

Morgan Lovell

Scope 3 emissions report 2022

Pushing the
conversation
forward



Introduction

Why Scope 3 carbon is the big one for our business

Since turning our attention to Scope 3 emissions, **we've learned just how huge and complex these carbon sources are,** and how much more work we need to do

Like many businesses in recent years, we've been diligently reporting our Scope 1 and 2 emissions. These are published in our parent company's [carbon reports](#) and, for the most part, they're straightforward. But, as we now know, Scope 1 and 2 tell only a fraction of the story.

Since turning our attention to Scope 3 emissions, we've learned just how huge and complex these carbon sources are, and how much more work we need to do. We're ready to publish a report on our Scope 3 emissions, with as much honesty and transparency as this challenging exercise demands.

Our findings are by no means perfect. Nor do they cover every last molecule of carbon dioxide. This, we've discovered, is the nature of the beast. But we're keen to share where our true carbon impacts are, and to use this report to help improve our working practices, along with our supply chain partners. We're confident that, in time, we'll also improve our Scope 3 reporting as our processes generate more accurate results.

First a little context for anyone who's unfamiliar with carbon emissions reporting standards. We've written this report based on the [Greenhouse Gas \(GHG\) Protocol](#), which categorises three areas of carbon output.

Scope 1

These are emissions that a company makes directly, for example by burning fuel for the vehicles and boilers that it owns and runs itself.

Scope 2

These are emissions that a company makes indirectly, such as when the electricity and energy it buys for heating and cooling buildings.

Scope 3

These are all the emissions for which a company is indirectly responsible up and down its value chain. They include emissions related to a company's purchase, transportation and distribution of goods and services, as well as their customers' use of sold products. They also account for business-generated waste, end-of-life product disposal and employee commuting and business travel.

While Scope 1 and 2 emissions are largely within a company's control – both to regulate in the first place and to address down the line – Scope 3 emissions involve so many other parties that it's difficult to measure, manage and map a solution for their impact.

It's come as no surprise, to see in glaring numbers that Scope 3 carbon is the big one for us – bigger than Scope 1 and 2 by a long, long way. The same is true for many businesses – especially those whose carbon footprint, like ours, extends to the extraction, manufacture and processing of raw materials. This report has given us the data to support our belief that, in the design and build sector, Scope 3 is pretty much the whole ball game.

Scope 3 accounts for **99.75%** of our carbon emissions.



Our methodology

How we measured our data (and kept perspective on the minutiae)

We've focused our Scope 3 efforts where we can have the greatest impact on our carbon emissions.

We approached this weighty task using the measurements and calculations described in the table on pages 5 to 8. We took guidance from the [GHG Protocol](#), and sometimes used Google. We encountered difficulties, limitations and errors along the way, and have tried to acknowledge these in writing up our findings.

For example, we had trouble obtaining embodied carbon data for mechanical, electrical and plumbing (MEP) components and found a general lack of environmental product declarations (EPDs). We even had trouble sourcing [TM65s](#), which would have at least given us rough figures.

There's an element of overlap in Scope 1, 2 and 3 reporting. We've focused our Scope 3 efforts on areas that are less likely to be caught by other parts of our value chain. For example, our clients are committed to reducing their Scope 2 emissions, which fall under 'use of sold products' in our Scope 3. We'll continue to work with them, and challenge ourselves on our approach to M&E design, to further drive these down. We're confident about making gains here, but we want to give more attention to issues that are currently under-reported – namely, the embodied carbon of the materials we specify and install –



as this is where we see ourselves able to have the greatest impact.

We've also focused on data that's meaningful and robust. We've made sure our numbers are accurate enough to inform our strategy, without getting too tangled in precise decimal points. The scale of the exercise – and the carbon impact we're talking about – is so great that we'd rather invest our energies in reducing our emissions than sweating over the fractions.

Results

Now for the numbers

Here are the findings for our Scope 3 emissions. On the right you'll see notes in relation to our business and the guidance

we followed to make our calculations.

Note: tCO₂e stands for tonnes (t) of carbon dioxide (CO₂) equivalent (e).

Morgan Lovell 2022
total emissions
63,983 tCO₂e

Morgan Lovell total emissions 2022

63,983 tCO₂e

Scope 1 emissions

0.86 tCO₂e

What: These are based on the fuel we use in our company vehicles and on-site generators, as well as fugitive emissions that leak from our AC systems.

How: To make our calculations, we took the amount of gas that had to be refilled into the system this reporting year, then used government conversion factors (GCFs) to translate them into carbon emissions.

Scope 2 emissions

159 tCO₂e

What: These include emissions from our permanent offices and the energy we use on our sites.

How: We took energy records from our utility bills and actual meter readings, then used GCFs to calculate the associated carbon emissions.

Scope 3 emissions

63,823 tCO₂e

1. Purchased goods and services

26,948 tCO₂e

What: This category includes the embodied carbon of the materials we directly procure, plus those procured by our supply chain for our use, as well as the Scope 1 and 2 emissions for our service providers and subcontractors.

How: In part, we took carbon data for the products we use, as well as Scope 1 and 2 emissions for our service providers, and applied these to work out the associated emissions. We also calculated our spend on the different types of product and service we procure and used an open asset database to convert this into carbon emissions.



| | |
|---|---------------------------------------|
| 2. Capital goods | Not applicable to our business |
| <p>We don't have any capital goods, so this was not reported.</p> | |
| 3. Fuel and energy related activities not included in Scope 1 & 2 | 41 tCO₂e |
| <p>What: These include the emissions associated with transmission and distribution (T&D) losses of purchased electricity, plus well-to-tank (WTT) emissions of purchased electricity and fuel (emissions from the production, processing and delivery of a fuel).</p> <p>How: We took data from our Scope 1 and 2 reports, then used GCFs to convert these into T&D loss and WTT emissions.</p> | |
| 4. Upstream transportation and distribution | 250 tCO₂e |
| <p>What: This covers emissions from the transportation of goods from our tier 1 suppliers.</p> <p>How: We worked with our supply chain to obtain transportation data, including vehicle type, miles travelled and associated carbon emissions.</p> | |
| 5. Waste generated in operations | 22 tCO₂e |
| <p>What: This relates to the type, quantity and disposal method of our waste. It includes any waste arising from our company activities and office waste, as well as wastewater management.</p> <p>How: We used GCFs for different waste streams and disposal methods to calculate the associated carbon emissions.</p> | |



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| 6. Business travel | 109 tCO₂e |
| <p>What: This includes any business-related journeys – by air, rail, taxi and different fuel-type cars.</p> <p>How: We took our expenses data to calculate the total miles travelled for different transport methods, then used GCFs for the different vehicle types to calculate our business travel emissions.</p> | |
| 7. Employee commuting | 218 tCO₂e |
| <p>What: This covers our employees’ day-to-day travel to work.</p> <p>How: We gave our staff a survey to obtain data on how they travel to their permanent location of work and their distances travelled. We then created average assumptions and applied these across the business based on location and role to calculate commuting associated emissions.</p> | |
| 8. Upstream leased assets | Not applicable to our business |
| <p>We don’t have any upstream leased assets, so this was not reported.</p> | |
| 9. Downstream transportation and distribution | Not applicable to our business |
| <p>We don’t have any downstream transportation or distribution, so this was not reported.</p> | |
| 10. Processing of sold products | Not applicable to our business |
| <p>Due to the nature of our business and product, this category was not deemed relevant, so this was not reported.</p> | |



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| 11. Use of sold products | 34,067 tCO₂e |
| <p>What: This category is based on the type of product or service a company produces.</p> <p>How: For our business, we did a calculation based on the project area (in m²) and average office lifespan (10 years) that we delivered in 2022 using the CIBSE benchmark. Moving forward, we'll calculate this using our CarboniCa tool.</p> | |
| 12. End of life treatment of sold products | 2,168 tCO₂e |
| <p>What: Similarly, this category is based on the type of product or service a company provides.</p> <p>How: We calculated ours using our CarboniCa tool and metrics obtained via EPDs and benchmark data.</p> | |
| 13. Downstream leased assets | Not applicable to our business |
| <p>We don't have any downstream leased assets, so this was not reported.</p> | |
| 14. Franchises | Not applicable to our business |
| <p>We don't have any franchises, so this was not reported.</p> | |
| 15. Investments | Not applicable to our business |
| <p>Investments are managed centrally by our parent company, Morgan Sindall Group, so this will be included in their reporting.</p> | |

Conclusions

The unsurprising, the shocking and the scary

- It's all about Scope 3. We knew these emissions would be dominant, but we didn't know the overwhelming scale.
- Scope 3 accounts for 99.75% of our carbon emissions. This is clearly where we need to channel our efforts.
- Fit out has a problem. While there are achievable wins in terms of designing out materials and reducing wastage, the way to significantly lower our carbon impact is largely down to manufacturers producing much lower carbon products and the industry driving much greater reuse.
- We must ensure that we are alert to the lower embodied carbon products that are available, and that our designers understand the carbon impact of their design decisions.
- Some manufacturers are doing good things, but we need the leaders to keep driving down embodied carbon – and the followers to catch up fast.
- We should put time where the carbon is. Turns out it's less about the transportation of products, which has historically had a bad rep. For higher carbon products, the carbon impact of their shipping is a mere speck compared to the embodied carbon of their extraction and production.
- The same goes for commuting and business travel, whose combined carbon impact is around 1% of our Scope 3 emissions. It's not nothing, but it's tiny compared to that of all the products we specify and install through our supply chain, and their use in our design and build projects, which account for 95%. Not to say that we shouldn't work to reduce our carbon footprint caused by travel – we'll absolutely do that – but we'll put more time and resources into areas that have the biggest impact.
- 'Use of sold products' is a big one for us. As an industry, we must continue to reduce operational energy. The good news is we're making headway, thanks to better design (less over-engineering), greater use of efficient technologies, such as low-energy lighting and HVAC systems, and our efforts in driving down the energy use intensity (EUI) of the spaces we produce. But we need to close the performance gap, working with our clients and occupants to ensure our fit outs are being used efficiently in line with their design.
- Reuse, reuse, reuse. We knew this already but, with the evident limitations on reducing embodied carbon in new products, we must overcome barriers to reusing and repurposing products. As a sector, this should be a common goal. Without significant reuse uptake, the sector isn't going to do its bit to support the carbon reductions required by the Paris Climate Change Agreement.

The way forward

We must tackle Scope 3 now – all of us together

We can't wait for the sector to get there organically. Everyone needs to understand that Scope 3 is where the carbon is.

The more of us in the fit out industry who put pressure on reducing our Scope 3 emissions, the better a market we'll create for lower carbon products, lower carbon design and greater reuse.

At some point, we'll reach a critical mass where clients, designers, services engineers and site delivery teams, without even trying particularly hard to reduce their carbon impact, will deliver low carbon spaces due to the low carbon nature of the now-standard methods and products.

But we can't just wait for the sector to get there organically. We need everyone to understand that Scope 3 is where the carbon is – and how every decision we make will impact our carbon output.



Sustainability professionals need to produce better resources and communications that make it easier for people to recognise the carbon impact of their choices and decisions. Some good examples available today include [Perkins + Will Net Zero Now](#), [Hoare Lea's Calculating Whole Life Carbon](#), [tp bennett's Building a Sustainable Future report](#) and [Morgan Lovell's Low Carbon Office Checklist](#).

We strongly encourage both our supply chain partners and our competitors to get their Scope 3 figures out there as soon as possible. Some sectors have developed a transparent culture where competing companies publish their numbers for the benefit of the wider industry. We need to foster this collaborative approach across the fit out industry if we're going to drive carbon right down.

While it's difficult to pinpoint what constitutes net zero ambition, one thing's for certain: we need to start as a sector by admitting we have a carbon problem. We must adopt – and commit to – radical changes in how projects are briefed, designed, procured and delivered. Only then can we make the carbon reductions required so the sector can do its bit in helping the UK and wider global community reach net zero targets.

Morgan Lovell

Authors



James Shears

Environmental and
Sustainability Manager

james.shears@msfitout.com



Dr Joe Croft

Head of Environmental
and Sustainability

joe.croft@msfitout.com



Liz Collett

Environmental and
Sustainability Manager

liz.collett@msfitout.com

London

16 Noel Street
London
W1F 8DA

T 020 7734 4466

Southern

Maxis 1, Western Road
Bracknell Berkshire
RG12 1RT

T 01344 353 800

morganlovell.com