

Welcome to your CDP Climate Change Questionnaire 2020

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 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 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.

Investments

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

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2019	December 31, 2019	No

C0.3

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

United Kingdom of Great Britain and Northern Ireland

C0.4

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

GBP

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your 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.

Position of individual(s)	Please explain
Board-level committee	<p>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 one non-executive director (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 responsible business steering group (RBSG) was re-established at the end of 2019 and is chaired by the Group's finance director. The Group is made up of the DSP, the company secretary, the divisional MDs and the leaders of their responsible business teams. The RBSG 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 RBSG in determining the Group's environmental strategy including its approach to climate change.</p>

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	<p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding business plans</p> <p>Monitoring implementation and performance of objectives</p>	<p>The Board's HSE committee is responsible for monitoring the Group's environmental strategy, which includes its strategy in respect of climate change.</p> <p>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.</p> <p>The Group's Carbon Action group in conjunction with the director of sustainability and procurement (DSP)</p>

	<p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<p>advises and assists the RBSG 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.</p> <p>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 quarterly 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.</p> <p>The Board was given a presentation at their meeting in December 2019 to explain the implications of the Task Force for Climate-related Financial Disclosures (TCFD) for the Group as preparation for the Group implementing the TCFD through 2020 and 2021.</p>
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C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other, please specify Director Sustainability and Procurement	Both assessing and managing climate-related risks and opportunities	Annually

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 RBSG and also attends one meeting per year of the Group’s Management Team (the executive team below Board level), which is made up of the two executive directors, the divisional MDs, the Group’s commercial director and the company secretary. The purpose of these meetings is to report on progress against strategy 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	Comment
Row 1	Yes	

C1.3a

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

Entitled to incentive	Type of incentive	Activity incentivized	Comment
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<p>Other, please specify</p> <p>All drivers of company cars</p>	<p>Monetary reward</p>	<p>Emissions reduction target</p>	<p>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.</p>
<p>Other, please specify</p> <p>Director sustainability and procurement (DSP)</p>	<p>Monetary reward</p>	<p>Energy reduction target</p>	<p>The Group director of sustainability and procurement (DSP) has responsibility for assisting and advising the RBSG 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 Group's management team 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.</p>

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	1	
Medium-term	1	3	
Long-term	3	6	

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). 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 £4.1m for their 2019 audit which was equivalent to 5% of profit before tax for the year (see page 90 of the 2019 Annual Report).

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 23 and 44 of the 2019 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:

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. (see pages 23-32 of the Annual Report 2019 for full details of the Group's risk governance and principal risks). The Group determines the environment and climate change as one of its principal risks (see page 27 of the 2019 Annual Report).

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.

Case study examples:

- 1) In bidding for the M5/M6 motorway junction project in Birmingham, we identified that we needed to seek to replace diesel with solar powered generators to mitigate the risks to air pollution and the potentially significant risk of not securing work on the project,
- 2) We recently won a bid for Highways England for SMART motorways. As part of the bid and follow-up work we are running a Plant committee with equipment suppliers and contractors to help put in place diesel free sites which will help to reduce air pollution on the project.
- 3) In reviewing transition risks, we identified the need to look at developing a Hydrogen fuel supply chain for our construction and infrastructure projects in Cumbria, to meet emerging market requirements for low-carbon power generation.

These examples and the lessons learned have been shared across the Group.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Government regulations are a key driver of market activities in the UK construction sector, and climate-related developments. For example, our climate-related risk assessments cover current UK regulations including SECR, Streamlined Energy and Carbon Reporting regulations, and ESOS, the Energy Saving Opportunities Scheme for which we've had to carry out audits of our administrative sites and vehicle fleet energy consumption. The financial impact of these regulations are assessed in the risk assessment and management responses put in place. For the next phase of ESOS we have a committed plan in place. We comply with regulations at local authority level, including congestion charging for clean air.
Emerging regulation	Relevant, always included	Our climate-related risk assessments anticipate new regulations. For example, we are monitoring developments in the UK carbon floor price. The potential financial impact of these regulations are assessed in our risk assessments and management responses are put in place. We are also monitoring and responding to emerging regulations for vehicle emissions in cities. For example, on our project to construct a section of Thames Tideway in London, we assess the impacts and requirements for lorries and new plant, which may not be warranted initially by manufacturers. We are 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. We are also reviewing what we need to do to ensure that we can comply with the TCFD reporting requirements by the 2022 reporting deadline.
Technology	Relevant, always included	Our risk assessments consider current and future technology developments. For example, new power trains for vehicles, renewables on site, solar and other alternative fuels for powering our construction plant, EV chargers to all new offices and site offices, Mobile EV chargers, Stand down/smaller capacity generators, Telemetry - septic tank - tells suppliers when to empty it, and campaigns to reduce carbon on standard site set-up. We lead the Highways England Plant Group and head up the Supply Chain Sustainability School's Plant Group which includes most major fuel and plant manufacturers. Our Plant Desk is an IT platform set up by the Group to make use of plant

		more efficiently. Our internal Carbon Action Group helps relate climate issues to technical processes.
Legal	Relevant, always included	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. Legislation impacts on project sites, and our overriding requirement when addressing climate-related issues is to ensure we are meeting project specifications. For our regeneration businesses, which include our Regeneration divisions Partnership Housing (Lovell), Regeneration (Muse) and Investments, we also have to comply with Section 106 requirements, for example - legal agreements with local planning authorities to mitigate the impact of new developments on the local community and infrastructure.
Market	Relevant, always included	The potential for changing market requirements form a core part of project and company risk assessments. The UK construction industry, and particularly Government funded projects, are CAPEX driven, which means we are often unable to influence decisions on lower carbon solutions, which would reduce operating expenditure. There are some exceptions, and customers such as Highways England, for example, who have moved to more OPEX driven projects, which help us to make the case for lower carbon solutions.
Reputation	Relevant, always included	Poor environmental performance would affect our ability to secure future work and achieve targets. Our reputation as a supplier with strong sustainability credentials, and provider of low-carbon solutions, is a key differentiator for the Group. Sustainability credentials are weighted highly on many construction project RFQs, and our risk and opportunity assessments consider this as a significant financial impact on the business. The sustainability component of a tender award can account for up to 40% of the submission, for example. In our Construction and Infrastructure division, the Thames Tideway Tunnel West contract, for example, also required clear evidence of carbon management and reduction performance.
Acute physical	Relevant, always included	Acute physical risks, such as on-site flooding or power interruption from storms are incorporated into risk management plans at our construction project sites. These risk management plans need to address power interruption demand management on site, for example, or the need for contingency planning in case the floods. We have prepared documented procedures to assist with contingency planning.
Chronic physical	Relevant, always included	Chronic physical climate changes could impact significantly on project site construction time plans. For example, on our construction sites, it is not possible to pour concrete at a temperature of less than 5 degrees C. Adding water to concrete on site is also not possible, if significantly higher temperatures impact adversely on site vehicles delivering pre-mixed concrete to site, and delayed in traffic. Rising temperatures and

		<p>drought conditions also create increased fire risk. There is already a comprehensive risk assessment on every project, which follows a set template to cover these types of issues. Site environmental risk assessments also consider chronic physical changes. Climate-related physical changes are also raising potential cost issues on our work - potentially affecting lighting and electricity charging. Design solutions currently considered exceptional could also become the norm, for example, protection for buildings against extreme heat.</p>
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C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation

Enhanced emissions-reporting obligations

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Streamlined Energy and Carbon Reporting regulations (SECR), GHG mandatory reporting obligations. Description: There is a risk associated with data collection and compliance with reporting requirements across our decentralised business. Impact: For the Group this risk requires the implementation of robust data collection and management methodologies. It is anticipated that the business will be audited by the regulator, in due course, which may result in a potential risk of ensuring regulatory compliance across the wider Group.

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)

5,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Minimum of £5000 fines for erroneous reporting and potential reputational impact

The process has been continuously reviewed – Energy Source – Data gathering – Sense Checking – 3rd party Audit – Governance sign off via the Company secretariat and then transparently reported.

Cost of response to risk

10,000

Description of response and explanation of cost calculation

We have significantly improved our data collection process and included external contributions and additional checks of energy via a single group wide broker and compliance and sense checking via a third party carbon specialist, and the appointment of a Group Data Analyst to manage the process.

Case Study: Streamlined Energy and Carbon Reporting regulations (SECR)

The risks are being managed through three key stages: #1: Data verification and reporting requirements are externally assessed through engagement of an external verification company (Achilles) to confirm data collection and reporting metrics are correct. This provided the business with the certainty that its numbers are correct, as well as partially fulfilling the requirement for internal audit. #2 The Group is transitioning its utility management to an energy broker to assist with the management of data. The broker is acting as a direct intermediary between the utility providers and the Group, both for checking and validation purposes as well as the production of management information enabling focussed reduction activities. #3 Establishment of clear processes and procedures as part of the Group's management systems to ensure that appropriate management controls are put in place.

Cost of response estimate is to an order of magnitude for additional consultancy fees.

Comment

Identifier

Risk 2

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 demand for products and services

Company-specific description

Morgan Sindall Group, through its divisions, work for numerous private and public sector clients, who have differing sustainability priorities. It is expected that without clear leadership and action around important sustainability issues, this could lead to reduced market share, through poor success in bidding work, ultimately, affecting profitability of the Group. The sustainability component of a tender award can account for up to 40% of the submission.

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)

150,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

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 accounts for 5% of all tenders: 5% of £3,071m (Group turnover in 2019) ~ £150m at risk. .

Cost of response to risk

0

Description of response and explanation of cost calculation

To mitigate the risk, we have undertaken the following:

- 1) Established clear leadership and strategic direction: This ensures appropriate resource is deployed to achieve delivery against the Group's Responsible Business Strategy which is built around our five Total Commitments (see 2019 Responsible Business Report and Annual Report).
- 2) Action plans: to ensure the delivery of strategic objectives at project level.
- 3) Communication strategy to engage employees and interested parties - The Group produces regular sustainability communications in order to promote awareness, share good practice and report performance. The Annual Report 2019 and 2019 Responsible Business Report - publicly available communication on Website. In addition, each division produces its own sustainability communications.

Case Study: Infrastructure projects

Our Construction and Infrastructure division via projects such as Highways England Road Schemes, HS2, Sellafield Nuclear Establishment has made clear commitments to introduce ambitious operational and asset reduction targets that are continuously monitored.

Sunk cost within normal staff costs, so no additional cost of response.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

The risk of disruption to the supply of materials and equipment to construction sites through adverse/severe weather conditions across the supply chain from cradle to gate. This would potentially reduce and/or disrupt the Group's ability to deliver projects on time.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

10,000

Potential financial impact figure – maximum (currency)

100,000

Explanation of financial impact figure

It is not possible to accurately quantify the likely impact as this would be dependent on a project by project basis and the extent of impact. An approximate range of impacts has been provided, starting at a minimum impact to an order of £10,000; if, for example, an alternative more costly component, or piece of equipment, had to be sourced; to an order of 100,000 for significant delays to a large project.

Cost of response to risk

0

Description of response and explanation of cost calculation

Several management methods are used to mitigate impacts:

- 1) Direct liaison with supply chain and regular dialogue on supply capability, to ensure that disruptions to supplies to site are minimised.
- 2) Contractual agreements and long-standing relationship with supply chain partners to mitigate risks of disruption
- 3) Contingency planning for projects, taking account of adverse weather impact and planning for mitigation.

Case Study: The Supply Chain School

Morgan Sindall Group was one of 7 founder members of the Supply Chain Sustainability School, a virtual platform that's free for the construction supply chain to make use of.

This is the main management method we have used to train the supply chain in sustainability and raise awareness of emerging issues and megatrends, including the need for contingency planning to deal with disruption from severe weather events. For example, for our projects in Scotland the requirement for site-wide licences for construction sites stipulates some specific requirements, which include the need for contingency planning in case the floods. We have prepared documented procedures to assist with the contingency planning.

Sunk cost within normal staff costs, so no additional cost of response.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

The risk of spikes in the cost of raw materials through the disruption to supply and subsequent demand side pressures. This would potentially reduce and/or disrupt the Group's ability to deliver projects to budget.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

10,000

Potential financial impact figure – maximum (currency)

100,000

Explanation of financial impact figure

It is not possible to accurately quantify the likely impact as this would be dependent on the specific raw material/s impacted. An approximate range of impacts has been provided, starting at a minimum impact to an order of £10,000; if, for example, a low volume, less costly raw material is impacted; to an order of 100000 for raw materials with the highest spend profile.

Cost of response to risk

0

Description of response and explanation of cost calculation

We use several management methods to mitigate potential impacts:

- 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.
- As an example, in 2019, rising temperatures and drought conditions created increased fire risk in forested regions across the globe. This fed into commodity price increases for timber, one of our key building materials. Our supply chain was able to manage this challenge through securing alternative sources, and forward purchasing of supplies. Sunk cost within normal staff costs, so no additional cost of response.

Comment

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

The risk of disruption to operations in the advent of an adverse/severe weather event e.g. flooding, droughts, which could lead to suspension of works on the Group's site or projects

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

10,000

Potential financial impact figure – maximum (currency)

100,000

Explanation of financial impact figure

It is not possible to accurately quantify the likely impact as this would be dependent on a project by project basis and the extent of impact. An approximate range of impacts has been provided, starting at a minimum impact to an order of £10,000; to an order of 100,000 for significant delays to a large project.

Cost of response to risk

0

Description of response and explanation of cost calculation

We use several management methods to mitigate potential impacts: 1) Direct liaison with customer on programme delivery and impact 2) Local risk assessments with focus on weather conditions and required changes to programme of works, delivery, etc. at a local level. 3) Contingency planning for projects, taking account of adverse weather impact and planning for mitigation.

For example, for our projects in Scotland the requirement for site-wide licences for construction sites stipulates some specific requirements, which include the need for contingency planning in case the site floods. We have prepared documented procedures to assist with the contingency planning. We also look to design and build in resilience from the start at our sites. In London, a new Train Maintenance Unit building, which is under construction, 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. In terms of response to this risk, these are sunk cost within normal staff costs, so no additional cost of response is estimated.

Comment

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

The risk of increased incidence of flood, drought, high wind, etc. on our projects. This could lead to direct damage to the Group's assets as well as those we are constructing.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

50,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Financial impact would be through increased insurance premiums as well as impact of paying insurance excesses, of the order of £50,000 per project or office (based on illustrative commercial cost figures).

Cost of response to risk

0

Description of response and explanation of cost calculation

Several management methods are used to mitigate potential impacts: 1) Direct liaison with customer on programme delivery and impact 2) Local risk assessments with focus on weather conditions and required changes to programme of works, delivery, etc. at a local level. 3) Contingency planning for projects, taking account of adverse weather impact and planning for mitigation. For example, de-watering installation at EAC Drakelow. This managed water levels on a site with high groundwater, which were susceptible to weather conditions and reduced risk, which allowed the project to be

completed on time. As a further example, to minimize disruption to the water environment when laying cables under small to medium watercourses, we developed a system to create pre-cast concrete cable ducts to install directly onsite for 22 watercourses. This reduces pollution risks from using concrete within the watercourse, reduces impacts to the water environment and reduces waste. Sunk cost within normal staff costs, so no additional cost of response.

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

Requirements to address energy efficiency and creation of renewable energy alternatives. The main impact on the Group is that anticipated legislation will drive requirements to ensure that engineering capability (e.g. staff training, understanding of products and services, etc.) can be delivered.

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)

150,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Potential increased cost of construction while technology and solutions prices stabilise in the market. Estimated impact for construction is an additional 10% on capital cost comparing 'standard housing' with improved efficiency housing (CfSH Level 3 vs CFSH level 4). However, this also presents the consumer with much reduced energy and utility costs.

Assuming provision of low emission products and services accounts for 5% of all tenders: 5% of £3,071m (Group turnover in 2019) ~ £150m .

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Several management methods are used to monitor this opportunity: 1) Legislative review: As part of the divisions management systems (ISO 9001, ISO 14001 and OHSAS 18801) there is a requirement to monitor and assess the impact of legislation on operations. This is completed on a forward-looking basis, taking account of Government consultation and Industry developments, thereby anticipating future changes and opportunity for the Group. 2) Strategic planning: The Group and divisional strategies are reviewed annually as part of a formal strategic review process. During the year progress against strategy at Group and divisional level is monitored on a monthly basis.

Examples of initiatives we are carrying out include, from our urban regeneration division - Muse:

Plot A3 at New Bailey: The brief for this new office scheme 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 our English Cities Fund partnership we have recently been appointed by Salford Council and the University of Salford on the 250 acre Salford Crescent development. A major part of our bid was our approach to tackling the climate change agenda and using the opportunity this development provides to lead the way in Greater Manchester's drive to carbon neutrality. We are now developing a sustainability strategy alongside our partners which will really push the parameters.

Inclusive of current management costs, and therefore no immediate change in cost to realise opportunity.

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

Changes to the approach in handling waste materials. Diverting waste from landfill has a positive impact on our ability to win business, based on the Group's waste minimisation plans and ability to deliver projects which seek to ensure 100% of waste is diverted from landfill. Benefit in reputational enhancement, attractiveness to customers and reduced operating cost. Diverting waste from landfill by waste avoidance or material reuse reduces operational costs and thereby increases the profit margin of a project.

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)

200,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Illustrative project financial impact. Cost of waste to projects is estimated at typically 2% of project costs. Reducing waste can then 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.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

The management of waste on projects is an embedded process as part of the ISO 14001 systems across the Group. The key management method our projects apply is a waste hierarchy and methodology 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 Overbury project at LSE Life achieved the first SKA HE Silver rating with a 97% recycling rate with much of the furniture stripped out and reused through the university network.

Case Study: Carbon profiling and Neverwaste

Our Fit Out Division's Morgan Lovell 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 maximized. 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. Morgan Lovell is 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. Pallet Loop allow us to return their pallets back to them and we would receive money back

Inclusive of current management costs, and therefore no immediate change in cost to realise opportunity.

Comment

Identifier

Opp3

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

Increasing popularity and acceptance of ratings systems such as CEEQUAL, BREEAM, LEED, Ska, etc. This provides the Group with opportunities associated with the increasing requirement from clients and government for more energy efficient buildings. It encourages innovative solutions to carbon reductions.

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)

400,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Illustrative project financial impact. Potential increased operating cost and/or recovery of costs from customers setting higher standards. Typical reported impact of the application of BREEAM standard is less than 2% impact on capital cost. 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, and therefore, for example, an office with a capital cost of £20 million would incur an additional £400k of capital cost.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

The main management method here is to maintain a watching brief. Opportunity uptake would be through the use of in-house specialists and external consultants to help with the design process.

Among the steps we are taking to support this opportunity are:

- Deployment of our carbon calculator to pilot projects
- Climate Action working group with 220 stakeholders from supply chain, customers, consultants and tier one contractors
- Deployment of LM3 tool (Local Multiplier 3 – LM3- is a methodology that can be used by companies, government, or community organisations to measure how their spending generates local economic impact and benefit to communities) as an indicator of reducing scope 3 emissions
- Redesigning completed projects with the most up-to-date low-carbon measures

Examples of what we are doing to realise this opportunity include:

Design and development of the "Sustainable Twin" where we will redesign 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.

Plot A3 at New Bailey. The brief for this new office scheme 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.

St Helens Council Office. Through our English Cities Fund partnership, we have developed a Net Zero Carbon brief for new Council offices at St Helens. We are 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.

Inclusive of current management costs, and therefore no immediate change in cost to realise opportunity. Potential additional consultant costs on a project by project basis.

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 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

New Part L building regulations, as a step towards the Future Homes Standard, which focus on reducing carbon emissions and improving energy efficiency. This provides the Group with opportunities associated with the increasing requirement from Government for more energy efficient buildings. It encourages innovative solutions to carbon reductions.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

400,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Illustrative project financial impact. Increased cost to customers in assets being constructed. As noted above, this can have an impact of 10% of capital cost to build if

options for increased energy efficiency above the baseline are selected. However, this also presents the consumer with very much reduced energy and utility costs.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

The main mechanism for management assessment of this is through the Division's management systems and the requirement to monitor and assess the impact of legislation and standards on operations. This is completed on a forward looking basis, taking account of Government consultation and Industry developments, thereby anticipating future changes and opportunity for the Group.

Among the steps we are taking to support this opportunity are:

- Collaboration with the supply chain in order to produce a series of best practices for reducing carbon;
- Collation of carbon initiatives available into a database
- Deployment of our carbon calculator to pilot projects
- Climate Action working group with 220 stakeholders from supply chain, customers, consultants and tier one contractors

For example, design and development of the "Sustainable Twin" where we will redesign 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.

Inclusive of current management costs, and therefore no immediate change in cost of management.

Comment

Identifier

Opp5

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

Requirement to deliver assets that can withstand the impact of change in physical climate parameters i.e. climate change adaptation. This impacts the Group in that it needs to ensure it has appropriate design and engineering capability to deliver climate resilient assets.

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)

600,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Potential increased capital cost of construction. The National Infrastructure and Construction Pipeline published in November 2018 and updated in February 2019 set out the UK's planned infrastructure investment to 2021 and beyond. This included estimated levels of investment over the coming decade, with a projection of over £600 billion of investment, including major projects that would have to take account of resilience. Opportunity therefore for the Group is in accessing projects associated with this planned spend. Illustrative 0.1% of £600bn.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

The main management method here is to consider such opportunities as part of the annual strategic review. Opportunity uptake would be through the use of in-house specialists and external consultants to help with design process as well as the update of any standards and approaches take by the Group's engineers. These would be incorporated into existing design and construction management processes.

For example, we are largely governed by standards from our major customers in the rail sector. These standards include the requirement to design to include 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 community 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 consideration of climate change and the potential for increased rainfall intensities on this linear asset to take account of resilience.

Cost to realise opportunity included in existing management costs, so no additional costs to realise estimated.

Comment

Identifier

Opp6

Where in the value chain does the opportunity occur?

Downstream

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

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. This thereby provides opportunities for work winning.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

20,000,000

Potential financial impact figure – maximum (currency)

200,000,000

Explanation of financial impact figure

There are a number of Flood Defence Schemes and Frameworks requiring work over the next 5-8 years. As an illustration, assuming a proportion of the total framework value, these individual frameworks could have a potential value to an order of £20m to £200m range over the medium to long-term.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

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 would be through use of in-house specialists and external consultants to help with 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. Example flood defence schemes: 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. Opportunity development mainly included in existing management costs, and so no additional costs to realise estimated.

Comment

Identifier

Opp7

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

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 sustainability 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. The sustainability component of a tender award usually accounts for between 5-15% of the submission and sometimes up to 40% of the submission.

Time horizon

Medium-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)

150,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Assuming sustainability accounts for 5% of all tenders: 5% of £3,071m (Group turnover in 2019) ~ £150m. A more specific example can be provided from our Construction and Infrastructure division: In the Thames Tideway Tunnel West contract awarded, where the value of the contract was £416m (approx). The Sustainability questions accounted for 7% of the awarded contract submission, where evidence of carbon management and reduction performance was necessary.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

1) Clear leadership and strategic direction: This ensures appropriate resource is deployed to achieve delivery against the Group's Responsible Business Strategy which is built around our five Total Commitments (see 2019 Responsible Business Report and Annual Report). For example, our Carbon Action Group (formed in 2016) is responsible for driving carbon reduction and initiatives forward across the Group. 2) Action plans are

created to ensure the delivery of strategic environmental and climate change objectives at project level. 3) We ensure that we regularly engage with employees and interested parties through to promote awareness, share good practice and report performance. These include: - 2019 Responsible Business Report and our Annual Report 2019 which are publicly available on our website.. In addition, each division produces its own sustainability communications.

Case Study: Rail

With Network Rail, a client of Construction and Infrastructure sustainability accounts for 8% and Construction and Infrastructure is a signatory to Network Rail's sustainability charter. The HS2 tender, for which MSG won the enabling works, is an exception, where sustainability was woven into all questions and was said to account for 40% of the mark allocation.

Sunk cost within normal staff costs, so no additional costs.

Case Study: Speedy Hybrid Generator

Through our Plant Desk for site construction operations, we are trialling use of the Speedy Services Hybrid Power Generator, which reduces noise on site and carbon emissions from diesel use. The trails have so far saved £16k in fuel costs.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization’s strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

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

Yes, qualitative and quantitative

C3.1b

(C3.1b) Provide details of your organization’s use of climate-related scenario analysis.

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 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 are also rolling out a project carbon estimation tool, and introducing 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.

Case study:

The scenario analysis showed us the scale of carbon emissions required to align with 2°C carbon budget, and that some of the biggest opportunities to reduce emissions are over the operating life- cycles of the developments and infrastructure, that we build for clients. A decision was made, that where we are able to influence design, The Group would commit to completing life-cycle assessments, and providing the best (optimized) carbon design option for all major projects by 2023. This would allow clients to make better informed decisions on the potential for significant carbon reduction in project designs. A carbon tool, which calculates embodied carbon, is also being rolled out, by business division, starting in Construction & Infrastructure, for use by all site teams on all projects with a value of £10m plus, by 2023. The embodied carbon tool, whose methodology has now been verified independently by external consultants, allows site managers to estimate, manage and reduce emissions. During 2019, we also 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 expects this strategy to achieve annual GHG reductions to an order of magnitude that is equivalent to at least a 9% reduction in scope 3 GHG

	emissions by 2023 compared to 2016 levels.
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C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	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 footprinting 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 the Fit Out service teams, and requirements for other heating technologies and options, such as GSHP for Lovell projects. 50% of the fit-outs UK assessment team are now Well Standard qualified. For the business overall, this impacts on investment, training, and service focus.
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, so contractors are actively supported through the Supply Chain School, with specific carbon/climate education. We carry out monthly measurement of activity in this area. We are seeing and supporting the use of greener equipment on projects. Our 'Accommodation Desk' which helps achieve best value buying solutions for accommodation and associated plant is a differentiator in the market. We are now 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 gone up substantially - however this could also mean that occupants

		are potentially over- heating in high temperature periods - so we are spending more on mitigating this issue for or contractors.
Investment in R&D	Yes	Investments in carbon modelling have already been made, for example, for the University of Nottingham Chemistry Centre, making use of Research and Development tax incentives; and 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 EV chargers are being rolled out across the business and we are encouraging the installation of EV in cabins. Telematics in hire vehicles, Tunnelling - patents for lasers etc. and concrete work, are all being looked at, and we 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.
Operations	Yes	There have been significant changes to our company car policy, including green incentives for EVs and Low Carbon vehicles, and low carbon only options to reduce carbon emissions. For example, telematics are being applied to reduce mileage and carbon emissions on vehicle movements. Our London, Group HQ has been remodelled as a sustainable, SKA Gold office. To cover operations 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 sector, for example, Muse has developed a strategy that will provide a structured framework for all its projects to follow and report against. This will enable, for example, the drive towards material circularity and modern methods of construction (MMC).

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs	We have adapted our approach to climate change as we see it as an opportunity to improve our reputation, increase our work winning ability, and reduce costs and therefore improve our profitability and long term success. Overall, our reputation in the market has helped to increase

<p>Capital expenditures</p> <p>Capital allocation</p> <p>Access to capital</p> <p>Assets</p>	<p>revenues. MSG's reputational capital has helped to win work, and despite revenue increases, carbon emissions have generally reduced.</p> <p>Case study examples:</p> <p>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 tonnage of embodied carbon. Minimum Energy Efficiency Standard (MEES) is likely to increase the number of fit outs required by customers, and climate measurement on fit outs. All of which has to be factored into the financial planning process for projects over the short to medium term.</p> <p>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 sort-term, helping to reduce carbon tax from £360k to £70k; Lowering on-site accommodation costs through reducing fuel consumption; Mitigating against price increases for high volume components such as steel, and impacts on the cost of bricks and concrete blocks; Planning for more green specifications on products; Planning investments in vehicle trackers and behavioural training for drivers to reduce fuel costs. We have had to plan in for and balance price increases for materials by reducing our carbon/energy costs to mitigate this.</p> <p>Investment in leased assets, particularly vehicles, has been impacted as we look to reduce emissions but also to ensure that capital expenditures don't tie us into potentially obsolete equipment or vehicles in the long-term. An example of the impact on capital allocations is the decision to improve and revamp our HQ at Kent House, to be a lower carbon building.</p> <p>Taking effective action on climate change can make it easier to access capital. In terms of public sector funding an example of impact, over the short to medium term, is The London Mayor's Energy Efficiency Fund, which provides preferential lending for projects which reduce carbon emissions.</p> <p>In terms of the potential for assets becoming obsolete due to climate change activities, there is less risk to the business, and more flexibility to respond to higher energy performance and climate resilience requirements, through a preference for leasing rather than investment. An example of impact is Group consideration of not renewing leases, at the end of tenancy agreements, on properties that fail to meet energy performance requirements in the medium to long-term.</p>
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C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

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

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)

24,135

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]

21,480.15

Covered emissions in reporting year (metric tons CO₂e)

20,902.27

% of target achieved [auto-calculated]

121.7669548185

Target status in reporting year

Achieved

Is this a science-based target?

Yes, this target has been approved as science-based by the Science-Based Targets initiative

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.

In 2019 we achieved a verified 57.26% reduction in absolute scope 1 and 2 emissions relative to the CEMARS base year of 2010. Reductions are based upon a rolling five-year average.

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)

24,135

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 (%)

56

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

10,619.4

Covered emissions in reporting year (metric tons CO₂e)

20,902.27

% of target achieved [auto-calculated]

23.9185089822

Target status in reporting year

Underway

Is this a science-based target?

Yes, this target has been approved as science-based by the Science-Based Targets initiative

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.

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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.

In 2019 we achieved a verified 57.26% reduction in absolute scope 1 and 2 emissions relative to the CEMARS base year of 2010. Reductions are based upon a rolling five-year average.

C4.2

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

No other climate-related targets

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO ₂ e savings in metric tonnes CO ₂ e (only for rows marked *)
Under investigation	6	5,000
To be implemented*	4	4,000
Implementation commenced*	2	2,000

Implemented*	10	3,029
Not to be implemented	2	0

C4.3b

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

Initiative category & Initiative type

Transportation
Company fleet vehicle efficiency

Estimated annual CO2e savings (metric tonnes CO2e)

1,100

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

225,000

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

72,000

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

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 influence driver behaviours providing for efficient vehicle use as well as improved and reduced emissions performance. We now have one project (c50 vehicles) fitted with cameras which identify and record instances of harsh driving behaviours such as braking hard, enabling management action to be taken. Figures provided are order of magnitude estimates.

Initiative category & Initiative type

Transportation
Company fleet vehicle efficiency

Estimated annual CO₂e savings (metric tonnes CO₂e)

13

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

42,000

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

65,000

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

The Group's commercial fleet now consists of 13 fully electric vans with further increases expected. Figures provided are order of magnitude estimates.

Initiative category & Initiative type

Transportation

Business travel policy

Estimated annual CO₂e savings (metric tonnes CO₂e)

215

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

60,000

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

15,000

Payback period

<1 year

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

Waste reduction and material circularity
Product/component/material reuse

Estimated annual CO2e savings (metric tonnes CO2e)

1

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

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

18,542

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

5,000

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

Scope 3 Waste. The Group's Fit Out division has been focussing on the reuse of materials and furniture on their projects, including offcuts from construction materials as well as materials and furniture that were designated to be stripped out and removed. They were able to find alternative homes for furniture through reuse companies with charities, as well as discussing with clients about how they could reuse and refurbish the furniture items. They have also been focussing on reuse onsite with reuse zones for the reuse of plasterboard, timber and carpet offcuts. This has allowed the division to focus on a circular option for waste materials on their projects, preventing it from going to waste to be either recycled, incinerated or landfilled. The investment identified relates to management of the processes

Initiative category & Initiative type

Energy efficiency in production processes

Product or service design

Estimated annual CO₂e savings (metric tonnes CO₂e)

250

Scope(s)

Scope 1

Scope 2 (location-based)

Scope 3

Voluntary/Mandatory

Voluntary

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

100,000

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

20,000

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

Our Infrastructure Highways business has developed an inhouse carbon calculator tool. This forms part of our science-based targets approach to help us to achieve our reduction goals. The carbon calculator tool has been distributed to various members of staff, such as Quantity Surveyors and Site Agents to help them to understand the process, language and approach to measuring and reducing carbon emissions. We have developed a series of lessons learnt from initial uses of the carbon calculator tools which demonstrate that in general, the construction (direct emissions) on individual projects accounts for between 10-20% of the total emissions, with the remainder coming from embodied carbon of materials. The intention is to roll out the carbon calculator tool across the whole Group by the end of 2020. All scopes are covered within this initiative. Figures provided are order of magnitude estimates.

Initiative category & Initiative type

Low-carbon energy generation

Solar PV

Estimated annual CO₂e savings (metric tonnes CO₂e)

100

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

100,000

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

100,000

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

Across the Group we are trialling and using several Off-grid Solar Power Generation systems. The electricity generated is used to power lighting, site accommodation, etc. Their use has the added benefits of noise reduction and improved air quality. Figures provided are order of magnitude estimates.

Initiative category & Initiative type

Non-energy industrial process emissions reductions
Process material substitution

Estimated annual CO2e savings (metric tonnes CO2e)

200

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

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

0

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

0

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

The Group is a large user of aggregates for the construction of highways, rail, aviation and general building. We are focused on procuring secondary (recycled) aggregates

where possible. Other options that we used include shredded tyres. We recently formed a 2150m² of path from 5000 shredded tyres. Figures provided are order of magnitude estimates.

Initiative category & Initiative type

Company policy or behavioral change
Supplier engagement

Estimated annual CO₂e savings (metric tonnes CO₂e)

600

Scope(s)

Scope 1

Voluntary/Mandatory

Mandatory

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

250,000

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

0

Payback period

<1 year

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 highlighted the need to change our behaviours. Figures provided are order of magnitude estimates.

Initiative category & Initiative type

Company policy or behavioral change
Resource efficiency

Estimated annual CO₂e savings (metric tonnes CO₂e)

450

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

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

0

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

10,000

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

Employee travel to work: Our Construction & Infrastructure division requires all projects to have a Green Travel Plan in place for employees from each site or office location. The Green Travel Plan provides employees with a variety of energy efficient travel options and is reinforced on site through the provision of bicycle racks, showers and other facilities. Car sharing is actively promoted and 'sharemiles' are captured as part of the monthly SHEQ reporting. Magnitude of CO₂e savings estimated at 10% of annual commuting emissions.

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)

Voluntary/Mandatory

Voluntary

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

25,000

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

50,000

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

Site Accommodation – ECO cabins are being more widely used on our sites across the Group. The ECO specification which includes the building fabric and temperature, lighting and ventilation systems, has been designed to lower running costs by saving energy. This is demonstrated in each units Energy Performance Asset Rating. We have established a working group to drive this initiative. 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) which demonstrates 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 constructed 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 will be unique in the UK, not only in its design but also in its focus on world-leading research activity in sustainable chemistry. The building is 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. We completed this 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 the fume cupboards at zero diversity (i.e. all available at 100% capacity 100% of the time) means the building doesn't need to run high energy fume exhaust systems for small isolated experiments, it runs at maximum efficiency most of the time.

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

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 has 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, Fit Out trained 25 different subcontractor firms in the procurement of products that are sustainably sourced. We look at 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, we 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 – carpet being cheap, but needs replacing many times over a 40year lifecycle period. We continue to look at different products and materials, and also at different methods of installing the works. There is a hidden cost with carbon and greenhouse gas emissions – and we look to create efficiency in the way we build to create savings in emissions. We continue to minimise carbon emissions by including things like: eco cabins, no diesel generators, new (efficient) plant and equipment, bulk ordering materials, etc).

C5. Emissions methodology

C5.1

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

Scope 1

Base year start

January 1, 2016

Base year end

December 31, 2016

Base year emissions (metric tons CO₂e)

17,200

Comment

Scope 2 (location-based)

Base year start

January 1, 2016

Base year end

December 31, 2016

Base year emissions (metric tons CO₂e)

6,935

Comment

Scope 2 (market-based)

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO₂e)

1,860.67

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)

18,123.71

Comment

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. 66% 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

2,778.56

Scope 2, market-based (if applicable)

1,875.76

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

240,000

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 Morgan Sandal 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

1

Please explain

We have started a process to capture Scope 3 emissions from 1,000 (70% of all group spend) of the Group's suppliers and subcontractors. A portal has been set up for them to self-populate. We intend to annually assess how we may assist our suppliers and subcontractors in reducing CO2 emissions.

Capital goods

Evaluation status

Not relevant, explanation provided

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

235.9

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

15,500

Emissions calculation methodology

Calculation from scope 3 screening analysis for science-based targets

- 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

1,900

Emissions calculation methodology

Calculation from scope 3 screening analysis for science-based targets
Emissions by tonnage for each waste stream: Landfill, Recycled/EfW, and wastewater.
Converted using Defra 2016 emissions factors

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

0

Please explain

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

5,660.4

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.

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

0

Please explain

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

4,500

Emissions calculation methodology

Calculation from scope 3 screening analysis for science-based targets
Estimated 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

1,000

Emissions calculation methodology

Calculation from scope 3 screening analysis for science-based targets

- 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

Please explain

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

Processing of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

10,000

Emissions calculation methodology

Calculation from scope 3 screening analysis for science-based targets

- 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

1,199,000

Emissions calculation methodology

Calculation from scope 3 screening analysis for science-based targets

- Estimated the lifetime carbon emissions of buildings, office space, and other infrastructure, based on projected energy consumption, for the 10 largest construction and infrastructure projects by revenue, plus all category A fit-out projects
- Converted to carbon emissions using 2016 factors, reduction in grid emissions intensity has not been factored in to be consistent, and provide screening comparison with purchased embodied emissions

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

0

Please explain

End of life treatment of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

10,000

Emissions calculation methodology

Calculation from scope 3 screening analysis for science-based targets

- 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

0

Please explain

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

De minimis. less than 1% of emissions

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

No business franchises. Not applicable

Investments

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

98,000

Emissions calculation methodology

Calculation from scope 3 screening analysis for science-based targets

- Emissions from investments in JVs are not captured in corporate scope 1 and 2 emissions
- Based on trading transactions and the Group's share of contracts (assumed that the smaller the share, the lower the influence on emissions).
- Converted to carbon emissions based on Construction & 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

Please explain

Not applicable

Other (downstream)

Evaluation status

Not relevant, explanation provided

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	Cradle-to-practical completion/handover	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 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

0.00000681

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

20,902.27

Metric denominator

unit total revenue

Metric denominator: Unit total

3,071,000,000

Scope 2 figure used

Location-based

% change from previous year

14

Direction of change

Decreased

Reason for change

2018 emissions = 23,566 tCO₂e.

There has been an overall decrease in combined Scope 1 and 2 tCO₂e emissions on the previous year: emissions decreased by 2,664 tCO₂e going down to 20,902 tCO₂e from a 2018 total of 23,566 tCO₂e. This is despite output increasing by 3.3 % in 2019 to £3,071m from £2,972m in 2018. Scope 1+ 2 emissions decreased 2,664 tCO₂e. 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.

There has been an overall 11% decrease in Scope 1 and 2 tCO₂e emissions on the previous year. Scope 1 emissions were down 9.1%. Scope 2 dropped from 3,632 tCO₂e (2018) to 2,779 tCO₂e (2019).

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO ₂ e)	GWP Reference
CO ₂	17,913.99	IPCC Fourth Assessment Report (AR4 - 100 year)
CH ₄	15.1	IPCC Fourth Assessment Report (AR4 - 100 year)
N ₂ O	194.62	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO ₂ e)
United Kingdom of Great Britain and Northern Ireland	18,123.71

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	13,116.404
Affordable Housing	2,637.291
Property Services	2,310.084
Muse	
Investments	
Group	12.893
Fit-out	14.804
Baker Hicks	32.226

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
United Kingdom of Great Britain and Northern Ireland	2,778.56	1,875.76	10,870.75	7,507.34

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	1,531.047	1,531.05
Affordable Housing	902.8	0
Property Services	61.33	61.33
Muse	23.31	23.31
Investments		
Group	9.21	9.21
Fit-out	225.98	225.98
Baker Hicks	24.89	24.89

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	0.42	2018 Scope 1 and 2 (location-based) emissions = 23,566 tCO2e Emissions value = $100 / 23566 * 100 = 0.42\%$ (Additional purchased renewable energy consumption in 2019 = 1450 MWh)
Other emissions reduction activities	2,378	Decreased	10.09	2018 Scope 1 and 2 (location-based) emissions = 23,566 tCO2e Emissions value = $2,378 / 23566 * 100 = 10.09\%$ Emissions decreased by 10.09%, 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				
Acquisitions				
Mergers				
Change in output				
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

C7.9b

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

Location-based

C8. Energy

C8.1

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

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

C8.2

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

Indicate whether your organization 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	Yes

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	64,201.73	64,201.73
Consumption of purchased or acquired electricity		7,507.34	3,363.41	10,870.75
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		7,507.34	67,565.14	75,072.48

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

1,979.61

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

1,979.61

Emission factor

0.00254

Unit

metric tons CO2 per liter

Emissions factor source

Defra UK Greenhouse Gas Reporting Conversion Factors 2019

Comment

Fuels (excluding feedstocks)

Diesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

21,165.32

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

21,165.32

Emission factor

0.00259

Unit

metric tons CO2 per liter

Emissions factor source

Defra UK Greenhouse Gas Reporting Conversion Factors 2019

Comment

Fuels (excluding feedstocks)

Gas Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

38,693.71

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

38,693.71

Emission factor

0.00275

Unit

metric tons CO2 per liter

Emissions factor source

Defra UK Greenhouse Gas Reporting Conversion Factors 2019

Comment

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

1,814.96

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

1,814.96

Emission factor

0.00018

Unit

kg CO2 per kWh

Emissions factor source

Defra UK Greenhouse Gas Reporting Conversion Factors 2019

Comment

Fuels (excluding feedstocks)

Petrol

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

548.13

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

548.13

Emission factor

0.0022

Unit

metric tons CO2 per liter

Emissions factor source

Defra UK Greenhouse Gas Reporting Conversion Factors 2019

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	100	100	100	100
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

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, supported by energy attribute certificates

Low-carbon technology type

Wind

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Europe

MWh consumed accounted for at a zero emission factor

7,507.34

Comment

Energy attribute certificates, Guarantees of Origin

C9. Additional metrics

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	

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

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 is being 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 & infrastructure division, 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.

Development of a Sustainability Strategy for our urban regeneration division, which will provide a structured framework for all our projects to follow and report against. We are aiming to have the strategy completed and rolled out across the business for use on all new projects from the third quarter of 2020. 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:

Plot A3 at New Bailey

The brief for this new office scheme 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 our English Cities Fund partnership we have recently been appointed by Salford Council and the University of Salford on the 250 acre Salford Crescent development. A major part of our bid was our approach to tackling the climate change agenda and using the opportunity this development provides to lead the way in Greater Manchester's drive to carbon neutrality. We are now developing a sustainability strategy alongside our 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 our English Cities Fund partnership, we have developed a Net Zero Carbon brief for new Council offices at St Helens. We are 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 we have 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

(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

 Verification_Report_2019_Morgan_CM_Org.pdf

Page/ section reference

P3

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

 Verification_Report_2019_Morgan_CM_Org.pdf

Page/ section reference

P3

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

 Verification_Report_2019_Morgan_CM_Org.pdf

Page/section reference

P3

Relevant standard

Certified emissions measurement and reduction scheme (CEMARS)

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Waste generated in operations

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

 Verification_Report_2019_Morgan_CM_Org.pdf

Page/section reference

P3

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

 Verification_Report_2019_Morgan_CM_Org.pdf

Page/section reference

P3

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	Change in Scope 1 emissions against a base year (not target related)	CEMARS	57.26% reduction in absolute scope 1 and 2 emissions made relative to the base year. Reductions are based upon a rolling five year average.  1

C4. Targets and performance	Change in Scope 2 emissions against a base year (not target related)	CEMARS	57.26% reduction in absolute scope 1 and 2 emissions made relative to the base year. Reductions are based upon a rolling five year average.  1
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 1Verification_Report_2019_Morgan_CM_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

Application

Group recouped the cost of carbon taxation (formerly from the UK CRC) from its divisions on a proportional basis, thereby making each of the divisions responsible for

their climate change impact and at the same time, raising awareness of carbon.

In 2019, our largest division, C&I, shared the 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 as appropriate to that particular business unit. It should be noted that C&I accounts for 75% of the Group's carbon footprint, as verified by Achilles through the CEMARS scheme.

in 2019, the Group introduced a Social Value Bank, which will apply a new Carbon price to projects to link to the delivery of SBTs, and will be used in the Social Value Banks carbon assessment tool.

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

18.3

Variance of price(s) used

This was the average cost per tonne applied for the CRC compliance period 2018/19.

The price of the allowances for the 2018-19 compliance year was set at £17.20 per tonne of CO₂ for the forecast sale and £18.30 per tonne of CO₂ at the "buy to comply" sale.

Type of internal carbon price

Implicit price

Impact & implication

The Group recouped the cost of carbon taxation from its divisions on a proportional basis, thereby making each of the divisions responsible for their climate change impact and at the same time, raising awareness of carbon.

In 2019, our largest division, Construction and Infrastructure, shared the 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 as appropriate to that particular business unit. It should be noted that Construction and Infrastructure accounts for 75% of the Group's carbon footprint, as verified by Achilles through the CEMARS scheme. The Carbon price has helped generate awareness of the impact of greenhouse gas emissions on climate change, and encourages the implementation of emissions reduction initiatives.

The CRC Energy Efficiency Scheme was phased out by the UK Government at the end of the 2018/19 compliance period.

in 2019, the Group introduced a Social Value Bank, which will apply a new Carbon price to projects to link to the delivery of SBTs, and will be used in the Social Value Banks 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

(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 has committed that 70% of sub-contractors by spend will be requested to disclose their greenhouse gas emissions by the end of 2020 and establish their own science-based target by the end of 2025. 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 ranking, project teams will work directly with the supply chain to ensure documented and attributed solutions are put in place that deliver carbon reductions thereby achieving the relevant standard. Prioritisation and participation invitations have commenced with our strategic supply chain partners, starting with those organisations receiving the greatest spend, to encourage them to declare their scope 1 & 2 carbon emissions. We will then seek to encourage the remainder of our supply chain to do the same based on turnover and spend.

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 as well as those that provide complete information 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 the source 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. This will be completed by the end of 2020. We will also train at least 1,400 sub-contractors by 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.

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. Prioritisation and participation invitations have commenced with our strategic supply chain partners who are 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 to be certified against the BREEAM standard 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 achieving the relevant standard.

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 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 the "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 who the source 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. This will be completed by the end of 2020. We will also train at least 1,400 sub-contractors by 2023 on reducing carbon emissions.

Comment

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.

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

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

% of customers by number

25

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

75

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 (optimized) carbon design option, for all major 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 achieve annual GHG reductions to an order of magnitude that is 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 into place that deliver carbon reductions

thereby achieving the relevant standard. 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, but there is a long way to go and the financial environment is challenging. 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 optimized carbon solutions to our clients and major suppliers.

Impact of engagement, including measures of success

The success of our engagement is measured by winning customer orders 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 measure 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.

C12.3

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

- Direct engagement with policy makers
- Trade associations
- Other

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Climate finance	Support	Morgan Sindall 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 us 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 has been working with the Carbon Trust on the Heathrow project to influence policy and the reduction of carbon generated at the airport through innovation and driving the supply chain to reduce emissions. By the end of 2019 Carbon Trust level 2 had been achieved.	Provide incentives for investment in low-carbon infrastructure.

C12.3b

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

Yes

C12.3c

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

Trade association

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 Groups 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 Groups 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

The Supply Chain Sustainability School, part funded by the Construction Industry Training Board (CITB), It 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, as a matter of fiduciary duty, companies are sending a clear signal to policymakers that businesses are 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.

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 and Total Commitments are set at Group-level with sign off through 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 2018 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 or 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 communications team to produce the following sustainability publications, all of which include information on our strategic objectives, our Total Commitments (including Total Commitment to reducing energy use and carbon emissions):

2019 Responsible Business Report

2019 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 sustainability 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 reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

 2019-MSG-Annual-Report-Final-for-web.pdf

Page/Section reference

P3, P7-8, P10

P27

P55-57

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

Comment


Publication

In voluntary sustainability report

Status

Complete

Attach the document

 2019-Responsible-business-report-Final.pdf

Page/Section reference

P3-4

P12-16

P25-27

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

Comment

C15. Signoff

C-FI

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

C15.1

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

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

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	3,071,000,000

SC0.2

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

Yes

SC0.2a

(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

Emissions in metric tonnes of CO₂e

186

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

Emissions in metric tonnes of CO₂e

29

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

Emissions in metric tonnes of CO₂e

65

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

Emissions in metric tonnes of CO₂e

115

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

Emissions in metric tonnes of CO₂e

18

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

Emissions in metric tonnes of CO₂e

40

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

Emissions in metric tonnes of CO₂e

114

Uncertainty ($\pm\%$)

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

Emissions in metric tonnes of CO₂e

17

Uncertainty ($\pm\%$)

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

Emissions in metric tonnes of CO₂e

40

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
<https://www.morgansindall.com/assets/Uploads/Downloads/2019/93d5577eec/2019-MSG-Annual-Report-Final-for-website.pdf>

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
<p>Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult</p>	<p>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.</p> <p>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</p>

	<p>our 2019 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.</p>
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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?

No

SC3.1

(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?

No

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?

No

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 Customers	Public	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms