# Morgan Sindall Group plc - Climate Change 2021



### C0. Introduction

### C0.1

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

Morgan Sindall Group plc is a leading UK construction and regeneration group operating through five divisions (set out below). The Group employs circa 6,600 people.

#### Construction

### Construction & Infrastructure

Provides infrastructure services in the highways, rail, aviation, energy, water and nuclear sectors, including tunnel design and construction services in education, healthcare, defence, commercial, industrial, leisure and retail. BakerHicks offers a multidisciplinary design and engineering consultancy service.

#### Fit Out

Overbury specialises in fit out and refurbishment in commercial, central and local government offices, retail banking and further education. Morgan Lovell provides office interior design and build services direct to occupiers.

### **Property Services**

Provides planned asset management and responsive maintenance to social housing and the wider public sector.

## Regeneration

## **Partnership Housing**

Works in partnerships with local authorities and housing associations. Activities include mixed-tenure developments, building and developing homes for open market sale and affordable rent, design and build contracting and planned maintenance and refurbishment.

# **Urban Regeneration**

Works with landowners and public sector partners to transform the urban landscape through the development of multi-phase sites and mixed-use regeneration, including residential, commercial, retail and leisure.

### C0.2

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

	Start date	End date		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=""></not>

## C0.3

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

United Kingdom of Great Britain and Northern Ireland

### C<sub>0.4</sub>

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

## 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.

Operational 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

**Buildings** management

Other real estate or construction activities, please specify (Provides infrastructure services in the highways, rail, aviation, energy, water and nuclear sectors, and construction services in housing, education, healthcare, defence, commercial, industrial, leisure and retail.)

### 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.

	Please explain
individual(s)	
	The Board's HSE committee assists the Board in fulfilling its oversight responsibilities in relation to environmental matters and makes recommendations to the Board for any changes considered necessary. The committee is responsible for monitoring the Group's strategy and regulatory environmental obligations including climate change and carbon emissions reduction. The committee is made up of two non-executive directors (one of whom is the chair), the Group's commercial director (GCD) and company secretary. The chair of the Board also attends each meeting. The committee meets 4 times per year and reports to the Board after each meeting. The Group's director of sustainability and procurement (DSP) reports to the GCD and attends one meeting of the HSE committee each year to review the Group's responsible business strategy which includes environmental performance. The Group's Group management team, made up of the Group chief executive, finance director, GCD, company secretary and divisional MDs (the GMT) is responsible for setting the Group's strategy on responsible business including the Group's approach to climate change. The DSP chairs the climate action group (CAG) which advises and assists the GMT in determining the Group's environmental strategy including its approach to climate change. The Board declared a target to achieve net zero for scope 1, 2 and operational scope 3 emissions by 2030 at the beginning of 2021 and set an internal carbon tax with effect from 1 January 2021 based on emissions used by each division in the prior financial year. The Group published its first TCFD statement in the 2020 Annual report

### C1.1b

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

with which climate- related	Governance mechanisms into which climate- related issues are integrated	Scope of board- level oversight	Please explain
Scheduled – some meetings		e>	The Board's HSE committee is responsible for monitoring the Group's environmental strategy, which includes its strategy in respect of climate change. The HSE committee, as part of its annual agenda of activities, regularly reviews the Group's performance against the Group's goals and targets for climate-related issues. The Group's Carbon Action group in conjunction with the director of sustainability and procurement (DSP) advises and assists the GMT in setting the Group's environmental strategy which includes targets and objectives for addressing climate change and carbon reduction. In 2010, the Group introduced a target to reduce its carbon emissions by 5% year on year against its 2010 baseline. This target remained in place until 2018 when it was replaced by the Group's science-based targets. In 2017, the Group established science-based targets which received approval from the Science Based Target Initiative working group in March 2018. The Group reported its performance against these science-based targets as part of its annual reporting for 2019. At the beginning of 2021, the Group has set new environmental targets, to reduce scope 1,2 and operational scope 3 emissions by 30% by 2025 and 60% by 2030 (based on a 2019 baseline). In 2021, the Group will be re-accrediting its science-based targets to a 1.50 warming scenario rather than 20 and will continue to report against its science-based targets The DSP provides an annual update of activities undertaken including those in relation to climate change to the Board's HSE Committee. The chair of the HSE committee updates the Board after each meeting of issues covered at their quarterty meetings. The Group Board has overall responsibility for ensuring that the Group as a whole can meet all of its obligations and commitments including those related to climate change.

#### 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	•		Frequency of reporting to the board on climate- related issues
Other, please specify (Director Sustainability and Procurement)	<not Applicable&gt;</not 	Both assessing and managing climate-related risks and opportunities	<not applicable=""></not>	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).

The Board has appointed the director of sustainability and procurement (DSP) to have overall responsibility for delivering and determining the Group's approach to Climate Change. This includes setting targets, including science-based targets, for reducing the Group's impact on climate related activities as well as monitoring performance against the same. In setting the Group's environmental strategy, full account of climate-related risks and opportunities are taken.

The DSP ensures that he is aware of current legislation, regulation and best practice in respect of climate change. He also has a deep understanding of how best the Group can act to ensure it meets its obligations and ensure that it delivers against any commitments made.

The DSP meets with the Board's HSE committee annually, is a member of the Group's Climate Action Panel and attends one meeting per year of the the Group management team, made up of the Group chief executive, finance director, GCD, company secretary and divisional MDs (the GMT). The purpose of these meetings is to report on progress against the Group's responsible business strategy, including climate change as well as to advise on changes to regulatory/customer requirements and best practice that may impact the Group's climate related activities.

The DSP also sits on the Group's risk management committee which consists of the heads of key Group functions, including legal, company secretarial, IT, finance, internal audit and tax and treasury. This committee meets twice per year to review the Group's risk and opportunities.

## 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	
Row 1	Yes	

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

	71	Activity inventivized	Comment
Other, please specify (All drivers of company cars)	Monetary reward	Emissions reduction target	The metric used is in relation to average fleet CO2. The Group's largest division is its Construction and Infrastructure division. The division's largest environmental impact is from fuel used in its company vehicles and car fleet - as confirmed through the Achilles CEMARS report, attached. To reduce these emissions, the division has introduced an incentive scheme that will assist it in making a positive contribution to the reduction of carbon emissions. Incentives are produced as part of the division's company car selection process based on base model CO2 figures and deviation from the same. As stated in the division's car policy: "Each grade has a maximum CO2 emission level attached to it. To encourage a reduction in CO2 emissions, if a model is chosen which has CO2 emissions below that set level for their grade, the driver receives £1 per calendar month for each gram of CO2 saved. These amounts will be displayed as a fixed 'green' saving on the monthly payslip". This is documented in the division's HR Policy (HR POL 21 HR Policy - Company Car - Rev 15 Feb 17). In addition to this, commercial fleet driver performance is managed through a tracker system. The best performing drivers each month are identified and the best performer each quarter receives a £150 cash prize.
Other, please specify (Director sustainability and procurement (DSP))	Monetary reward	Energy reduction target	The Group director of sustainability and procurement (DSP) has responsibility for assisting and advising the GMT on setting the Group's Responsible Business strategy which includes its strategy in respect of environmental impacts, engaging with all Group divisions to ensure that the responsible business strategy is implemented and accurately reported. The responsible business strategy includes setting minimum standards and targets for improvement over the short and long term. The DSP reports directly to the GCD and annually reports to HSE committee and the GMT on progress against targets. The role is performance incentivised and a part of the remuneration is dependent upon achieving set standards and targets in terms of carbon reduction and minimising the impact of the energy used in completing our projects.

# 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)	Comment
Short- term	0	Twice a year each division carries out a detailed risk review, recording significant matters in its risk register. Each risk is evaluated both before and after the effect of mitigation, as to it likelihood and occurrence and severity of impact on strategy. Climate change as a principal risk is included within the principal risk register and its impact reviewed along with wider corporate risks. Emerging risks such as shifts towards more sustainable methods of construction are also reviewed as part of this process. Sustainability commitments, carbon mitigation initiatives and targets are also assessed annually and reporting against our performance is issued within the annual Responsible Business Data Sheet, enabling management of the climate and environmental targets that have been set by the Group.
Medium- term	1	In order to satisfy itself that the Group has adequate resources to continue in operation for the foreseeable future and that there are no material uncertainties in respect of the Group's ability to continue as a going concern, the Group undertakes an annual viability assessment covering the three-year period commencing 1 January 2021, which is in line with the Group's budgeting cycle. Base case financial projections are based on the Group's strategy and capital committed, including the responsible business strategy and carbon reduction initiatives.  Medium-term climate change mitigation targets have also been set and approved by the Science Based Targets initiative.
Long- term	3	Our long-term risks are assessed in line with our strategic review, and considered in line with our long-term carbon targets, including Science Based Targets. We also assess emerging risks as part of our sustainability materiality assessment, which was reviewed and updated in 2020, and as part of our TCFD-aligned climate scenario analysis being undertaken in 2021

# C2.1b

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

The Group undertakes a formal strategic and budget review each year (see pages 47 – 48 of the Group's annual report). We use our principal risks to identify scenarios which could force the Group to be unviable over a three-year period. One of the Group's principal risks is the environment and climate change. Each year we assess the cash flow implications of a particular risk or mix of risks to understand the impact on cash held, credit facilities available, and their ability to affect the business and meet our operating liabilities. The Board assumes overall responsibility for the management of risk and reviewing the effectiveness of the risk control systems.

As a listed company, a substantive financial or strategic impact would be anything that could impact the Group's current market consensus by c5%. The Group's auditor set their materiality level at £3.8m for their 2020 audit which was equivalent to c5% of PBTA for the year (see page 109 of the 2020 Annual Report).

When considering longer-term climate related risks, the Group also considers a key substantial or financial impact as one that could have a key impact on our reputation or brand, one that could impact upon the long-term development of the Group, or those that could threaten the company's business model, future performance, solvency or liquidity in the next 6 years. Our processes do not just consider internal risks but also the risks that appear in our value chain, which are assessed and evaluated using the same metrics as our direct risks.

The Group Board has a formal schedule of matters reserved for the Board. The Group finance director and head of audit and assurance have established a schedule of delegated authorities that assigns approval of material decisions to appropriate levels of management. Each of our divisions adhere to these authorities in managing their individual businesses and have their own clear set of procedures for managing operational matters (see pages 38 of the 2020 annual report).

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**

Company level: Top-down risk management process: The Board is responsible for setting the Group's risk appetite and for ongoing risk management, including assessing the principal risks that threaten the Group's strategy and performance (one of which is climate change). (see pages 38-48 of the Annual Report 2020 for full details of the Group's risk governance and principal risks). Risk identification and assessment is undertaken at Group level, with input provided by divisional leads, representing all activities, geographies and business areas of the Group. The Group's divisions undertake a detailed review of their divisional risk registers on a bi-annual basis. The Group head of audit and assurance follows the same process for identifying and reviewing Group risks, conferring with the Group's risk committee. The risk review looks at shortterm, medium-term and long-term risks that could impact upon the business' strategy and finances. Entity and asset level risk management process As part of our bottom-up risk management processes, specifically with regard to climate-related risks, we carry out workshops and brainstorming sessions to identify emerging risks which need to be incorporated within our company-wide risk management processes. Input Is collected from divisional heads and working groups such as the Carbon Action Panel. We also identify and assess climate-related asset level risk through site reviews, asset level reviews and supply chain reviews. Risk Management Framework The process has resulted in a consolidated list which represent key strategic and financial risks, some key risks related directly or indirectly to climate change including those relating to legal and regulatory risks, market risks, reputational risks and physical risks of climate change. In order to complement this process, a specific and deeper review of climaterelated risks across the value chain has been undertaken involving collaboration between many departments including the sustainability, risk, corporate governance and finance teams. The result of this ongoing work will result in a risk management system which incorporates climate change thinking when assessing risk. Review and responsibility The Group head of audit and assurance retains responsibility for the overall risk management system and its appropriateness is reviewed by the Audit Committee. The Risk Management Framework also details the controls in place around key risks, the management responsibilities for the overall risk, individual controls mitigating risk and the level of risk and whether it is increasing or decreasing. TCFD-aligned risk assessment In order to ensure we meet the recommendations of TCFD, the Group are assessing how a Paris Aligned climate scenario (of 1.5 degrees warming) will impact or exacerbate our risks, and are also assessing how a Business-as-Usual scenario will impact upon our risks. We published our first 2020 TCFD statement in our 2020 Annual report (see page 17). As part of our 2021 review, we will consider both the physical and transition risks of climate change and consider how these could impact upon our business cash flow, operating results, financial position, business and reputation, if they were not mitigated appropriately. The climate risks identified will be integrated into our overall risk management system. Management of risk Each division is responsible for managing risks arising from their individual operations. For example, our Construction and Infrastructure division, applies COM PRO2 Risk Management Standard, an established process to assess risk at the Pre-construction and Construction phase of its projects. Risk is assessed at the start of a project, revisited on commencement of the project and regularly during the project. Processes are embedded within each division's quality (ISO 9001) environment (ISO 14001) and health and safety (OHSAS 18001) management systems. Any issues that arise will be dealt with in accordance with the divisional procedures for managing operational matters and if the matter meets the requirements of the delegated authorities, it will be elevated accordingly. PHYSICAL RISK CASE STUDY Our projects must be resilient against extreme rainfall events and mitigate changes to surface flooding as a result of infrastructure built. Project level risk assessments are required. Our Construction & Infrastructure's Network Rail project in Werrington, Peterborough received a Green Apple environmental award for ecology and biodiversity works, which included the construction of a new 840m long section of river with additional flood capacity and biodiversity features to minimise this project level risk. Our infrastructure division also works with leading water companies to create resilient, high quality water and wastewater facilities that safeguard supply, helping to remove properties from the flood risk register and contributing to a cleaner environment by reducing the frequency and impact of flood events. TRANSITION RISK CASE STUDY In a Paris-aligned, low carbon transition, where global warming is limited to below 2 degrees by the end of the century, it is expected that there will be a significant shift in legislation and regulation to reduce harmful emissions, including the potential introduction of a carbon price. In order to assess the impact of a carbon price on a divisional basis, in January 2021, the Group implemented an internal carbon price to incentivise divisional leads to reduce their divisional carbon emissions and risk exposure, and to finance future carbon reduction initiatives. As part of the Group's TCFD-aligned risk assessment, which looks at a longer-time horizon than business-as-usual strategic thinking, it has assessed that a global carbon price could impact upon the Group's operating and supply chain costs. The Group's UK and offshore GHG emissions (in CO2e tonnes) were 22,790 in 2020. Under the International Energy Agency's Sustainable Development Scenario, it is possible that there will be a carbon price of \$140 per tonne in 2040. Using simplifying assumptions for scenario analysis and strategic planning purposes, it can be estimated that if the same emissions existed today as in 2040, the Group could be exposed to additional costs of \$3.2m (or £2.3m). However, it is important to note that there is significant uncertainty over changes in carbon price both in the UK and globally, and as such this risk is unlikely to materialise. In any case, in order to mitigate against uncertainty around changes in carbon pricing, and to ensure that the Group is contributing to reducing the impact of climate change, the Group have committed to achieve net zero in our Scope1, Scope2 and operational Scope3 emissions by 2030. These examples and the lessons learned have strengthened our strategic focus on climate mitigation and adaptation and our full TCFD risk assessment will further highlight key learnings from our emerging risk assessment processes.

## C2.2a

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

Relevan & inclusio	pe Please explain
Current regulation always included	The regulatory environment is constantly reviewed by the Group and requires continuous monitoring and assessment of policy actions. Failing to meet current regulatory requirements could impact upon our cash flow, operating results, financial position, business and reputation. Specific risks in this area relate to emissions reporting and energy regulation, increased energy costs, carbon pricing and expanding carbon trading schemes. UK Government regulations particularly are a key driver of market activities in the UK construction sector. Participation with trade associations such as the Supply Chain Sustainability School and the Home Building Federation, including regular regulatory review by Group and divisional leads and the risk teams, ensure that we are aware of changes to current legislation before they are put in place to ensure that we adequately prepare for the changes. CASE STUDY EXAMPLE As an example of specific regulatory risk considered as part of our assessment process, the Group is required to abide by UK regulations including SECR, Streamlined Energy and Carbon Reporting regulations, and ESOS, the Energy Saving Opportunities Scheme. Changing regulation is regularly assessed through participation in trade associations and as part of our annual risk assessment. In order to ensure accuracy of the data reported, our GHG data for SECR is externally verified by Achilles to meet the requirements of Toitū Envirocare's 'carbonreduce' certification standard/Carbon Reduce scheme (formerly CEMARS, the Carbon & Energy Management And Reduction Scheme). For ESOS, we carry out audits of our administrative sites and vehicle fleet energy consumption and have a committed plan in place ready for our next submission in December 2023. In acknowledgement of the potential changes to carbon reduction regulation and legislation particularly, the Group has put in place a Net Zero target by 2030 and has set Science Based Targets which have been approved by the Science Based Targets initiative. As new regulation is put in pla

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	The regulatory environment is constantly reviewed by the Group and requires continuous monitoring and assessment of policy actions to identify emerging regulatory risk. Failing to meet emerging regulatory requirements could impact upon our cash flow, operating results, financial position, business and reputation. Specific risks in this area relate to emissions reporting and energy regulation, increased energy costs, carbon pricing and expanding carbon trading schemes. UK Government regulations particularly are a key driver of market activities in the UK construction sector. Participation with trade associations such as the Supply Chain Sustainability School and the Home Building Federation, including regular regulatory review by Group and divisional leads and the risk teams, ensure that we are aware of changes to current legislation before they are put in place to ensure that we adequately prepare for the changes. We are also members, and on the management group, of the London Mayor's Climate Partnership, which is helping to shape new regulations and activities in the capital. As an example of a specific regulatory risk considered as part of our assessment process, the Group is monitoring developments in the UK carbon floor price and has implemented an internal carbon price to assist with project-level business planning, carbon reduction plans within different divisions and funding for climate change mitigation projects. CASE STUDY EXAMPLE As part of the Group's TCFD-aligned risk assessment, which looks at a longer-time horizon than business-as-usual strategic thinking, it has assessed that a global carbon price could impact upon the Group's operating and supply chain costs. The Group's UK and offshore GHG emissions (in CO2e tonnes) were 22,790 in 2020. Under the International Energy Agency's Sustainable Development Scenario, it is possible that there will be a carbon price of \$140 per tonne in 2040. Using simplifying assumptions for scenario analysis and strategic planning purposes, it can be estimated that if
Technology	Relevant, always included	Failure to innovate is included as a principal risk within our principal risk register and the implications of this risk are considered as part of our bi-annual risk assessment. Failure to produce or embrace new products and techniques could diminish our delivery to clients and reduce our competitive advantage, affecting sales and growth. It could also make the Group less attractive to existing or prospective employees. Particularly, our ability to reach Net Zero relies on embracing and co-developing new technologies to increase efficiency. Ultimately, failure to innovate may impact upon our cash flow, operating results, financial position, business and reputation. CASE STUDY EXAMPLE It has been identified that the emissions arising from our operations (and project developments) needs to be reduced, firstly to enable us to meet our climate change mitigation targets, but also to decrease the impact on air pollution in high emissions zones and to meet our regulatory requirements. In order to mitigate this risk, a number of processes are in place including using renewable energy or alternative fuels to power our construction plant, installing electric vehicle charging points at site offices, and using smaller capacity generators. During work undertaken on the M1 road improvements between 2019 and 2021 for Leicestershire County Council, automated heat controls were installed for site offices, that automatically turn off when windows and doors are open to minimise heat loss and subsequent energy use. Welfare cabins and tower lights with hybrid technology were used to minimise fuel use on sight and move toward renewable energy use. Electric vans were used for site use, rather than petrol fuelled vehicles. In addition, red diesel was replaced with HVO to provide energy to the site compound building. In order to ensure that the best options are put in place to enhance operational efficiency, reduce emissions and mitigate air pollution, we lead the Highways England Plant Group and head up the Supply Chain Sustainability
Legal	Relevant, always included	Legal risks are systematically included in our risk mapping exercise in order to reduce our exposure to litigation, including litigation around climate law. Failure to mitigate this risk could result in reduced cash flow, could impact our operating results and could result in damages to financial position and reputation. Legal compliance is monitored by divisional commercial directors and the Group commercial director and general counsel. As part of our TCFD risk assessment process, the Group recognises that in a Paris-aligned future, the UK is more likely to see increased levels of climate-related litigation around environmental incidents. Environmental incidents that cause harm could result in legal action, fines, costs and insurance claims as well as project delays and damage to reputation. Poor environmental performance could also affect our ability to secure future work and achieve targets. CASE STUDY Before commencing a project (for example the recent £28m contract for extension of the railway line rockfall shelter at Dawlish), a site is assessed to consider site-specific environmental risks, and to identify activities undertaken for that project which could have the potential for environmental harm. The Infrastructure business's environmental procedures and guidance documents and site-specific environmental plans provide guidance on how to minimise environmental impacts whilst on site which includes adherence to ecological and biodiversity procedures, standards and guidance. Project site management will also produce a set of emergency procedures that are project-specific, to establish the contingency arrangements for catastrophic incidents, such as environmental or pollution incidents. Within our Infrastructure Division, the Project Safety, Health, Environment, Wellbeing and Quality Standard, incorporating the Codes of Conduct for Morgan Sindall and subcontractor operations Creating a Safe and Sustainable Environment (morgan-sindall-pztaznsy-media.s3.amazonaws.com) provides an overview of our environment
Market	Relevant, always included	The Group is exposed to market trends 1) through our purchase of raw material, components and energy, and 2) as a result of our consumer base and the requirement to meet changing consumer expectations and ensure a competitive edge. Failure to manage our exposures to fluctuations in the cost of raw materials could impact our cash flows, our operating results and could result in damages to financial position and reputation. Failure to meet the needs of our customers could result in loss of projects and ultimately impact upon our cash flow, operating results and could result in damages to financial position and reputation. Changes in market trends are continually assessed as part of our strategic planning, and continuous stakeholder engagement (including an in-depth and robust materiality assessment undertaken in 2020). Participation with trade associations such as the Supply Chain Sustainability Chool and the Home Building Federation, ensure that we are aware of market trends and the changing needs of our customers. Sustainability credentials are also weighted highly on many construction project RFQs, and our risk and opportunity assessments consider this as a potential significant financial impact on the business. The sustainability component of a tender award can account for up to 40% of the submission. CASE STUDY As a specific example of this risk, Procurement Policy Notice ("PPN") 06/21 requires in-scope UK Govt. departments and bodies to take into account carbon plans as part of their procurement activities for contracts valued in excess of £5m p.a. As part of the procurement process, bidding suppliers need to provide a Carbon Reduction Plan, detailing their organisational carbon footprint, and confirm their commitment to achieve Net Zero by no later than 2050 in their UK operations. The supplier is required to have the Carbon Reduction Plan approved by a senior leader, update it annually at a minimum and publish it on its UK website using the template provided for this purpose. The Group has always been an
Reputation	Relevant, always included	Reputational risks are widely considered within our risk assessment processes as many factors relating to climate change could also impact upon our reputation (operational delays, inabilit to manage price fluctuations, failure to meet regulatory or policy requirements). We also carried out an extensive stakeholder materiality risk assessment in 2020 to assess priority areas from a stakeholder perspective, which highlighted climate change action as a key issue. We place high value on being recognised as a Responsible Business, and taking action on climate change as this potentially impacts our share price (through investor confidence) and sales (through tendering processes which require clear sustainability credentials). Poor environmental performance is an example of a reputational risk, and would affect our ability to secure future work and achieve targets. Our reputation as a supplier with strong sustainability redentials, and provider of low-carbon solutions, is a key differentiator for the Group. CASE STUDY Sustainability indices accounts for between 5% - 15% (and up to 40%) of out tenders (7% in the recently awarded Thames Tideway Tunnel contract which had a reported contract value of £416m and completes in 2025). Assuming sustainability is a differentiator in 5% of tenders we can estimate the impact of not being sustainable to c 7% of revenue, i.e. £151.7m The Group regularly assesses media reports relating to our activities to understand how the general public perceives our business, and carry out extensive stakeholder engagement to ensure we continually assess what matters most to our customers from a sustainability perspective. We participate in external rankings and sustainability ratings to understand our performance against sustainability standards and our peers, and to ensure that we continually improve our carbon reduction proposals are verified and meaningful. We actively work with our supply chain to improve their approach to sustainability and to ensure that our whole operations continually imp
Acute physical	Relevant, always included	The Group has a wide number of projects that are ongoing at different geographical locations within the UK at any single point in time. The risk of extreme weather could result in flooding and damage to partially completed works resulting in increased costs to repair. In addition, power interruption or on-site flooding could slow or halt operations, leading to delays in project completion, or could impact on the ability of staff getting to our sites. More extreme weather could also impact upon our supply chain, resulting in higher commodity prices or delays to goods. These impacts could ultimately impact upon cash flow, operating results and could result in damages to financial position and reputation. CASE STUDY An example of a specific acute physical risk identified and assessed as part of our risk assessment process, is therisk of flood incidents which are embedded into our risk management processes. These risk management plans also address power interruption demand management on site, or the need for contingency planning in case the floods. We prepare documented procedures to assist with contingency planning for our site teams. Our project duration is relatively short-term and is unlikely to be impacted by the more severe impacts of a warming climate, which are likely to become more severe in the longer-term. However, in acknowledgement of the increased risk of flood in future periods, which our completed projects will need to be resilient against, projects are assessed to consider how the completed project will impact upon flood risk for local areas. In our Maendy Primary School Flood Consequence Assessment, for example Maendy Primary School FCA (asbriplanning.co.uk), a flood modeller /TUFLOW / ESTRTY model was requested to ascertain key flood risk, with scenarios assessed which looked at climate change uplift of 25% to all flows, following the central uplift for the 2080s estimate. Flood risk assessments are applied for all relevant projects to ensure that our developments do not have detrimental impacts
Chronic physical	Relevant, always included	As part of our TCFD-aligned risk assessment processes, chronic, physical risks have been highlighted as key for the Group. It is expected that in a Business-as-usual scenario where warming is 3-4 Degrees C by the end of the century, there will be significant changes to weather systems, which could result in chronic changes in precipitation and temperature, leading to hotter drier summers. The Group has a wide number of projects that are ongoing at different geographical locations within the UK at any single point in time. The risk of chronic changes to temperature could result in project delays if staff are unable to work, or where equipment does not function in higher heat. Higher temperatures may also increase fire risks on our project sites. Design solutions currently considered exceptional could become the norm, for example, protection for buildings against extreme heat. Our inability to manage these risks could utlimately impact upon cash flow, operating results and could result in damages to financial position and reputation. As an example of a specific chronic physical risk identified and assessed as part of our risk assessment processes, the risk of extreme temperature has been identified and is embedded into our risk management processes. These risk management plans address power interruption demand management on site or the need for contingency planning in case of extreme heat. We have prepared documented procedures to assist our site teams with contingency planning. CASE STUDY Project Medius, for example, was a regeneration project in Leicester which completed in 2019 and took place during one of the hottest summers on record. Hotter temperatures resulted in a risk to concrete becoming unable to radiate its head of hydration, cure too quickly and become cracked and friable. The increased temperature also presented a health and safety risk to our workers. Changes to shift working patterns and new concrete mix recipes were brought in to combat the effects of the high temperatures on both the workforce

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

#### 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 indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

#### Company-specific description

RISK DRIVER: In a Paris-aligned scenario which limits warming to well-below 2 Degrees C, it is likely that the cost of carbon will increase, to drive down emissions and minimise global warming. The Group and its suppliers could be impacted by increased carbon pricing through fossil fuel energy taxes, carbon taxes, or emissions trading schemes. An increased carbon price could translate to higher prices issued by suppliers for products and services, or higher costs of operations. IMPACT TO COMPANY: Increased carbon pricing could also impact upon the company directly, in the event that a carbon tax was introduced on the emissions we produce. This could impact upon our cash flow, direct costs and ultimately our profitability. GEOGRAPHICAL/REGIONAL EXAMPLE The Group operates within the UK and secures all procurement with UK suppliers (though some of these may source products from other countries). The UKETS could therefore impact the Group, if the UK Government expanded the scheme to a wider-range of industries such as the construction sector. COMPANY SPECIFIC CASE STUDY As a simplifying assumption for the purposes of scenario analysis, it has been assumed that a carbon tax would apply directly to the emissions we produce, and would be realised within our supply chain by increasing our supply chain costs. In reality, carbon pricing mechanisms would likely be brought in variably, depending on the nature of the industry (the Steel industry for example, is already subject to a carbon pricing mechanisms via the UK and EU ETS). The IEA predicts a carbon price in 2040 of \$140/tonne CO2e in developed economies such as the UK. Assuming that a carbon tax of a similar value could apply, the cost based on our 2020 emissions would be £2.3m.

### Time horizon

Short-term

### Likelihood

Virtually certain

### Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

2300000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

# Explanation of financial impact figure

APPROACH AND ASSUMPTIONS: The Group's UK and offshore GHG emissions (in CO2e tonnes) were 22,790 in 2020. Under the International Energy Agency's Sustainable Development Scenario, it is possible that there will be a carbon price of \$140 per tonne CO2 in 2040 (though this may not apply to the construction sector). Using simplifying assumptions for scenario analysis and strategic planning purposes we have applied that carbon tax to the Group's Scope 1, 2 and operational scope 3 emissions, assumed no mitigating measures are in place, and have assumed that the carbon price would be realised either directly, or as a result of increased supply chain costs. It can be estimated that if the same emissions existed today as in 2040, and the Group could be exposed to additional costs directly throughout the supply chain of \$3.2m (or £2.3m at an exchange rate of 0.72). However, it is important to note that there is significant uncertainty over changes in carbon price both in the UK and globally, and as such this risk is unlikely to materialise. CALCULATION: \$140\*22,790 = \$3.2m. \$3.2m\* 0.72 = £2.3m

## Cost of response to risk

50000

### Description of response and explanation of cost calculation

MANAGEMENT OF RISK: The Group has a Net Zero target for its scope 1, 2 and operational scope 3 emissions by 2030 and Science Based Targets (approved). Our internal carbon price encourages carbon reduction initiatives within divisions, and generates funds for future green investment by the Group. The Group is working to reduce its own emissions through changes to dependencies on fuel and energy saving initiatives, but is also working with the supply chain to reduce their own carbon impacts. The Group offers clients whole-life carbon assessments on projects; recommends low-carbon materials; provides training for staff re low-carbon solutions; measures and removes embodied carbon and operational carbon where possible; uses renewable energy where possible; offsets residual carbon; and has pledged to use a carbon calculation tool on all of its projects by 2023. CASE STUDY ENERGY EFFICIENCY (MITIGATION): For HS2's enabling works, (undertaken as a joint venture operation between 2017-2022) the Group has run a 'Switch Off' campaign across site to raise awareness on energy use on site and wasted energy. The campaign encourages switching off lighting in cabins and idling plant (especially where running off generators rather than renewable energy) to reduce fuel consumption and carbon emissions. As part of the same project, we also replaced 3 Land Rover Discoveries with Hybrid Toyotas in 2018 to reduce fuel consumption, reduce emissions and improve

air quality and increased the number to 15 during the project (today there are 6 in place). It is estimated that hybrids reduce GHG emissions by 15%-30% depending on the model. CASE STUDY ENERGY EFFICIENCY (TRANSER): In 2021 we pledged to create 15 new woodlands in partnership with Blenheim Estate in Oxfordshire, planting more than 1/4 million trees. The project will have beneficial impacts in terms of biodiversity, soil erosion prevention and cleaner water and in the longer-term will offset some of the residual carbon emissions that cannot be offset by operational and developmental efficiencies. EXPLANATION OF COSTS OF MANAGEMENT The indicative cost represents the salary costs of our Carbon Action Panel who meet regularly to push the low carbon agenda and to mitigate our exposure to potential fluctuations in the cost of carbon. (~ Combined Salary \* time spent (8-10 hours a week total))

#### Comment

#### Identifier

Risk 2

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

Direct operations

### Risk type & Primary climate-related risk driver

Chronic physical Rising mean temperatures

#### 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

RISK DRIVER: The Group has multiple projects ongoing at different geographical locations in the UK. High temperature extremes can result in project delays if staff are unable to work, or where equipment does not function in higher heat. Higher temperature may also increase fire risks on our project sites. Design solutions currently considered exceptional could also become the norm, for example, protection for buildings against extreme heat. Our inability to manage these risks could ultimately impact upon cash flow, operating results and could result in damages to financial position and reputation. GEOGRAPHICAL/REGIONAL EXAMPLE: A Business-as-Usual scenario which sees temperatures increasing by 3-4 Degrees C by the end of the century is more likely to result in changes to meteorological conditions. The UK State of the Climate report shows that warm spells have already more than doubled in length (from 5.3 days in 1961-90 to over 13 days in 2008-2017). In addition, extreme summer temperatures such as those seen in 2018 are 30X more likely than in pre-industrial times. The latest Met Office projections of future UK climate change suggest these summer temperatures could be "normal" by the 2050s. According to the latest Met Office UKCP18 climate projections, these impacts will be most keenly felt in the South and South-East of the UK where the Group carry out a significant proportion of its activities, for example, our Fit-Out division which reported £700m revenue in 2020 sourced 69% of its revenue from London and the South East. COMPANY SPECIFIC DETAIL: Project Medius, a regeneration project in Leicester completed in 2019 and took place during one of the hottest summers on record. Concrete in unmitigated circumstances would have cured too quickly and become cracked and friable. The increases of temperature also presented a health and safety risk to our workers. Changes to shift working patterns and new concrete mix recipes were brought in to combat the effect of the high temperatures on both the workforce and on th

#### Time horizon

Long-term

### Likelihood

More likely than not

### Magnitude of impact

Low

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

Yes, a single figure estimate

# Potential financial impact figure (currency)

5140000

## Potential financial impact figure - minimum (currency)

<Not Applicable>

## Potential financial impact figure - maximum (currency)

<Not Applicable>

# Explanation of financial impact figure

APPROACH AND ASSUMPTIONS: The impact of delays and extreme weather conditions is built into our project proposals. However, we have modelled potential hot weather disruption impacts using the impact of Covid-19 on our Fit-Out Division, which saw revenues fall 22% in the first half of 2020, primarily as a result of COVID-19 site closures. Assuming that hot weather delays would only impact for a fraction of the time that Covid-19 impacted (i.e. 3 days rather than the c.2 months which our Fit-Out operations were closed for), the expected reduction in revenue could be: CALCULATION: Fit Out Revenue in 2020: £700m \* 69% operations in London \* 22% reduction in revenues from closure \* 3/62 representing 3 days of closure rather than approx 62 under Covid-19 = £5.14m £700m\*69%\*22%\*3/62 = £5.14m. Due to the specific nature of COVID-19 and the far- and wide-reaching impacts that the pandemic played on our operations, we would not expect a similar impact to profitability, and the above has been used as an indicative example of how our revenue and profits could be impacted. Overall we would expect the actual impact of a hot weather to be minimal, and built into our project contingency planning.

### Cost of response to risk

300000

### Description of response and explanation of cost calculation

MANAGEMENT OF RISK: The Group have various strategies in place to ensure that extreme heat and other temperature extremes are managed appropriately. These include health and safety policies to ensure staff have adequate PPE, access to water and shelter, and do not work in extreme conditions. Our agility and ability to respond to changing situations ensures that we can change working patterns to avoid extremes in temperature, and develop concrete mixes more suitably adapted to high temperature pouring. The Group is also using modern methods of construction to enable key elements of a building to be constructed using pre-fabricated or pre-assembled products, manufactured in an offsite factory environment, thus reducing potential delay impacts on project sites. Project delays and contingencies are also built into our project proposals and development plans. In reality, it is expected that the incremental changes from climate change will be gradually built into our operational activities over time, rather than having an acute and direct impact on our revenues. CASE STUDY: Project Medius was developed in Leicester in 2018 during an extreme heatwave.

Morgan Sindall Group changed the concrete mix design, opting for a recipe that would make it workable for longer periods in the heat and minimising the risk of it curing too

quickly and cracking. In addition, the worker's shift patterns were changed to avoid working during the hottest part of the day and minimising health and wellbeing implications. The project did not result in significant impacts to revenue recognition. EXPLANATION OF COST OF MANAGEMENT: The costs of management represent costs of our project managers who assess project contingencies required on commencement of projects. It represents the approximate salary costs of our ~300 number of site managers at 2% to indicate the time spent managing contingency risks.

#### Comment

#### Identifier

Risk 3

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Market

Increased cost of raw materials

#### Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

#### Company-specific description

RISK DRIVER: The Group has significant reliance on construction materials such as concrete, steel and wood which are subject to pricing fluctuations. Increased materials costs could increase the operating costs on our projects and decrease profitability. Alternatively, it could impact upon the cost of our products and services, where this additional cost is passed to our customers. REGULATORY/REGIONAL EXAMPLE: The industry is currently experiencing significant variations in the price of steel and wood as a result of COVID-19 delays, increased demand and other economic factors, however the impact of the increased cost of carbon credits under the EU ETS has also been shown to directly impact upon the cost of steel particularly (amongst other supply and demand drivers). Removal of incentives under the EU ETS (or UK ETS) and changes to the cost of credits could therefore also impact upon the cost of materials from energy intensive sectors. The steel industry in the UK is forging a Net Zero ambition to reduce its exposure to increased costs of carbon, however operational changes to meet this ambition will also impact upon costs to the steel industry, which are likely to materialise as increased costs in market prices. To assess potential fluctuations in the cost of steel to our UK based Group, the Group have 1) considered how the EU ETS has historically impacted upon the traded price of steel and 2) considered how meeting the steel industry's Net Zero commitment could impact upon the cost of steel. Given the uncertainties around how either scenario could impact upon market pricing, Morgan Sindall Group have assessed the fluctuations in pricing between 30%-100% to assess how the fluctuations in the cost of steel could impact upon market prices consequently increased 30-60% year on year in 2021 (though supply and demand also impacted upon pricing). We have therefore considered the impact of a 30-60% change in steel prices. It is also estimated in a study by Eurofer (the European Steel Association) that the total cost

#### Time horizon

Medium-term

### Likelihood

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)

13600000

## Explanation of financial impact figure

APPROACH AND ASSUMPTIONS: Our 2020 Cost of Sales was £2,718.2m. As an approximation, we have assumed that costs of steel approximate to 0.5% of these costs (£13.6m). An increase of 30% in costs could result in £4m of additional cost, an increase of 100% in costs could result in £13.6m of additional cost. CALCULATIONS: £2,718.2 \* 0.5% \* 30% = £4m; £2,718.2 \* 0.5% \* 100% = £13.6m

### Cost of response to risk

300000

## Description of response and explanation of cost calculation

MANAGEMENT OF RISK: 1) Direct liaison with supply chain and regular dialogue on supply capability mindful of likely supply impacts. In addition, for example, we've used the Supply Chain Sustainability School to provide training for suppliers to raise awareness of emerging issues and megatrends 2) Contractual agreements and long-standing relationship with supply chain partners to mitigate risks associated with potential cost impact 3) Maintaining a watching brief on commodity prices with forecast impacts for projects, as well as forward purchase of materials 4) Continued investment and promotion of the Supply Chain Sustainability School. CASE STUDY: Covid-19 has resulted in industry-wide impacts on the price of materials primarily as a result of factory delays, operational and supply chain delays, and increased demand. The cost of materials is priced into our contracts and is fixed by our procurement partners. As such, on commencement of a construction project, we know how much we expect to pay for materials. This ensures that fluctuations during the course of a project do not impact upon our operations. EXPLANATION OF COST OF MANAGEMENT: The costs of management represent costs of our project managers who assess project contingencies required on commencement of projects. It represents the approximate salary costs of our ~300 number of site managers at 2% to indicate the time spent managing contingency risks.

### Comment

### Identifier

Risk 4

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

Downstream

#### Risk type & Primary climate-related risk driver

Emerging regulation	Mandates on and regulation of existing products and services
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### Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

#### Company-specific description

RISK DRIVER: It is expected that in a Paris-aligned climate scenario, there will be increased demand for low-carbon products and services such as energy efficient homes, and zero-carbon buildings. REGULATION/POLICY: The Future Homes Standard in the UK is expected to change Parts L (conservation of fuel and power) and F (ventilation) of the Building Regulations to improve energy efficiency of new homes and is intended to ensure that all new homes built from 2025 will produce 70% to 80% less carbon emissions than homes delivered under current regulations. REGIONAL IMPACT: Certain regulatory authorities in the UK have also pledged to make all new buildings "net-zero" (Manchester has committed to making all new buildings "net-zero" by 2028). 57 local authorities representing more than 35% of the UK population have pledged net zero targets requiring them to neutralise emissions of their residents and businesses by 2045. Anticipated legislation will drive requirements within the Group to ensure that it has and develops necessary engineering capability (e.g. staff training, understanding of products and services, etc.) to deliver net zero buildings. In addition, there may be potential increased costs of construction while technology prices stabilise in the market. This could impact upon our construction and infrastructure division (which contracts with regulatory authorities) and our partnerships housing and urban regeneration divisions (which develop domestic dwellings) amongst others. Our estimated financial impact is £2.718m which represents the potential increased capital costs of construction using low carbon products and services. CASE STUDY: LOW CARBON BUILDINGS: The design of a new office building at Plot A3 Net Bailey has been developed using the Better Building Partnership's Design for performance standard and the RICS Whole Life Carbon assessment methodology to try and achieve net zero carbon for construction and operational energy use intensity targets. Currently in the design development phase, the scheme will be assessed against these standards at every RIBA stage of the development with the energy and carbon intensity performances report. The building has been designed in accordance with LETI's Climate Emergency Design Guide and to achieve the UKGBC's operational energy intensity target of 55kWh/m2 (GIA). The project requires additional capital costs to ensure that it meets low carbon requirements, which have been priced into the contract costs.

Time horizon

Medium-term

Likelihood

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)

4900000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

## Explanation of financial impact figure

APPROACH AND ASSUMPTIONS: According to the BRE report - Delivering sustainable Buildings (BRE and Cyril Sweet: Delivering Sustainable Buildings. BRE IHS BRE Press, 2014) including energy efficiency measures as part of an overall approach to BREEAM excellent can add up to 2% to capital costs. For domestic dwellings specifically, we have assumed that an additional 2% on Costs of Sale compared to 'standard housing' will be required to meet improved efficiency housing specifications (CfSH Level 3 vs CFSH level 4). Lovell Partnership's mixed-tenure revenue (part of which comprises domestic dwellings) was £278m in 2020, assuming that cost of sales were 89% of this amount (in line with the Group) being £249m, an increase in Costs of Sale of 2% could be £4.9m. We would expect any additional costs to be factored into contract pricing agreements prior to commencement of works.

Cost of response to risk

50000

## Description of response and explanation of cost calculation

MANAGEMENT OF RISK 1) LEGISLATIVE REVIEW: The Group's divisional management systems (ISO 9001, ISO 14001 and OHSAS 18801) require monitoring and assessment of the impact of legislation on operations and services on a forward-looking basis taking account of Government consultation and industry developments. The Group therefore anticipates future changes and ensures readiness for changing requirements. 2) STRATEGIC PLANNING: The Group and divisional strategies are reviewed annually as part of a formal strategic review process to ensure that emerging trends and market changes are considered. 3) RESEARCH AND DEVELOPMENT CarboniCa is a carbon calculation tool that allow our site teams to estimate, manage and reduce carbon emissions from projects throughout their lifecycle, including from design and construction to operation. It has been externally validated by Arup to the latest industry standard and will be used to assess the carbon impact of our developments. 4) CROSS GROUP COLLABORATION AND BEST PRACTICE Our Carbon Action Panel, including representatives from all divisions meet regularly to share knowledge on carbon positive developments, investments and procurement, to ensure that our teams are aware of latest trends in carbon reduction and that we have the necessary skills. CASE STUDY - DELIVERING NET ZERO BUILDINGS: Plot A3 New Bailey embodied carbon. Design specifications include cement replacements, specifying recycled steel for rebar, reducing steel weights by optimising the structural grid, designing out the curtain walling system and using re-used raised access floors. Further recommendations include the potential to reduce the upfront embodied carbon by a further 25% to bring it in line with the LETI 2020 embodied carbon intensity target. Best practice knowledge is shared across our wider business practices, and through the Carbon Action Panel. We are also redesigning a project completed in 2016 (Sustainable Twin), applying lessons learned from the Climate Action working group with the ambition to remove carbon and waste from the process. Working to the LETI embodied carbon standard, RIBA 2030 Climate Challenge and UKGBC Framework for Net Zero Buildings. EXPLANATION OF COSTS OF MANAGEMENT The indicative cost represents the salary costs of our Carbon Action Panel who meet regularly to push the low carbon agenda and to mitigate our exposure to potential fluctuations in the cost of carbon. (~ Combined Salary \* time spent (8-10 hours a week total))

Comment

Identifier

Risk 5

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

Downstream

#### Risk type & Primary climate-related risk driver

Reputation Increased stakeholder concern or negative stakeholder feedback

#### 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

RISK DRIVER: Morgan Sindall Group, through its divisions, work for numerous private and public sector clients, who have differing sustainability priorities. Demonstrating clear leadership and action around important responsible business issues, makes us more attractive and successful in work winning activities. This can help the Group to achieve increased market share and ultimately increased profits, job security for employees and supply chain opportunities. For the purposes of the financial impact, we have considered that failure to have strong responsible business credentials could cost us contracts accounting for 5% of our tenders at an impact of £151.7m REGIONAL EFFECT: The responsible business component of a tender award usually accounts for between 5-15% (and can account for up to 40%) of the submission (across all of our UK contracts). CASE STUDY: For example, our Network Rail contracts usually account for c.8% of the submission process, and for the Thames Tideway Tunnel West contract (a contract value of £416m and expected to complete in 2025) the sustainability questions accounted for 7% of the awarded contract submission, where evidence of carbon management and reduction performance was necessary. However HS2, for which the Group won the enabling works contract sustainability questions accounted for 40% of the mark allocation, and sustainability was woven throughout the submission questionnaire.

#### Time horizon

Medium-term

#### Likelihood

More likely than not

#### Magnitude of impact

High

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

Yes, a single figure estimate

### Potential financial impact figure (currency)

151700000

#### Potential financial impact figure - minimum (currency)

<Not Applicable>

#### Potential financial impact figure - maximum (currency)

<Not Applicable>

# Explanation of financial impact figure

The financial impact of not addressing the challenges of sustainability from a work-winning perspective cannot be over-stressed. Assuming sustainability is a differentiator in 5% of all tenders: 5% of £3,034m (Group turnover in 2020) ~ £151.7m.

### Cost of response to risk

50000

## Description of response and explanation of cost calculation

MANAGEMENT OF RISK: Management to achieve our sustainability ambitions and be a leader in the climate and sustainability space includes: 1) Clear leadership and strategic direction ensuring appropriate resource is deployed to achieve delivery against the Group's Responsible Business Strategy. For carbon specifically, our Carbon Action Group (formed in 2016) is responsible for driving carbon reduction initiatives across the Group. 2) Action plans are created to ensure the delivery of strategic environmental and climate change objectives at project level, 3) We continuously engage with employees and external stakeholders to promote awareness, share good practice and report performance. Reporting on our strategy and success is outlined in our 2020 Responsible Business Data Sheet, Annual Report 2020 and divisional sustainability communications. CASE STUDY: We benchmark against peers and ensure leadership in responsible business by reporting initiatives such as CDP (in which we received an A in 2020) and GRI. We also ensure the social value we deliver as a Group is assessed. We run a supply chain social value bank, developed in conjunction with Simetrica, that monetises activities undertaken on our construction projects that add value to local communities. The bank is aligned to the HM Treasury's Green Book and allows us to reliably forecast and calculates the economic, environmental and social value our projects create. In 2020 we used the bank on 83 projects and it calculated that we contributed 68p of social value for every £1 spent. FOR EXAMPLE - During the Collaborative Teaching Library project (2017-2018) a parametric (3D) curtain wall base was specified for the project based on an aluminium system offered by a single EU manufacturer. A new product was developed by a local fabricator in Birmingham to mimic the design. It was successfully tested for air permeability and weather-proofing before being prefabricated off-site. This approach not only reduced costs, but ensured local investment and higher social value through support for the local economy. EXPLANATION OF COSTS OF MANAGEMENT These costs would typically be covered by the project team as part of normal project costs, but the additional indicative cost represents the salary costs of our Carbon Action Panel who meet regularly to push the low carbon agenda and to mitigate our exposure to potential fluctuations in the cost of carbon. (~ Combined Salary \* time spent (8-10 hours a week total))

### 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

NATURE OF OPPORTUNITY: It is expected that in a Paris-Aligned climate scenario there will be increased demand for low carbon services and products. Indeed, changes are already being seen, such as the Future Homes Standard in the UK, which is expected to change Parts L (conservation of fuel and power) and F (ventilation) of the Building Regulations to improve energy efficiency of new homes and is likely to ensure that all new homes built from 2025 will produce 70% to 80% less carbon emissions than homes delivered under current regulations. Certain regulatory authorities in the UK have also pledged to make all new buildings "net-zero" (such as Manchester which has committed to making all new buildings "net-zero" by 2028). 57 local authorities representing more than 35% of the UK population and 28% of England's land area have pledged net zero targets explicitly requiring them to neutralise council emissions by 2030 and those of their residents and businesses by 2045 indicating that demand for low carbon buildings is set to increase. APPLICATION TO COMPANY: This could impact upon our construction and infrastructure division (which contracts with regulatory authorities) and our partnerships housing division (which develops domestic dwellings) amongst others. Ensuring that we are positioned as a leader in this space will ensure that we are ready to deliver on carbon neutral projects as demand increases. CASE STUDY: The Group has recently won a Baglan Park eco build at a contract value of £7.9m to build an energy positive industrial building for Neath Port Talbot Council, creating more energy than it produces and offsetting more carbon than it increases, and is a demonstrable example of increased demand for low carbon developments. The potential impact for the Group has been based on a potential increase in demand for low carbon products and services from our Construction and Infrastructure division of approximately 10%

#### Time horizon

Medium-term

#### Likelihood

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)

56900000

### Potential financial impact figure - minimum (currency)

<Not Applicable>

## Potential financial impact figure - maximum (currency)

<Not Applicable>

### Explanation of financial impact figure

APPROACH AND ASSUMPTIONS: Our Construction and Infrastructure division is most likely to be impacted by governmental and local authorities changing demands for lower carbon products and services. 57 local authorities representing 35% of the UK population have pledged net zero targets. CALCULATION: Construction and Infrastructure revenue in 2020 was £1,627m. 35% of this amount (representing the UK population covered by local authorities with more ambitious net zero targets) is £569,45m. An increase of c10% of demand in this area could equate to £56.9m

## Cost to realize opportunity

50000

## Strategy to realize opportunity and explanation of cost calculation

REALISING OPPORTUNITY 1) LEGISLATIVE REVIEW: Divisional management systems (ISO 9001, ISO 14001 and OHSAS 18801) monitor and assess impacts of legislation, taking account of Government consultation and industry developments to ensure readiness 2) STRATEGIC PLANNING: The Group and divisional strategies are reviewed annually as part of a formal strategic review, which takes account of changing legislation, regulation and market trends. 3) RESERCH AND DEVELOPMENT CarboniCa is a carbon calculation tool that allow our site teams to estimate, manage and reduce carbon emissions from projects throughout their lifecycle, from design and construction to operation. It has been externally validated by Arup to the latest industry standard and will be used to assess the carbon impact of our developments. 4) CROSS GROUP COLLABORATION AND BEST PRACTICE Our internal Carbon Action Panel, Climate Action Working Group and supply chain engagement enables knowledge sharing for best practice, identification of carbon positive methodologies and supply chain collaborations which ensure we are maximising our ability to provide low carbon developments and services and to ensure we and our supply chain have the skills to deliver low carbon projects. CASE STUDY – DELIVERING NET ZERO BUILDINGS: Plot A3 New Bailey embodied carbon. Design specifications include cement replacements, specifying recycled steel for rebar, reducing steel weights by optimising the structural grid, designing out the curtain walling system and using re-used raised access floors. Further recommendations include the potential to reduce the upfront embodied carbon by a further 25% to bring in line with the LETI 2020 embodied carbon intensity target. These approaches were discussed within our Carbon Action Panel so that best practice knowledge sharing could be applied to our wider business practice. We are also redesigning a project completed in 2016 (Sustainable Twin), applying lessons learned from the Climate Action working group with the ambition to remove carbon and

## Comment

## Identifier

Opp2

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

Direct operations

## Opportunity type

Resource efficiency

#### Primary climate-related opportunity driver

Use of recycling

### Primary potential financial impact

Reduced indirect (operating) costs

#### Company-specific description

OPPORTUNITY: DEFRA reports in their February 2018 edition of UK Statistics on Waste that in 2014 the UK generated 202.8 million tonnes of waste. Construction, demolition and excavation (CDE) was responsible for 59% of that number. Reducing Morgan Sindall's contribution to this waste figure reduces the Group's environmental impact and has a positive impact on our business and reputation. 95%% of the Group's waste was diverted from landfill in 2020. For example, a Morgan Sindall school scheme in South Wales in 2018 put circular economy principles into practice. Ensuring that waste to landfill was minimised enabled us to win the contract, The project was identified as one of Constructing Excellence Wales' exemplar demonstration projects for its approach to waste management. Reducing waste to landfill also reduces the costs of waste disposal and reusing materials decreases acquisition costs for new materials. CASE STUDY: The UK imports about 1.4 million m3 of plywood each year, which is often used for temporary site installations and then disposed to landfill on project completion due to their toxic formaldehyde content. Instead of purchasing plywood storm-boards, the Group's Infrastructure Division 2019 project in Dorset, turned plastic waste into recycled hoarding boards to provide an alternative to traditional plywood. This not only saved cost, but also reduced carbon. Once it has been used five times the waste plastic panel is 30% lower in CO2e than Oriented Strand Board (OSB) and 80% lower in CO2e than plywood. This equates to a saving of approx. 732kg CO2e per tonne of waste plastic hoarding (once it has been used 5 times), compared with plywood hoarding. CASE STUDY: M27 Junctions 4-11 Smart Motorway project for Highways England 2018 – 2021 (pending). The M27 team were approached by the team at IFA2 (another Infrastructure project), who were in the process of reinstating their site post-works. An agreement was reached to transport the excess materials from the IFA2 project to the M27, as they were deemed suit

#### Time horizon

Short-term

#### Likelihood

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)

271800000

## Potential financial impact figure - minimum (currency)

<Not Applicable>

#### Potential financial impact figure - maximum (currency)

<Not Applicable>

### Explanation of financial impact figure

APPROACH AND ASSUMPTIONS: The cost of waste disposal within our projects is estimated at typically 2% of project costs. Reducing waste can therefore have a positive contribution and impact on operating costs to the order of 1 - 2%. For a project of c£10 million, typical waste cost impact is approximately £200,000. Using a simplifying assumption to consider the savings to our Cost of sales (£2,718.2m in 2020), we have estimated that a potential saving of 1% in waste reduction costs could equate to £271.8m CALCULATION: £2,718.2m \* 1% = £271.8m

### Cost to realize opportunity

300000

### Strategy to realize opportunity and explanation of cost calculation

METHOD TO REALISE: The Group has in place waste minimisation plans and an ability to deliver projects which seek to ensure 100% of waste is diverted from landfill. The management of waste on projects is an embedded process as part of the ISO 14001 management systems across the Group. The key management method our projects apply is a waste hierarchy methodology which includes to avoid producing waste through design, prevention, reuse, recycling, recovery, etc. In 2019, 95% of Group waste was diverted from Landfill. The launch of the BREEAM Refurbishment and Fit Out scheme in late 2014 and SKA for Higher Education (SKA HE) in May 2016 has pushed projects to find innovative ways of reducing waste and encouraged reuse on projects. Our Fit Out Division's project at LSE Life achieved the first SKA HE Silver rating with a 97% recycling rate, which was achieved through a large amount of the furniture being stripped out and reused through the university network for example. CASE STUDY: during 2020, our Fit-Out Division worked with a carbon profiling specialist on their project for the UK Green Building Council to ensure that opportunities to reuse, recycle, and responsibly source were maximised. The project achieved an embodied carbon footprint of 139 kgCO2/m² - 22% below a comparable "standard" fit-out and the lowest ever recorded in the UK (SCP database, WRAP database) The project achieved: 99.4% of construction waste diverted from landfill; 98% of original fixtures and finishes reused or repurposed; 48% decrease in carbon emissions from lighting. We are also trialling a new product that makes an MDF alternative from recycled cardboard. This has been reviewed with the supply chain, and one supplier is going to roll out a trial supplying us with skirting and architrave. We are also considering ways that we can recycle pallets using Pallet Loop, to reuse pallets where possible. EXPLANATION OF COSTS TO REALISE Cost to realise opportunity include the costs of our project managers who ensure that our project specifications

### Comment

### Identifier

Орр3

## 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

OPPORTUNITY: Morgan Sindall Group, through its divisions, work for numerous private and public sector clients, who have differing sustainability priorities. Demonstrating

clear leadership and action around important responsible business issues, makes us more attractive and successful in work winning activities. This can help the Group to achieve increased market share and ultimately increased profits job security for employees and supply chain opportunities. Our Construction and Infrastructure Division particularly (which represents £1,637m of revenue) regularly contracts on governmental projects which have high sustainability indices within tenders. CASE STUDY: The sustainability component of a tender award usually accounts for between 5-15% of the submission (and can account for up to 40%). For example, on our Network Rail contracts sustainability usually accounts for c.8% of the submission, and for the Thames Tideway Tunnel West contract (a contract value of £416m and expected to complete in 2025) the sustainability questions accounted for 7% of the awarded contract submission, where evidence of carbon management and reduction performance was necessary. However HS2, for which the Group won the enabling works, sustainability accounted for 40% of the mark allocation and was woven throughout the submission questionnaire. For the purposes of the financial impact we have considered that strong sustainability credentials could win us group-wide contracts for 5% of our tenders at an impact of £151.7m

#### Time horizon

Short-term

#### Likelihood

Virtually certain

#### Magnitude of impact

High

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

Yes, a single figure estimate

## Potential financial impact figure (currency)

151700000

#### Potential financial impact figure - minimum (currency)

<Not Applicable>

#### Potential financial impact figure - maximum (currency)

<Not Applicable>

### Explanation of financial impact figure

APPROACH AND ASSUMPTIONS: The impact of our sustainability credentials throughout the tender process is significant. Assuming sustainability is a differentiator in 5% of all tenders across the Group as a whole we would anticipate an opportunity of £151.7m: CALCULATION: 5% of £3,034m (Group turnover in 2020) ~ £151.7m.

#### Cost to realize opportunity

50000

#### Strategy to realize opportunity and explanation of cost calculation

METHOD TO REALISE: Management to achieve our sustainability ambitions and be a leader in the climate and responsible business space includes: 1) Clear leadership and strategic direction ensuring appropriate resource is deployed to achieve delivery against the Group's Responsible Business Strategy. For carbon specifically, our Carbon Action Group (formed in 2016) is responsible for driving carbon reduction initiatives across the Group. 2) Action plans are created to ensure the delivery of strategic environmental and climate change objectives at project level. 3) We continuously engage with employees and external stakeholders to promote awareness, share good practice and report performance. Reporting on our strategy and success is outlined in our 2020 Responsible Business Data Sheet, Annual Report 2020 and divisional sustainability communications. CASE STUDY: We benchmark against peers and ensure leadership in sustainability by reporting initiatives such as CDP (in which we received an A) and GRI. We also ensure the social value we deliver as a Group is assessed. We run a supply chain social value bank, developed in conjunction with Simetrica, that monetises activities undertaken on our construction projects that add value to local communities. The bank is aligned to the HM Treasury's Green Book and allows us to reliably forecast and calculate the economic, environmental and social value our projects create. In 2020 we used the bank on 83 projects and it calculated that we contributed 68p of social value for every £1 spent. FOR EXAMPLE – During the Collaborative Teaching Library project (2017-2018) a parametric (3D) curtain wall basewas specified for the project, based on an aluminium system offered by a single EU manufacturer. A new product was developed by a local fabricator in Birmingham to mimic the design. It was successfully tested for air permeability and weather-proofing before being prefabricated off-site. This approach not only reduced costs, but ensured local investment and higher social value though s

### Comment

### Identifier

Opp4

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

Direct operations

## Opportunity type

Products and services

### Primary climate-related opportunity driver

Development of climate adaptation, resilience and insurance risk solutions

### Primary potential financial impact

Increased revenues resulting from increased demand for products and services

## Company-specific description

OPPORTUNITY: The floods of recent years has seen certain clients, such as the Environment Agency, and Yorkshire Water procure the construction of assets, such as flood defence schemes. In a business-as-usual climate scenario it is expected that flood events and precipitation will increase, and it is therefore expected that there will be increased demand for flood defence schemes. This will particularly impact our Construction and Infrastructure Division which works on large UK-wide infrastructure requirements, such as flood defences. CASE STUDY: Whilst details of the UK-based water infrastructure schemes under proposal remain confidential, we have a number of projects in the pipeline, and Ofwat has recently announced £2.8bn will be invested in water company developments to help with climate adaption - including £1.9bn of future planned projects which will be brought forward. It is expected that a proportion of the proposed projects will be won by the Group and we estimate the Group will secure between £20m - £200m of projects by value within the pipeline.

## Time horizon

Short-term

# Likelihood

More likely than not

### Magnitude of impact

#### Medium

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

Yes, a single figure estimate

#### Potential financial impact figure (currency)

28000000

#### Potential financial impact figure - minimum (currency)

<Not Applicable>

#### Potential financial impact figure - maximum (currency)

<Not Applicable>

### Explanation of financial impact figure

APPROACH AND ASSUMPTIONS: There are a number of Flood Defence Schemes and Frameworks requiring work over the next 5-8 years, including £2.8bn funding committed from Ofwat alone. As an illustration – assuming that a proportion of this work related to flood defence schemes, and our Construction and Infrastructure Group obtained 1% of the total committed capital, the revenue received from flood defence contracts could be estimated to be £28m CALCULATION: 2800000000 \* 1% = £28m

#### Cost to realize opportunity

300000

#### Strategy to realize opportunity and explanation of cost calculation

METHOD TO REALISE OPPORTUNITY: The main management method here is to consider such opportunities, as part of the annual strategic review and ongoing as part of identifying work winning opportunities. Opportunity uptake will be through the use of in-house specialists and external consultants to help with tenders including the design process as well as the update of any standards and approaches take by the Group's engineers. Incorporated into existing design and construction management processes. We have analysed where there are the most significant opportunities to win this type of work, based on regional flood defence requirements, and drawing on our reputation for delivering infrastructure in this area. CASE STUDY – FLOOD DEFENCE We've been working on major water infrastructure upgrades for Yorkshire Water as part of the AMP6 Framework (part of Construction and Infrastructure division). Other opportunities include the Natural Resources Wales Flood Defence Works; the Environment Agency Flood Defence Framework next iteration; and renewal of the Environment Agency TEP2100 framework. CASE STUDY – WIDER INFRASTRUCTURE RESILIENCE It is also important to ensure that the projects we develop are resilient to climate change. For example, we are largely governed by standards from our major customers in the rail sector. These standards include design which includes climate change mitigation. We are putting in place more design capacity to look at these issues from a strategic design perspective. We have been engaging our internal design teams to incorporate potential scope items / challenges that designers need to address, including evidence of design to accommodate for climate change. For a current Train Maintenance Unit project in London, the new building has been designed for critical storm events and has a green roof and rain water attenuation tank (500m3) to help reduce the risk of flooding. Another example in the transport sector is the A14 Highways project. On A14 junctions 7 to 9 the drainage designs included cons

#### 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	Yes	The low carbon transition plan is described in the Annual Report, which is voted on at the AGM.

## C3.2

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

Yes, qualitative and quantitative

### C3.2a

Climate- related scenarios and models applied	Details
2DS	Morgan Sindall Group used the Sectoral Decarbonization Approach (SDA) to help establish its science-based targets. The SDA allocates the 2°C carbon budget to different sectors. This method takes into account inherent differences among sectors, such as mitigation potential and how fast each sector can grow relative to economic and population growth. From a 2016 baseline, the International Energy Agency's 2°C Scenario model was used to define a sector intensity pathway for MSG's scope 1 and 2 emissions to 2025, and further beyond this to 2050. The time horizon to 2025 is linked to our long-term planning horizon, and the 2050 target to at least the length of time that many MSG designed and constructed assets being undertaken to date will be in place. Projected GHG emissions from all areas of our business, where we have direct control, were incorporated into the scenario model. In 2017, the Group finalised the science-based targets which received approval from the Science Based Target Initiative in March 2018. The Group is reporting its performance against these science-based targets as part of its annual reporting. The targets commit MSG to reducing its GHG emissions, where it has direct operational control, by 11 % from the 2016 benchmark level by the end of 2025, and by 56% by 2050. In order to meet these targets, as well as reducing direct GHG emissions, we recognise that we need to use our influence on clients, suppliers, sub-contractors, and other partners along the value chain more effectively. We are developing better ways of delivering products and services - that generate much lower carbon emissions during project delivery and product lifecycle. We have also rolled out a project carbon estimation tool, and introduced a Carbon Charter across the Group, where individuals are trained, and sign-up to specific carbon reduction objectives in their business roles and day-to-day activities. The Highways Business Unit, for example, has adopted a 25by25 carbon reduction plan (also being used by Highways England for
IEA 450 IEA Sustainable development scenario	In order to ensure we meet the recommendations of TCFD, the Group is assessing how a Paris Aligned climate scenario (of 1.5 degrees warming) will impact or exacerbate our risks, and is also assessing how a Business-as-Usual scenario will impact upon our risks. As part of our 2020 CDP review, we considered both the physical and transition risks of climate change and considered how these could impact upon our business cash flow, operating results, financial position, business and reputation, if they were not mitigated appropriately. Due to the granularity of data required for integer of the physics and the lack of appropriate data from certain climate models, we have used a range of data inputs to understand the implications of variable climate futures. This includes data inputs from models such as the IEA's Sustainable Development Scenario, and also narrative assumptions of how different futures could arise, drawn from industry data. Applying potential carbon pricing data (of \$140/CO2e in 2040) from this scenario to the Group's UK and offshore GHG emissions (22,790 CO2e tonnes in 2020) results in a cost to the Group of £2.3m at an FX rate of 0.72\$/£. The awareness of how potential carbon pricing could impact the Group has strengthened the Group's resolve to achieve its Net Zero target for scope 1, 2 and operational scope 3 emissions by 2030 and Science Based Targets (approved). Medium-term targets (by 2030) will reduce Scope 1 and 2 emissions by 60% against the 2019 baseline of 20,903 tonnes and Operational Scope 3 emissions by 60% against our 2019 baseline of 6,339. This would reduce our 2040 risk exposure by ((20,903*60%)) + (6,339*60%))*140*0.72 = £1.64m. CASE STUDY: In 2021 we pledged to creat 15 new woodlands in partnership with Blenheim Estate in Oxfordshire, planting more than 1/4 million trees. The project will have beneficial impacts in terms of biodiversity, soil erosion prevention and cleaner water and in the longer-term will offset some of the residual carbon emissions that cannot be offset by operat

C3.3

	related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Short-term strategy is already being influenced by climate-related risks and opportunities. This is impacting how we provide services, for example, we have made significant changes to our company car policy (EVs are now included on the Company car list), and vehicles used on projects, to reduce carbon emissions. Across our projects, we have also replaced lighting with LEDs; and carbon foot printing is being carried out on an increased number of projects, e.g. in construction of the University of Nottingham's Centre for Sustainable Chemistry.  There has been an increase in requests for BREEAM, Ska and other certifications from Fit Out's clients and requirements for other heating technologies and options, such as GSHP for Lovell projects. 50% of Fit Out's UK assessment team are Well Standard qualified. For the business overall, this impacts on investment, training, and service focus. CASE STUDY: Our Urban Regeneration division has a vision to create exemplar sustainable net-zero developments that maximise social benefits and enhance the environment for future generations. Over the last 12 months Muse has been developing a Sustainable Development Strategy which change the way Muse designs and constructs all new developments. Key objectives include the requirement for all new projects to be net zero carbon at point of completion and during operation. UPFRONT EMBODIED CARBON Project teams are required to limit the associated upfront embodied carbon of the development. Targets have been set to reward projects that embrace the principles of circular economy, retaining major building elements and utilising high levels of recycled content. OPERATIONAL ENERGY INTENSITY All developments will be designed to have a low operational energy intensity. The targets established represent industry best practice and align to the Paris agreement. Performance will be validated during operation.
Supply chain and/or value chain	Yes	Our supply chain, and broader value chain, is having to adjust to new requirements driven by climate-related issues over short to medium term time horizons. As an example, for M&E contractors generating compliant thermal models is potentially an issue. M&E contractors are actively supported through the Supply Chain School, which provides specific carbon/climate education. We carry out monthly measurement of suppliers and contractors using the Supply Chain School. We are seeing the introduction of and supporting the use of greener equipment on projects. Our 'Accommodation Desk' helps achieve best value buying solutions for accommodation and associated plant in the market. We are currently introducing more solar arrays on site cabins and introducing new technologies such as hybrid lighting towers. To reduce energy consumption and carbon emissions, air tightness/thermo conductivity on construction project cabins has increased significantly. Unfortunately increased air tightness/thermo conductibility can also mean that occupants potentially over- heat in high temperature periods and therefore we are working with site cabin suppliers to mitigate this issue. CASE STUDY: Morgan Sindall Construction at Glebe Farm School (Jan 2021) sought to drive low carbon solutions as part of a local responsible business plan. The project team worked with ThinkHire to specify a solar powered solution backed up by hydrotreated vegetable oil (HvO). The HVO fuel produces 0.195kg of CO2 per litre of fuel compared with 2.68kg per litre for red diesel. This enabled a sustainable, environmentally sympathetic and cost-effective solution to off-grid power, without impacting on the efficiency of the project.
Investment in R&D	Yes	As part of its activities, the Group invests in carbon modelling. Examples include, the University of Nottingham Chemistry Centre, making use of Research and Development tax incentives;. Group development of a carbon calculator to measure the carbon footprint of buildings in terms of both emissions and the embodied carbon of building materials. In the medium-term electric vehicle chargers are being rolled out across the Group and we are encouraging the installation of electric vehicle chargers in site cabins. We are also working with vehicle hire companies to arrange for the installation of telematics in all vehicles that the Group hires to allow us to monitor driver behaviour., Our tunnelling business has obtained patents for lasers etc., are looking at how to reduce carbon in concrete workand are trialling new low-emission vehicles and plant. The Horizon group at the supply chain sustainability school helps to advise the Group and the supply chain about where future, longer-term investments should be made. In addition, we are investing in changes to design specifications to reduce the embodied carbon of our projects. CASE STUDY: Jan 2020: Morgan Sindall Infrastructure, at the Barking Riverside Extension designed out the need for 597 concrete parapets from the elevated sections of the project. Although part of the original design, JV engineers realised the non-essential nature of the parapets. These were therefore designed out, removing 2,507 tonnes of concrete and 417 tonnes of steel from the works. In terms of embodied carbon this is a saving of 463 tonnes of carbon equivalent, which would be equivalent to c 10 new steel footbridges and is an example of how redesigning our projects results in carbon efficiencies. CASE STUDY: During the Collaborative Teaching Library project (2017-2018) a parametric (3D) curtain wall base was specified for the project based on an aluminium system offered by a single EU manufacturer. A new product was developed by a local fabricator in Birmingham to mimic the design. It was su
Operations	Yes	There have been significant changes to our company car policy, including green incentives for EVs, low carbon vehicles, and low carbon only options to reduce carbon emissions. For example, telematics are being applied to reduce carbon emissions on vehicle movements. Our Group head office was remodelled as a sustainable, SKA Gold office in 2019. In the medium to long-term, our divisions have been identifying and generating opportunities to significantly cut carbon emissions and waste. In the urban regeneration division, for example, Muse has developed a strategy that will provide a structured framework for all its projects to follow and report against. This will help enable, for example, the drive towards material circularity and modern methods of construction (MMC). CASE STUDY Lovell Partnerships have introduced HVO fuel and are currently trialling it in each of their 8 region. Some regions have made the commitment to introduce it on all new sites, alongside switching some current sites from gas oil to HVO. The use of HVO has been adopted due to the 90% CO2e savings. As gas oil is the largest contributor to Lovell Partnership's carbon emissions, this will change will help to achieve their Scope 1 SBT targets (and also improve air quality).

# C3.4

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

Financia planning element that hav been influenc	Description of influence
Row Revenue  I Direct co Indirect costs Capital expendit Capital allocation Access to capital Assets	We have adapted our approach to climate change as we see it as an opportunity to improve our reputation, increase our work winning ability, reduce costs and therefore improve our profitability and long term success. MSG's reputational capital has helped to win work, and despite revenue increases, carbon emissions have generally reduced. CASE STUDIES REVENUES: The Group (particularly Morgan Sindall Construction and Infrastructure) anticipate increased revenues from climate change adaptation projects such as flood resilience projects. Muse anticipates a growing market in Net Zero buildings. Our Fit-Out Division anticipates that Minimum Energy Efficiency Standard (MEES) are also likely to increase the number of fit outs required by customers, and climate measurement on fit outs. DIRECT COSTS: We anticipate increased construction costs in order to meet increased regulatory requirements for energy efficient buildings and changes to experience of a carbon objectives during operational phases. On recent major construction projects such as HS2, for example, there has been increased interest in measuring carbon emissions, and we are seeing requests from clients to reduce the tonnage of embodied carbon, all of which has to be factored into the financial planning process for projects over the short to medium term. Tackling climate change issues has both positive and negatives impacts on operating costs in the short to medium term. Examples where operating costs are being impacted and factored into financial planning, in the medium term, include: • Embedding carbon reduction activities into people's job roles, rather than relying on individual experts helps to save money across the Group; * Activities around CRC and ESOS, previously and in the short-term, helped to reduce the Group's carbon tax from £360k to £70k; * Lowering on-site accommodation costs through reducing our carbon theory. * All planning investments in vehicle trackers and behavioural training for drivers to reduce fuel costs. We have had to plan for and bal

## C3.4a

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

We are creating a series of Morgan Sindall woodlands, in Oxfordshire. We will plant more than a quarter of a million trees on 9 interconnected pieces of land spanning 150 hectares to create a thriving, self-sustaining eco-system.

Over the course of the next 25 years, these woodlands will absorb a total of 22,000 tonnes of carbon from the atmosphere, capturing it in the trees, plants and soil. The 28 varieties of carefully chosen trees will purify the air, their roots will hold the soil on the sloping fields and they will provide a home to birds, insects, animals and fungi.

## C4. Targets and performance

#### C4.1

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

Absolute target

### C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2017

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Base year

2016

Covered emissions in base year (metric tons CO2e)

24135.48

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2025

Targeted reduction from base year (%)

11

Covered emissions in target year (metric tons CO2e) [auto-calculated]

21480.5772

Covered emissions in reporting year (metric tons CO2e)

18820.33

% of target achieved [auto-calculated]

200.201303038288

Target status in reporting year

Achieved

Is this a science-based target?

Yes, and this target has been approved by the Science-Based Targets initiative

Target ambition

2°C aligned

## Please explain (including target coverage)

This combined scope 1 and scope 2 absolute emissions reduction target is a science-based target, which was set in 2017 and approved by the Science Based Targets Initiative. It replaced the following 2020 targets, which were on track to be significantly exceeded: Scope 1: Reduce direct fuel consumption by 26% by 2020 against a 2010 baseline through fuel efficient choice and driving behaviour. Achieved: absolute emissions in 2016 were 8,535.36 tCO2e compared to 2010 baseline, 23,480tCO2. This represented a 63% reduction achieved compared to 26% target. Scope 1: Reduce bulk fuel purchase and use by 26% by 2020 against a 2010 baseline, through ecosite establishment, equipment selection and behaviour. Achieved: absolute emissions of 8,665.40 tCO2e in 2016 compared with 10,581tCO2e in 2010, our baseline year. This represented a 18% reduction achieved compared to 26% target Scope 2: Reduce direct electricity consumption by 26% by 2020 against a 2010 baseline, through installation of energy efficient devices and behavioural change. Achieved: absolute emissions of 6,934.73 tCO2e in 2016 compared with 25288 tCO2e in 2010, our baseline year. This represented a 27% reduction achieved compared to 26% target.

## Target reference number

Abs 2

#### Year target was set

2017

### **Target coverage**

Company-wide

## Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

#### Base year

2016

#### Covered emissions in base year (metric tons CO2e)

24135.48

## Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

## Target year

2050

#### Targeted reduction from base year (%)

г.

## Covered emissions in target year (metric tons CO2e) [auto-calculated]

10619.6112

### Covered emissions in reporting year (metric tons CO2e)

18820.33

## % of target achieved [auto-calculated]

39.3252559539495

## Target status in reporting year

Underway

#### Is this a science-based target?

Yes, and this target has been approved by the Science-Based Targets initiative

#### Target ambition

2°C aligned

#### Please explain (including target coverage)

This combined scope 1 and scope 2 absolute emissions reduction target is a science-based target, which was set in 2017 and approved by the Science Based Targets Initiative. It replaced the following 2020 targets, which were on track to be significantly exceeded: Scope 1: Reduce direct fuel consumption by 26% by 2020 against a 2010 baseline through fuel efficient choices and driving behaviour. Achieved: absolute emissions in 2016 were 8,535.36 tCO2e compared to 2010 baseline, 23,480tCO2. This represented a 63% reduction achieved compared to 26% target. Scope 1: Reduce bulk fuel purchase and use by 26% by 2020 against a 2010 baseline, through ecosite establishment, equipment selection and behaviour. Achieved: absolute emissions of 8,665.40 tCO2e in 2016 compared with 10,581tCO2e in 2010, our baseline year. This represented a 18% reduction achieved compared to 26% target Scope 2: Reduce direct electricity consumption by 26% by 2020 against a 2010 baseline, through installation of energy efficient devices and behavioural change. Achieved: absolute emissions of 6,934.73 tCO2e in 2016 compared with 25288 tCO2e in 2010, our baseline year. This represented a 27% reduction achieved compared to 26% target.

## C4.2

### (C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)

## C4.2c

#### (C4.2c) Provide details of your net-zero target(s).

#### Target reference number

NZ1

#### Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Abs2

#### Target year for achieving net zero

2030

### Is this a science-based target?

No, but we are reporting another target that is science-based

## Please explain (including target coverage)

In January 2021, the Group set a target of achieving net zero carbon emissions by 2030. We will achieve this by continuing to work towards externally-verified, science-based targets, which are calculated to contribute to limiting global warming to 2 Degrees C compared to pre-industrial levels (and will be revised in 2021 to align to the lower level of 1.5 Degrees C); and by being clear and transparent about our off- setting activities – this means investing in UK carbon reduction initiatives that are long-term and sustainable, and only using offsetting once we have taken action to reduce emissions. To help us drive progress, we have, as of 1 January 2021, introduced an internal carbon charge on our emissions that will be paid into a climate change fund. The net-zero target is for our Scope 1 and Scope 2 carbon emissions, as well as our operational Scope 3 emissions to the scope of our annual CEMARS® certification.

#### 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	5	1000
To be implemented*	7	1150
Implementation commenced*	7	1150
Implemented*	14	2292
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

1	ow-carbon energy consumption	Liquid biofuels

## Estimated annual CO2e savings (metric tonnes CO2e)

97

## Scope(s)

Scope 1

# Voluntary/Mandatory

Voluntary

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

0

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

0

### Payback period

No payback

### Estimated lifetime of the initiative

6-10 years

## Comment

Switch from diesel to HVO (Biodiesel from used cooking oil)

# Initiative category & Initiative type

Low-carbon energy consumption Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

1

Scope(s)

Scope 1

Scope 3

Voluntary/Mandatory

Voluntary

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

Λ

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

0

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

Switch from diesel to Solar PV

Initiative category & Initiative type

Energy efficiency in production processes Electrification

Estimated annual CO2e savings (metric tonnes CO2e)

128

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

0

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

Switch from diesel to electric power drives

Initiative category & Initiative type

Energy efficiency in production processes Fuel switch

Estimated annual CO2e savings (metric tonnes CO2e)

32

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

138000

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

0

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Commen

CDP

Not invested - hired plant for the duration of the scheme.

Initiative category & Initiative type

Waste reduction and material circularity

Product/component/material reuse

### Estimated annual CO2e savings (metric tonnes CO2e)

292

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

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

138000

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

243000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Repairing in preference to replacement of damaged products

## Initiative category & Initiative type

Waste reduction and material circularity

Product or service design

### Estimated annual CO2e savings (metric tonnes CO2e)

267

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

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

2500000

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

400000

Payback period

1-3 years

Estimated lifetime of the initiative

3-5 years

Comment

Reducing construction material requirements. Annual monetary savings and investment required are order of magnitude estimates based on typical project extrapolated to total estimated CO2e savings

## Initiative category & Initiative type

Energy efficiency in production processes

Product or service design

# Estimated annual CO2e savings (metric tonnes CO2e)

40

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

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

2000000

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

0

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Annual monetary savings and investment required are order of magnitude estimates based on a typical project extrapolated to total estimated CO2e savings

Transportation

Other, please specify (Switch of transport mode on construction project from road to rail)

### Estimated annual CO2e savings (metric tonnes CO2e)

100

Scope(s)

Scope 1

Scope 3

#### Voluntary/Mandatory

Voluntary

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

 $\cap$ 

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

0

## Payback period

No payback

## Estimated lifetime of the initiative

3-5 years

#### Comment

The majority of waste produced during possession works has been transported from the Barking Riverside extension project by rail rather than road. To date approximately 25,500 tonnes of such materials have been removed by rail. If removed by road, this would have equated to 1,274 lorries on the road network. Order of magnitude CO2e savings estimate for year.

### Initiative category & Initiative type

Transportation

Company fleet vehicle replacement

### Estimated annual CO2e savings (metric tonnes CO2e)

15

### Scope(s)

Scope 1

## Voluntary/Mandatory

Voluntary

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

0

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

0

## Payback period

No payback

# Estimated lifetime of the initiative

Ongoing

### Commen

The Group's commercial fleet is being switched to electric vans with ongoing replacement taking place. Figures provided are order of magnitude estimates.

### Initiative category & Initiative type

Transportation

Company fleet vehicle efficiency

## Estimated annual CO2e savings (metric tonnes CO2e)

500

## Scope(s)

Scope 1

# Voluntary/Mandatory

Voluntary

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

0

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

0

## Payback period

No payback

## Estimated lifetime of the initiative

Ongoing

#### Comment

The Group's commercial vehicle fleet continues to be fitted with telematics, generating detailed information on use, movement and emissions. Management takes appropriate action to help influence driver behaviours providing for efficient vehicle use as well as improved and reduced emissions performance. Figures provided are order of magnitude estimates.

### Initiative category & Initiative type

Transportation Business travel policy

### Estimated annual CO2e savings (metric tonnes CO2e)

200

#### Scope(s)

Scope 1

### Voluntary/Mandatory

Voluntary

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

n

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

0

### Payback period

No payback

#### Estimated lifetime of the initiative

Ongoing

#### Comment

The Group has introduced a selection of 100% electric vehicles into the choice of company cars that employees can select for their company cars. The above calculations are based on 10% of all company car drivers switching to electric vehicles per annum. The investment cost is based on a £150 company contribution towards the cost of installing electric charging points. Figures provided are order of magnitude estimates.

### Initiative category & Initiative type

Transportation	Teleworking

## Estimated annual CO2e savings (metric tonnes CO2e)

500

### Scope(s)

Scope 1

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)

0

## Payback period

No payback

### Estimated lifetime of the initiative

Ongoing

### Comment

The use of Zoom, Teams, etc is being promoted to engage with suppliers, clients, and employees to reduce travel in terms of time and CO2. COVID-19 has demonstrated that electronic meetings are effective and has helped to change behaviours. Figures provided are order of magnitude estimates.

## Initiative category & Initiative type

Energy efficiency in buildings	Other, please specify (Switch off and behavioural campaigns )
--------------------------------	---

# Estimated annual CO2e savings (metric tonnes CO2e)

20

### Scope(s)

Scope 1

Scope 2 (location-based)

Scope 2 (market-based)

## Voluntary/Mandatory

Voluntary

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

0

CDP

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

0

## Payback period

No payback

Estimated lifetime of the initiative

Ongoing

#### Comment

Figures provided are order of magnitude estimates.

## Initiative category & Initiative type

Energy efficiency in buildings Insulation

## Estimated annual CO2e savings (metric tonnes CO2e)

100

### Scope(s)

Scope 1

Scope 2 (location-based)

Scope 2 (market-based)

### Voluntary/Mandatory

Voluntary

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

0

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

0

## Payback period

No payback

## Estimated lifetime of the initiative

Ongoing

### Comment

Site Accommodation – ECO cabins are being more widely used on our sites across the Group. Figures provided are order of magnitude estimates.

## C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Compliance with the Energy Saving Opportunity Scheme (ESOS) and also the Achilles CEMARS external verification scheme, both of which require reduction strategies to be in place and delivered upon.
Financial optimization calculations	Process optimisation - understanding that process efficiencies e.g. using less fuel will offer operational cost savings and also carbon efficiency.
Financial optimization calculations	Value engineering results in waste and carbon reductions being achieved at project level, where design is included in the scope of the asset(s) being constructed.

## 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

Designing and constructing low carbon assets for clients. The following are three examples: 1. We completed an office development at Marischal Square, Aberdeen (Developed by Muse as Client, constructed by Morgan Sindall Construction) which achieved BREEAM Excellent (73%) and EPC ratings "A". This demonstrates Morgan Sindall Group commitments to minimise the effect of a building on the environment in terms of Carbon dioxide emissions. The better the EPC rating, the less impact on the environment. 2. Morgan Sindall Construction built the UK's first carbon neutral laboratory. The facility houses The University of Nottingham's Centre for Sustainable Chemistry, which serves as a hub to catalyse new collaborations with industry. The centre was unique in the UK, not only in its design but also in its focus on world-leading research activity in sustainable chemistry. The building was set to achieve a BREEAM rating of Outstanding and LEED (Leadership in Energy and Environmental Design) Platinum rating. It is set to reach carbon neutral status after 25 years. The laboratory was built from natural materials and energy required to run it will be met by renewable sources such as solar power and sustainable biomass. Excess energy created by the building will provide enough carbon credits over 25 years to pay back the carbon used in its construction. 3. University of Birmingham Collaborative Teaching Lab project. Morgan Sindall Construction completed this project with a BREEAM rating of 74.4% and EPC 'A'. It is exemplary in the sense that it is difficult to achieve EPC A in a lab setting. In addition, the University went for a remarkably high space utilization rate for this building. Some universities have space utilization rates as low as 15%, whereas this building was targeting 80%. Increasing space utilization to 80% for CTL maximizes the material (carbon) investment in the building and essentially means that other 'spaces' will be utilized less, more people in one building = less people in other buildings. Also, running t

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

Low-carbon product and avoided emissions

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

Other, please specify (Passivhaus, BREEAM, CEEQUAL)

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

25

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

#### Comment

The above percentage is an estimate. The percentage of projects by value where our teams are able to influence the design is estimated to be 25%. However, we also provide low-carbon products where we are not involved at the design stage, but have responsibility for managing and specifying materials and construction methods. The Group has completed projects that were confirmed to have achieved BREEAM, CEEQUAL, LEED, SKA or other industry-relevant sustainability ratings. Fit Out delivered Deloitte's new 270,000 sq ft headquarters at 1 New Street Square, London and achieved the highest-ever BREEAM Outstanding score for fit out and is the largest project in the world to be awarded the WELL Building Standard gold certificate in the category of 'New and Existing Interiors'. To help attain these standards, 25 different subcontractor firms were trained in sustainable product procurement. Our teams use the green house guide rating for materials to aid selection of the right product on BREEAM projects. BREEAM is a collaborative approach to design, allowing the team (including our Clients) to make an informed decision on the selection of materials. A good example is the choice of condensing units and the condensate required to provide the cooling (the condensate being a material that can contain high levels of ozone depleting substances). The condensate needs to match the condensing unit. For low carbon projects, our teams balance the cost of a material or product against its carbon expense so that a project team can ensure that the carbon savings are tracked against the project budget. This might also include a Lifecycle costing exercise to demonstrate the carbon saving over time, even though there might be an initial uplift in capital cost (an example is the use of polished concrete floors instead of a traditional carpet floor covering – while carpet maybe cheaper, it is likely to need replacing many times over a 40year lifecycle period. We continue to look at different products and equipment, bulk ordering materials, e

C5	<b>Emiss</b>	sions	meth	ndo	Nuv
CJ.	LIIIIO	510113	HICUI	ouo	iogy

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2). Scope 1 Base year start January 1 2016 Base year end December 31 2016 Base year emissions (metric tons CO2e) 17200.75 Comment Scope 2 (location-based) Base year start January 1 2016 Base year end December 31 2016 Base year emissions (metric tons CO2e) 6934.73 Comment Scope 2 (market-based) Base year start January 1 2016 Base year end December 31 2016 Base year emissions (metric tons CO2e) 1860.67 Comment C5.2 (C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions. ISO 14064-1 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) 16031.14 Start date <Not Applicable> End date <Not Applicable> Audited and certificated by Achilles CEMARS external verification scheme 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

We have engaged UPA Energy to manage approx. 62% of the Group's electricity supply. They utilise the major energy suppliers to enforce our market-based requirement. This is supported by an independent consultant Tricarbon

#### C6.3

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

#### Reporting year

Scope 2, location-based

2789.18

Scope 2, market-based (if applicable)

1418.91

### Start date

<Not Applicable>

#### End date

<Not Applicable>

#### Comment

UPA Energy supported data audited by Tricarbon

### C6.4

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

No

# C6.5

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

Purchased goods and services

### **Evaluation status**

Relevant, calculated

### Metric tonnes CO2e

207825

## Emissions calculation methodology

Calculation from scope 3 screening analysis for science-based targets 1. Top 20 materials by spend • Emissions calculated from main annual consumption volumes of Concrete & Quarry Products, Timber, Bricks, Aggregates, and Reinforced Steel (accounting for 6 of the top 10 purchased product items). • Annual consumption volumes based on average unit price. • All consumption volumes converted to tonnes based on typical material densities etc. • Assumptions as to whether virgin (conservative), open or closed loop recycled material. • Extrapolated using top 20 products spend, and assuming they account for 80% of total Group spend. 2. Top 20 Subcontractors by spend • Total estimated spend assuming Top 20 account for 50% of spend. • Apportionment of sub-contractor's own scope 1 and 2 emissions (offsite) based on spend. • Assuming emissions from any off-site, pre-fabricated products is covered here. • Average scope 1 and 2 emissions based on £ for sample of construction engineering service suppliers (no onsite fuel). • Assuming all project site energy use is included in scope 1 and 2 emissions. • Currently assuming materials/products, energy and fuel purchased by sub-contractors is used on-site and included in purchased goods and scope 1 and 2 energy emissions. The supply and consumption of potable water has also been assessed. This is a mandatory reporting requirement of the Achilles CEMARS programme

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

20

Please explain

#### Capital goods

### **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

De minimis Not significant as most plant is leased

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

#### **Evaluation status**

Relevant, calculated

#### Metric tonnes CO2e

240

#### **Emissions calculation methodology**

Electricity UK: Transmission and distribution losses (2013 methodology). Fuel and energy related emissions relate solely to electricity transmission losses. Data for transmission losses are generated via an external broker and energy provider data

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

100

### Please explain

Audited and certificated by Achilles CEMARS external verification scheme

#### Upstream transportation and distribution

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

13986

#### **Emissions calculation methodology**

• Emissions calculated from main annual consumption volumes for Concrete and Quarry Products, Timber, Bricks, Aggregates, and Reinforced Steel (accounting for 6 of the top 10 purchased product items). • Typical supply routes, transport legs and vehicles assumed • Extrapolated to top 20 products purchased based on spend, then to total assuming they account for 80% of total spend.

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

0

# Please explain

## Waste generated in operations

## **Evaluation status**

Relevant, calculated

### Metric tonnes CO2e

2738

## **Emissions calculation methodology**

Emissions calculated from tonnage for each waste stream: Landfill, Recycled/EfW, and wastewater. Converted using Defra 2020 emissions factors. Conversion factors for average construction waste: Open and closed loop = 1.0091 kg CO2e per tonne of waste Landfill = 1.2489 kg CO2e per tonne of waste Mixed industrial and commercial waste: Closed loop and combustion (EfW) = 21.3167 CO2e per tonne of waste Landfill = 458.1763 kg CO2e per tonne of waste

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

100

# Please explain

## **Business travel**

### Evaluation status

Relevant, calculated

# Metric tonnes CO2e

3442

### **Emissions calculation methodology**

Business travel emissions relate to the use of private vehicles for business use as well as public transport (rail and flights). Accounting methods are used to determine the emissions, based on expenses claims for using private vehicles for business use. However, for rail and flights, data is sourced through the Group's travel broker as well as expenses claims. Audited and certificated by Achilles CEMARS external verification scheme

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

50

### Please explain

#### **Employee commuting**

### **Evaluation status**

Relevant, calculated

#### Metric tonnes CO2e

2441

#### **Emissions calculation methodology**

Emissions based on employee numbers and UK average commuting mode data.

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

0

### Please explain

#### **Upstream leased assets**

### **Evaluation status**

Relevant, calculated

#### Metric tonnes CO2e

1565

#### Emissions calculation methodology

• Calculation based on Top 20 supplier spend. • Assumes leased assets include Plant and Tools Hire, Site Accommodation, and Crane Hire. • Estimated and included scope 1 and scope 2 emissions of Lessors based on spend. • Total estimated spend assuming Top 4 suppliers account for 20% of spend

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

0

#### Please explain

#### 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

Emissions from the category are De minimis. Covers courier vehicles etc.

### Processing of sold products

## **Evaluation status**

Relevant, calculated

## Metric tonnes CO2e

10000

# Emissions calculation methodology

• This category only refers to emissions from processing subsequent to sale, so is assumed to be de minimis for build projects. • Relevant for design projects, though usage stage covered in category 11 • Assumption made as to magnitude of scope 1 and 2 emissions of companies processing sold products from design projects

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

0

# Please explain

### Use of sold products

### **Evaluation status**

Relevant, calculated

## Metric tonnes CO2e

958444

### **Emissions calculation methodology**

• Estimated the lifetime carbon emissions of buildings, office space, and other infrastructure, based on projected energy consumption, for the 10 largest construction projects by revenue, plus all category A fit-out projects • Converted to carbon emissions using 2020 factors

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

20

# Please explain

#### End of life treatment of sold products

### **Evaluation status**

Relevant, calculated

#### Metric tonnes CO2e

3000

#### **Emissions calculation methodology**

• Future end of life waste when third-party clears site. Assume similar magnitude to recorded waste emissions from current construction projects, but larger number of relevant projects • Emissions from processing on-site demolition waste in 25-75 years likely to be considerably lower than now, due to on-going improvements in waste processing technology and practices. • Assumption made as to magnitude of emissions

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

Ω

## Please explain

#### Downstream 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

De minimis. less than 1% of emissions

#### 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

No business franchises. Not applicable

### Investments

## **Evaluation status**

Relevant, calculated

## Metric tonnes CO2e

14699

### **Emissions calculation methodology**

• Emissions from investments and JVs are not captured in corporate scope 1 and 2 emissions • Based on 2020 AAR revenue from investments and interest and dividends income from JVs • Converted to carbon emissions based on Construction and Infrastructure emissions intensity per £m revenue

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

0

# Please explain

### 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

Not applicable

## 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

Not applicable

## 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	Yes, both qualitative and quantitative assessment	

## C-CN6.6a/C-RE6.6a

(C-CN6.6a/C-RE6.6a) Provide details of how your organization assesses the life cycle emissions of new construction or major renovation projects.

	Projects assessed	Earliest project phase that most commonly includes an assessment	Life cycle stage(s) most commonly covered	Methodologies/standards/tools applied	Comment
Row 1	All new construction and major renovation projects	Design phase		Embodied Carbon in Construction Calculator (EC3) Tool Whole life carbon assessment for the built environment (RICS)	

## C-CN6.6b/C-RE6.6b

(C-CN6.6b/C-RE6.6b) Can you provide embodied carbon emissions data for any of your organization's new construction or major renovation projects completed in the last three years?

Ability		Ability to disclose embodied carbon emissions	Comment
	Row 1	No	Carbon emissions data has been calculated, but is not made available publicly.

# C6.7

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

No

## C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

### Intensity figure

0.00000621

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

18820

#### Metric denominator

unit total revenue

Metric denominator: Unit total

3034000000

### Scope 2 figure used

Location-based

% change from previous year

q

### Direction of change

Decreased

#### Reason for change

There has been an overall decrease in combined Scope 1 and 2 tCO2e emissions on the previous year: emissions decreased by 2,082 tCO2e going down to 18,820 tCO2e from a 2019 total of 20,902 tCO2e. Output decreased by 1.2 % in 2020 to £3,034m from £3,071m in 2019. It is not possible to be certain and directly attribute how much of this change is due to changes in emissions intensity and output. The circumstances being influenced by the type and nature of the construction projects being completed. However, based on the emissions initiatives that were implemented during the year, and estimates of their carbon emissions savings, it is reasonable to attribute some of these savings to the emission reduction activities listed in 4.3b.

## C7. Emissions breakdowns

### C7.1

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

Yes

# C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	15840.73	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	12.57	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	177.84	IPCC Fourth Assessment Report (AR4 - 100 year)

## C7.2

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

0	Country/Region	Scope 1 emissions (metric tons CO2e)
ι	United Kingdom of Great Britain and Northern Ireland	16031.14

## 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)	
Construction and Infrastructure	12527.47	
Affordable Housing	1701.31	
Property Services	1775.27	
Group	11.33	
Fit-out	3.37	
Baker Hicks	12.4	

## C7.5

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

	1 ' '		**	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	2789.18	1418.91	11963.56	7880.37	

## 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)
Construction and Infrastructure	1734.9	122.37
Affordable Housing	737.88	1083.73
Property Services	94.54	81.11
Muse	22.26	33.18
Group	8.91	0
Fit-out	158.22	98.53
Baker Hicks	32.48	0

# 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	100	Decreased	0.48	2019 Scope 1 and 2 (location-based) emissions = 20,902 tCO2e Emissions value =-100/ 20,902*100 = -0.48% Additional renewable energy consumption in 2020 accounts for saving of ~ 100 tCO2e. The calculation does not take account of additional renewable energy purchases in 2020 accounted for under the Scope 2 market-based emissions.
Other emissions reduction activities	2192	Decreased	10.49	2019 Scope 1 and 2 (location-based) emissions = 20,902 tCO2e Emissions value =-2,192/ 20,902*100 = -10.49% Emissions decreased by 10.49%, due mainly to fuel switch and energy efficiency activities undertaken. Changes due to variation of emission factors associated with the grid mix have also contributed to a decrease of emissions, although that is not considered here.
Divestment		<not Applicable &gt;</not 		
Acquisitions		<not Applicable &gt;</not 		
Mergers		<not Applicable &gt;</not 		
Change in output		<not Applicable &gt;</not 		
Change in methodology		<not Applicable &gt;</not 		
Change in boundary		<not Applicable &gt;</not 		
Change in physical operating conditions		<not Applicable &gt;</not 		
Unidentified		<not Applicable &gt;</not 		
Other		<not Applicable &gt;</not 		

	7	0	L
$^{\circ}$	1	.9	L

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

Location-based

# C8. Energy

## C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy? More than 0% but less than or equal to 5%

# C8.2

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

	Indicate whether your organization 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)	LHV (lower heating value)	0	64593.06	64593.06
Consumption of purchased or acquired electricity	<not applicable=""></not>	7880.37	4083.18	11963.55
Consumption of purchased or acquired heat	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired steam	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired cooling	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Total energy consumption	<not applicable=""></not>	7880.37	68676.24	76556.61

# 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)

Burning Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

54.16

MWh fuel consumed for self-generation of electricity

U

MWh fuel consumed for self-generation of heat

54.16

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** 

0.00253

Unit

metric tons CO2 per liter

Emissions factor source

BEIS UK Greenhouse Gas Reporting: Conversion Factors 2021

Comment

Fuels (excluding feedstocks)

Diesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

24225.34

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

24225.34

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**

0.00248

Unit

metric tons CO2 per liter

#### **Emissions factor source**

BEIS UK Greenhouse Gas Reporting: Conversion Factors 2021

# Comment

# Fuels (excluding feedstocks)

Gas Oil

#### Heating value

LHV (lower heating value)

# Total fuel MWh consumed by the organization

37824.93

# MWh fuel consumed for self-generation of electricity

•

# MWh fuel consumed for self-generation of heat

37824.93

# 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**

0.00272

Unit

metric tons CO2 per liter

# **Emissions factor source**

BEIS UK Greenhouse Gas Reporting: Conversion Factors 2021

# Comment

# Fuels (excluding feedstocks)

Natural Gas

# Heating value

LHV (lower heating value)

# Total fuel MWh consumed by the organization

2200.92

# MWh fuel consumed for self-generation of electricity

0

# MWh fuel consumed for self-generation of heat

2200.92

# MWh fuel consumed for self-generation of steam

<Not Applicable>

# MWh fuel consumed for self-generation of cooling

<Not Applicable>

# $\label{lem:matter} \mbox{MWh fuel consumed for self-cogeneration or self-trigeneration}$

<Not Applicable>

# **Emission factor**

0.00018

Unit

kg CO2 per KWh

# **Emissions factor source**

BEIS UK Greenhouse Gas Reporting: Conversion Factors 2021

# Comment

# Fuels (excluding feedstocks)

Petrol

# Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

286.57

MWh fuel consumed for self-generation of electricity

Λ

MWh fuel consumed for self-generation of heat

286.57

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** 

0.00218

Unit

metric tons CO2 per liter

**Emissions factor source** 

BEIS UK Greenhouse Gas Reporting: Conversion Factors 2021

Comment

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

1.14

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

1.14

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** 

0.00155

Unit

metric tons CO2 per liter

**Emissions factor source** 

BEIS UK Greenhouse Gas Reporting: Conversion Factors 2021

Comment

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

Wind

 ${\bf Country/} area\ of\ consumption\ of\ low-carbon\ electricity,\ heat,\ steam\ or\ cooling$ 

United Kingdom of Great Britain and Northern Ireland

MWh consumed accounted for at a zero emission factor

7880.37

Comment

Energy attribution certificates, Guarantees of Origin

# C9.1

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

# 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	We are planting more than a quarter of a million trees on 9 interconnected pieces of land spanning 150 hectares to create a thriving, self-sustaining eco-system. The project will be delivered in conjunction with Grown In Britain, an independent not-for-profit organisation that the Group helped set up in 2011, which focuses on revitalising and investing in woodlands and certifying British wood products Over the course of the next 25 years, these woodlands will absorb a total of 22,000 tonnes of carbon from the atmosphere, capturing it in the trees, plants and soil. The 28 varieties of carefully chosen trees will purify the air, their roots will hold the soil of the sloping fields and they will provide a home to birds, insects, animals and fungi. Morgan Sindall will help fund, design and create the woodlands, in collaboration with Cotswolds-based forestry company, Nicholsons. The woods will incorporate 28 carefully selected varieties of trees – including Hornbeam, Lime, Sycamore, Wild Cherry, Oak, Norway Maple, Alder and Beech in the mixed woodlands with an understorey of woody shrub species including Hazel, Hawthorn, Viburnums, Euonymus and Dogwoods to create a diverse and self-sustaining eco-system. Experimental species will also be included to assess climate resilience and a small percentage of conifers planted to provide winter habitats for wildlife. The project aims to set new standards for auditing and transparency, with changes to the air, water and soil monitored, and carbon levels tracked using state-of-the-art technology - including drones with Artificial Intelligence – to quantify environmental changes.

# 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

Unable to disaggregate by technology area

## Stage of development in the reporting year

<Not Applicable>

# Average % of total R&D investment over the last 3 years

21 - 40%

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

# Comment

Investment in low-carbon R&D: 1. Development of a carbon calculator to measure the carbon footprint of buildings in terms of both emissions and the embodied carbon of building materials. The tool was piloted by the Construction business in 2020. 2. Design and development of the "Sustainable Twin", where we are redesigning a project we completed in 2016, applying the lessons learned from the Climate Action working group with the ambition to remove carbon and waste from the process. Working to the LETI embodied carbon standard, the RIBA 2030 Climate Challenge and the UKGBC Framework for Net Zero Buildings.

# 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.

Design and development of the "Sustainable Twin" in our construction and infrastructure division, where we are redesigning a project we completed in 2016, applying the lessons learned from the Climate Action working group to remove carbon and waste from the process. Working to the London Energy Transformation Initiative (LETI) embodied carbon standard, the RIBA 2030 Climate Challenge and the UK Green Building Council (UKGBC) Framework for Net Zero Buildings.

Development of a sustainability strategy for our urban regeneration division, which will provide a structured framework for all their development projects to follow and report against. Muse completed the strategy in last year, ready for roll out across the business for use on all new projects. The strategy will address all environmental aspects of development including the drive towards net zero carbon buildings on construction and in operation. Net zero projects under development include:

# Aiming for a net zero carbon office building

Our urban regeneration division is developing a 10-storey, 110k sq. ft office building in Salford. It aims to be net zero in accordance with LETI's Climate Emergency Design Guide and achieve UK GBC's operational energy intensity target of 55kWh/m2. Innovative design and construction methods will limit embodied and whole life-cycle emissions, from raw materials through construction, operation, maintenance, refurbishment and disposal. It will be one of the most sustainable and energy-efficient commercial buildings in the country. The building is designed to enhance health, wellbeing and productivity.

#### Plot A3 at New Bailey

The brief for this new office scheme, which Muse is developing, is to target net zero carbon in construction and operation in accordance with the LETI's Climate Emergency Design Guide and to achieve the UKGBC's operational energy intensity target of 55kWh/m2 (GIA). The building will be designed to limit its embodied and whole life-cycle carbon emissions, whilst considering flexibility and adaptability. The brief includes a landscape design to include an urban green factor target of 0.4 and a policy on Zero construction waste to landfill.

#### Salford Crescent

Through its English Cities Fund partnership Muse has recently been appointed by Salford Council and the University of Salford on the 250 acre Salford Crescent development. A major part of their bid was their approach to tacking the climate change agenda and using the opportunity this development provides to lead the way in Greater Manchester's drive to carbon neutrality. Muse is now developing a sustainability strategy alongside its partners which will really push the parameters.

## North West Quadrant Project, Slough

Production of a sustainability framework for the North West Quadrant project in Slough. The framework includes key targets against all environmental aspects including enabling Zero Carbon.

# St Helens Council Office

Through its English Cities Fund partnership, Muse has developed a Net Zero Carbon brief for new Council offices at St Helens. Muse is currently exploring the design options to achieve both net zero carbon in construction and operation. This design will include the option to tie into a district heat from waste network being developed on the former Pilkington Glass site.

# Removal of Gas Fired Boilers

On Plot B7 at New Bailey Muse has removed any gas fired boilers from the design therefore the building (including any kitchen equipment) will be fully electric. Going forward the Muse sustainability strategy will ensure gas fired boilers will not be permitted on any developments unless there is a specific end user requirement.

# 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) 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

Reasonable assurance

Attach the statement

Disclosure\_2020\_Morgan\_CM\_Org.pdf

Certificate\_2020\_2021011J\_Morgan\_CarbonReduce\_Org.pdf

Pagel section reference

p1-4 Summary of CEMARS® certification

Relevant standard

Certified emissions measurement and reduction scheme (CEMARS)

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

Reasonable assurance

Attach the statement

Disclosure\_2020\_Morgan\_CM\_Org.pdf

 $Certificate\_2020\_2021011J\_Morgan\_CarbonReduce\_Org.pdf$ 

Pagel section reference

p1-4 Summary of CEMARS® certification

Relevant standard

Certified emissions measurement and reduction scheme (CEMARS)

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: 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

Reasonable assurance

# Attach the statement

Disclosure\_2020\_Morgan\_CM\_Org.pdf

Certificate\_2020\_2021011J\_Morgan\_CarbonReduce\_Org.pdf

# Page/section reference

p1-4 Summary of CEMARS® certification

#### Relevant standard

Certified emissions measurement and reduction scheme (CEMARS)

# Proportion of reported emissions verified (%)

100

# Scope 3 category

Scope 3: Business travel

# Verification or assurance cycle in place

Annual process

# Status in the current reporting year

Complete

# Type of verification or assurance

Reasonable assurance

# Attach the statement

Disclosure\_2020\_Morgan\_CM\_Org.pdf

Certificate\_2020\_2021011J\_Morgan\_CarbonReduce\_Org.pdf

## Page/section reference

p1-4 Summary of CEMARS® certification

# Relevant standard

Certified emissions measurement and reduction scheme (CEMARS)

# 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
C4. Targets and performance	Year on year change in emissions (Scope 1)	CEMARS	There was absolute reduction in Scope 1 emissions. GHG emissions for the Group for the current reporting period show a decrease of 2,092.56 tCO2e over the preceding year.  Disclosure_2020_Morgan_CM_Org.pdf  Certificate_2020_2021011J_Morgan_CarbonReduce_Org.pdf
C4. Targets and performance	Year on year change in emissions (Scope 2)	CEMARS	There was an absolute increase in Scope 2 emissions. GHG emissions for the Group for the current reporting period show an increase of 10.62 tCO2e over the preceding year.  Disclosure_2020_Morgan_CM_Org.pdf  Certificate_2020_2021011J_Morgan_CarbonReduce_Org.pdf
C4. Targets and performance	Progress against emissions reduction target	CEMARS	GHG emissions for the organisation for the current reporting period show a decrease of 5,315.15 tCO2e since the base year (2016) and a decrease of 2,081.94 tCO2e over the preceding year. There was an absolute reduction in Scope 1 and 2 emissions.  Disclosure_2020_Morgan_CM_Org.pdf  Certificate_2020_2021011J_Morgan_CarbonReduce_Org.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?

Yes

## C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

# Objective for implementing an internal carbon price

Stakeholder expectations

Change internal behavior

Drive energy efficiency

Drive low-carbon investment

Identify and seize low-carbon opportunities

#### **GHG Scope**

Scope 1

Scope 2

Scope 3

## Application

An important part of the development of our Net Zero pathway is the establishment of an internal carbon price. This values a tonne of carbon and enables us to monetise the amount of carbon emitted, embedded or offset. Having a carbon price allows us to put a value, or opportunity cost, on alternative designs, substitute materials and other aspects of project design and delivery. It also gives our divisions more visibility of their own impact, and contribution. We have also developed a new net zero carbon modelling tool which enables us to consider different scenarios, based on changes to carbon pricing In 2019, the Group also introduced a Social Value Bank, which applies a carbon price to projects to link to the delivery of Science Based Targets, and is used in the Social Value Bank's carbon assessment tool.

# Actual price(s) used (Currency /metric ton)

25

# Variance of price(s) used

This is an indicative base point for the carbon price. A rising carbon price will be applied moving forward. Global energy organisations predict that a price of £80/tonne is likely by the end of the decade and we will review Group's price periodically.

# Type of internal carbon price

Shadow price

# Impact & implication

Having a carbon price allows us to put a value, or opportunity cost, on alternative designs, substitute materials and other aspects of project design and delivery. It also gives Divisions more visibility of their own impact, and contribution. We have also developed a new net zero carbon modelling tool which enables us to consider different scenarios, based on changes to carbon pricing The Group charges each division for their carbon emissions based on their prior year usage, thereby making each of the divisions responsible for their climate change impact and at the same time, raising awareness of carbon. Our largest division, Construction and Infrastructure, has traditionally shared carbon tax liability between its business units. Hence, operational business units were responsible for paying for carbon emissions associated with their projects, adhering to the polluter pays principle. It was anticipated that this would create more ownership and awareness of carbon emissions and encourage reduction activities appropriate to that particular business unit. It should be noted that Construction and Infrastructure accounts for 75% of the Group's carbon emissions, as verified by Achilles through the CEMARS scheme. The Carbon price has helped generate awareness of the impact of greenhouse gas emissions emissions on climate change, and encourages the implementation of emissions reduction initiatives. In 2019, the Group also introduced a Social Value Bank, which applies a carbon price to projects to link to the delivery of Science Based Targets, and is used in the Social Value Bank's carbon assessment tool.

# C12. Engagement

# C12.1

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

Yes, our suppliers

Yes, our customers

# (C12.1a) 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

20

## % total procurement spend (direct and indirect)

70

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

70

#### Rationale for the coverage of your engagement

During 2019, we developed a carbon portal for suppliers and produced guidance for all of our suppliers and subcontractors. The portal captures Scope 1 and 2 data from our top 1,000 suppliers, by spend. Guidance on the importance of carbon emissions reduction is provided. This will help us achieve our Science-based Targets. The Group committed that 70% of sub-contractors by spend will be requested to disclose their greenhouse gas emissions by the end of 2020 and to establish their own science-based targets by the end of 2025. In 2020, we invited our our strategic supply chain partners, starting with those organisations receiving the greatest spend, to declare their scope 1 & 2 carbon emissions. In 2021, we will seek to encourage the remainder of our supply chain to do the same based on turnover and spend. The Group engages with both suppliers and customers through direct liaison on a project-by-project basis. Here, the focus of engagement is project delivery which will include delivery of carbon reductions and measurement commitments. For example, where projects are required to be certified against the BREEAM standard and achieve agreed rankings, project teams will work directly with the supply chain to ensure documented and attributed solutions are put in place that deliver carbon reductions thereby helping to ensure the project achieves the relevant standard.

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

Approximately 75% of our turnover goes through the supply chain and the vast majority of our suppliers are small and medium sized businesses (up to 99% of our supply chain). Construction companies can have a big impact on scope 3 emissions because they can control and influence behaviours of their equipment, materials and labour suppliers. Success in engagement is measured in two ways; through number of participants that provide information on their scope 1 and 2 carbon emissions and set their own science-based targets. 150 supply chain partners have responded so far, and 15% have provided information directly. Performance against these targets will be measured on an annual basis. The Group has committed that 70% of sub-contractors by spend will be requested to: • Disclose their greenhouse gas emissions by the end of 2020. • Establish their own science-based target by the end of 2025. For purchased goods and services, and upstream transportation and distribution, we are prioritising those suppliers who provide goods or materials with the lowest embodied energy and transport emissions. To help us achieve this, we are rolling out our carbon calculator tool to all projects with a value of £10m or more, along with a Carbon Charter, which includes carbon awareness training and personal carbon reduction pledges - specific to each employee's job role. We will also train at least 1,400 sub-contractors by the end of 2023 on reducing carbon emissions.

## Comment

# Type of engagement

Engagement & incentivization (changing supplier behavior)

# Details of engagement

Run an engagement campaign to educate suppliers about climate change

# % of suppliers by number

20

# % total procurement spend (direct and indirect)

40

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

40

# Rationale for the coverage of your engagement

Approximately 75% of our turnover goes through the supply chain. The main way in which we engage with our supply chain is through the Supply Chain Sustainability School (SCSS) - a free virtual learning environment that aims to help construction suppliers and subcontractors develop their sustainability knowledge and competence. The Group was a founder member of the School and remains a key funding member, with representation on the Board. Via the SCSS we have driven the production of learning modules provided free of charge to the supply chain and a new carbon action group has been formed to explore ways of achieving carbon reductions. We instigated and chair the SCSS Plant Group which now includes main contractors, major manufacturers and fuel providers to create a best practice guide to raise standards for construction plant & equipment with low carbon impacts and to improve air quality etc. Supply Chain events provide local and national awareness raising opportunities to set out the importance of the Group's carbon reduction objectives to potential new subcontractors in the locality. In 2019 we staged a national supplier event which was attended by over 900 guests. Key suppliers were provided with exhibition stands, low emission plant was demonstrated, and clients and suppliers were encouraged to meet and discuss Responsible Business issues. Strategy for prioritisation: During 2019 we developed a carbon portal for suppliers and produced guidance for all of our suppliers and subcontractors. The portal captures Scope 1 and 2 data from our top 1000 suppliers, by spend. Guidance on the importance of carbon emissions reduction is provided. Invitations were issued in 2020 to our strategic supply chain partners (our top 1,000 suppliers by spend). The Group engages with both suppliers and customers through direct liaison on a project-by-project basis. Here, the focus of engagement is project delivery which will include delivery of carbon reduction and measurement commitments. For example, where projects are required

# Impact of engagement, including measures of success

Construction companies can have a big impact on scope 3 emissions because they can control and influence behaviours of their equipment, materials and labour suppliers. Success in engagement is measured in two ways; through the number of participants in the Supply Chain Sustainability School as well as those that complete a reassessment exercise. On projects, success is simply measured through achievement of our 'Perfect Delivery' process and the delivery of the projects which may include certification to sustainability accredited standards i.e. BREEAM outstanding, excellent, etc. Our Construction and Infrastructure division has set out what it expects from its sub-contractors in its "Creating A Safe and Sustainable Environment" (CASSE) document. This forms the basis for pre-contract meetings. We have approved Science-based targets in place for scope 3 emissions, which cover our supply chain. Performance against these targets is being measured on an annual basis. The Group has committed that 70% of sub-contractors by spend will be requested to: • Disclose their greenhouse gas emissions by the end of 2020. • Establish their own science-based target by the end of 2025. For purchased goods and services, and upstream transportation and distribution, we are prioritising those suppliers whose source goods or

materials have the lowest embodied energy and transport emissions. To help us achieve this, we are rolling out our carbon calculator tool to all projects with a value of £10m or more, along with a Carbon Charter, which includes carbon awareness training and personal carbon reduction pledges - specific to each employee's job role. This will be completed by the end of 2021. We will also train at least 1,400 sub-contractors by 2023 on reducing carbon emissions.

Approximately 75% of our turnover goes through the supply chain and the vast majority of our suppliers are small and medium sized businesses (up to 99% of our supply chain). The Group is a founder member of the Supply Chain Sustainability School and we use this as a platform to deliver training and best practice carbon performance. There are currently around 3,600 companies and 24,000 individuals registered with the school.

#### C12 1h

(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

25

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

# Portfolio coverage (total or outstanding)

<Not Applicable>

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

Where we are able to influence design, the Group has committed to complete life-cycle assessments, providing the best (optimised) carbon design options, for all significant projects by 2023 to allow clients to make better informed decisions; as well as the roll-out of its embodied carbon tool for use by all site teams, by 2023. The Group expects this strategy to contribute to achieving annual GHG reductions equivalent to at least a 9% reduction in scope 3 GHG emissions by 2023 compared to 2016 levels. The Group engages with both suppliers and customers through direct liaison on a project-by-project basis. Here, the focus of engagement is project delivery which will include delivery of carbon reduction and measurement commitments. For example, where projects are required to be certified against the BREEAM standard to achieve an agreed ranking, the project teams will work directly with the supply chain to ensure documented and attributed solutions are put in place that deliver carbon reductions thereby helping to ensure the relevant standard is achieved. The carbon impacts from buildings and major infrastructure installations occur far into the future and will also be influenced by decisions on future upgrades, system, and component replacement. In particular, the most significant impacts depend on our ability to influence project design and specifications for clients in terms of specific material sourcing and future energy use. There is also a balance to be had between reducing embodied carbon emissions in purchased materials, energy, and systems, and improving the long-term energy emissions intensity and efficiency performance of the facilities themselves. Some of our clients are beginning to insist on certain levels of carbon performance in the assets we build for them. In the UK built environment, decisions about projects are based primarily on capital expenditure rather than operating costs, and knowledge and interest in carbon performance is still relatively low. That is why we are focussing in particular on the rolling-out of product life-cycle assessments, and on-site carbon tools to all major projects, and clear communication and promotion of optimised carbon solutions to our clients and major suppliers.

# Impact of engagement, including measures of success

The success of our engagement is measured by winning tenders and delivering optimised carbon solutions, where possible. On projects, success is measured through achievement of 'Perfect Delivery' and the delivery of the projects which may include certification sustainability accredited standards i.e. BREEAM outstanding, excellent, etc. Our science-based targets include commitments to help reduce the carbon impact for our projects and customers, and our success will be measured by our ability to deliver these commitments, including: 1. Roll out of the embodied carbon tool for use by site teams, by 2023, on all projects with a value of £10m plus, which will account for around 58% of all contracts by value, and around 66% of all contracts by value excluding Fit Out projects. The embodied carbon tool allows site managers to estimate, manage and reduce emissions. 2. Where there is design influence, all new build projects to provide a CO2/m2/year build option which, where feasible, significantly exceeds building regulations Part L standard (or whatever regulations standard in place), and/or achieves "A" rated Energy Performance Certificate, by 2023. Morgan Sindall Group is one of the founding partners of UK Contractors Declare. This is an initiative started in 2021 by leading construction companies, making a statement of intent in preparation for specific action aimed at achieving net-zero carbon emissions, and limiting global warming to 1.5°C above pre-industrial levels, by no later than 2050. It is expected that the declaration will also encourage other contractors, who are in the early stages of their sustainability journey, to sign up and unite behind a common goal. By giving contractors a collective voice on the climate and biodiversity emergency, Contractors Declare is also intent on giving the supply chain, designers and ultimately clients, clarity on the contractors' ambition to achieve net zero.

# 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			Proposed legislative solution
Climate finance	Support	The Group is an active participant with the Greater London Authority's (GLA), London Business Climate Leaders Group a partnership which is led by CDP. Our Director of Sustainability and Procurement represents the Group along with 10 other businesses. The GLA aims to make London the cleanest city by 2050 and to aggressively reduce carbon by concentrating on the built environment, transport, transferring the capital to renewable energy, creating a circular economy and reducing waste. The London Business Leaders Group is actively liaising with major financial institutions regarding transport movements, the creation of a network of charging points and the development of electric vehicle usage. A map of London roof tops is being digitally created to attempt to maximise the potential for solar power etc. In 2019, our Infrastructure Aviation business worked with the Carbon Trust on the Heathrow project to influence policy and reduce carbon generated at the airport. By the end of 2019 Carbon Trust level 2 had been achieved.	investment

# C12.3b

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

# C12.3c

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

#### Trade association

CIOB

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

Consistent

#### Please explain the trade association's position

The CIOB warns against short term policies, calling for holistic strategies to tackle some major 21st century challenges: reducing carbon emissions, protecting against climate change and creating flexible and longer-lasting structures that can be more easily adapted to the changing needs of generations. The CIOB Carbon Action 2050 (CA2050) group leads the Institute and its members in meeting the industry's regulatory targets under the Climate Change Act (2008). Membership of the working group includes designers, building control experts, educationalists, project managers and environmental specialists, reflecting the diversity of construction management professionals. The overall aim of the Group is to cut carbon emissions through innovation and best practice in project planning, procurement, design, construction, maintenance, operation, retrofit, education and leadership.

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

Not attempting to influence the position.

#### Trade association

BUILD-UK

# Is your position on climate change consistent with theirs?

Consistent

#### Please explain the trade association's position

BUILD-UK, formerly the UKCG broadly supports the UK Governments position and statements on carbon reduction, working with industry to establish mechanisms and goals leading to an 80% reduction in emissions by 2050, and a 27% reduction by 2020. The Group's targets align with these aspirations.

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

Representatives of the Group participate in various sub-committees, and through participation ensure that the Group's position is represented.

# Trade association

UK Green Building Council

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

Consistent

## Please explain the trade association's position

The UK Green Building Council campaigns for a sustainable built environment. Their programme of work is about leading industry action on sustainability, building capacity within the sector and influencing government policy to enable green business to flourish. The UKGBC is a member of several review groups inputting to changes in building regulations and voluntary standards for low carbon buildings.

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

The Group purchases top tier membership of this organisation; known as Gold Leaf. Our Director of Sustainability and Procurement participates in UKGBC policy-making and provides input on sector-specific initiatives. The Group has previously signed up to and endorsed the Green Construction Board Infrastructure Carbon Review Strategy.

# Trade association

CIRIA

# Is your position on climate change consistent with theirs?

Consistent

# Please explain the trade association's position

CIRIA is the construction industry research and information association that engages with policy groups, government sponsors and regulators, clients, consultants, contractors and suppliers, which provides our members with a unique insight to new and emerging developments and the opportunity to influence policy and industry development.

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

Not attempting to influence the position.

# Trade association

Supply Chain Sustainability School

# Is your position on climate change consistent with theirs?

Consistent

# Please explain the trade association's position $\label{eq:position} % \begin{center} \begin{ce$

The Supply Chain Sustainability School, part funded by the Construction Industry Training Board (CITB), is a collaboration between clients, contractors and first tier suppliers. A focus of some of the school's work is training and education on the reduction of embodied and operational carbon.

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

As co-founders and sponsors of the school, we are actively involved in shaping and implementing policy. One initiative involves the collection of carbon emissions data from members using an online platform to enable tier one contractors to assess their Scope 3 emissions more accurately.

# C12.3e

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

#### Method of engagement

Following the adoption of the Paris Agreement, in 2016 the Group joined over 700 global business and engaged with the 'We Mean Business Coalition' through their Take Action initiative.

#### Topic of engagement

To act and be recognised for leadership on climate change. Businesses recognise that the transition to a low carbon economy is the only way to secure sustainable economic growth and prosperity for all, and that ambitious climate action makes business sense.

#### Nature of engagement

The Group signed up to four climate leadership initiatives using a common online platform developed by We Mean Business.

Actions advocated

- To provide climate change information in mainstream filings.

By providing climate change information, companies are sending a clear signal to policymakers that their business is serious about addressing economic risks and opportunities around climate change.

- To set GHG emissions reduction targets that limit global warming to below 2°C

If we are to limit the increase in global average temperatures to below 2°C — the level governments and leading scientists agree must be achieved - then businesses too must align strategies and emissions reductions targets. By setting these targets in advance of carbon-related regulations, leading companies will be well-equipped to respond to regulatory changes and demonstrate their commitment.

In early 2018 Morgan Sindall Group had its science-based targets for scope 1 and 2 emissions, and its scope 3 emissions targets, approved by the Science Based Target Initiative (SBTI).

The Group engaged with the SBTI throughout the process of setting science-based carbon reduction targets.

- To ensure responsible corporate engagement in climate policy

Business plays a crucial role in helping to inform and shape policy. However, companies have a responsibility to ensure that their engagement on policy issues sends a clear, consistent and transparent message to governments. By committing to responsible corporate engagement, companies are advancing best practice in policy advocacy.

- To remove commodity-driven deforestation from all supply chains

Limiting global average temperatures rising to below 2°C is only possible through reducing deforestation and increasing forests restoration. Businesses, through their procurement choices, play a key role in curbing the main drivers of deforestation. By removing commodity-driven deforestation from supply chains, companies are driving towards a low-carbon economy.

Morgan Sindall Group is one of the founding partners of UK Contractors Declare. This is an initiative started in 2021 by leading construction companies, making a statement of intent in preparation for specific action aimed at achieving net-zero carbon emissions, and limiting global warming to 1.5°C above pre-industrial levels, by no later than 2050. It is expected that the declaration will also encourage other contractors, who are in the early stages of their sustainability journey, to sign up and unite behind a common goal. By giving contractors a collective voice on the climate and biodiversity emergency, Contractors Declare is also intent on giving the supply chain, designers and ultimately clients, clarity on the contractors' ambition to achieve net zero.

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?

Climate change strategy is incorporated into the Group's Responsible Business Strategy and is part of our Five Total Commitments. The Responsible Business Strategy, which incorporates our Total Commitments is set at Group-level with sign off by the Group Management Team. The Improving the Environment Total Commitments includes a specific commitment to reducing energy use and carbon emissions. Our science-based targets are set out in our 2019 Responsible business report on page 24

Strategic direction is shaped and challenged in the following ways:

- -Materiality assessment In 2020 the Group engaged with various stakeholders (employees, clients, suppliers) to establish what they see as our responsible business (including climate change) priorities.
- -Assessment of responsible business risks, including megatrends risks are regularly reviewed for significance.

Responsible Business Forums at divisional level - risks, opportunities and strategic direction is communicated for coherent and consistent uptake across each division.

- -Environment forum and information share point at Construction and Infrastructure a knowledge sharing and learning forum, ensures engagement with carbon reduction plans, amongst others.
- -Reporting performance against Total Commitments targets this ensures that all divisions are reporting on the same metrics and key performance indicators.
- Responsible Business policy set at Group level.
- Being a decentralised business, each division is responsible for determining how it will deliver against the Total Commitment targets. For example, our Construction & Infrastructure division's requirements regarding carbon is set out in their Safety, Health and Environment (SHE) policy.

The above allows for two-way communication in achieving the Total Commitment targets and ensures that there is consistent buy-in across the divisions, with performance being reported back to Group quarterly. If any inconsistencies are identified these are followed up by the DSP and divisional heads.

In addition, the DSP works closely with the Group company secretarial team and Head of Communicationsto produce the following responsible business publications, all of which include information on our Total Commitments (including Total Commitment to reducing energy use and carbon emissions):

2020Responsible Business Data Sheet

2020 Annual Report

Group website - morgansindall.com

- At divisional level, for example at our Construction & Infrastructure division, employees receive a monthly newsletter, called Cascade, which contains a responsible business update. Information is provided to keep all employees up to date with progress, initiatives and developments.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this rother than in your CDP response? If so, please attach the publication(s).	eporting year in places
Publication	
In mainstream reports	
Status	
Complete	
Attach the document	
Morgan Sindall Interactive-AR2020.pdf	

Page/Section reference

p2-3, 6-7, 11, 13-17, 24-26, 42-43, 52

**Content elements** 

Governance

Strategy

Risks & opportunities

Emissions figures

**Emission targets** 

Other metrics

#### Comment

# **Publication**

In voluntary sustainability report

# Status

Complete

# Attach the document

MSG-Responsible\_Business\_DataSheet\_Final.pdf

# Page/Section reference

p5, 7-8, 10-11, 14

# Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

# Comment

# **Publication**

In voluntary communications

# Status

Complete

# Attach the document

Responsible-business-presentation-November-2020-for-website.pdf

# Page/Section reference

p7-8, 10-13, 28-29

# **Content elements**

Governance

Strategy

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	Chief Executive Officer (CEO)

# SC. Supply chain module

# SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

Morgan Sindall Group plc is a leading UK construction and regeneration group operating through six divisions (set out below). The Group employs circa 6,600 people.

## Construction

Construction & Infrastructure

Provides infrastructure services in the highways, rail, aviation, energy, water and nuclear sectors, including tunnel design and construction services in education, healthcare, defence, commercial, industrial, leisure and retail. BakerHicks offers a multidisciplinary design and engineering consultancy services.

#### Fit Out

Overbury specialises in fit out and refurbishment in commercial, central and local government offices, retail banking and further education. Morgan Lovell provides office interior design and build services direct to occupiers.

## Property Services

Provides planned asset management and responsive maintenance to social housing and the wider public sector.

# Regeneration

# Partnership Housing

Works in partnerships with local authorities and housing associations. Activities include mixed-tenure developments, building and developing homes for open market sale and affordable rent, design and build contracting and planned maintenance and refurbishment. Urban Regeneration

Works with landowners and public sector partners to transform the urban landscape through the development of multi-phase sites and mixed-use regeneration, including residential, commercial, retail and leisure.

# Investments

Provides the Group with construction and regeneration opportunities through various strategic partnerships to develop under-utilised property assets.

# SC0.1

# (SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	303400000

# SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Yes

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	GB	008085614

# SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

#### Requesting member

National Grid PLC

#### Scope of emissions

Scope 1

#### Allocation level

Company wide

# Allocation level detail

<Not Applicable>

#### **Emissions in metric tonnes of CO2e**

239.63

#### Uncertainty (±%)

5

#### Major sources of emissions

Fuel purchases for vehicles. Bulk fuel use in power generation.

#### Verified

Yes

#### Allocation method

Allocation based on the market value of products purchased

# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project.

# Requesting member

National Grid PLC

# Scope of emissions

Scope 2

# Allocation level

Company wide

# Allocation level detail

<Not Applicable>

# Emissions in metric tonnes of CO2e

41.69

# Uncertainty (±%)

5

# Major sources of emissions

Electricity consumption.

# Verified

Yes

# Allocation method

Allocation based on the market value of products purchased

# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project.

# Requesting member

National Grid PLC

# Scope of emissions

Scope 3

#### Allocation level

Company wide

# Allocation level detail

<Not Applicable>

# **Emissions in metric tonnes of CO2e**

59.34

# Uncertainty (±%)

5

#### Major sources of emissions

Grey Fleet cars

#### Verified

Yes

#### Allocation method

Allocation based on the market value of products purchased

#### Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project.

#### Requesting member

Microsoft Corporation

## Scope of emissions

Scope 1

#### Allocation level

Company wide

# Allocation level detail

<Not Applicable>

#### Emissions in metric tonnes of CO2e

1.82

# Uncertainty (±%)

5

# Major sources of emissions

Fuel purchases for vehicles. Bulk fuel use in power generation

# Verified

Yes

# Allocation method

Allocation based on the market value of products purchased

# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project

# Requesting member

Microsoft Corporation

# Scope of emissions

Scope 2

# Allocation level

Company wide

# Allocation level detail

<Not Applicable>

# Emissions in metric tonnes of CO2e

0.32

# Uncertainty (±%)

5

# Major sources of emissions

Electricity consumption.

# Verified

Yes

# Allocation method

Allocation based on the market value of products purchased

# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon

emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project

#### Requesting member

Microsoft Corporation

# Scope of emissions

Scope 3

#### Allocation level

Company wide

#### Allocation level detail

<Not Applicable>

#### **Emissions in metric tonnes of CO2e**

0.45

# Uncertainty (±%)

5

# Major sources of emissions

Grey Fleet cars

#### Verified

Yes

#### Allocation method

Allocation based on the market value of products purchased

## Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project

## Requesting member

Visa

## Scope of emissions

Scope 1

# Allocation level

Company wide

# Allocation level detail

<Not Applicable>

# Emissions in metric tonnes of CO2e

41.07

# Uncertainty (±%)

5

# Major sources of emissions

Fuel purchases for vehicles. Bulk fuel use in power generation

# Verified

Yes

# Allocation method

Allocation based on the market value of products purchased

# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project.

# Requesting member

Visa

# Scope of emissions

Scope 2

# Allocation level

Company wide

# Allocation level detail

<Not Applicable>

# Emissions in metric tonnes of CO2e

7.14

# Uncertainty (±%)

5

# Major sources of emissions

Electricity consumption

#### Verified

Yes

#### Allocation method

Allocation based on the market value of products purchased

# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project

#### Requesting member

Visa

## Scope of emissions

Scope 3

#### Allocation level

Company wide

#### Allocation level detail

<Not Applicable>

## Emissions in metric tonnes of CO2e

10.17

#### Uncertainty (±%)

5

#### Major sources of emissions

Grey Fleet cars

#### Verified

Yes

# Allocation method

Allocation based on the market value of products purchased

## Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project.

# Requesting member

SSE

# Scope of emissions

Scope 1

# Allocation level

Company wide

# Allocation level detail

<Not Applicable>

# Emissions in metric tonnes of CO2e

149

# Uncertainty (±%)

5

# Major sources of emissions

Fuel purchases for vehicles. Bulk fuel use in power generation.

# Verified

Yes

# Allocation method

Allocation based on the market value of products purchased

# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project.

# Requesting member

SSE

# Scope of emissions

Scope 2

# Allocation level

Company wide

Allocation level detail

<Not Applicable>

# **Emissions in metric tonnes of CO2e**

25.92

#### Uncertainty (±%)

5

#### Major sources of emissions

Electricity consumption.

#### Verified

Yes

# Allocation method

Allocation based on the market value of products purchased

#### Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project.

# Requesting member

SSE

# Scope of emissions

Scope 3

# Allocation level

Company wide

# Allocation level detail

<Not Applicable>

# Emissions in metric tonnes of CO2e

36.9

# Uncertainty (±%)

5

# Major sources of emissions

Grey Fleet cars

## Verified

Yes

# Allocation method

Allocation based on the market value of products purchased

# Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The sources have been identified as part of the externally verified Achilles CEMARS ISO 14064 standard exercise. All data gathered and presented is from a Group and divisional basis, it is not yet possible to provide detailed breakdown of data on individual projects or customers -a major limitation. A key assumption is that carbon emissions associated with an individual customer are proportional to the turnover achieved and therefore allocation has been on the basis of project turnover as a proportion of overall Group carbon emission and therefore is a proxy for actual emissions for each project.

# SC1.2

# (SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

Annual Report and Accounts including mandatory GHG reporting

 $\underline{\text{https://www.morgansindall.com/assets/Uploads/Downloads/2020/3b2c821b55/Morgan} \quad \underline{\text{Sindall Interactive-AR2020.pdf}}$ 

# SC1.3

Allocation challenges	Please explain what would help you overcome these challenges
emission factors of diverse and numerous	In any year, the Group has around 500 projects at varying stages of completion, which makes the collation of individual project carbon emissions very difficult. Consequently, the customer data across the full spectrum of products and services is very difficult and administratively burdensome. Where customers request the carbon footprint of individual projects, or aggregated total emissions, this can be executed, when instructed at the time of work winning. It is important to establish the requirements for reporting at the earliest opportunity so that adequate resources (personnel, financial, ICT, training, time, availability, etc) can be mobilised and allocated appropriately. It should also be noted that for the many thousands of materials and products used during the construction process, a carbon figure may not be available, presenting the potential for inaccuracy of any reporting. The continuing development of information by supply chain partners and provision of the information to contractors is an area that is progressing, however there are still gaps. In 2018 the Group adopted science-based targets to reduce our carbon emissions, which were validated by the global Science Based Targets initiative. Targets are considered to be science-based if they are in line with the level of decarbonisation required to keep the global temperature increase below 2 degrees Celsius, compared to pre-industrial temperatures. We have reported against our science-based targets in our 2020 Responsible Business Report. In 2020, our climate action group, which is independently chaired and whose members represent all divisions, will roll out carbon calculator tool they have developed, to help manage our carbon usage and meet our new targets. In 2018 we were one of 11 businesses selected to partner with the Mayor of London's campaign to make London a zero-carbon city by 2050. This involves reducing our carbon usage and waste generated in our offices and on any project.

# SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future? Yes

# SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

The Group continues to monitor the situation with regard to carbon foot printing of individual projects and therefore its customers. We are able to provide the carbon footprint of an individual project if required by the client as long as the appropriate resource is deployed, as stated above, at contract award stage.

As the subject area evolves and robust and common methodologies for calculation techniques come to the fore, then the Group will be in a position to provide enhanced reporting where specific projects and customer requirements can be addressed

# SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

# SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

# SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services? No, I am not providing data

# 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	Are you ready to submit the additional Supply Chain questions?
I am submitting my response	Investors	Public	Yes, I will submit the Supply Chain questions now
	Customers		

# Please confirm below

CDP

I have read and accept the applicable Terms

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