ALLFORD HALL MONAGHAN MORRIS

[CLARASYS]

Allford Hall Monaghan Morris (AHMM)

[*Net Zero Action Plan*]

June 2023

[*WHY?*]

In 2018, The Intergovernmental Panel on Climate Change (IPCC) stated that [**to avoid the worst effects of climate breakdown**], global temperature increase must be capped at 1.5°C.

Answering to the urgency, AHMM signed up to the Science-Based Targets initiative (SBTi) [**Business Ambition for 1.5°C**].

This commitment involves setting near-term and long-term Net Zero targets to be consistent with the agreed level of decarbonisation required to [**keep global temperatures below 1.5°C**].

This report outlines what this level of commitment means for AHMM and sets out an [**action plan to begin the transition towards Net Zero**].

Contents page

1. AHMM Footprint

2. Net Zero Action Plan

Below are quick links to each business units overall footprint breakdown, reduction measures and data maturity:

Facilities	Finance	IT	Support
HR	Model Workshop	Legal	Communications

3. Carbon removal guidance

4. Governance plan

5. Appendices

The purpose of this document is to…

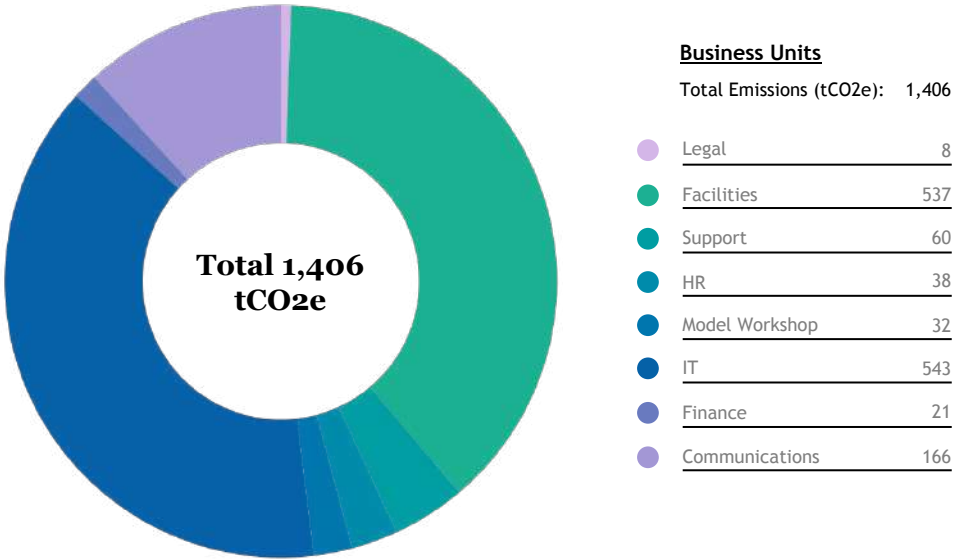
- Provide an overview of AHMM's 2022 carbon footprint
- Outline AHMM's pathway to achieving net zero under the Science-Based Targets Initiative (SBTi)
- Set out actionable, data-driven recommendations across business units to reduce AHMM's emissions
- Offer guidance for purchasing carbon removals
- Put forward an indicative governance plan to ensure AHMM has the right accountability, engagement and reporting to drive progress against SBTi commitments
- Signpost to relevant guidance and tools to support with the implementation of the Net Zero Action Plan

Part 1. AHMM Footprint

AHMM 2022 Carbon Footprint - Overview

Overall Footprint Breakdown

Percentage breakdown of AHMM's carbon footprint for the calendar year 2022 (*tCO2e = tonnes carbon dioxide equivalent*)



Scope 1 - Direct emissions from sources that AHMM own or control
Scope 2 - Emissions from purchased electricity
Scope 3 - Indirect emissions from AHMM's supply chain

Footprint Breakdown by Scope

Percentage breakdown of carbon footprint by scope across all office:

Scope	tCO2e	%
Scope 1	15.2	1%
Scope 2	63.4	5%
Scope 3	1327	94%

AHMM's carbon footprint is equivalent to...

Driving around the world 195 times in an average-sized petrol car

402 return flights between the UK and Hong Kong

The amount of carbon captured by **70,300 trees growing for a whole year**

AHMM 2022 Carbon Footprint - Office Breakdown

77% of all AHMM's carbon footprint is from the **Morelands office** and the **UK** as a whole contributes to **94%** of the total emissions figure.

White Collar Factory

Total Emissions: 133 tCO2e

Facilities	89
Finance	3
IT	21
HR	8
Legal	1
Model Workshop	2
Support	10

Oklahoma

Total Emissions: 66 tCO2e

Communications	3
Facilities	34
Finance	3
IT	23
HR	3
Legal	3
Support	2

Morelands

Total Emissions: 1094 tCO2e

Communications	163
Facilities	345
Finance	11
IT	478
HR	22
Legal	3
Model Workshop	30
Support	40

Queen Charlotte House

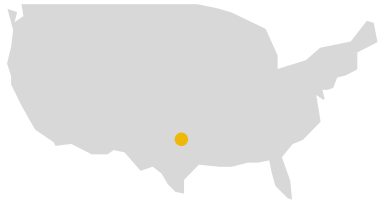
Total Emissions: 95 tCO2e

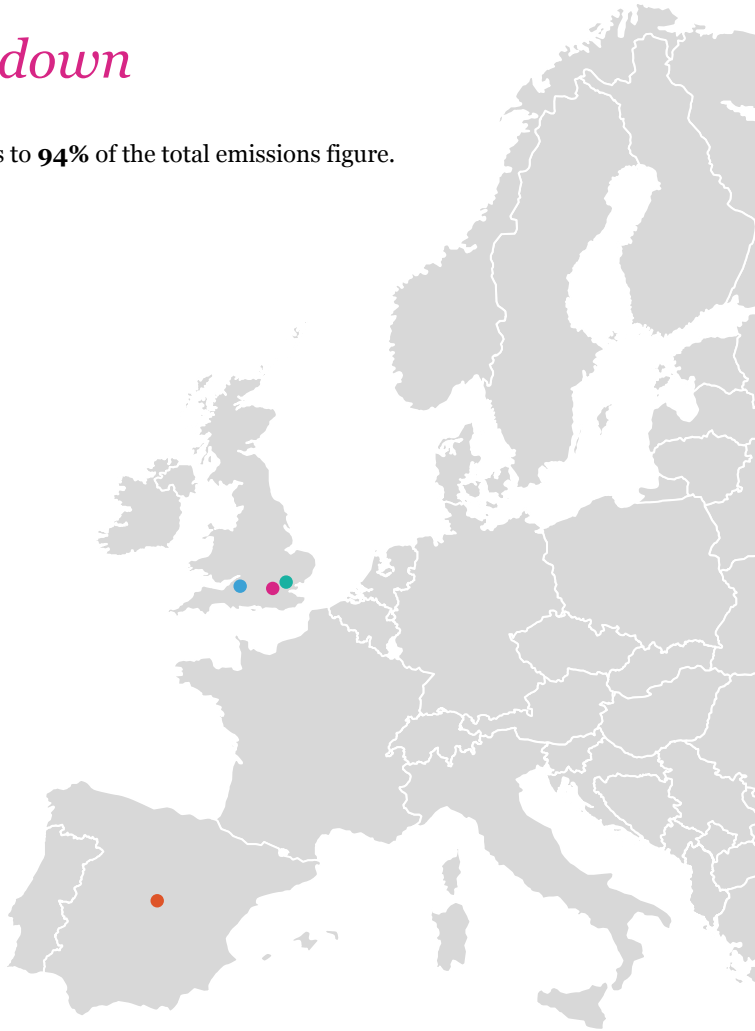
Facilities	65
Finance	2
IT	15
HR	5
Legal	1
Support	7

Madrid

Total Emissions: 19 tCO2e

Facilities	8
Finance	2
IT	7
HR	0.6
Legal	0.4
Support	1



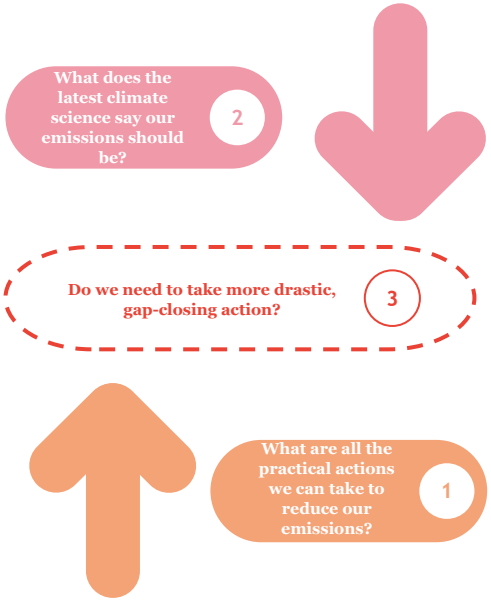


How has this Net Zero Action Plan been developed?

The target setting method outlined in this report covers both a bottom-up (SMART Targets) and a top-down approach (Science-Based Targets). **SMART targets** have been determined after analysing AHMM's footprint and outlining all practical emissions reduction actions across business units. **Science-based targets** have been set using the Science-Based Targets Initiative (SBTi) methodology, which uses AHMM's carbon data and determines what reductions need to be made in the near-term and long-term to reach 'net zero'.

SMART Targets

- SMART stands for specific, measurable, attainable, relevant, and time-bound.
- SMART targets are bottom-up and allow you to set targets based on identified reduction opportunities.
- Allows your company to quickly engage stakeholders and start with the low-hanging fruit measures.
- The reduction trajectory is likely to fall short of what is needed for the 1.5°C pathway.
- See the next page for further information on how to set SMART targets.



Science-Based Targets (SBTs)

- SBTs provide a top-down approach to reaching net zero emissions.
- They are consistent with limiting global warming to 1.5°C and require an external validation by SBTi.
- Demonstrates a high level of ambition
- When committing to an SBT, you may need to implement additional reduction measures on top of the ones used to define your SMART targets.
- Ensures that you are well prepared for policy and regulatory changes in the future.

AHMM's SBTi Net Zero Target Pathway

AHMM is setting both **near-term (2030)** and **net zero (2040)** science-based targets consistent with the ambition to **limit global warming to 1.5C**.

This commits to reducing Scope 1, 2 and 3 emissions by **42% by 2030** and **90% by 2040**.

These targets are shown on the chart to the left, which demonstrates the linear reduction pathway. The actual pathway taken by AHMM will naturally fluctuate above and below this line shown over time.

2022 (Baseline)

Scope 1+2

Current business unit emissions are **78.6 tCO2e**

Scope 3

Current business unit emissions are **1327.4 tCO2e**

2030 Target (Near-Term)

Scope 1+2

Reduce emissions by 42% to **45.6 tCO2e** (5.7 tCO2e per year)

Scope 3

Reduce emissions by 42% to **769.9 tCO2e** (96.2 tCO2e per year)

2040 Target (Net Zero)

Scope 1+2

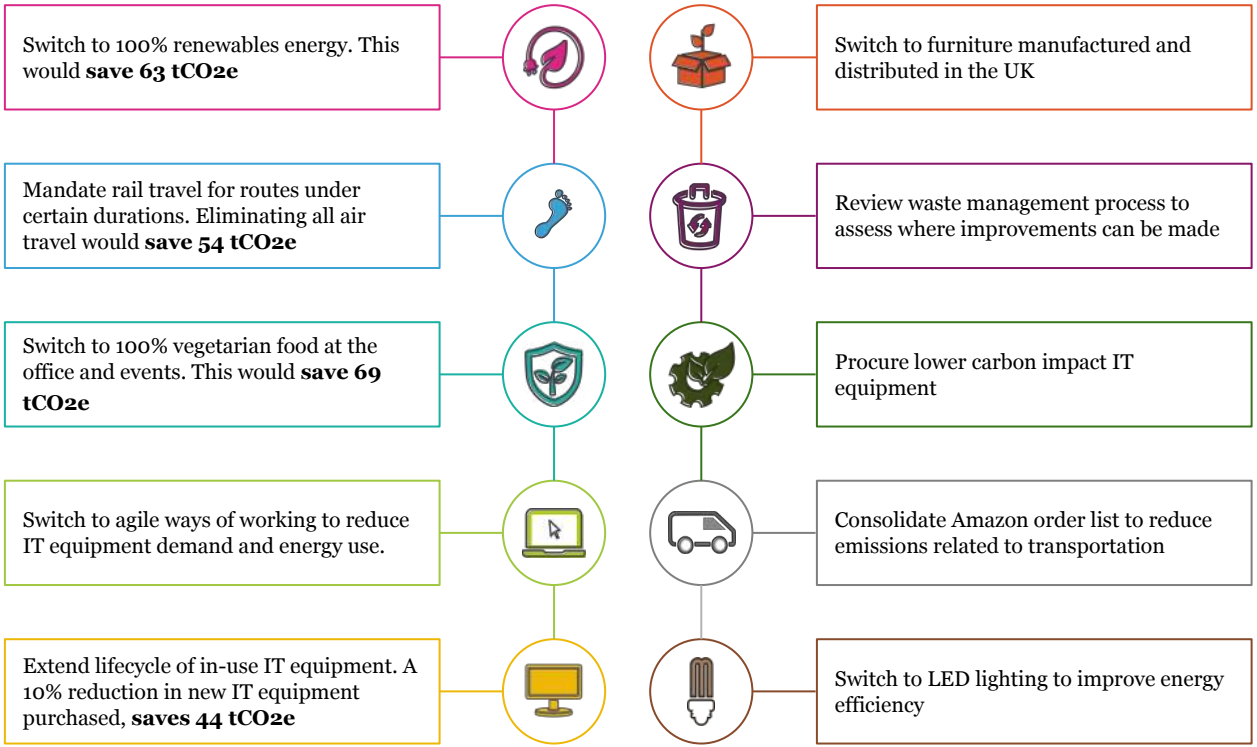
Reduce emissions by 90% to **7.9 tCO2e** (0.8 tCO2e per year)

Scope 3

Reduce emissions by 90% to **132.7 tCO2e** (13.3 tCO2e per year)

10 priority reduction measures

Drawing on a hotspot analysis of AHMM's carbon footprint, focus sessions with the business units and research of industry-best practices, we have identified the following **top 10 reduction measures** prioritised based on **impact** (on footprint) and **effort** (to implement).



The potential savings shown here are high-level estimates based on Climate Essentials. When switching to a different (more accurate) tool, it is likely these numbers will change due to subtle differences in carbon factors and methodology used.

Not all reduction measures have been quantified, as doing so for some would rely on too many assumptions for them to be meaningful.

Part 2. Net Zero Action Plan

Business Units

Legend

Impact is categorised as **Low, Medium,** and **High** based on our assessment of AHMM's carbon footprint hotspots and the potential reductions that can be achieved.

Effort is categorised as **Low** (can be done with limited resources and time), **Medium** (takes more time and resources) and **High** (takes significant time and resources) based on the discussions in the business unit sessions. Further, detailed prioritisation with relevant internal and external stakeholders is recommended to inform reduction measure implementation.

Strategic Emissions Reduction Roadmap

To set an ambitious path towards the SBTi net zero targets, AHMM should focus on delivering the below priorities. Priorities have been separated into 'Direct Impact' reduction measures that when implemented will lead to actual reductions in AHMM's carbon footprint, and 'Enabling Measures', which indirectly enable further footprint reductions to be implemented over time. This roadmap has been developed based on the measures identified based on the 2022 footprint - further measures in the Next and Later phases should be continually identified.

Top Priorities	Now	Next	Later
Direct Impact	**FA1**: Transition electricity to 100% renewable	**FA2**: Review energy efficiency measures across facilities	**FA5**: Adopt data driven maintenance
	FA3: Install LED lighting across all offices	**FA4**: Optimise control & monitoring system	**IT4**: Responsible reconditioning & reselling
	FA7: Review waste management process	**FA6**: Benchmark facilities' energy performance & set targets	**HR3**: Reduce number of compulsory days in the office
	FA8: Switch to UK based furniture	**FA11 & CO2**: Improve proportion of sustainable food/drink	**MW3**: Donate materials from model workshop
	FA9: Consolidate Amazon orders	**FI2**: Engage financial services regarding net zero	**CO4**: Engage with evets suppliers around net zero
	FA10 & CO1: Engage catering suppliers to offer 100% vegetarian	**MW2**: Move towards fully circular model workshops	
	IT1: Build carbon reductions into move to agile working model	**CO3**: Mandate rail travel to AHMM events	
	IT2: Continue to review lifecycle of IT equipment		
	IT3: Evaluate potential to procure lower carbon IT equipment		
	SU2: Eliminate all flights that can be replaced by rail travel		
	MW1: Procure lower carbon materials		
Enabling Measures	**FI1**: Develop sustainable procurement policy	**FI4**: Integrate net zero into strategic planning	**FI3**: Set internal price of carbon in budget decisions
	SU1: Incorporate a sustainable business travel policy	**SU4**: Encourage sustainable travel via offsetting platforms	Develop and implement a net zero carbon removal strategy
	SU3: Embed travel policy into centralised booking system / process	**HR1**: Incentivise more sustainable employee commuting	
	HR2: Equip staff with the tools to track personal carbon footprint	**LE1**: Embed AHMM's sustainability goals when procuring services	
	MW4: Engage & educate AHMM and MW staff about sustainability	**LE2**: Advocate for net zero in corporate governance	

Facilities *- Overview*

CO2

The **Facilities** business unit accounts for **38%** of AHMM's Total Carbon Footprint, at **537 tCO2e**

45%

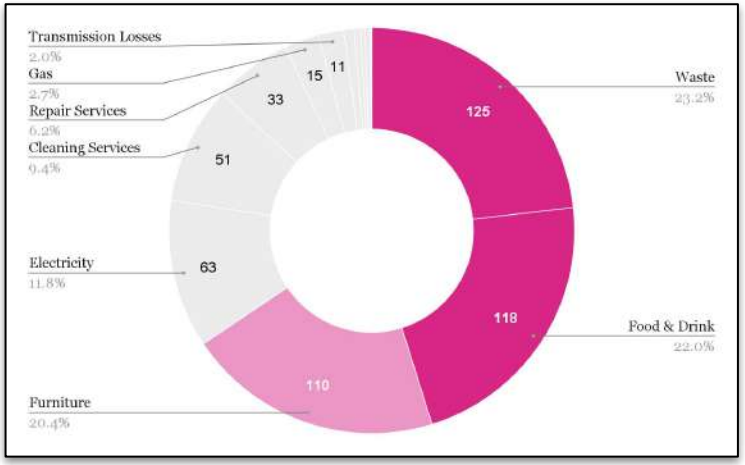
Over **45%** of Facilities' Carbon Footprint is from **Waste** and **Food & Drink** combined, whilst just above 20% is from Furniture

Morelands accounts for **65%** of Facilities' total Carbon Footprint

WCF - 16% | QCH - 12% | OKC - 5% | Madrid - 2%

Footprint Breakdown

Percentage breakdown of the Facilities carbon footprint - all offices (units = tCO2e)



2022 (Baseline)

Scope 1+2
Current business unit emissions are **78.6 tCO2e**

Scope 3
Current business unit emissions are **458.8 tCO2e**

2030 Target (Near-Term)

Scope 1+2
Reduce emissions by 42% to **45.6 tCO2e** (5.7 tCO2e per year)

Scope 3
Reduce emissions by 42% to **266.1 tCO2e** (33.3 tCO2e per year)

2040 Target (Net Zero)

Scope 1+2
Reduce emissions by 90% to **7.9 tCO2e** (0.8 tCO2e per year)

Scope 3
Reduce emissions by 90% to **45.9 tCO2e** (4.6 tCO2e per year)

Facilities *- Reduction Opportunities*

Click here for guidance and tools

Reduction Measure	How the Measure Reduces Carbon Emissions	Impact	Effort	Potential next steps
FA1: Transition electricity supply to 100% renewable as soon as possible	Choosing service providers with lower emissions will reduce the Scope 2 emissions of AHMM. Switching to 100% renewable electricity suppliers who can provide Energy Attribute Certificates (EACs), such as Renewable Energy Guarantees of Origin (REGO) in the UK, can be used to fully decarbonise your electricity supply under the market-based approach. By doing so and increasing demand for renewable energy, it will lead to greater grid coverage of renewable energy and a reduction in the carbon intensity of utilities overall. This can effectively reduce all AHMM Scope 2 emissions to zero.	High	Low	Review renewables % mix of current suppliers by requesting EACs. Identify potential new suppliers.
FA2: Continually review energy efficiency measures across facilities (via landlord consultation)	This creates the space necessary to discuss large energy saving implementations that will reduce AHMMs energy consumption, including: • Improvements in windows and insulation to minimise heat loss and thus reduce amount of office heating • Upgrading plant equipment (when approaching end of life), such as switching to all-electric systems to decarbonise energy consumption (coupled with renewable supply) • Optimise on-site electricity generation, e.g. by increasing solar panels capacity with excess energy sold back to the grid • Switching to LED lighting and movement-sensor lighting throughout offices • Installing local external shading, e.g. reflective window film that lets light in but reflects heat out in summer (reversible for winter)	Med	High	Raise ambition and any desired energy efficiency measures with landlords (e.g. Morelands Green Forum meeting) to gauge the feasibility of each measure and generate buy-in from fellow tenants.
FA3: LED lighting	Implement LED lighting throughout all offices when current lighting requires replacing	Low	Low	Identify possible LED suppliers
FA4: Optimise / update control and monitoring systems	Improving the ability to monitor building performance data would enable AHMM to identify energy consumption patterns and hotspots that can be targeted for reduction measures. Controls can be configured / automated and employee behaviour change initiatives can be tailored and implemented to reduce consumption. E.g. linking meeting room sensors with BMS to detect changes in lighting / temperature / CO2 / window operation and automating controls to respond.	Med	High	Review controls and monitoring strategy to identify improvement opportunities
FA5: Adopt data-driven maintenance	Implementing equipment, systems and data to create a predictive or condition-based maintenance strategy that can automatically raise issues based on demands or statutory requirements. This can enable better management of assets, whilst anticipating items that need repairing / replacing - leading to less unneeded replacement of appliances, reducing emissions associated with buying new. Monitoring will also provide usage insights that can be communicated to staff to drive employee behaviour change. • E.g. installing M2G Load Monitoring ALM optimises boiler heating efficiency by intelligently identifies instances of boiler dry cycling and immediately inhibits the boiler firing up unnecessarily	Low	Med	Install and monitor performance of M2G. Consider roll-out to other offices if effective / feasible.
FA6: Benchmark facilities' energy performance and set targets	This can help to provide more accurate, granular performance data for energy efficiency measures to test initiatives and drive reductions. (e.g. UKGBC targets)	Low	Low	Calculate baseline energy efficiency across offices following UKGBC guidance.

Facilities *- Reduction Opportunities*

Click here for guidance and tools

Reduction Measure	How the Measure Reduces Carbon Emissions	Impact	Effort	Next Steps
FA7: Review Waste Management Process	Undertaking an audit of waste management processes at AHMM facilities should identify waste management improvement opportunities, along with associated cost savings. The audit may include mapping waste streams, i.e. the type, quantity, source, disposal method and destination of waste generated. An audit may also cover the effectiveness of waste management strategies, for example, storage and handling equipment and arrangements, service providers and the way in which waste data is collected and reported. This should allow you to collect and report on emissions from waste more accurately.	Med	Med	Undertake waste audits at key facilities. Raise any waste management issues at landlord-tenant forums to test feasibility of improvements, get fellow tenant buy-in and build an action plan.
FA8: Switch to UK-based furniture - procurement recommendation	All office furniture is currently imported from Seville - procuring from local suppliers will reduce carbon emissions created through shipping.	Med	Med	Identify local suppliers in line with current furniture aesthetic
FA9: Consolidate Amazon orders	By grouping company orders, AHMM would prevent multiple delivery journeys to the same location, reducing carbon emissions. When ordering, consider environmentally friendly shipping options (e.g. using Pedal Me). • Bi-monthly, bulk orders initially, and over time consider moving to monthly or longer periods when ordering • Limit the number of suppliers to aggregate volumes • Define a minimum amount for an order • Aggregate orders among services/departments	Low	Low	Establish items that can be ordered in bulk, define minimum order quantity and look to introduce set ordering schedules
FA10: Engage existing catering suppliers to change the menu and provide exciting meat-free options - procurement recommendation	Switching to 100% vegetarian catering options will greatly reduce emissions levels. For example, switching to all vegetarian for the Christmas Party would reduce emissions from 82 tCO2e to 56 tCO2e (modelled using Climate Essentials tool).	High	Med	Engage with current suppliers to understand cost and feasibility. Communicate options with staff in context of AHMM net zero targets
FA11: Improve proportion of sustainably sourced food and drink options - procurement recommendation	It is also possible to reduce emissions by purchasing low-carbon food products, such as those that are locally-sourced, use low impact packaging and are produced by suppliers with strong net zero credentials. This will reduce scope 3 emissions associated with transport of purchased goods and waste generation.	Low	Med	Map key food and beverage suppliers (e.g. by cost), review carbon credentials and identify possible lower carbon suppliers where available

Facilities *- Data Maturity Opportunities*

Activity	Current method	Recommended method
Gas Consumption (Morelands only)	Consumption data (kWh) - data for Q1 was unavailable	Consumption data (kWh) for a complete calendar year
Refrigeration Use	Assumptions based on quantity and type of units - available for Morelands / WCF / QCH, extrapolated for OKC / Madrid	Record / request actual quantity (kg) and type of refrigerants used to 'top-up' any units containing refrigerants during the reporting year
Electricity Consumption	Consumption data (kWh) for Morelands (Q1 unavailable) / WCF, extrapolated WCF data for remaining offices	Consumption data (kWh) from on-site meter readings or utility bills for each office
Water Consumption	Consumption data (m3) for WCF only, extrapolated for all other offices	Consumption data (m3) from on-site meter readings or utility bills for each office
Cleaning Services	Spend data for Morelands, WCF & QCH offices, extrapolated for remaining offices	Spend data broken down for each office (where possible)
Warehousing for Storage Services	Spend data for Morelands & WCF (combined), extrapolated for UK offices	Spend data broken down for each office (where possible)
Office Waste	Estimated Total Waste by office occupancy via Climate Essentials calculation	Tonnes of waste generated by each office, broken down by waste type (general, glass, metal, paper, plastic, food, etc.) and waste treatment type (e.g. landfill, recycling, composting, incineration, etc.)
Upstream Transport & Distribution	Distance Travelled of Morelands, WCF & QCH offices combined, extrapolated	Mode, Vehicle Class & Distance Travelled broken down for each office
Repair Services	Total spend per office	Total spend per office
Furniture	Total Spend of Morelands, WCF & QCH offices combined, extrapolated	Inventory of new furniture purchases for each office, including item type and quantities
Electronics	No data collected due to lack of availability	Inventory of new electronic item purchases (excluding IT) for each office, including item type and quantities
Postal / Courier Services	Total Spend of Morelands & WCF offices combined, extrapolated	Mode, Vehicle Class & Distance Travelled broken down for each office **OR** Total spend per office
Stationary	Total spend per office	Total spend per office
Food & Drink	Total spend per office	Total spend per office for low quantity items Actual quantities (kg / tonnes) for any high quantity, regular purchases (e.g. milk, cereals, tea, coffee)

Finance *- Overview*

CO2

The **Finance** business unit accounts for **1%** of AHMM's Total Carbon Footprint, at **21 tCO2e**

54%

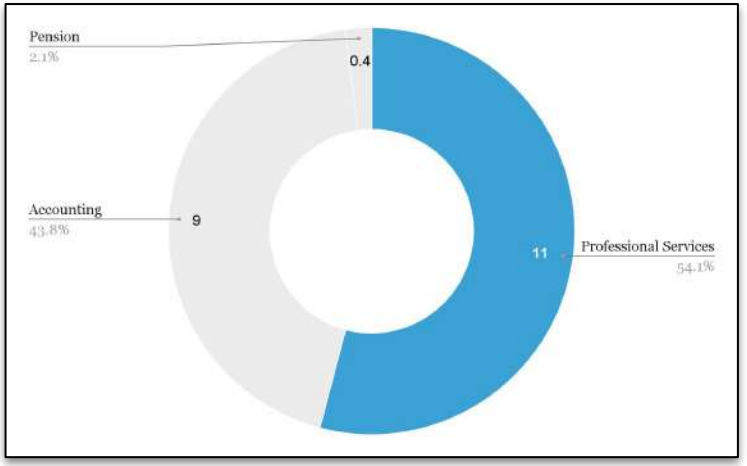
Over **50%** of Finance's Carbon Footprint is from **Professional Services**, whilst around below 44% is from Accounting

Morelands accounts for **52%** of Finance's total Carbon Footprint

WCF - 14% | QCH - 10% | OKC - 14% | Madrid - 10%

Footprint Breakdown

Percentage breakdown of the Finance carbon footprint - all office (units = tCO2e)



2022 (Baseline)

Scope 3

Current business unit emissions are **20.9 tCO2e**

2030 Target (Near-Term)

Scope 3

Reduce emissions by 42% to **12.1 tCO2e** (1.5 per year)

2040 Target (Net Zero)

Scope 3

Reduce emissions by 90% to **2.1 tCO2e** (0.2 per year)

Finance *- Reduction Opportunities*

Click here for guidance and tools

Reduction Measure	How the Measure Reduces Carbon Emissions	Impact	Effort	Next Steps
FI1: Develop sustainable procurement policy - procurement recommendation	Develop a sustainable procurement policy with a specific section for each business unit to ensure the longevity of products until their end of life, and the procurement of products with lower carbon footprints. • It is important to curate the specific policy sections with input from each business unit to ensure the policy is feasible and visible when procuring decisions are made • When an individual is procuring a good or service, it would be beneficial to include a 'consideration' barrier, in which the individual cannot complete the order unless they have commented on how they've considered the procurement policy before making an order e.g. they're confident making a purchase because they opted for locally sourced rather than overseas • Ensure sustainable procurement policy is uploaded to AHMM Procurement Portal, and that the procurement policy is referred to in the AHMM Purchasing Policy	Enabling Measure	Med	Utilise the Procurement Policy template (Appendix B) and each business units 'procurement related' recommendations to create realistic policy for each business unit (with their input)
FI2: Engage pension, professional contractors and accounting, bookkeeping and auditing service providers on Net Zero	AHMM could include net zero in the agenda of annual meetings with their pension providers, with aims of discussing how the providers are working towards net zero, and to provide any data regarding this. If not already in place, similar meetings could be arranged annually with all professional services and accounting providers that AHMM work with. When procuring a new service, AHMM could make it a mandatory requirement for the service provider to submit their carbon reporting data and look to only work with new providers that have a carbon reporting mechanism in place. Also consider if a service provider works with carbon-intensive industries such as oil & gas.	Low	Med	Contact service providers to make them aware of AHMM's drive to net zero, and thus the reason for wanting to discuss their net zero with them
FI3: Set an internal carbon price to factor in carbon in budget decisions	Consider setting an internal price of carbon, which is a useful tool to translate metric tonnes of carbon into monetary value, making it easier to factor in carbon in decision making (especially in the annual budget setting process). Finance team to take ownership of running an annual review in which each business unit reports on their own carbon reductions and carbon price of activities undertaken, allowing for a comparison between carbon targets and actuals. • Craig Robertson to hold bi-annual meeting with each business unit to discuss the internal price or carbon, carbon reductions and data capture methods. Potentially impose an internal carbon tax based on the carbon price to invest in carbon removal projects	Enabling Measure	Med	To be discussed with each business unit on a bi-anunal basis - communicate this with each business unit to allow for preparation
FI4: Integrate Net Zero into strategic planning	Integrate climate risks and net zero into the strategic planning process by including it as part of the agenda of Strategic Planning meetings, also discussing clear actions and timelines. This will ensure future-proof investment decisions by considering all forms of capital that will impact that business case. • Nigel Harris to take the lead on such discussions Consider the potential impact of AHMM's investment funds through a sustainability and carbon reduction lens - opting for a diverse sustainable fund will align the business on the importance of sustainability as a company wide policy going forwards, which can be further enhanced by offering employees the option to invest in a green pension fund also.	Enabling Measure	Med	Prepare for net zero segment of the Strategic Planning Meetings, illustrating the importance of net zero in wider AHMM decision making, ensuring it's embedded in culture and budget decisions

Finance *- Data Maturity Opportunities*

Activity	Current method	Recommended method
Accounting, Bookkeeping and Auditing services	Total spend per office	To improve data quality, the Finance team can request the Scope 1+2 emissions total from financial service providers, alongside AHMM's % of their total revenue, to calculate the proportion of these emissions attributed to AHMM. This effectively calculated the amount of emissions that each supplier has 'spent' to provide AHMM with its services. This can then be captured in AHMM's carbon calculator tool (note: not currently possible in ClimateEssentials). However, given the low impact of professional services on the overall footprint (~1%), it would not be a high priority area.
Pension	Total spend per office	
Professional Contractors	Total spend per office	

IT - Overview

CO2

The **IT** business unit accounts for **39%** of AHMM's Total Carbon Footprint, at **543 tCO2e**

80%

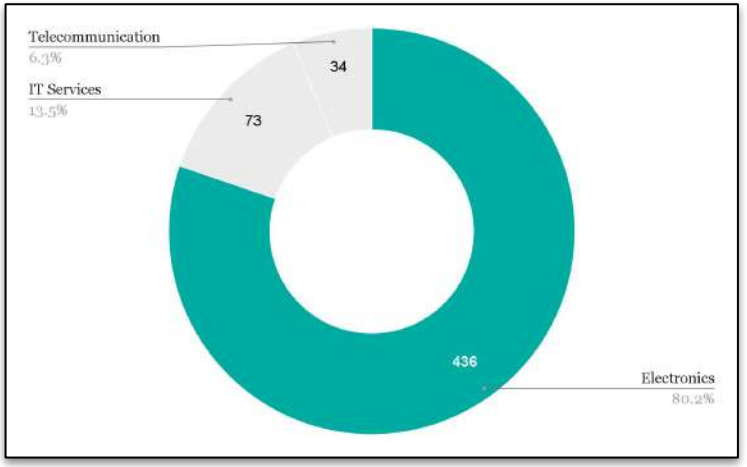
Over **80%** of IT's Carbon Footprint is from **Electronics**, whilst just below 20% is from IT Services & Telecommunication

Morelands accounts for **88%** of IT's total Carbon Footprint

WCF - 4% | QCH - 3% | OKC - 4% | Madrid - 1%

Footprint Breakdown

Percentage breakdown of the IT carbon footprint - all offices (units = tCO2e)



2022 (Baseline)

Scope 3

Current business unit emissions are **543 tCO2e**

2030 Target (Near-Term)

Scope 3

Reduce emissions by 42% to **315 tCO2e** (39.4 per year)

2040 Target (Net Zero)

Scope 3

Reduce emissions by 90% to **54.3 tCO2e** (5.4 per year)

IT - Reduction Opportunities

Click here for guidance and tools

Reduction Measure	How the Measure Reduces Carbon Emissions	Impact	Effort	Next Steps
IT1: Build carbon reductions in move to more agile working model	Whilst some AHMM staff require on-site desktops to be running 24/7, there is an opportunity to reduce energy consumption related to onsite servers and desktops, particularly for support staff, who often require lower spec equipment than architects. Suggestions include: **Move to cloud based servers -** Cloud-based servers use less electricity than on-site servers. Support staff working from home do not need to use remote desktop logins, thereby reducing energy consumption and AHMM can measure the energy consumption of on-site servers to identify savings from switching to the cloud. Moreover, AHMM could consider running a trial in which a small proportion of architects test the effectiveness of a cloud based server more suited to architecture and the demand for high quality graphics cards (such as VMware). **Transfer support staff to laptops -** Minimising the amount of remote logins to desktop computers will decrease the number of times two devices are used simultaneously and reduce the need to keep desktops on when they might not be in use, decreasing energy consumption.	High	High	Look to transfer all support staff (where they do not require high performance desktops) to laptops and provide them with a cloud based server to remove the need for remote login to desktops - this can be used as a wider AHMM trial to assess the feasibility of transferring more staff to laptops with no remote login.
IT2: Continue to review lifecycle of IT equipment	Increase threshold of replacing equipment and utilise AHMM's wider aim towards net zero to inform decision making (e.g. only upgrading staff mobiles when they have reached end of life) Better monitoring and tracking of equipment life cycles alongside staff specification requirements will allow for less new purchases of equipment and should lead to a waterfall effect, in which staff that require higher specification equipment can 'pass down' their equipment to the staff requiring the next level of specification, minimising need for replacement.	Med	Low	Consider feasibility of increasing threshold at which equipment is upgraded at 'end-of-life'.
IT3: Evaluate potential to procure lower carbon IT equipment - procurement recommendation	If new equipment is needed, source refurbished where the specification of device will not be adversely impacted by being a refurbished model (lower emissions due to less reused parts, reducing energy consumption needed to manufacture new ones). Alternatively, aim for low carbon models (e.g. Lenovo TCO Certified laptops) from responsible manufacturers. Create staff personas based on required equipment specifications of specific roles, and incorporate a sustainability lens, from which staff are asked whether they will opt for a lower carbon, more sustainable model (e.g. refurbished)	Med	Med	Create staff personas to ensure correct specification allocation and offer sustainable equipment models as an option when upgrading. Identify refurbished equipment suppliers.
IT4: Responsible Reconditioning and Reselling	AHMM could improve their IT management strategy to ensure governance of their equipments end life, minimising waste emissions by preventing IT equipment becoming electronic waste by not being reconditioned or resold properly. Consider offering equipment that would otherwise have been recycled to institutions such as schools / universities etc.	Low	Med	Engage with schemes that support with equipment recycling (e.g. WeeeCharity).

IT *- Data Maturity Opportunities*

Activity	Current method	Subactivity	Recommended method	Next steps
IT equipment & machinery	Spend combined by office	Desktops and laptops	No. of Units by office	1. Set up the process to collect data on telecommunications and computer programming and IT services for each office 2. Identify if data for recommended method and/or ideal method is available (through invoice, procurement logs, google analytics) 3. Look at tools that allow for inputting recommended method of data (based on no. of units) 4. Set up data governance process for collecting and processing more detailed IT data
		Computer servers	No. of Units by office	
		Storage devices	No. of Units by office	
		Printers	No. of Units by office	
		Monitors	No. of Units by office	
		Keyboards	No. of Units by office	
Telecommunications	Spend combined all offices	Wireless / wired phone	Spend specific by office	To improve data quality, the Scope 1+2 emissions total from telecoms service providers, alongside AHMM's % of their total revenue, to calculate the proportion of these emissions attributed to AHMM. This effectively calculated the amount of emissions that each supplier has 'spent' to provide AHMM with its services. This can then be captured in AHMM's carbon calculator tool (note: not currently possible in ClimateEssentials). However, given the low impact of these services on the overall footprint, it would not be a high priority area.
		Internet	Spend specific by office	
		Website usage	No. of visits	Request data on dwell time and traffic on your website using Google Analytics (or any provider you use that can provide this information).
Computer programming and IT services	Spend combined all offices	Consulting services	Spend specific by office	Using spend is the most relevant here given the relatively low impact for procuring services
		Cloud services	Supplier-specific by office	Cloud service providers can provide the specific amount of carbon emissions associated with usage

Support - *Overview*

CO2

The **Support** business unit accounts for **4%** of AHMM's Total Carbon Footprint, at **60 tCO2e**

82%

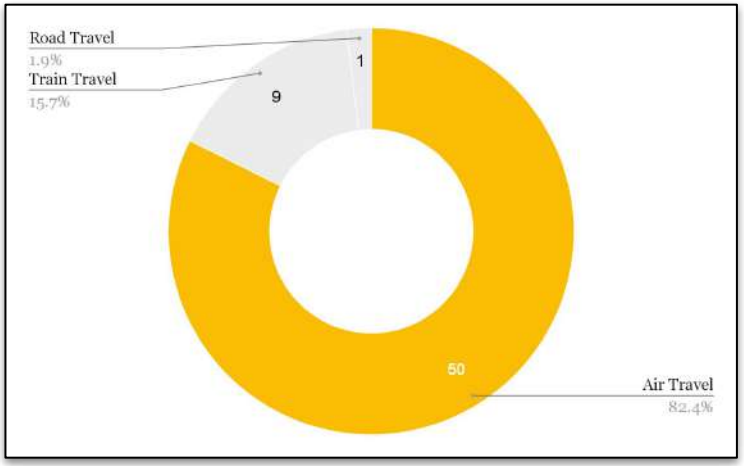
Over **80%** of Support's Carbon Footprint is from **Air Travel**, whilst just below 20% is from Train & Road Travel

Morelands accounts for **66%** of Support's total Carbon Footprint

WCF - 17% | QCH - 12% | OKC - 3% | Madrid - 2%

Footprint Breakdown

Percentage breakdown of the Support carbon footprint - all offices (units = tCO2e)



2022 (Baseline)

Scope 3

Current business unit emissions are **60.3 tCO2e**

2030 Target (Near-Term)

Scope 3

Reduce emissions by 42% to **35 tCO2e** (4.4 per year)

2040 Target (Net Zero)

Scope 3

Reduce emissions by 90% to **6 tCO2e** (0.6 per year)

Support *- Reduction Opportunities*

Click here for guidance and tools

Reduction Measure	How the Measure Reduces Carbon Emissions	Impact	Effort	Next Steps

SU1: Incorporate a sustainable business travel policy	Implementing a policy that aims to promote sustainable travel in a hierarchical order of least emissions first ensures only necessary, and least polluting travel is undertaken
	• Promote digital meeting technologies to avoid unnecessary travel whenever possible
	• If travel is necessary, follow a hierarchical approach opting for travel that emits the least as a priority:
	  ○ Walking and cycling (AHMM could reconsider opting into cycle schemes to encourage cycling e.g. santander bikes)
	  ○ Public and shared transport
	  ○ Electric vehicles and car sharing
	  ○ Mandate rail travel for routes under certain durations (e.g. 8 hours) or only book economy due to lower associated carbon emissions (business class 2-3 times more carbon intensive, with first class up to 6 times)
	• Build sustainable travel considerations into contracts with clients and suppliers that are likely to involve high levels of travel to set expectations and agree project-specific reduction targets
	• Consider future impact of new international projects on reduction potential / targets
	• Also assess employee support necessary to enable this (e.g. additional holiday days for opting for slow travel over flights, in line with commitment through schemes such as Climate Perks)
		Enabling Measure	Med	Utilise the Sustainable Travel Policy template examples (tools and guidance repository) to curate an updated policy with an emphasis on embedding carbon impact considerations in all travel booking.

SU2: Eliminate all flights that can be replaced by rail travel	Mandate rail travel for routes under certain durations (set by Support team) to minimise the need for air travel.	High	Med	Outline this specific aim in the travel policy and communicate within AHMM.
SU3: Embed travel policy into a centralised booking system and process	Aim to book as much travel as possible through the centralised booking platform currently used (Sunways Travel) to ensure all business journeys are considered and booked with the sustainable travel policy in mind. Booking all business travel through a centralised booking platform will allow for more accurate and simpler tracking of travel related carbon emissions, and should increase the amount of data that can be tracked to include hotel stays.	Enabling Measure	Med	Review the proportion of journeys booked through the Sunways and aim to increase this figure.
SU4: Encourage more sustainable travel choices by utilising existing platforms	Consider booking rail travel through a sustainable booking platform (e.g. Train Hugger - for every train journey booked, they plant a tree in the UK), or for hotel travels you can direct staff to sites that provide transparent information on emissions (e.g. Staze).	Enabling Measure	Med	Investigate feasibility of embedding sustainable booking platforms in current processes

Support *- Data Maturity Opportunities*

Activity	Current method	Recommended method
Business Travel: Air	Total Km travelled by all offices combined, extrapolated	Total Km travelled by office (excl. extrapolation) + Track emissions associated with seat gradings
Business Travel: Road	Total Km travelled of Morelands & WCF offices combined, extrapolated	Total Km travelled by office (excl. extrapolation) + Track emissions associated with transport type
Business Travel: Rail	Total Km travelled by all offices combined, extrapolated	Total Km travelled by office (excl. extrapolation)
Business Travel: Underground	No data collected	Total Km travelled by office
Business Travel: Bus	No data collected	Total Km travelled by office
Hotel stays	No data collected	Carbon factor related to specific hotel and country it resides in
Overarching Data Collection Recommendation	To collect business travel data for Bus and Underground travel, creating an additional expense code for these types of travel could be considered as this will allow for more accurate tracking of these journey types. This could be accompanied by communications to inform all staff about the new codes and how they should be used when booking travel other than train or plane journeys that are currently captured in the centralised booking platform.	

HR - Overview

CO2

The **HR** business unit accounts for **3%** of AHMM's Total Carbon Footprint, at **38 tCO2e**

49%

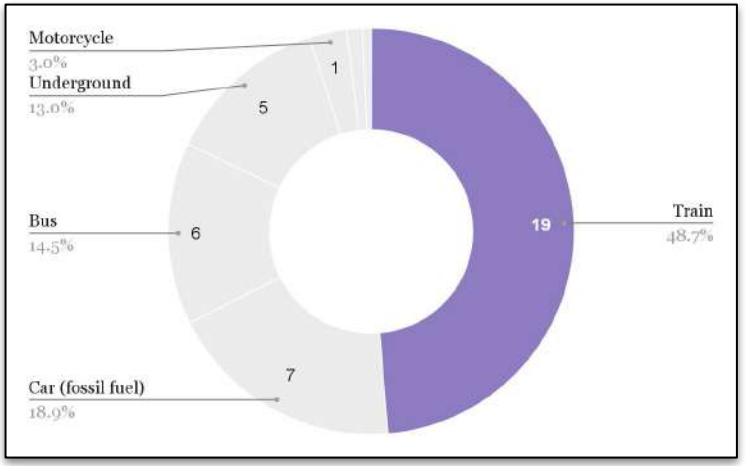
Around **49%** of HR's Carbon Footprint is from **Travel by Train**, whilst just above 30% is from Road Travel (including bus and car)

Morelands accounts for **57%** of HR's total Carbon Footprint

WCF - 20% | QCH - 13% | OKC - 8% | Madrid - 2%

Footprint Breakdown

Percentage breakdown of the HR carbon footprint - all offices (units = tCO2e)



2022 (Baseline)

Scope 3

Current business unit emissions are **38.3 tCO2e**

2030 Target (Near-Term)

Scope 3

Reduce emissions by 42% to **22.2 tCO2e** (2.8 per year)

2040 Target (Net Zero)

Scope 3

Reduce emissions by 90% to **3.8 tCO2e** (0.4 per year)

HR *- Reduction Opportunities*

Click here for guidance and tools

Reduction Measure	How the Measure Reduces Carbon Emissions	Impact	Effort	Next Steps
HR1: Incentivise more sustainable employee commuting	Providing staff with AHMM endorsed commuting options will increase the likelihood of more sustainable travel being taken up. • Raise awareness of AHMM's cycle to work scheme to encourage greater uptake • Build AHMM's train season ticket loan into their sustainable travel policy to disincentivize road travel. • When road travel is required, look to suggest car sharing where possible to reduce emissions per person • Consider signing up to an EV car scheme such as 'Octopus Electric Vehicles' - a salary sacrifice scheme in which employees can save up to 40% on a new EV with no upfront cost ○ Caveat - using an older, more polluting car until its end of life is still more sustainable than shifting all people to new EVs, therefore a specific criteria would need to be in place to assess staff eligibility to the scheme e.g. those who didn't own a car before joining the scheme	Enabling Measure	Med	Use internal comms channels (e.g. the EO Bulletin) to increase awareness of AHMM's sustainable commuting schemes and track new uptake.

HR2: Equip staff with the ability and tools needed to reduce their personal carbon footprint	• Set employees up with online tools and guidance that enable them to track their personal footprint such as Giki Zero, which also suggests methods staff can put into practice themselves to reduce their overall footprint. Gamification can also be introduced to further incentivise employees to reduce their footprint.
	• Giki Zero Costing:
	  ○ For Individuals - Free
	  ○ For Companies - Giki Zero Pro is charged at 30p to 80p per person, per month depending on number of people in the organisation
		Enabling Measure	Low	Introduce staff to Giki Zero (free version initially) and illustrate to them the ease and importance of tracking their own carbon footprints.

HR3: Reduce number of compulsory days in the office	Reducing compulsory days in the office would reduce travel emissions created by staff travelling to work. Further benefit could be if certain groups of staff take set days to work from home, entire office floors could be 'closed' to reduce energy usage. Running a staff survey to assess the cultural impact this may have would be beneficial to run before implementing such a change.	Low	High	Raise this point during Strategic Planning meetings or in Steering Committee meetings to gauge buy-in / feasibility

HR *- Data Maturity Opportunities*

Activity	Current method	Recommended method
Employee Commute (Primary)	Weekly average of miles travelled by transport type by office	Continue with employee commuting survey in short-term. Investigate potential to use automated tracking platforms (e.g. Tripshift).
Employee Commute (Secondary)	Weekly average of miles travelled by transport type by office	
Working From Home	Total no. of days WFH on an average week (No. of employees * Days WFH per week) * 8 hours (Working day)	Continue with employee commuting survey in short-term. Investigate potential to use data from employee engagement platforms (e.g. Giki Zero)
Overarching Data Collection Recommendation	Currently, about 70% of staff fill the survey relating to commuting and working from home. To increase the quality of data, AHMM could ask more qualitative questions seeking to better understand employees attitudes / decision making when selecting a specific commute transport type - this would enable AHMM to help employees move to more sustainable forms of travel (e.g. if people didn't want to cycle due to lack of bike access, AHMM could consider ways to improve access)	

Model Workshop *- Overview*

CO2

The **Model Workshop** business unit accounts for **2%** of AHMM's Total Carbon Footprint, at **32 tCO2e**

55%

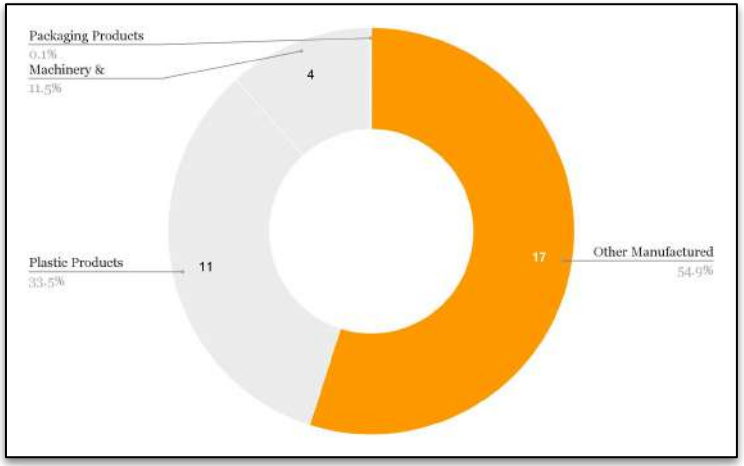
Over **50%** of the Model Workshop's Carbon Footprint is from **Other Manufactured Goods**, whilst just above 30% is from Plastic Products

Morelands accounts for **94%** of the MW's total Carbon Footprint

WCF - 6% | QCH - 0% | OKC - 0% | Madrid - 0%

Footprint Breakdown

Percentage breakdown of the Model Workshop carbon footprint - all offices (units = tCO2e)



2022 (Baseline)

Scope 3

Current business unit emissions are **31.8 tCO2e**

2030 Target (Near-Term)

Scope 3

Reduce emissions by 42% to **18.5 tCO2e** (2.3 per year)

2040 Target (Net Zero)

Scope 3

Reduce emissions by 90% to **3.2 tCO2e** (0.3 per year)

Model Workshop *- Reduction Opportunities*

Click here for guidance and tools

Reduction Measure	How the Measure Reduces Carbon Emissions	Impact	Effort	Next Steps
MW1: Procure lower carbon materials - procurement recommendation	Reducing the quantity and / or embodied carbon in workshop materials will reduce emissions from the purchased materials as well as waste generation. Consider investigating the feasibility of the following measures: • Reduce need for new model workshops materials by engaging with suppliers to purchase recycled materials (as an alternative to purchasing virgin materials or fossil-fuel based materials) • Procure lower impact materials (for key materials such as timber, acrylic, paint etc.) • Look to import less materials from overseas, favouring local where possible (e.g. when importing high tolerance acrylic, consider local suppliers to limit emissions from importing materials) • Consolidate material orders to reduce the amount of transport related emissions	High	Med	Identify suppliers offering recycled materials within the UK, and identify where bulk purchases can be made.
MW2: Move towards fully circular model workshops	• Work with architects to minimise the creation of models that may be less necessary. When a model is necessary, encourage the architect to opt for the use of more sustainable model materials. • Undertake waste audit specifically for the model workshop to map material and waste streams and identify hot spots from which waste savings can be made. • Embed workshop materials into the larger sustainable procurement policy and reduce packaging of model workshop materials • Optimise model design to improve material efficiency (e.g. increased use of 3D printing) • Building more circular models to allow for disassembly and direct reuse of materials • Identifying companies / services that will collect AHMM's excess / recycled acrylic to prevent it from going to waste	High	High	Consider feasibility of proposed reduction measures.
MW3: Donate materials from model making workshops	Consider recycling model making workshop materials by donating them to schools / universities (as AHMM has done in the past).	Low	Med	Identify schemes / institutions that would take recycled materials.
MW4: Engage and educate AHMM staff about sustainability within the workshop	• By providing architects who require models with a sustainable model material option, and illustrating to them the carbon emission savings, more may be willing to opt for this option.	Enabling Measure	Low	Communicate to architects the importance of sustainable material choices via comms channels (e.g. EO Bulletin).

Model Workshop *- Data Maturity Opportunities*

Activity	Current method	Recommended method
Plastic Products	Total spend on plastic products (Morelands)	Total weight / volume / number of units / type of plastic products at each office
Packaging Products	Total spend on packaging products (Morelands)	Total weight / volume / number of units / type of packaging products at each office
Other Manufactured Goods	Total spend on other manufactured goods (Morelands)	Total weight / volume / number of units / type of other manufactured goods at each office
Machinery and Equipment	Total spend on machinery and equipment (Morelands and WCF)	Total number of units of machinery and equipment at each office
Overarching Data Collection Recommendation	Consider reaching out to suppliers to see if they are able to provide data regarding the weight or volume of a material order to increase the accuracy of model workshop material data. In some cases, it may be preferential to use type and number of units if weight or volume proves difficult to obtain.	

Legal *- Overview*

CO2

The **Legal** business unit accounts for **1%** of AHMM's Total Carbon Footprint, at **8 tCO2e**

228 tCO2e

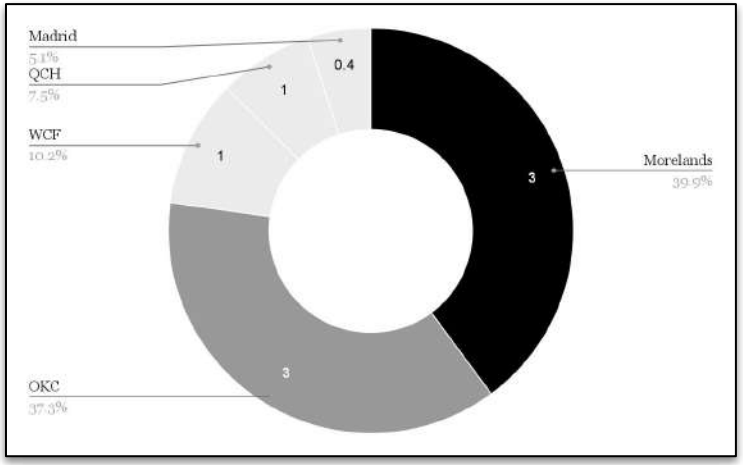
Through contracts, **Legal has influence** over all procured services, which have a combined total footprint of **228 tCO2e** (16% of footprint)

Morelands accounts for **40%%** of Legal's total Carbon Footprint

WCF - 10% | QCH - 8% | OKC - 37% | Madrid - 5%

Footprint Breakdown by Office

Percentage breakdown of the Legal carbon footprint - all offices (units = tCO2e)



2022 (Baseline)

Scope 3
Current business unit emissions are **8.5 tCO2e**

2030 Target (Near-Term)

Scope 3
Reduce emissions by 42% to **4.9 tCO2e** (0.6 per year)

2040 Target (Net Zero)

Scope 3
Reduce emissions by 90% to **0.8 tCO2e** (0.1 per year)

Legal *- Reduction Opportunities*

Click here for guidance and tools

Reduction Measure	How the Measure Reduces Carbon Emissions	Impact	Effort	Next Steps
LE1: Incorporate AHMM's wider sustainability aims when procuring supplier services	When contacting prospective suppliers, the Legal team could incorporate sustainability specific questions within the ProcureWare questionnaire alongside current questions (e.g. if they hold ISOs), with an overall aim of driving reductions in AHMM's Scope 3 emissions footprint as the SBTi target is approached. Whilst the final decision regarding whether or not a supplier is utilised sits with the head of department procuring that service, adding sustainability questions will: 1. Push AHMM teams to consider more sustainable suppliers with existing SBTi targets and commitments towards net zero etc. 2. Encourage a culture shift in which all AHMM supplier contracts are considered from a sustainability lens as well as from a fees / liabilities / indemnities etc viewpoint. 3. Encourage suppliers to start thinking about their role within net zero and broader sustainability When supplier contracts and their answers from ProcureWare have been received, the Legal team could highlight the sustainability results to business unit heads (where relevant) to inform their decision making.	Enabling Measure	Med	Include sustainability / net zero focussed questions in the ProcureWare form sent to suppliers.
LE2: Advocate for Net Zero in corporate governance	The legal team can monitor **upcoming regulation on Net Zero** and broader voluntary standards and frameworks, such as the **Sustainability Accounting Standards Board (SASB) standards**. The team can ensure that climate risks and ESG are on the Employee Ownership Trust's board agenda. • To ensure sustainability is considered, the team could potentially select sustainability / net zero as a preference within the service PLC (Practical Law) to receive updates regarding these topics. • Build into broader governance around AHMM carbon reporting.	Enabling Measure	Low	Gather information and keep updated on the latest sustainability / net zero best practices in industry. Inform the board and key decision makers in the sustainability team of important regulatory changes around Net Zero and the potential impact they have from a legal perspective

Legal *- Data Maturity Opportunities*

Activity	Current method	Recommended method
Legal Services (External)	Total spend of offices combined, extrapolated	To improve data quality, the Legal team can request the Scope 1+2 emissions total from legal service providers, alongside AHMM's % of their total revenue, to calculate the proportion of these emissions attributed to AHMM. This effectively calculated the amount of emissions that each supplier has 'spent' to provide AHMM with its services. This can then be captured in AHMM's carbon calculator tool (note: not currently possible in ClimateEssentials). However, given the low impact of legal services on the overall footprint (~1%), it would not be a high priority area.

Communications *- Overview*

CO2

The **Communications** business unit accounts for **12%** of AHMM's Total Carbon Footprint, at **166 tCO2e**

89%

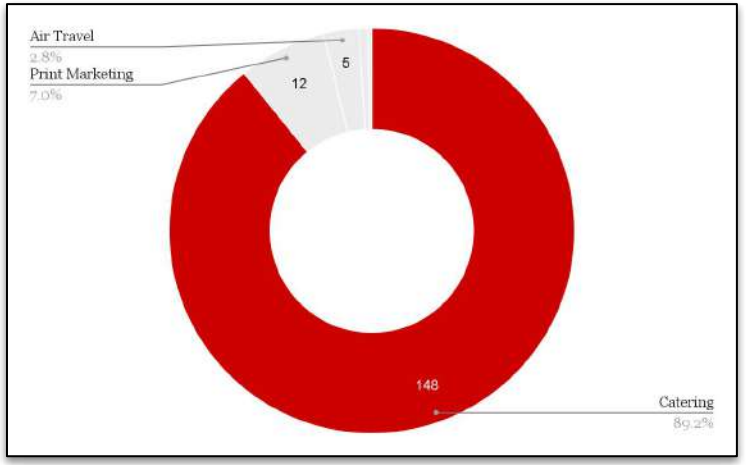
Around **90%** of Communication's Carbon Footprint is from **Catering**, whilst 7% is from Print Marketing

Morelands accounts for **98%** of Comm's total Carbon Footprint

WCF - 0% | QCH - 0% | OKC - 2% | Madrid - 0%

Footprint Breakdown

Percentage breakdown of the Communications carbon footprint - all offices (units = tCO2e)



2022 (Baseline)

Scope 3

Current business unit emissions are **165.8 tCO2e**

2030 Target (Near-Term)

Scope 3

Reduce emissions by 42% to **96.2 tCO2e** (12 per year)

2040 Target (Net Zero)

Scope 3

Reduce emissions by 90% to **16.6 tCO2e** (1.7 per year)

Comms *- Reduction Opportunities*

Click here for guidance and tools

Reduction Measure	How the Measure Reduces Carbon Emissions	Impact	Effort	Next Steps
CO1: Engage existing catering suppliers to change the menu and provide exciting meat-free options - procurement recommendation	Switching to 100% vegetarian catering options will greatly reduce emissions. For example, switching to all vegetarian for the Christmas Party would reduce emissions from 82 tCO2e to 56 tCO2e (modelled using Climate Essentials tool).	High	Med	Engage with current suppliers to understand cost and feasibility. Communicate options with staff in context of AHMM net zero targets
CO2: Improve proportion of sustainably sourced food and drink options - procurement recommendation	It is possible to reduce emissions by purchasing low-carbon food products, such as those that are locally-sourced, use low impact packaging and are produced by suppliers with strong net zero credentials. This will reduce scope 3 emissions associated with transport of purchased goods and waste generation.	Low	Med	Map key food and beverage suppliers (e.g. by cost), review carbon credentials and identify possible lower carbon suppliers where available
CO3: Mandate rail travel only for all AHMM events	Reducing road and air travel to events will reduce travel-related emissions. Where possible, aim to increase train travel to awards over flying as a first consideration.	Low	Low	Incorporate into sustainable business travel policy & engage wider business of importance of not flying in light of AHMM's net zero commitment
CO4: Engage with events suppliers around Net Zero (e.g. energy efficiency, renewables, procurement, waste)	**Venue** This will reduce the emissions associated with electricity consumption at the events space to zero **Food Waste** Growing, transporting and packaging food produces emissions so reducing the amount of food waste also reduces emissions. This can be achieved through more accurate attendance of events to minimise over-ordering. Reaching out to food and drink suppliers to explore how they handle waste could highlight current inefficiencies and encourage AHMM to identify a more sustainable catering partner. The same process can be taken when approaching venues too.	Low	Med	When organising upcoming events, engage early with prospective events suppliers regarding their net zero commitments and factor answers in when selecting a venue

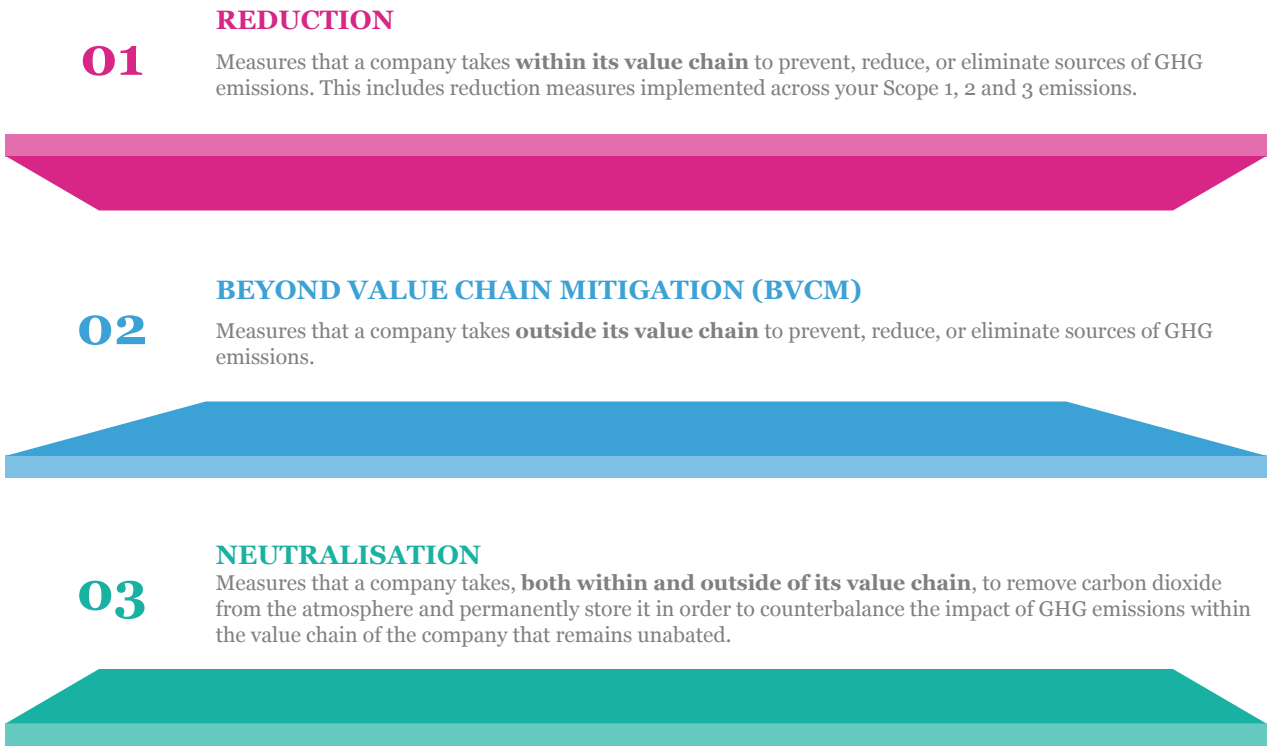
Comms *- Data Maturity Opportunities*

Activity	Current method	Recommended method
Events catering	Total spend	Measure the weight or unit amounts of food and drink
Road and Train Travel	Distance travelled	In Climate Essentials this is currently measured under urban high density travel. If AHMM switch to another tool, it is recommended to capture road and travel travel to events more accurately
Air Travel	Distance travelled	Total distance travelled and track emissions associated with seat gradings
Event Hotel Stays	No. of nights	Carbon factor related to specific hotel and country it resides in
Events Energy Use	Duration of event	Collect the amount of kWh from event space providers
Virtual Events	Duration of event	Continue with current method
Print Marketing	Not measured	Start collecting data on the amount spent by office
Publishing & Marketing Services	Not measured	Start collecting data on the amount spent by office

Part 3. Carbon removal guidance

Climate change mitigation tactics

In a complete climate strategy there are three main actions a company can employ: **reduction**, **beyond value chain mitigation (BVCM)**, and **neutralisation**. The previous section focused on what AHMM can do to reduce its emissions. This section outlines how AHMM could approach addressing any 'residual' emissions that cannot be reduced as they are necessary for AHMM to continue to operate. BVCM and neutralisation measures are an important mechanism to do this, however they **cannot be used to demonstrate reduction against an SBTi validated target**.



Carbon removals and avoidance

The two main climate mitigation mechanisms available are **carbon avoidance** and **carbon removals**. If structured well, carbon removal and reduction projects can offer sustainability co-benefits including biodiversity enhancement, poverty alleviation, and other gains in pursuit of UN Sustainable Development Goals (SDGs). Below are some examples of what AHMM could pursue for both BVCM and Neutralisation mechanisms.

	BEYOND VALUE CHAIN MITIGATION (BVCM)	NEUTRALISATION
	CARBON AVOIDANCE	**CARBON REMOVAL**
DEFINITION	The prevention of emitting carbon in the first place either via particular carbon offsets or via direct carbon reduction measures.	Removing carbon from the atmosphere and storing it for a long-enough period to fully neutralise the impact of any of the company's GHG emissions that continue to be released into the atmosphere.
PROS	• Mitigates climate change, improves air quality, and protects ecosystems • Easier to put into practice because it is easier not to do things than it is to do them • Offers a proactive rather than reactive way of dealing with carbon emissions	• Reduces atmospheric carbon dioxide levels by permanently removing carbon from the atmosphere • Carbon removal is easier to track, calculate, and record because you are physically removing a set amount of carbon from the atmosphere
CONS	• May not work at the core issue of reducing overall carbon emissions • More difficult to quantify because it involves not putting carbon into the atmosphere	• Technology is harder to implement
CARBON CREDITS APPROACH*	• Purchase avoidance credits from qualified carbon brokers, retailers or open platforms • Critically evaluate the provider using independent websites	• Purchase carbon removal credits from qualified carbon brokers, retailers or open platforms • Critically evaluate the provider using independent websites
EXAMPLE PROJECTS	• Avoided nature loss, e.g. prevention of forest degradation or deforestation • Technology-based avoidance, e.g. wind farms, solar farms, biomass • Nature-based solutions, e.g. afforestation, mangrove restoration • Technological solutions, e.g. direct air capture, enhanced mineralisation	• Short-term storage (e.g. afforestation and reforestation, regenerative agriculture) • Long-term storage (e.g. bio energy carbon capture and storage, mineralisation, direct air capture)

**A carbon offset credit is a transferable verified and certified tradable instrument representing an emission reduction (or removal enhancement) equivalent to one metric tonne of CO_2.*

Carbon removals and avoidance

Below are some examples of carbon removal options ranging from relatively inexpensive, less permanent options to more expensive, but far more durable, impactful carbon removal techniques that can be utilised by AHMM to remove residual emissions. This can be achieved by calculating the 'residual' emissions after all reductions have been achieved, and purchasing equivalent removal credits from a vendor (e.g. SuperCritical) to address these. This mechanism could also be used in parallel with AHMM's reduction strategy to incentivise more aggressive reduction. For instance, AHMM could purchase removal credits equivalent to its emissions footprint each year, attaching a financial value to any under or over performance against the SBTi reduction pathway. Architecture firm Bennett Associates's carbon removal strategy can be found here.

Natural

Tree Planting

Removing large amounts of CO_2 from atmosphere, but limited by land and prone to reversal from disturbances and from climate change itself

Biochar

Charcoal-like material rich in stable carbon. It's most commonly used as soil amendment in agriculture and horticulture.

Bio-oil

Bio-oil is similar to biochar, however it is the liquid form and is used pumped in geological storage, where it's highly likely going to stay permanently.

Technological

Enhanced Weathering

Enhanced rock weathering (ERW) takes natural weathering of silicate rocks that removes & mineralises atmospheric CO_2 and speeds it up dramatically.

Direct Air Capture

A chemical process to capture ambient CO_2 from atmosphere, which is transported and stored underground in disused gas fields or in geological formations where it mineralises in reaction with surrounding rocks.

Less Costly
Less Permanent
Closer to Deployment

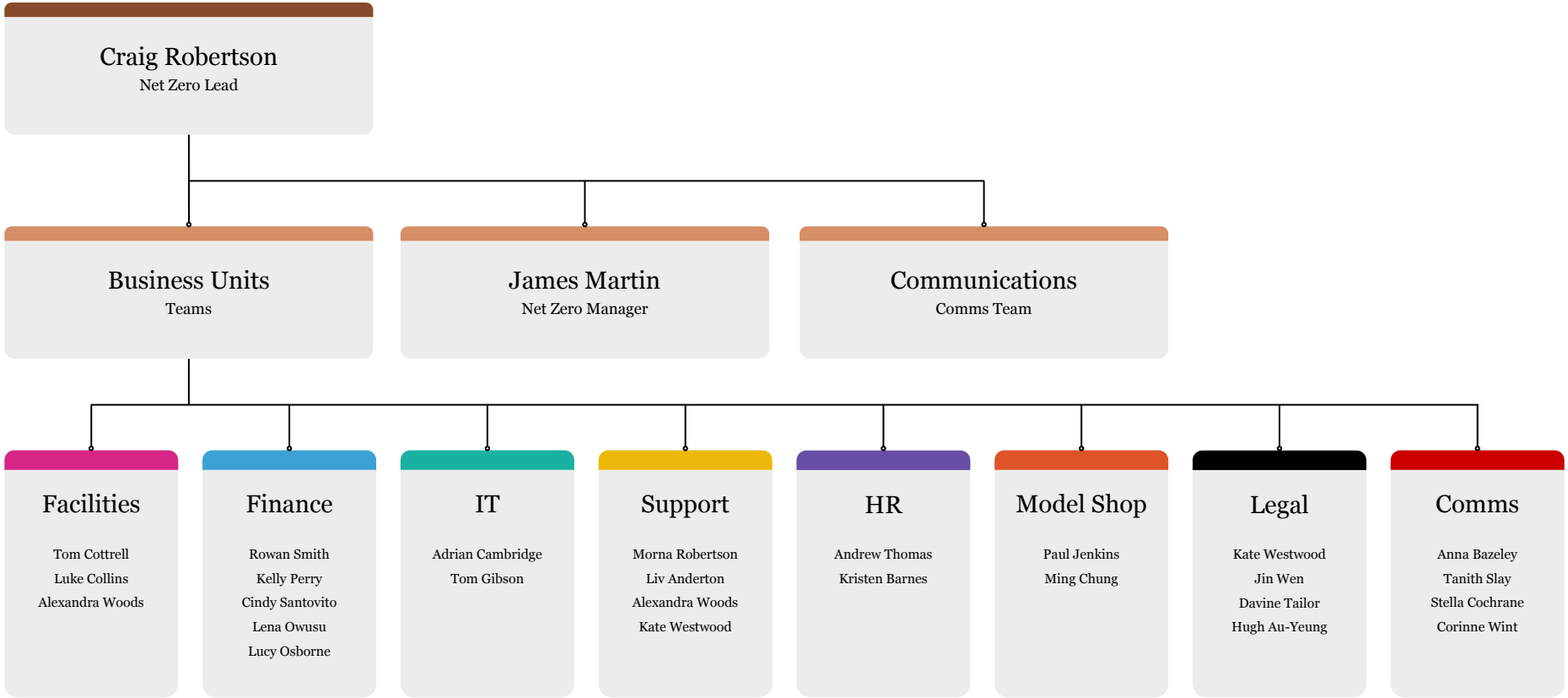
More Costly
More Permanent
Greater R&D Needs

Graphic and content above inspired by SuperCritical guidance (link above).

Part 4. Governance plan

Note: The governance plan outlined in this section is intended to be an initial outline of the roles, responsibilities and ongoing meeting schedule required to deliver the Net Zero Action Plan. This is based on a combination of the conversations held in the one-to-one business unit meetings and our previous experience. As such, it should be tested and refined on an ongoing basis.

High-level overview of governance model



Outline meeting schedule

To provide effective ongoing governance of the Net Zero Action Plan, we have suggesting the following core governance activities during the course of a reporting year. This should be tested and iterated on an ongoing basis to ensure meetings are relevant and effective.

Activity	Purpose	Attending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Steering committee	To provide executive leadership oversight of progress towards carbon emissions targets and future plans	Carbon Lead												
Emissions activity planning	To check-in on progress against prioritised reduction measures and identify new opportunities	Whole team												
Business Unit Touch Point	Discuss reduction measure implementation, including challenges and further opportunities	All business units (independently)												
Climate update	Update everyone across AHMM on the progress towards targets and planned initiatives	All AHMM	Align with AHMM company-wide engagements											
Annual meeting	To present annual progress towards SBTi target reduction levels, with business unit breakdown. Consider incorporating this into annual strategic planning meeting to embed it in decision making	All business units												

Outline engagement Approach

To increase awareness, employee participation and to enable knowledge sharing, we suggest the following engagement activities are deployed. To increase the effectiveness of the reduction measures, it is critical that all business units engage in collaboration of ideas and knowledge sharing (e.g. Facilities and Communications may have shared learnings regarding the switch to 100% vegetarian catering options).

Activity	Purpose	Audience	Channel(s)	Frequency	Owner
Carbon Event	Develop a shared understanding, enthusiasm and buy-in across the organisation around Net Zero	All AHMM	In person event	One-off	TBC
Quarterly Bulletin Post	More detailed explanation of how business units are working towards Net Zero to keep people engaged and in the loop	All AHMM	Internal AHMM Bulletin (spotlight on sustainability)	Every quarter	TBC
Company Practice Update	A brief segment within the company practice update to update all AHMM of the Net Zero work, including learnings and action points, aiming to engage staff to get involved	All AHMM	Slide in company practice update	Annually	TBC
Sustainability updates	Regular updates about sustainability and Net Zero can be communicated through the sustainability page on intranet to ensure to keep people up-to-date and allow them to engage	All AHMM	Intranet	Regular	TBC
Share SBTi Targets & Annual Carbon Report	External facing update regarding carbon reduction progress, data robustness to indicate confidence in reductions, and action points / next steps to consider at senior level	Board, Clients, Partners, Suppliers	Online / Website	Annually	TBC

SBTi reporting timeline

The timeline below outlines the actions that AHMM needs to take following the SBTi target submission. A complete overview of the steps and reporting requirements can be found in the SBTi Corporate Manual (April 2023).

July 2023

Submit targets for validation

After the near-term and Net Zero targets are submitted, the validation process follows a 5-step process:

1. Initial screening
2. Lead reviewer desk review
3. Appointed approver review
4. Target validation team discussion
5. Communicating decisions and feedback

< 6 months following validation

Announce targets

When the target is approved, the SBTi Communications Team will coordinate target publication plan with AHMM.

Communications guidelines are provided by SBTi.

SBTi suggests a publication date, which is usually 1 month from the date the final deliverables are sent. Note that targets should be published within 6 months.

It's recommend to have final approval of the near-term target ahead of submitting for validation

Annually from 2023

Disclose your progress

Disclose progress annually in the Carbon Report and/or Sustainability Report.

Disclose on the following items (table 10 in SBTi Corporate Manual:

1. Target description
2. Target progress
3. Substantial emissions variation and changes in target
4. Actions towards meeting SBTs
5. GHG emissions inventory

Check out the Corporate Manual for further guidance and worked examples on how to report progress (46-71). The SBTi also provide a Communications Guide.

Annually from 2024

Target review

Mandatory recalculation
Targets must be reviewed, and if necessary, recalculated and revalidated, at a minimum every 5 years.

Triggered target recalculation
Significant adjustments to the base year inventory, data sources or calculation methodologies, trigger a target recalculation.

Submitting new targets
AHMM might consider submitting new targets if the Net Zero ambition changes, if a target is achieved or if the target year is reached.

For all options companies must submit and updated Near-term Target Submission Form and submit via the target update service. Target update service fee: $4,750

Carbon calculator tool

As discussed during the course of the 2022 carbon baseline calculation, the ClimateEssentials platform functionality can be limiting in terms of its ability to use higher quality data.

For example, many of the scope 3 emissions categories (forming 94% of AHMM's overall footprint) are only able to be captured using spend-based data. Spend-based data provides a useful initial indicator for where emissions hotspots might be, however it can be challenging to accurately track changes in emissions over time. This is because some reduction measures could potentially have similar or increased costs compared to the baseline.

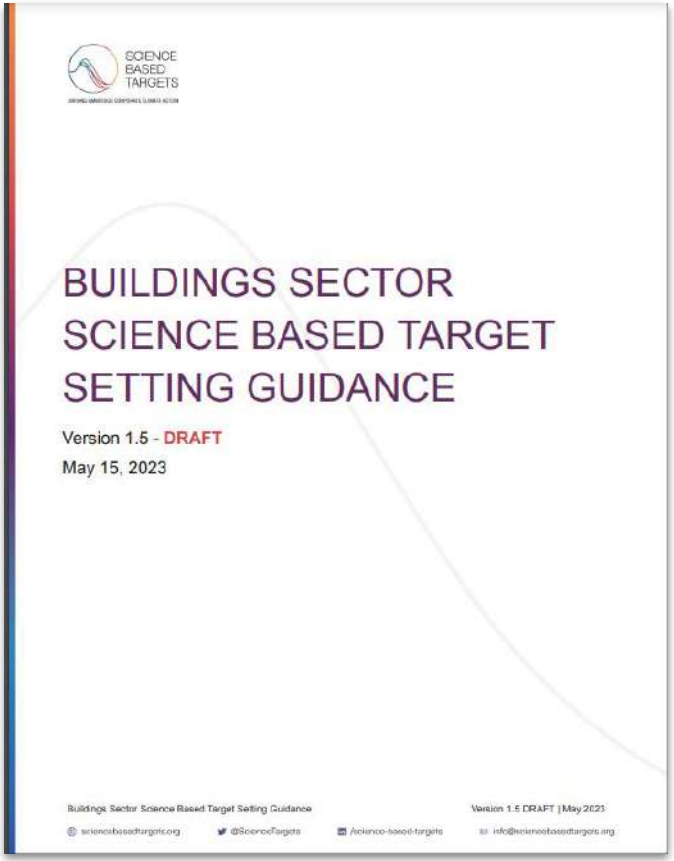
The tool we typically use on projects, including other architecture firms such as Hawkins\Brown, is called CompareYourFootprint, which offers greater depth in terms of moving away from just spend data. For a turnover range between £30m-£50m the cost would be £2,399 per year. If you are interested in a demo we can provide an introduction to the team.

SBTi Draft Buildings Sector Guidance (Link)

[CLARASYS]

Key takeaways

- ➔ **No current impact** on AHMM's footprint or SBTi target setting and validation process
- ➔ Planned adoption of the guidance end of 2023
- ➔ **Required:** account for / report in-use operational emissions resulting from the use of its designed buildings under scope 3 category 11 'use of sold products' (for the year in which the building was sold)
- ➔ **Required**: set a science-based target for overall in-use emissions intensity (kgCO2e / m2) across designed buildings
- ➔ **Required:** public commitment to no new fossil fuel installations in building design portfolio from 2025.
- ➔ **Recommended**: account for / report on end of life embodied emissions of designed buildings and publicly commit to making energy efficiency improvements in buildings portfolio by 2030 in line with CRREM's energy-reduction pathway
- ➔ **Recommended**: set a science-based target for end of life embodied emissions (tCO2e/m2 GFA) across designed buildings
- ➔ **Recommended:** public commitment to making energy efficiency improvements in their buildings portfolio by 2030 in line with CRREM's energy-reduction pathway (for EU commercial offices this is 123 kWh/m2/yr by 2030).
- ➔ Targets can be set using methods: Cross-sector absolute reduction (1.5°C or well-below 2°C); Economic intensity; or Physical intensity.



Part 5. Appendices

Appendix A - Tools and guidance repository

Appendix A - Tools and guidance repository

We recommend using some of the **best practice guidance documents and tools** provided below to help support your next steps with your net zero action plan, in addition to specific reduction measure guidance on the following pages.

Calculation	Data governance	Reducing emissions	Target setting
• CompareYourFootprint (CYF) Usage Data Guide • GHG Protocol Corporate Standard • GHG Protocol Scope 2 Guidance • GHG Protocol Scope 3 Standard • GHG Protocol Scope 3 Guidance • SBTi Best Practices in Scope 3 GHG Management	• The 1.5°C Supplier Engagement Guide • Activating Supplier Engagement on Scope 3 Emissions • A guide to GHG emissions accounting and ESG data management	• Project Drawdown: An employee guide to drawdown-aligned business • The 1.5°C Business Playbook • HKEX Practical Net-Zero Guide for Business • Net Zero Challenge: The supply chain opportunity • Carbon Offset Guide • The Circular Office Guide	• Science Based Targets Initiative (SBTi) Resources • SBTi FAQs for SMEs

Guidance (Reduction Opportunities)

Facilities Reduction Measure	Guidance
FA1: Transition electricity supply to 100% renewable as soon as possible	UKGBC Renewable Energy Procurement & Carbon Offsetting
FA2: Continually review energy efficiency measures across facilities (via landlord consultation)	Better Buildings Partnership (BBP) Responsible Property Management Toolkit - Energy
FA3: LED lighting	Delivering Net Zero: Key Considerations for Commercial Retrofit
FA4: Optimise / update control and monitoring systems	Facilities Management for the Digital Age (Arup)
FA5: Adopt data-driven maintenance	BBP Monitoring and Maintenance Strategies /
FA6: Benchmark facilities' energy performance and set targets	UKGBC Net zero carbon: energy performance targets for offices
FA7: Review Waste Management Process	Better Buildings Partnership (BBP) Responsible Property Management Toolkit - Waste
FA8: Switch to UK based furniture	Rype Office - Net Zero Carbon Office Furniture
FA9: Consolidate Amazon orders	Lyreco Office Supplies / Case Study: UCL office supplies consolidation leads to 80% reduction in carbon emissions
FA10: Engage existing catering suppliers to change the menu and provide exciting meat-free options	Case Study: Plant-based food at PwC
FA11: Improve proportion of Sustainably sourced food and drink options	Sustainable Office Catering Guide

Finance Reduction Measure	Guidance
FI1: Develop sustainable procurement policy	See Appendix B / Responsible Sourcing - How to embed sustainability into procurement processes
FI2: Engage pension, professional contractors and accounting, bookkeeping and auditing service providers on Net Zero	WWF Example Questionnaire for Suppliers / GHG Protocol - Supplier Engagement Guidance / The 1.5°C Supplier Engagement Guide / Activating Supplier Engagement on Scope 3 Emissions
FI3: Set an internal carbon price to factor in carbon in budget decisions	Leaders for Climate Action - Set an internal price for carbon guide / How-to guide to corporate internal carbon pricing
FI4: Integrate Net Zero into strategic planning	Climate Solutions at Work - Finance Guide

IT Reduction Measure	Guidance
IT1: Build carbon reductions into move to agile working model	-
IT2: Continue to review lifecycle of IT equipment	Minimizing the environmental footprint of your IT equipment / Sustainable technology consumption and the Circular Economy
IT3: Evaluate potential to procure lower carbon IT equipment	Laptop carbon footprints directory
IT4: Responsible Reconditioning and Reselling	WeeeCharity - Non-profit UK charity that helps to relieve poverty by offering free complete recycling of computers and electrical equipment to businesses.

Support Reduction Measure	Guidance
SU1: Incorporate a sustainable business travel policy	Climate Perks (Coming Aboard Section) / Leaders for Climate Action - Set up a policy for sustainable business travel
SU2: Eliminate all flights that can be replaced by rail travel	As above
SU3: Embed travel policy into a centralised booking system and process	As above
SU4: Encourage more sustainable travel choices by utilising existing platforms	Train Hugger / Staze

HR Reduction Measure	Guidance
HR1: Incentivise more sustainable employee commuting	Leaders for Climate Action - Encourage sustainable commuting
HR1: Equip staff with the ability and tools needed to reduce their personal carbon footprint	GikiZero (Free option available) / Pawprint (Paid)
HR1: Reduce number of compulsory days in the office	-
Model Workshop Reduction Measure	**Guidance**
MW1: Procure lower carbon materials	-
MW2: Move towards fully circular model workshops	The Circular Office Guide
MW3: Donate materials from model making workshops	-
MW4: Engage and educate the AHMM team about sustainability within the model workshop team	-
Legal Reduction Measure	**Guidance**
LE1: Incorporate AHMM's wider sustainability aims when procuring supplier services	WWF Example Questionnaire for Suppliers / GHG Protocol - Supplier Engagement Guidance / The 1.5°C Supplier Engagement Guide / Activating Supplier Engagement on Scope 3 Emissions
LE2: Advocate for Net Zero in corporate governance	Travers Smith - Timeline sets out recent and expected UK and EU legal and regulatory developments relating to ESG and wider sustainable business topics
Communications Reduction Measure	**Guidance**
CO1: Engage existing catering suppliers to change the menu and provide exciting meat-free options	-
CO1: Improve proportion of Sustainably sourced food & drink options	Sustainable Office Catering Guide
CO1: Mandate rail travel only for all AHMM events	-
CO1: Engage with events suppliers around Net Zero (e.g. energy efficiency, renewables, procurement, waste)	WWF Example Questionnaire for Suppliers / GHG Protocol - Supplier Engagement Guidance / The 1.5°C Supplier Engagement Guide / Activating Supplier Engagement on Scope 3 Emissions

Appendix B - Example sustainable procurement policy

Appendix B: *Sustainable procurement policy*

A sustainable procurement policy can help and guide AHMM when to acquire goods and services and select the products based on their social and environmental impact. Please review the template sustainable procurement policy that we've shared with you. To further build out this policy in line with AHMM's requirements, follow the steps below (based on The Matcha Initiative).

Build out the strategy

- Implement on a small category to test the approach before expanding to other categories
- Set tangible procurement objectives (e.g. share of green products/services and suppliers with sustainable certifications)
- Prioritise based on level of spend and influence, and scope of improvement

Redesign the purchasing process

- Start with assessing the need for a product or service
- Assess the products and services using the sustainable purchasing considerations
- Detail environmental factors to be included in specifications to incentivise innovation (e.g. green transport, packaging, product traceability)
- Select suppliers based on green credentials (e.g. certifications, location, sustainability practices)
- Limit the number of purchase orders to minimise logistics and transport (see facilities business unit)

Implement externally and internally

- Involve all teams in defining sustainable procurement objectives
- Communicate your procurement action plan to the teams (e.g. communicate KPIs and provide progress follow ups)
- Share objectives with suppliers and implement improvement plans

Use KPIs to monitor performance

- Evaluate and report on your sustainability policy performance
- Define procurement targets and KPIs such as:
  - No. of products or services purchased in line with sustainable procurement principles (see template policy)
  - Increase the number of local suppliers with X%
  - Limit the number and frequency of deliveries

SUSTAINABLE PURCHASING CONSIDERATIONS

MINIMISE

Can we ensure we only order the ***amount we need***?

RESOURCES

Can we buy a version that **minimises resources** and does **not overly extract natural resources?**

POLLUTION

Can we ensure that the product will **not be created with harmful chemicals that could enter the air or water?**

EMISSIONS

Can we buy the product which is likely to have the **lowest carbon emissions?**

PACKAGING

Can we ensure we buy products were the **packaging is minimised and at worst recyclable?**

TRANSPORT

Can we have it delivered in a **low-carbon way**, can we ensure there will be as few a journeys as possible?

CIRCULARITY

Can we buy **virtual or repairable items?**
Can we **lease rather than buy?**
Can we ensure it's **refurbished/reused** at the **end of its life?**

B-CORP

Can we buy from a **B-Corp?**

(B Corps, are companies verified by B Lab to meet high standards of social & environmental responsibility and transparency)

LOCAL

Can we buy something from a **local SME?**

LIVING WAGE

Can we buy from an organisation that pays the **living wage?**

WORKING CONDITIONS

Can we buy from an organisation that ensures **fair working conditions across it's supply chain?**

REPRESENTATION

Can we support an organisation who **supports underrepresented groups?**

Sustainable purchasing considerations

Start by asking yourself:

- Do we need it?

Something we need will bring significant value to our business, our people or our clients.

- What is the impact that you want to have through buying the product? Could we have that impact without buying something?

E.g. sourcing items for in office socials
- Could buy from somewhere that delivers in **reusable packaging**
- Can we make sure we order the exact amount to **reduce waste**?
- Can we support a **local business?**

E.g. Buying literature for work
- **Could we buy something electronically?**
- If bought, can it be put in the **Clarasys library for re-use or donated?**
- Can we buy **second hand?**
- Can we buy **from the Bookseller or an alternative company?**

Eg., attending a conference
- What marketing materials are **necessary?**
- Can we ensure that they are suitable for **reuse/ can be recycled?**
- **Could we produce some of it electronically?**

MINIMISE RESOURCES POLLUTION EMISSIONS PACKAGING TRANSPORT CIRCULARITY B-CORP LOCAL LIVING WAGE WORKING CONDITIONS REPRESENTATION