average Laden HGV (all diesel) (Source - UK Government GHG Conversion Factors for Company Reporting); the rest calculated from PG&S data.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
50

Please explain
Improved by separating emissions out from PG&S emissions and estimating emissions from TW Logistics using actual distance data. The figure has been rounded to show an order of magnitude.

Waste generated in operations

Evaluation status
Relevant, calculated

Metric tonnes CO2e
11255

Emissions calculation methodology
Waste data provided in tonnes and then BEIS emission factors applied.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
It should be noted that waste data is for the UK only and excludes Spain. It includes all construction waste but excludes soil and demolition waste. However, given the size of operations in Spain (<2.5% of turnover), its contribution to total waste is considered to be immaterial.

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
6593

Emissions calculation methodology
Car fleet emissions excluded. However, grey fleet (vehicles owned by employees who do mileage on company business) mileage included. Rail, taxi and flight distance data derived from staff surveys (both present and past) and extrapolated to cover the whole company.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Car fleet emissions are already included in the Scope 1 and 2 footprint. Data on business travel were not available for the entire year for all offices, and secondary data is less accurate.

Employee commuting

Evaluation status
Relevant, calculated

Metric tonnes CO2e
13771

Emissions calculation methodology
Estimated using commuting distances for 10% of employees and extrapolating to all of TW employees. Commuting distances were estimated by collecting anonymised data from 10% of the employees in each of our 23 BUs. The home post codes of these employees were gathered and the post codes of their usual place of work (regional office or construction site), and the distance between these two locations calculated.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
These emissions from offices / equipment leased by Taylor Wimpey have already been taken into account in our Scope 1 and 2 emissions as we take the operational control approach.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Taylor Wimpey does not procure the services of third parties to undertake downstream transportation activities.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Sold products (houses) are not subsequently processed and therefore this category is not relevant.

Use of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
754625

Emissions calculation methodology
Estimated using Dwelling Emissions Rate (DER) data from four of our business units (Bristol, East London, North Thames and Manchester) and extrapolating to TW's entire portfolio. Projected decarbonisation of the grid is now incorporated into the calculations and therefore this category has reduced significantly.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Estimated using DER data from four of our business units and extrapolating to TW's entire portfolio.

End of life treatment of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
20105

Emissions calculation methodology
Calculated by taking end of life emissions for a typical TW three-bedroom semi-detached home and extrapolating across all of the homes built by Taylor Wimpey in 2020.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Calculated by taking end of life emissions for a typical TW three-bedroom semi-detached home and extrapolating across all of the homes built by Taylor Wimpey in 2020.

Downstream leased assets

Evaluation status
Relevant, calculated

Metric tonnes CO2e
6178

Emissions calculation methodology
Estimated using data on the area of TW's freehold land and the average emissions released from agricultural land.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Estimated using data on the area of TW's freehold land and the average emissions released from agricultural land.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Taylor Wimpey does not have franchises.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Taylor Wimpey does not have equity or debt investments of significance.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
N/A

Other (downstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
N/A

C-CN6.6/C-RE6.6

(C-CN6.6/C-RE6.6) Does your organization assess the life cycle emissions of new construction or major renovation projects?

	Assessment of life cycle emissions	Comment
Row 1	No, but we plan to for upcoming projects	We plan to do so in future, and towards meeting our scope 3 Science-based emissions targets.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	0	We plant trees, shrubs, hedgerows, plants and turf on almost every site as part of our landscaping design. We have developed a tool to help quantify the sequestration, but do not have data of sufficient quality or reliability to calculate our total sequestration.

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
0.000006631

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
18503

Metric denominator
unit total revenue

Metric denominator: Unit total
2790200000

Scope 2 figure used
Market-based

% change from previous year
17.11

Direction of change
Increased

Reason for change
There was a significant, 35.7% drop in revenue in 2020 due to the Covid lockdown, which impacted on house completions. Despite absolute scope 1 and 2 emissions dropping by 24.2% during 2020 this meant that overall intensity per unit revenue increased.

Intensity figure
2.31

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
21794

Metric denominator
Other, please specify (Completed floor area 100m2)

Metric denominator: Unit total
9439

Scope 2 figure used
Location-based

% change from previous year
29

Direction of change
Increased

Reason for change
There was a significant, 36.4% drop in completed floor area in 2020 due to the Covid lockdown. Despite absolute scope 1 and 2 location-based emissions dropping by 20% during 2020 this meant that overall intensity per unit completed floor area increased.

Intensity figure
1.96

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
18503

Metric denominator
Other, please specify (Completed floor area 100m2)

Metric denominator: Unit total
9439

Scope 2 figure used
Market-based

% change from previous year
21

Direction of change
Increased

Reason for change
There was a significant, 36.4% drop in completed floor area in 2020 due to the Covid lockdown. Despite absolute scope 1 and 2 (market-based) emissions dropping by 24.7% during 2020 this meant that overall intensity per unit completed floor area increased.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
No

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	16393
Spain	129

C7.3

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

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Taylor Wimpey Bristol	586.96
Taylor Wimpey Central London	6.59
Taylor Wimpey East Anglia	801.07
Taylor Wimpey East London	1110.55
Taylor Wimpey East Midlands	715.2
Taylor Wimpey East Scotland	771.33
Taylor Wimpey Exeter	877.42
Taylor Wimpey Manchester	715.71
Taylor Wimpey Midlands	502.88
Taylor Wimpey North East	1246.4
Taylor Wimpey North Midlands	535.79
Taylor Wimpey North Thames	478.31
Taylor Wimpey North West	719.45
Taylor Wimpey North Yorkshire	835.39
Taylor Wimpey Oxfordshire	499.55
Taylor Wimpey South East	675.15
Taylor Wimpey South Midlands	819.77
Taylor Wimpey South Wales	327.76
Taylor Wimpey South Thames	905.47
Taylor Wimpey Southern Counties	508.06
Taylor Wimpey West London	659.79
Taylor Wimpey West Midlands	651.46
Taylor Wimpey West Scotland	623.59
Taylor Wimpey Yorkshire	497.59
Taylor Wimpey Head Office	242.5
Taylor Wimpey Logistics	79.01
Taylor Wimpey Europe	129.31

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 for in Scope 2 market-based approach (MWh)
United Kingdom of Great Britain and Northern Ireland	5142	1802	22056	13006
Spain	130	179	521	0

C7.6

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

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Taylor Wimpey Head Office	13.23	0
Taylor Wimpey Europe	130.17	178.59
Taylor Wimpey Logistics	30.1	0
Taylor Wimpey Bristol	131.49	63.45
Taylor Wimpey Central London	14.07	21
Taylor Wimpey East Anglia	250.72	100.46
Taylor Wimpey East London	338.56	439.7
Taylor Wimpey East Midlands	195.05	58.72
Taylor Wimpey East Scotland	254.95	27.04
Taylor Wimpey Exeter	104.45	53.36
Taylor Wimpey Manchester	278.52	43.4
Taylor Wimpey Midlands	126.67	37.23
Taylor Wimpey North East	159.64	54.81
Taylor Wimpey North Midlands	173.04	81.53
Taylor Wimpey North Thames	291.46	53.44
Taylor Wimpey North West	241.11	70.87
Taylor Wimpey North Yorkshire	205.51	65.21
Taylor Wimpey Oxfordshire	250.97	79.66
Taylor Wimpey South East	255.41	33.03
Taylor Wimpey South Midlands	325.15	129.44
Taylor Wimpey South Wales	231.46	75.41
Taylor Wimpey South Thames	268.06	23.87
Taylor Wimpey Southern Counties	203.71	68.63
Taylor Wimpey West London	241.55	131.57
Taylor Wimpey West Midlands	127.09	58.21
Taylor Wimpey West Scotland	247	18.68
Taylor Wimpey Yorkshire	183.24	13.81

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?
Decreased

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	965	Decreased	3.93	The proportion of green electricity purchased increased from 40 to 58% of total MWh consumption. The estimated annual CO2e savings of 965 tonnes CO2e are based on the additional percentage renewable MWh purchases made in 2020 compared to 2019. Scope 1 & 2 (market-based) emissions in 2019 were 24581 CO2e =(-965/24581)*100 = -3.93
Other emissions reduction activities	10.31	Decreased	0.04	Combined Scope 1 and Scope 2 (market-based) emissions reduced by 6078 tCO2e in 2020 compared to 2019. Consumption for most of the material emission sources decreased due to a reduction in activity due to Covid restrictions. Estimated emissions from implemented reduction initiatives in 2020 (attributed to Scope 1 and 2 emissions) = 10.31 tCO2e (See C4.3b). Scope 1 & 2 (market-based) emissions in 2019 were 24581 CO2e, therefore the emissions change value =(-10.31/24581)*100 = -0.04% Changes due to variation of Scope 1 emission factors and the type and stage of site projects during the year may also have contributed to the decrease in emissions.
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output	6078	Decreased	24.7	2020 scope 1 and 2 emissions = 18,503 2019 s1 and s2 emissions = 24,581 Change = 24,581 – 18,503 = 6078 % change = (6078/24,581)*100 = 24.7%
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

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?

Market-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 undertook this energy-related activity in the reporting year
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 (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	73618.33	73618.33
Consumption of purchased or acquired electricity	<Not Applicable>	13071.41	8984.98	22056.4
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>	13071.41	82603.32	95674.73

C8.2b

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

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

C8.2c

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

Fuels (excluding feedstocks)
Natural Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
29706.82

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
29706.82

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>

Emission factor
0.18387

Unit
kg CO2e per KWh

Emissions factor source
www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

Comment

Fuels (excluding feedstocks)
Butane

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
340

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
340

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>

Emission factor
2938.81

Unit
kg CO2e per metric ton

Emissions factor source
www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

Comment
Value for 'LPG'

Fuels (excluding feedstocks)
Diesel

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
8530

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
8530

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>

Emission factor
2.758

Unit
kg CO2e per liter

Emissions factor source
www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

Comment
Used Gas Oil Factor as Site Consumption is Red Diesel

Fuels (excluding feedstocks)
Gas Oil

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
24419

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
24419

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>

Emission factor
2.758

Unit
kg CO2e per liter

Emissions factor source
www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

Comment

Fuels (excluding feedstocks)

Kerosene

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
10.3

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
10.3

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>

Emission factor
2.54039

Unit
kg CO2e per liter

Emissions factor source
www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

Comment

Fuels (excluding feedstocks)
Liquefied Petroleum Gas (LPG)

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
28.7

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
28.7

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>

Emission factor
2.939

Unit
kg CO2e per metric ton

Emissions factor source
www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

Comment

Fuels (excluding feedstocks)
Propane Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
351.1

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
351.1

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>

Emission factor
2.939

Unit
kg CO2e per metric ton

Emissions factor source
www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

Comment

Fuels (excluding feedstocks)
Petrol

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
1524.6

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
1524.6

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>

Emission factor
2.16802

Unit
kg CO2e per liter

Emissions factor source
www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

Comment
Average biofuel blend forecourt petrol

Fuels (excluding feedstocks)
Diesel

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
8708.1

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
8708.1

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>

Emission factor
2.54603

Unit
kg CO2e per liter

Emissions factor source
www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

Comment
Average biofuel blend forecourt petrol

C8.2e

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

Sourcing method
Green electricity products (e.g. green tariffs) from an energy supplier, not supported by energy attribute certificates

Low-carbon technology type
Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling
United Kingdom of Great Britain and Northern Ireland

MWh consumed accounted for at a zero emission factor
64.93

Comment

Sourcing method
Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

Low-carbon technology type
Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling
United Kingdom of Great Britain and Northern Ireland

MWh consumed accounted for at a zero emission factor
13006.48

Comment
Nearly 60% of the electricity we used in 2020 was backed by a green, zero emission tariff.

C9. Additional metrics

C9.1

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

Description
Energy usage

Metric value
10.2

Metric numerator
Site and office fuel and electricity (MWh)

Metric denominator (intensity metric only)
Completed build in 100sq.m.

% change from previous year
36.16

Direction of change
Increased

Please explain
Absolute operational energy use fell from 101,352 MWh in 2019 to 85,442 MWh in 2020. However, the fall in the number of houses Taylor Wimpey built as a result of the pandemic led to a small denominator and therefore a higher operational energy intensity number.

Description
Waste

Metric value
7.98

Metric numerator
Total tonnes of construction waste

Metric denominator (intensity metric only)
Completed build in 100sq.m.

% change from previous year
22.7

Direction of change
Increased

Please explain
Absolute waste produced fell from 96,509 tonnes in 2019 to 73,305 tonnes in 2020. However, the fall in the number of houses Taylor Wimpey built as a result of the pandemic led to a small denominator and therefore a higher total construction waste intensity number.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	

C-CN9.6a/C-RE9.6a

(C-CN9.6a/C-RE9.6a) Provide details of your organization's investments in low-carbon R&D for real estate and construction activities over the last three years.

Technology area
Construction methods

Stage of development in the reporting year
Large scale commercial deployment

Average % of total R&D investment over the last 3 years
21 - 40%

R&D investment figure in the reporting year (optional)

Comment
We built seven modular houses, known as the I-House, as part of a trial in our Oxfordshire, Manchester and West Scotland business units, testing off-site construction techniques such as cross-laminated timber. We are increasing the proportion of homes built using timber frame. This can have a significantly lower carbon footprint than traditional 'brick and block' building techniques due to the materials and use of off-site construction techniques. 18.7% of the houses we built in 2020 were timber frame, marginally lower than an internal target of 20%. We estimate that the overall percentage of R&D investment focused on low carbon is approximately 21-40%.

Technology area
Architectural or constructional elements improving the thermal performance of buildings

Stage of development in the reporting year
Pilot demonstration

Average % of total R&D investment over the last 3 years
21 - 40%

R&D investment figure in the reporting year (optional)

Comment
We built our Project 2020 prototype homes during 2019 and gathered feedback from the first occupants. These were developed from the winning entry to our design competition with the Royal Institute of British Architects (RIBA) and built on developments in Oxfordshire, Manchester and West Scotland. We used the process to test sustainable build technologies, including cross-laminated panels with wood fibre insulation and energy efficiency solutions. Our Project 2020 homes in Scotland meet the rigorous Scottish Buildings Standards Gold label for sustainability. The homes incorporate high performance insulation, a whole house ventilation system, battery powered hot water heating, PV panels and other technology. We are also working with Strathclyde University to develop a new model for measuring the energy efficiency and air tightness of our homes enabling us to assess more easily the impact of new technologies and different design approaches.

C-CN9.10/C-RE9.10

(C-CN9.10/C-RE9.10) Did your organization complete new construction or major renovations projects designed as net zero carbon in the last three years?
No, but we plan to in the future

C-CN9.11/C-RE9.11

(C-CN9.11/C-RE9.11) Explain your organization's plan to manage, develop or construct net zero carbon buildings, or explain why you do not plan to do so.

This is something we are starting to investigate as part of our Environment Strategy. The Environment Strategy is going to be released later in 2020.

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 emissions, and attach the relevant statements.

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
Taylor Wimpey UK Ltd - CTS Verification Diploma - 02.2021 v2.pdf
Taylor Wimpey UK Ltd - CTS Verification Letter - 02.2021 v2.pdf

Page/ section reference
p1-3

Relevant standard
Verification as part of Carbon Trust standard certification

Proportion of reported emissions verified (%)
100

C10.1b

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

Scope 2 approach
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
Taylor Wimpey UK Ltd - CTS Verification Diploma - 02.2021 v2.pdf
Taylor Wimpey UK Ltd - CTS Verification Letter - 02.2021 v2.pdf

Page/ section reference
p1-3

Relevant standard
Verification as part of Carbon Trust standard certification

Proportion of reported emissions verified (%)
100

Scope 2 approach
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
Taylor Wimpey UK Ltd - CTS Verification Diploma - 02.2021 v2.pdf
Taylor Wimpey UK Ltd - CTS Verification Letter - 02.2021 v2.pdf

Page/ section reference
p1-3

Relevant standard
Verification as part of Carbon Trust standard certification

Proportion of reported emissions verified (%)
100

C10.1c

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

Scope 3 category
Scope 3: Purchased goods and services

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
Verfication Statement - Taylor Wimpey - CY2020.pdf

Page/section reference
p1-2

Relevant standard
Verification as part of Carbon Trust standard certification

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

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
Verfication Statement - Taylor Wimpey - CY2020.pdf

Page/section reference
P1-2

Relevant standard
Verification as part of Carbon Trust standard certification

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Use of sold products

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
Verfication Statement - Taylor Wimpey - CY2020.pdf

Page/section reference
P1-2

Relevant standard
Verification as part of Carbon Trust standard certification

Proportion of reported emissions verified (%)
100

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?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	The Carbon Trust Standard	The Carbon Trust review year on year change in Scope 1 + 2 emissions 1, 2 Taylor Wimpey UK Ltd - CTS Verification Diploma - 02.2021 v2.pdf Taylor Wimpey UK Ltd - CTS Verification Letter - 02.2021 v2.pdf

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

Yes, other partners in the value chain

C12.1a

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

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Collect climate change and carbon information at least annually from suppliers

% of suppliers by number
82

% total procurement spend (direct and indirect)
90

% of supplier-related Scope 3 emissions as reported in C6.5
88

Rationale for the coverage of your engagement
We look for sustainably sourced materials and aim to partner with suppliers on resource efficiency. This is important because the environmental footprint of our supply chain including energy and water use, carbon emissions and waste is many times greater than that of our direct operations. Sourcing sustainably can also reduce costs and risks to the business and may help us to increase resilience to future resource shortages or price rises. We are working with suppliers to reduce the carbon impact of our value chain. This includes designing our homes to be energy efficient, selecting materials with lower embodied carbon, reducing waste and piloting off-site construction techniques. We are increasing the proportion of homes built using timber frame, targeting 20% of our total completions. In 2020, 18.7% of our completions were built using timber frame. This will reduce emissions as wood from renewable sources takes carbon from the atmosphere and replaces more energy intensive materials such as blocks and bricks. 90% of total spend refers to supplies that are centrally procured (regional procurement is separate), and where there is greatest influence from our centralised operations. Of our 90 group suppliers, 73 are registered with the Supply Chain Sustainability School (82%).

Impact of engagement, including measures of success
We are engaging our suppliers on sustainability issues including climate change through the Supply Chain Sustainability School (SCSS). As part of the SCSS Carbon Group, we are working on an ambitious project to collect energy and carbon data from construction suppliers. A digital portal was developed in 2019. Through the SCSS, suppliers can complete a sustainability self-assessment, create an action plan and use free resources to address gaps in their approach. 30 of our suppliers re-assessed themselves during 2019, achieving an average 19% improvement in their score. This is one measure of success. Our suppliers also used the School's online resources over 1,300 times during 2020 covering topics such as waste, modern slavery, sustainable materials, biodiversity, supplier diversity and wellbeing. 30 attended an SCSS event or workshop. This level of engagement is another measure of success.

Comment

C12.1b

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

Type of engagement
Education/information sharing

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

% of customers by number
100

% of customer - related Scope 3 emissions as reported in C6.5
100

Portfolio coverage (total or outstanding)
<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement
We aim to engage with 100% of our customers, all of whom will have significant influence and impact on energy use, and carbon emissions, over the lifetimes of their homes. Our new integrated Taylor Wimpey website contains a dedicated customer service section with useful information for new and existing homeowners. All our customers receive information on their new home via our 'From House to Home' manual. This was updated in 2019 and we added advice on living sustainably including tips to help customers save energy, reduce waste, and encourage nature in their gardens. We also give all our customers details on how to use and maintain the environmental features in their homes through our Maintenance Guide. We want to deliver every customer a high-quality home. We are investing in our processes to ensure consistency across business regions. Getting things right first time is not just good for customers, it reduces costs and is important from an environmental perspective as fewer mistakes mean less waste, fewer deliveries to site and homes perform to the energy efficiency standards we expect. Our Production Academy training and our Production Manual help our teams to understand and apply our quality and finishing standards. Build quality on site is overseen by our Head of Production who works closely with our Customer Director. Progress is reviewed monthly by our Group Operations Team of senior leaders. We agree a quality improvement plan where business units are not meeting our standards and our Head of Production and Technical Director work with commercial and production teams to implement improvements. We have recruited Quality Managers across our regional businesses. They work closely with our Production Directors to review performance and identify and address quality issues. In some businesses we are also trialling Finisher roles, to assess whether this speeds up the process of addressing snagging issues. Our Consistent Quality Approach (CQA) guidelines ensure our Site Managers, subcontractors, production and customer service teams have a consistent understanding of the finishing standards we expect on all our homes. In 2020, we plan to produce a customer-facing version so our customers know what to expect from us. In 2020 we completed a survey of 1000 customers and their attitudes to the environment including climate, carbon and energy efficiency.

Impact of engagement, including measures of success
Our sales and marketing materials include details of the sustainability and community features of developments as well as the environmental features of our homes, allowing us to communicate these features to our customers. Our website also includes a section on sustainable living, explaining what our customers can do to live a sustainable life and how to take steps to improve our environmental, social and economic impact on our planet. Advice ranges from energy-efficiency tips to growing your own vegetables, getting to know your neighbours and supporting your local shops and services. Taylor Wimpey has installed Sustainability Boards at sales areas to inform prospective customers of our work in the sustainability area, including placing a high priority on insulation to enable customers to save on their energy bills. In the future, Taylor Wimpey is planning to roll out a Post Occupancy Monitoring Review to gain customer's feedback once they have moved in. The feedback will cover their new home, the development, and any other general issues. We also engage extensively with local communities in the areas in which we operate. Many of our customers come from these local communities - 75% of our customers move from a 5 mile radius of the Taylor Wimpey development they are purchasing on – and we listen and respond to community requirements. Academy of Customer Excellence: Training for our customer service teams covers our product range, Customer Journey, consumer protection legislation, technical standards, and health, safety and the environment. Role-specific modules are available for team leaders and Heads of Customer Service. Over 345 employees have enrolled in the training so far. In terms of success we lead the volume housebuilders in build quality as measured by the NHBC CQR score, which measures build quality at key build stages. In 2019, we scored an average of 4.13 (2018: 3.93) from a possible score of 6. This compares with an industry average score of 4.01. We are fifth nationally when ranked against all housebuilders who have more than 100 build stages (which excludes self-build and very small housebuilders). We aim to improve this further by ensuring our quality assurance processes are embedded at every stage of build. Our target is to achieve a score of at least four by 2020 in each regional business.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

We work with many different stakeholders as we run our business. We strive to be open and honest about how we work and to listen and respond to our stakeholder views. This dialogue gives us access to new ideas and insights and helps us manage sustainability issues.

We engage with local communities at every site, from planning and throughout construction, including through meetings, exhibitions, workshops, newsletters, information boards, social media and our website. Community priorities include: early delivery of infrastructure and facilities; managing local impacts during the construction process such as noise and dust; and provision of public and open spaces to help create a sense of place and support communities to adopt healthy lifestyles. We will apply our updated Community Engagement Toolkit and Community Communication Plan to make sure we communicate effectively with communities at every stage and reflect their needs in our plans. We are exploring how we can accelerate the development of new communities on our schemes through our connected communities trial.

We engage with investors on sustainability issues through meetings, our reporting and by participating in benchmarks and disclosure initiatives. We responded to numerous investor questions on environmental, social and governance aspects in 2020 including in relation to workplace culture, community engagement, affordability, modern slavery, environmental regulation, sustainable timber, climate change and fire safety. We will continue to engage with investors and to disclose our performance to investors through initiatives including CDP, Dow Jones Sustainability Index, FTSE4Good and NextGeneration benchmark. We aim to align with the recommendations of the Task Force on Climate-related Financial Disclosures.

We engage with local authorities and parish councils and participate in the development of strategic frameworks, Local Plans and Neighbourhood Plans. Local governments prioritise schemes which reflect local priorities and feature high-quality design and placemaking. Efficient delivery and build quality are also key objectives. Many local authorities are exploring how best to respond to the climate emergency. We will continue to focus on community engagement, placemaking and the early delivery of community infrastructure.

We interact with the Ministry of Housing, Communities & Local Government, Homes England, the Department for the Environment, Food & Rural Affairs, the Scottish and Welsh Governments, and other institutions to understand their priorities and share our views. We engage directly and through trade associations such as the Home Builders Federation. Government priorities include placemaking, efficiency and fast delivery. The environmental impact of housing is rising up the agenda with expected legislation in the areas of biodiversity net gain and home energy and carbon efficiency. We will continue to engage with government and provide our input through public consultations on issues relating to planning and housebuilding.

NGOs (non-governmental organisations), academia and expert organisations provide insights into sustainability issues and trends. Examples of engagement in 2020 include: our membership of Business in the Community; our materiality assessment; and engagement with community groups and nature organisations , including through our partnerships with Buglife and Hedgehog Street.

Case Study: Our materiality assessment helps us to identify and focus on the sustainability issues and impacts that matter most to our business and our stakeholders, including customers, investors, our people and regulators. Details of the methodology are included on our website.

We updated our assessment in early 2020 and considered and ranked a wide range of issues. It took account of how important each issue is to business strategy; which issues could represent a significant risk or opportunity for the business; how important each issue is to our key stakeholders (including investors, customers, employees, communities and local government); and issues where our business operations could have a significant negative or positive impact on people or the environment.

The assessment showed that issues relating to the sustainability of our homes and developments – such as placemaking, community infrastructure, build quality, fire safety, affordability and environmental performance are among the key issues for our business. Health & safety also remains one of the most highly rated issues.

Compared with our previous materiality assessment, issues relating to environmental impacts including climate change, biodiversity and air quality have increased in importance.

We expanded the initial list of issues considered in the assessment, which means some issues (such as build quality) appear on the matrix for the first time.

We used the results of the assessment to inform the development of our Environment Strategy during 2020.

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
Other

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	Under the Future Homes Standard we are part of the HBF working group and will be engaging with ministers on its future trajectory. In addition we have and will continue to engage with officials on changes to various approved documents and SAP methodology. During 2017, Taylor Wimpey's Director of Sustainability met with the Secretary of State for the Environment, Food and Rural Affairs, Michael Gove, prior to the publication of HM Government's 25-year Environment Plan. In January 2020 Taylor Wimpey's Director of Sustainability attended the Home Builders Federation Environment Summit, a meeting which planned to kick-start a step change in the environmental performance of house building. Throughout 2020 and 2021 Taylor Wimpey's Technical Director has been supporting the Future Homes Standard's Task Force, which is a multiparty approach to developing a road map for the sustainable homes of the Future.	To simplify the range of local standards that currently exist into one set of standards which applies to all regions. The view was to review standards or put them into regulations where appropriate.
Other, please specify (Government and planning policy)	Support	Engagement with government and opposition on all emerging housing and planning policy. This includes participation in the Plans Management Group (PMG), via the Home Builders Federation (HBF), as well as the HBF committee working groups, e.g. National Planning Committee. We have also engaged directly along with the HBF on Building a Safer Future consultation. Various Directors at the business recently engaged with BEIS on issues relating to the Future Homes Standard.	Ensure local plans are robust and Community Infrastructure Levy (CIL) charge schedules are appropriate; Starter Homes and the Housing and Planning Bill.
Other, please specify (Super- fast broadband)	Support	This is engaging with the Ministry of Housing, Communities and Local Government (MHCLG) , specifically the Building Standards and Regulation department. An increasing number of people now work from home - so this supports the ability to work from home by improving home-based internet connections. This should reduce commuter emissions and road congestion/energy efficiency. This work stream is undertaken with telecommunications providers in order to improve site technology infrastructure.	We support the roll out of super-fast broadband with no exceptions.

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

HBF (Home Builders Federation)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

To be responsible in discussing how the housing industry can meet the UK Government's policy requirements with regards to climate change issues in a fair and proportionate way. For example, the HBF continues to collaborate with Government on low and zero carbon housing.

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

The HBF is the voice of the housebuilding industry and therefore reflects the opinion of its members. As Taylor Wimpey is actively involved in working with and influencing industry bodies and regulators, we believe we are the leader among our peers in this space. Our Group Operations Director, is an external director on the the NHBC's New Homes Quality Board and a member of the Construction Quality Expert Panel. Our Technical Compliance Director chairs the HBF National Technical and Sustainability Committee (NTSC) and the HBF Future Performance of New Homes sub-group. There are also other members of staff who participate in relevant working groups.

Trade association

National House Building Council (NHBC)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The organisation has been at the heart of industry engagement on sustainability for a number of years; raising the construction standards of new homes in the UK, and providing consumer protection for homebuyers through its 10-year Buildmark warranty. It provides training to house builders, and research to help the industry progress with the zero carbon homes agenda.

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

Our UK Technical Compliance Director is a member of the NHBC Standards Review Group, the NHBC Building Control Industry Support Group and the HBF's Tall Buildings sub-group. Our Technical Compliance Director also sat on the Robust Details Standards Review group in 2020. This is a separate group set up to address Robust Details and agreed through the UK Government as an acceptable way of demonstrating compliance using tried and tested solutions.

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

1. APPCCG. Taylor Wimpey's Sustainability Director is a member of the All Party Parliamentary Climate Change Group (APPCCG). The group organises regular events on line and in Whitehall on all aspects of Climate Change. The purpose of the APPCCG is to raise awareness of the threat of climate change and to promote policies to counter that threat. Taylor Wimpey fully supports the aims of the APPCCG.

2. UK Government. Our Group Operations Director communicates on a regular basis with Government, on behalf of Taylor Wimpey and on occasion on behalf of the Home Builders Federation (HBF). Topics include practical approaches to zero carbon housing, the burden of regulation for the housebuilding industry and planning issues that include sustainability.

3. All Party Parliamentary Group on Environment: In 2017 our Sustainability Director was a member of the All Party Parliamentary Group on Environment, which aims to raise interest on environmental issues in both the House of Commons and the House of Lords.

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?

We understand that the effects of climate change have significant potential to impact our business and the residential developments that we build. We recognise that in order for the UK Government to reach its binding carbon targets significant additional regulation will be needed which will impact our business. A dedicated team within Taylor Wimpey is responsible for overseeing engagement with policy makers and trade associations with regard to activities that may influence policy on climate change. The same team is also part of Taylor Wimpey's Legacy, Engagement and Action for the Future (LEAF) committee and/or those responsible for developing climate change related strategy within the Company. This streamlined communication process ensures that any engagement remains consistent with Taylor Wimpey's strategic approach to sustainability and climate change.

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 Report 2020 final.pdf

Page/Section reference
p8-9, p18 p42-45

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

Publication
In voluntary sustainability report

Status
Complete

Attach the document
Taylor Wimpey_Sustainability Report_2020.pdf

Page/Section reference
P6 P17-20 P33

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C15. 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.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

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

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms