SUSTAINABILITY REPORT FY2023-24

Authored by Christian Wallace

Reviewed by Ayesha Ali, Jaz Sandalli, Josh Loar, Louise Barclay, Megan Willmott-Geary & Environmental & Social Responsibility Steering Committee members.

Date of issue: March 2025

CHARCOALBLUE

THEATRICAL INNOVATION | ESTD 2004

1. INTRODUCTION

Every day presents the chance to do things a little bit better than the day before. Our practice commits to reducing the negative environmental impact of our work every day, from examining and reducing our travel, to driving sustainable procurement for our studios, to ensuring our design teams have the tools and training they need to reduce the carbon embodied in our designs. As practitioners in the built environment, we have a responsibility to future generations to work in ways that will leave the lightest footprint, and that reduce or eliminate the harm done to earth's ecosystems. It's up to us to produce a livable future, and we're facing this challenge head-on.

JOSH LOAR

BLUE TEAM PRINCIPAL, CHARCOALBLUE

In April 2024 we issued our baseline carbon report which captured our emissions for the period of April 2022 – May 2023. The overall carbon footprint for this baseline report is 353,641kg CO2e with 98% of that total coming from Scope 3 emissions.

64% of the Scope 3 emissions came from flights with only 1% coming from trains. Travel is essential for Charcoalblue given our work spreads across the globe. However, how often we travel needs to be reviewed thoroughly in order to reduce the scope 3 emissions.

The baseline report included a number of suggested targets to help lower the emissions. Those targets were:

- Review to see if there are any trends in terms of certain regions or business units increasing or decreasing their flight emissions from FY 2022-2023. For the next Sustainability report we will aim to announce a reduction plan for our business flights that will align with a new operational strategy.
- Reduce the overall number of higher class of flights per business unit unless there are exceptional circumstances. Noting that the current travel policy is based on health and wellbeing guidelines.
- In EMEA, Propose the no-fly guidance within 500 miles/800 km of the destination unless under exceptional circumstances.
- In the US & Australia, Propose the no-fly guidance within 250 miles/400km of the destination unless under exceptional circumstances.
- Research and develop better live streaming options for onsite meetings and testing.
- Include all business travel in the CRIF (currently only flights are included).

This report will use these targets to evaluate what changes have been made from the baseline report. As the baseline report was created and issued during the period of this current report (May 23 – April 24) a number of these targets were not implemented.

A new set of carbon reduction targets is included at the end of this report.

ENVIRONMENTAL GOALS

In February 2024, we launched our Environmental goals and action plan. These goals use our four environmental pillars to target specific areas of improvement and development. We set out our vision across all of our pillars which was:

1. **Reducing carbon emissions from our internal operations**

Acknowledgment of our own emissions and defining ways to reduce and mitigate them is a vital part of our vision with the ultimate goal of becoming Carbon Neutral by 2030.

2. **Engaging and educating our people and our clients**

Charcoalblue trains our staff to give them greater knowledge of how to tackle the climate crisis. We will align ourselves with our Global Statement of Values goal of not knowingly working directly on projects that knowingly cause harm to the environment through unabated use of fossil fuels, unsustainable materials, creating unnecessary waste, or pollution and destruction of natural habitats including contributing to deforestation.

3. **Fossil Fuel Divestment in our business partnerships**

Divesting our finances from fossil fuel companies. From our banks and insurance companies to our pension funds we will always endeavour to only invest in companies whose ethical investment policies align with ours. We seek to better understand our clients and the financing of our projects and make active choices in limiting our association with investment in fossil fuels.

4. **Efficient and low carbon design output**

Embedding efficient and less carbon-intensive designs whilst also working with our partners to ensure all elements of our projects are as low carbon as possible.

In our first year of goals (for the period of May 2024-March 2025) we have set the following:

1. **Reducing carbon emissions from our internal operations**

- Creation of new Environmental Policy
- Issue of 2nd Sustainability report

2. **Engaging and educating our people and our clients**

- Developing project environmental ranking metrics to help us evaluate the projects and clients we work with
- Becoming a Gold Standard Carbon Literate Organisation

3. **Fossil Fuel Divestment in our business partnerships**

- Review of our banks & insurance companies
- Review of our retirement fund providers and portfolios to all staff

4. **Efficient and low carbon design output**

- Review of design output
- Containment research – materials, quantity and the science behind the required separation

These goals are now part of our group wide targets and we will continue to measure against them to define our progress and success across all areas of our organization

CARBON LITERACY TRAINING

We continue to train our staff in Carbon Literacy to give them all a base level of understanding of the Climate Crisis.

In April 2024 we had 60 fully certified carbon literate staff.

This equated to around 38% of all staff are now fully Carbon Literate. Our goal is to get to 60% of all staff to be Carbon Literate by December 2024.

CARBON REMOVAL INVESTMENT FUND

We continue to offset our flights using our bespoke internal Carbon Removal Investment Fund (CRIF).

For the period of May 23 – April 24 we invested in 12 projects, saving 1,645 tonnes of Carbon.

For quarter 1 we invested in 3 projects in the UK. As the carbon credit market is relatively new within this area these projects are investments only until they become fully accredited carbon credits. When assessing which projects to invest in we take into consideration not only the environmental benefits but also the social and economic benefits. Each quarter we look to invest in different parts of the world so we share our investments globally.

Quarter one

- Duich Moss in Scotland
- Lowther 2 in Engalnd
- Acheildh in Scotland

Quarter two

- Prony Wind Power in New Caledonia, saving 89.4 tonnes of carbon.
- Za Hung Hydropower in Vietnam, saving 132.4 tonnes of carbon.
- Composting facility at Okhla in India, saving 314 tonnes of carbon.

Quarter three

- Power for our planet in Brazil, saving 265 tonnes of carbon.
- Walk in the Woods in USA, saving 67 tonnes of carbon.
- Wigton Windfarm II in Jamaica, saving 507 tonnes of carbon.

Quarter four

- Breath of Fresh Air in Honduras, saving 137 tonnes of

2. EMISSIONS

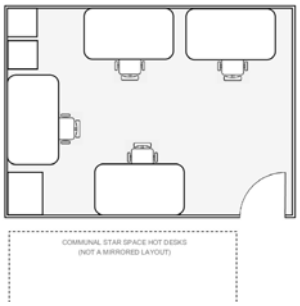
LOCATION AND DESCRIPTION OF STUDIOS

Charcoalblue operated six studios in the United States of America, Australia and The UK during the period of May 2023 and April 2024.

BAY AREA STUDIO

1250 Borregas Avenue #212 Sunnyvale, CA 94089

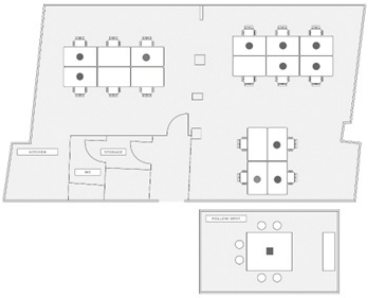
- Located on ground floor of multi-use office building.
- Gross internal area of 9m2
- Tinted film added to the windows to reduce solar glare.
- 17 staff associated with this studio



BRISTOL STUDIO

6 King Street, Bristol, BS1 4EQ

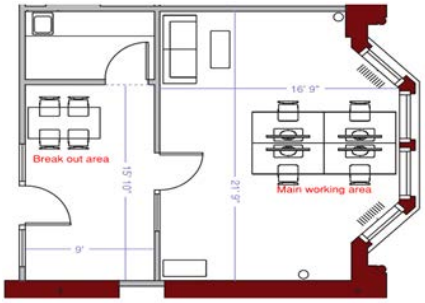
- Floors 2 & 3 of an office building.
- Gross internal area of 158m2.
- Gas-fired boiler with radiators. Gas and Electricity is supplied by Octopus Energy. The electricity is supplied through a 100% renewable sources tariff meaning that no fossil fuels are used in the creation of this electricity. The gas supplying the boilers is natural gas and a fossil fuel.
- •The studio building is a historically listed building and does not have any known insulation. Single glazed windows.
- •Natural ventilation via windows.
- 20 staff associated with this studio



CHICAGO STUDIO

53 W. Jackson Blvd. Suite 1538, Chicago, Il 60604

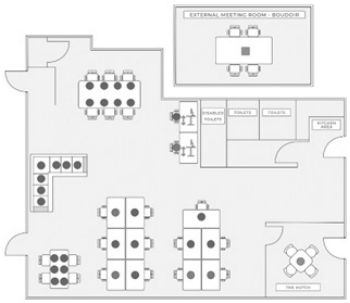
- Located on the 15th floor of an office building using 3% of floor area.
- Gross internal area of 63m2.
- Radiant heat with central air conditioning.
- Double glazed windows.
- 11 staff associated with this studio



LONDON STUDIO

17 Short Street, London, SE1 8LJ

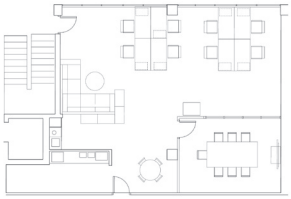
- 50% of ground floor within a mixed office / residential building.
- Gross internal area of 136m2.
- Gas-fired boiler with radiators. Gas is supplied by Smartest Energy. Electricity is supplied by Valda Energy and is supplied on a 100% renewable sources tariff meaning that no fossil fuels are used in the creation of this electricity. The gas supplying the boilers is natural gas - a fossil fuel.
- Natural ventilation via windows.
- Double glazed windows.
- This studio overheats during warm months and uses desktop and pedestal fans to cool staff.
- 53 staff associated with this studio



MELBOURNE STUDIO

Suite 1.02 153-161 Park Street, South Melbourne, VIC 3205

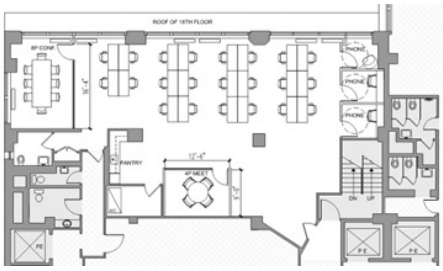
- Located on floor 1 of 3 within an office building. Using 8% of the overall floor area.
- Gross internal area of 127m2.
- Electricity is supplied by Diamond Energy which claim to provide on 100% renewable energy. This claim is being investigated.
- Central heating and cooling.
- Double glazed windows.
- 8 staff associated with this studio



NEW YORK STUDIO

330 7th Ave, Suite 2002, New York, NY 10001

- 20th floor in an office building using 31% of the 20th floor.
- Gross internal area of 260m2.
- Oil-fired boiler and central air conditioning.
- Double glazed windows.
- 51 staff associated with this studio



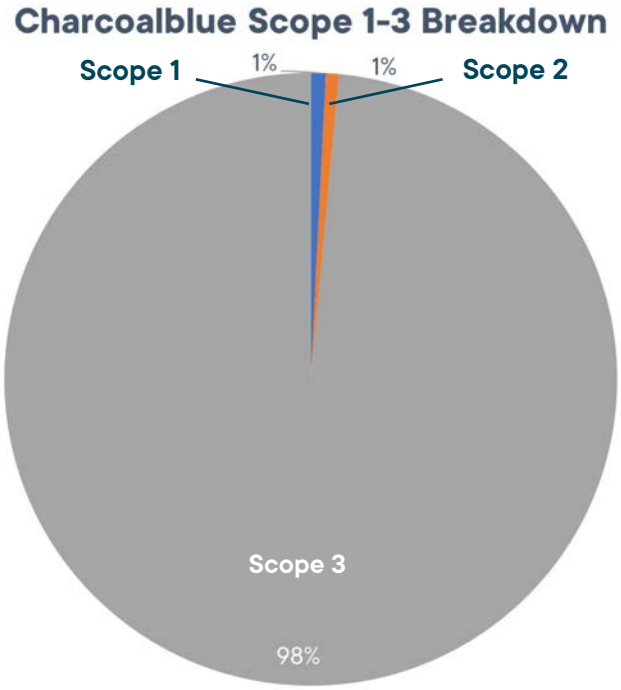
EXPLANATION OF SCOPES 1, 2 & 3

The Greenhouse Gas Protocol is a standard that is used when calculating a company's emissions. The protocol is broken into 3 scopes.

Scope 1 Emissions— This covers all emissions that a company makes directly — for example gas boilers and any company-owned vehicles.

Scope 2 Emissions — All emissions a company makes indirectly – like when the electricity or energy it buys for heating and cooling buildings is being produced on its behalf.

Scope 3 Emissions — All the emissions associated not with the company itself, but that the organisation is indirectly responsible for ranging from business flights to the procurement of office furniture.



SCOPE EMISSIONS FOR MAY 2023-APRIL 2024

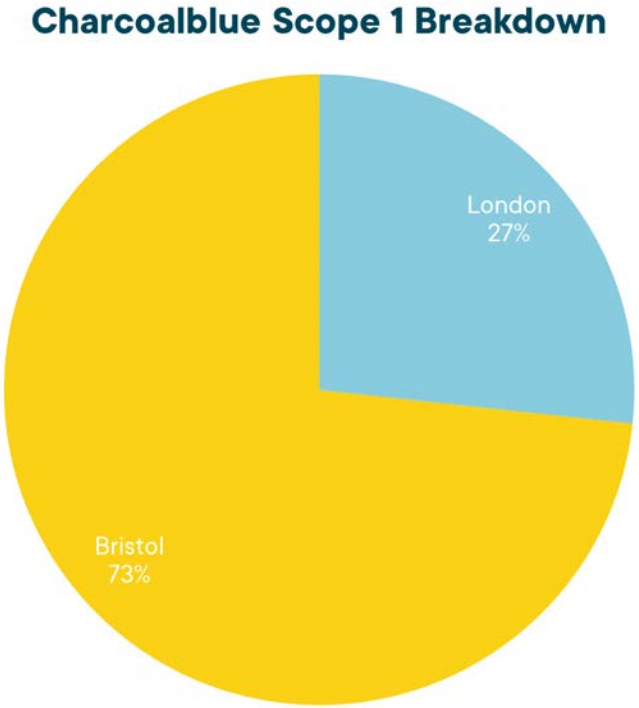
SCOPE 1 – DIRECT EMISSIONS

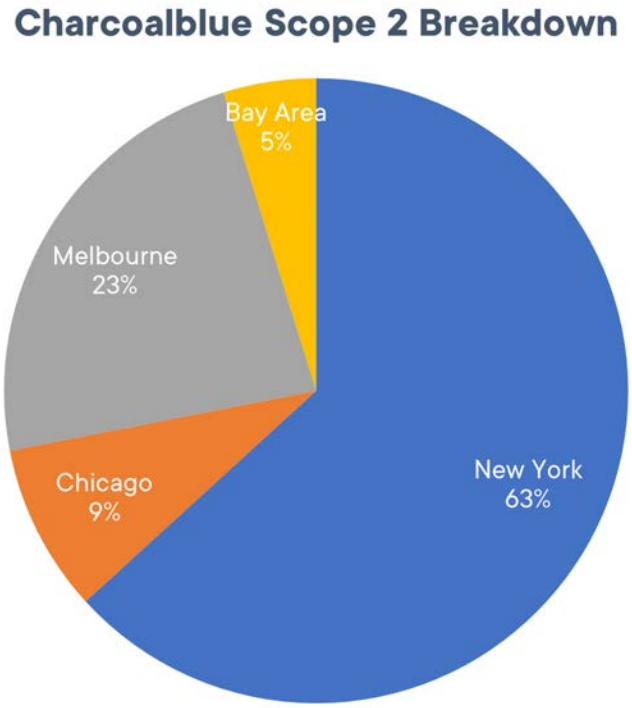
As Scope 1 covers direct emissions, Charcoalblue's only Scope 1 emissions are the gas boilers located in the Bristol and London studios. The New York, Chicago and Melbourne studios have oil fired boilers but at present there is no way to calculate the emissions from these. Scope 1 also includes company owned vehicles but Charcoalblue does not own any. Therefore, the overall emissions for Scope 1 are very low.

The total emissions for Scope 1 are *3,637*kg CO2e.

SCOPE 2 – INDIRECT EMISSIONS

Scope 2 includes electricity used in all buildings/ offices/studios that Charcoalblue owns or pays rent on. The London and Bristol Studios use 100% renewable sources for its electricity; therefore these emissions are not included in the overall total. The Melbourne studio energy supplier may also provide 100% renewable electric but until this is fully confirmed the associated emissions from the Melbourne studio electricity has been included in these emissions. The total emissions for Scope 2 are *3,187*kg CO2e.





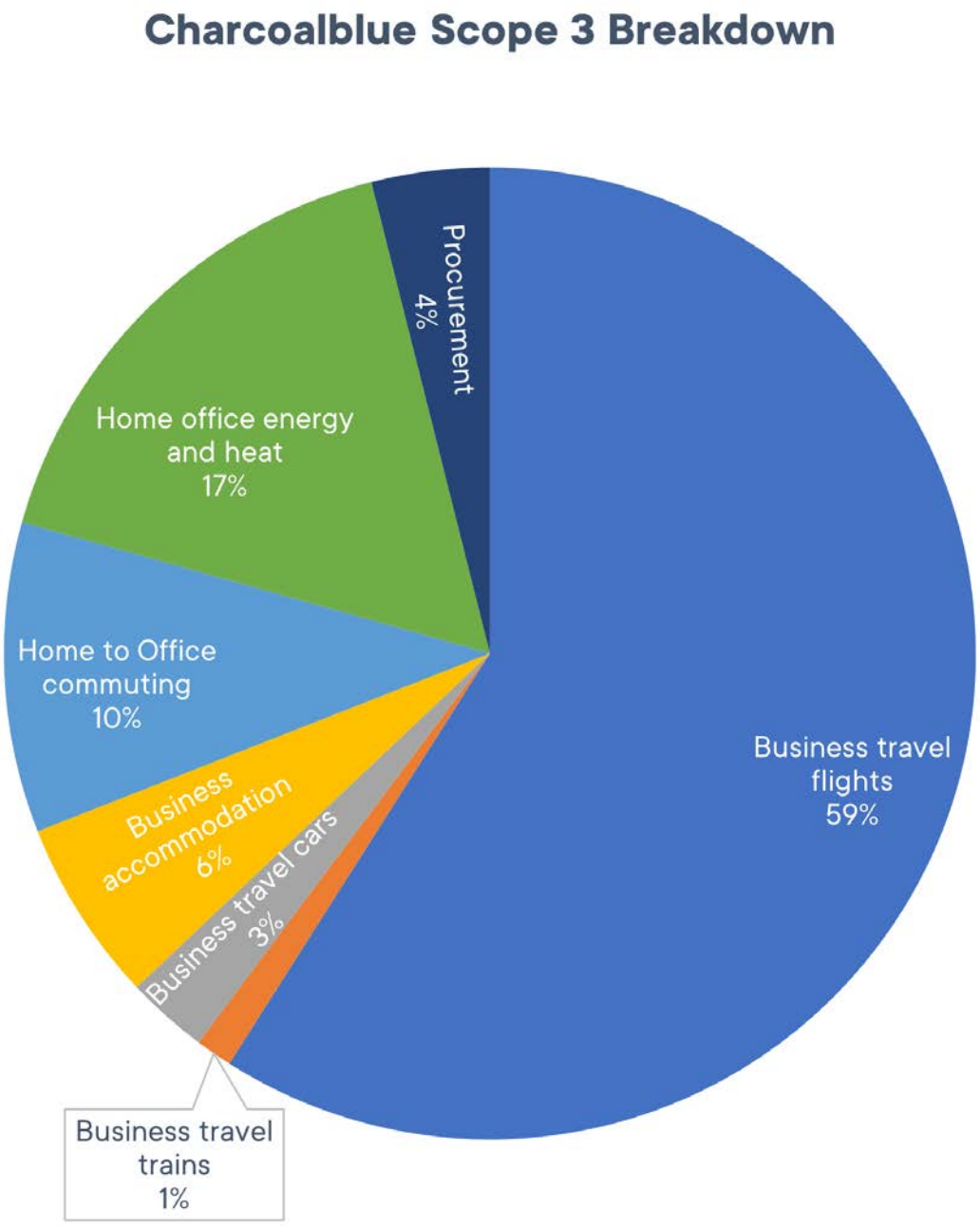
SCOPE 3 – EVERYTHING ELSE

Due to the very fact that this scope wraps up every other activity that a company carries, this scope is usually the highest. Charcoalblue is no exception as our Scope 3 emissions include all business travel and accommodation, energy used when working from home, commuting and procurement.

The total emissions for Scope 3 are 454,967kg CO2e.

Charcoalblue's total Carbon Footprint for May 2023 – April 2024 was *464,103kg* CO2e with 98% of that total coming from Scope 3 emissions.

The breakdown of these scopes is shown here for the entire company:



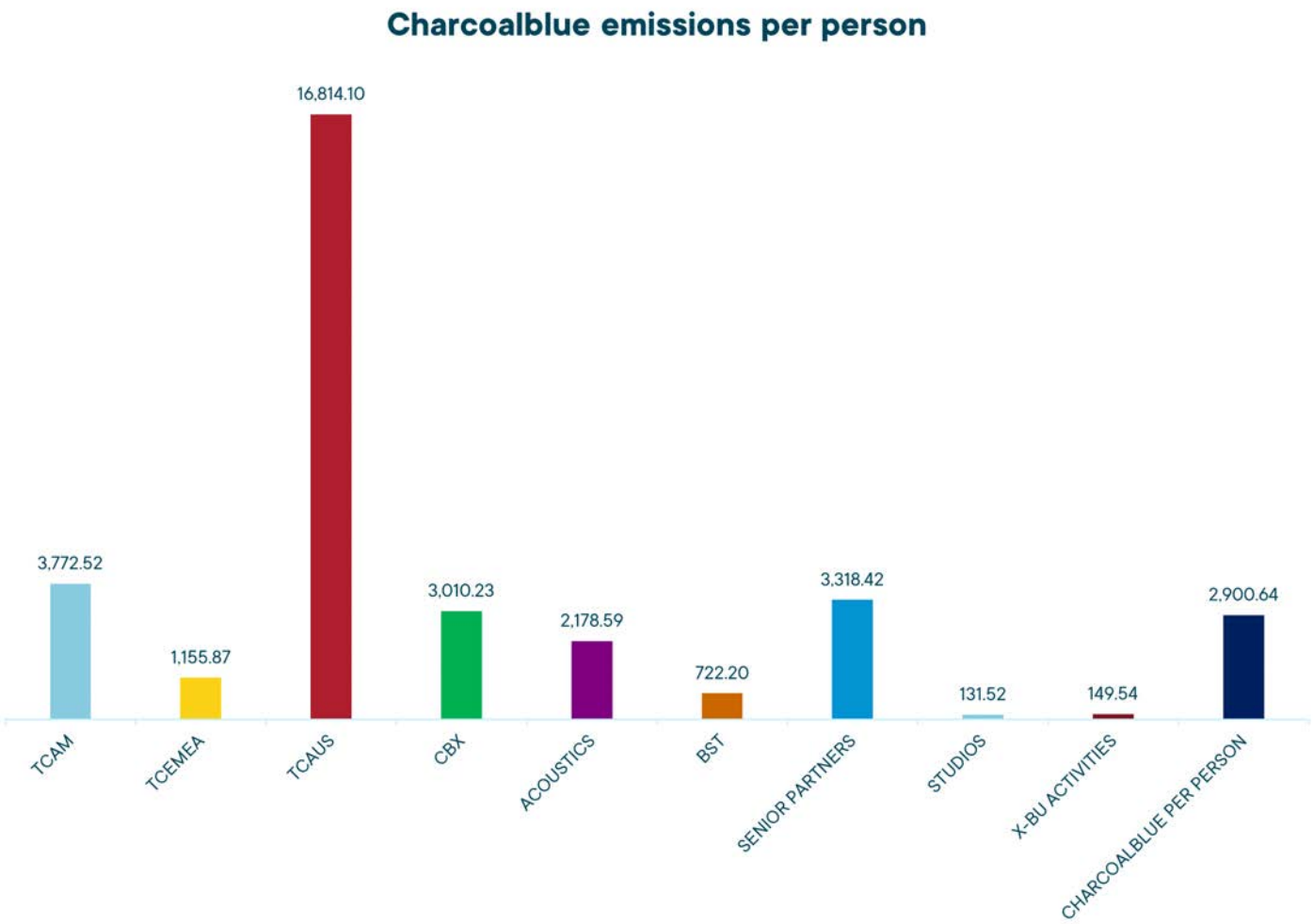
CHARCOALBLUE TOTAL EMISSIONS

Charcoalblue's Carbon Footprint is dominated by our Scope 3 emissions. As we are a design consultancy, we do not produce any emissions from manufacturing. However, as part of our business we must travel, and this is where our main emissions come from. As shown in the graph on this page, 58% of our total emissions come from Business flights alone. A further 6% come from our overnight stays in business accommodation. Energy from working from home and commuting take up a combined total of 26%.

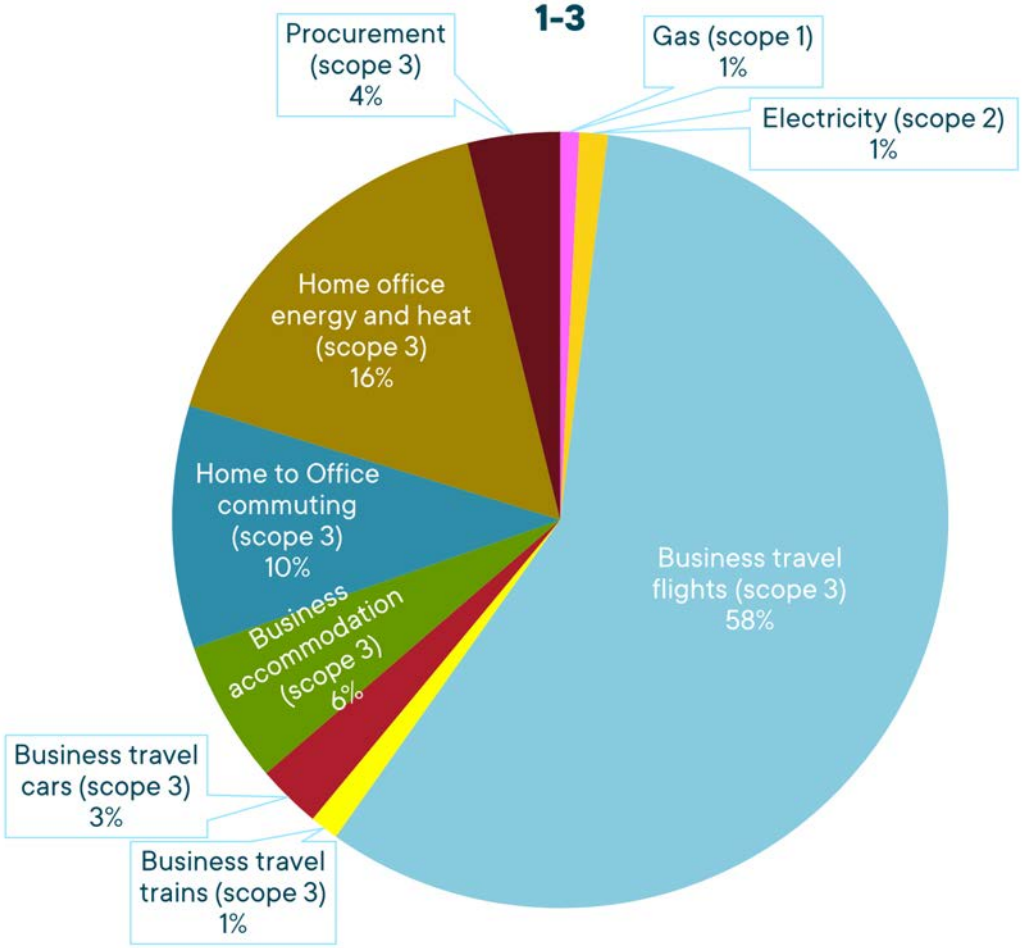
Charcoalblue's total Carbon Footprint for May 2023 – April 2024 was **464,103kg C02e**.

During the period of May 2023 to April 2024 Charcoalblue employed a total of 160 staff. The table to the right shows how these staff were employed across each Business Unit and their region. Using the total emissions and total number of staff employed over this period the CO2e/kg per person equates to 2,900.64kg CO2e per person per year.

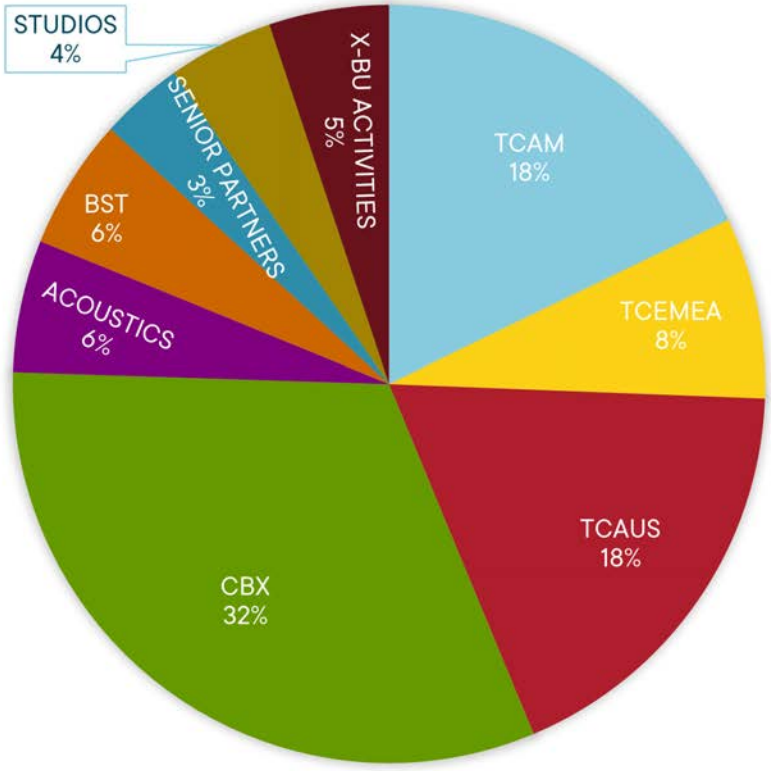
	Americas	Australia	UK	Grand Total
Acoustics	7	1	4	12
Business Support Team	15	2	19	39
Charcoalblue Experience	35		14	49
Senior Partners (& Assistant)			5	5
Theatre Consultancy America	22			22
Theatre Consultancy Australia		5		5
Theatre Consultancy EMEA			31	31
Grand Total	**79**	**8**	**73**	**160**



Charcoalblue FY 2023-24 Carbon Footprint Scopes 1-3



Charcoalblue emission breakdown

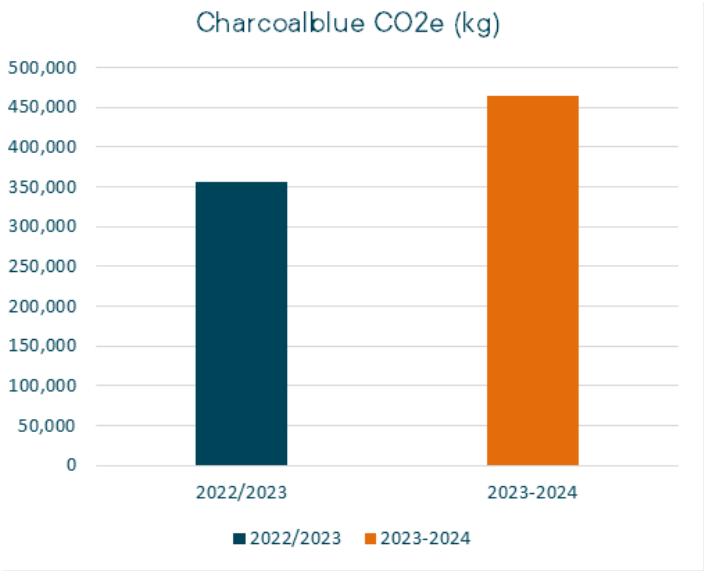


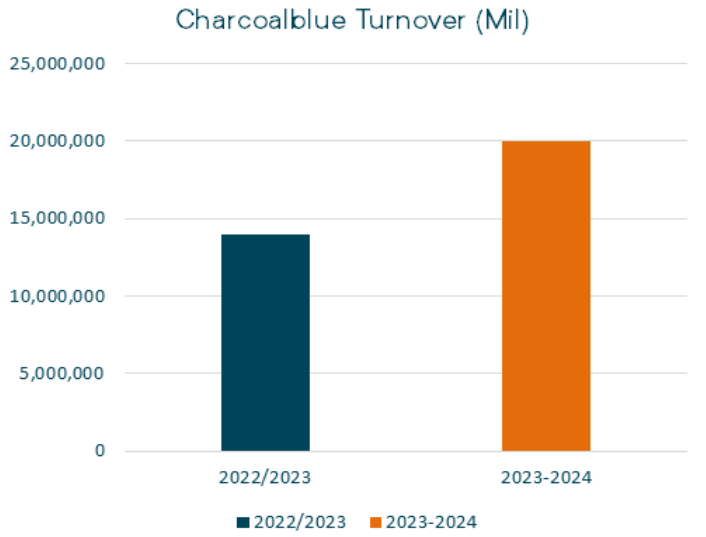
BASELINE COMPARISON

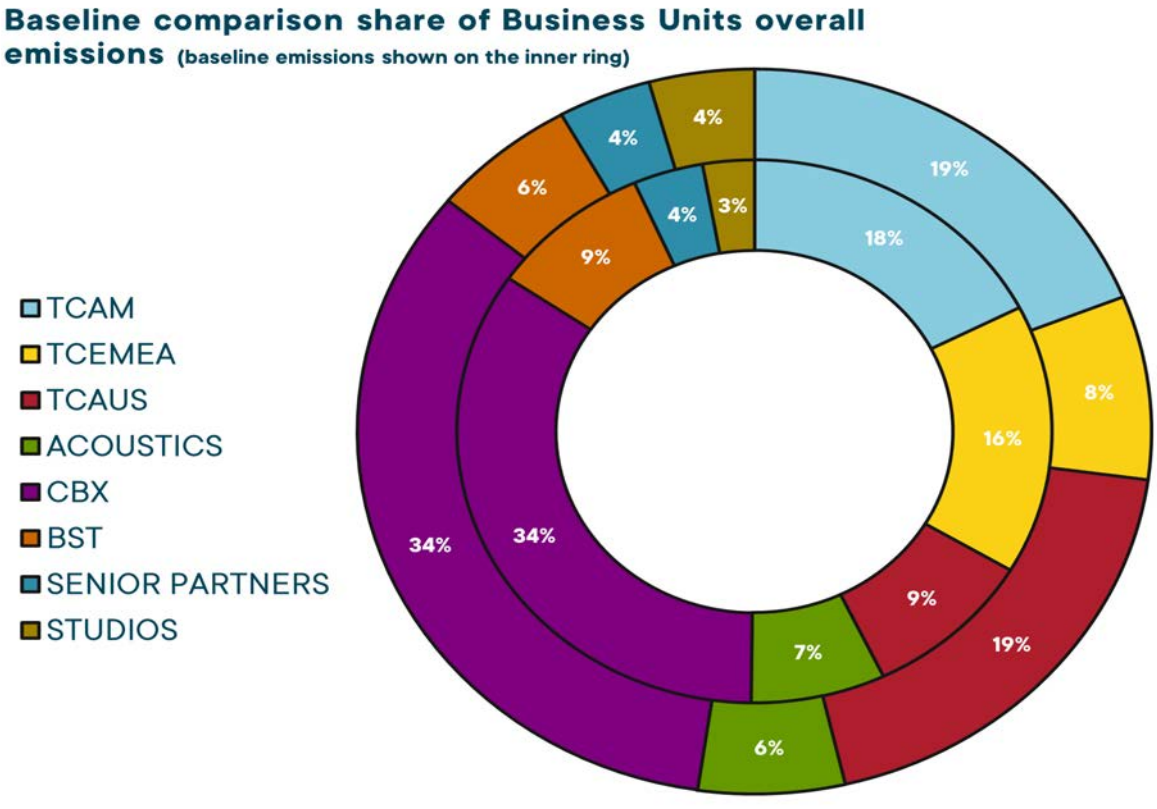
The baseline report FY 22-23 presented our total carbon footprint of 355,707kg CO2e (note this is a small increase from the reported total following some final emission calculations coming in post the issue of the report). As shown on the previous page our footprint for the period of May 2023 – April 2024 is 464,103kg CO2e.

As illistrated in the graphs to the right, the increase in CO2e FY 23-24 vs the baseline year 22-23 directly correlates to the increase in turnover for Charcoalblue.

This presents a 30% increase in overall emissions. Five business units have increased (including the Senior Partners), The Business Support Team plateaued and Theatre Consultancy EMEA have decreased their emissions. The graph shown at the bottom of the page presents the overall share of emissions between all business units in the baseline year and the FY of 23-24.





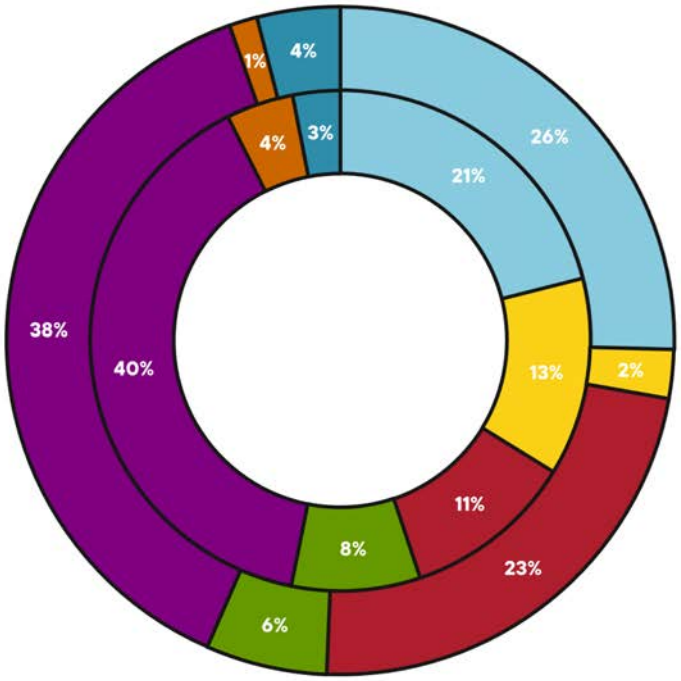


Whilst there was no AGM for this period, cross business unit collaboration days occurred which accounted for nearly 24,000kg of CO2e. Furthermore, an additional 112 flights were taken during this period compared to the baseline period. This added another 71,761kg CO2e to our overall total.

Baseline comparison flights

(baseline emissions shown on the inner ring)

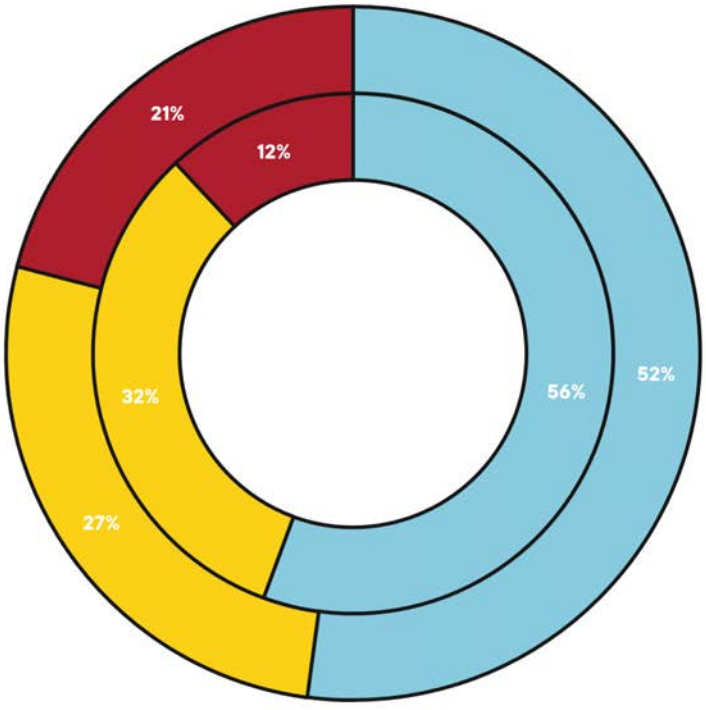
- TCAM
- TCEMEA
- TCAUS
- ACOUSTICS
- CBX
- BST
- SENIOR PARTNERS



Regional baseline comparision

(baseline emissions shown on the inner ring)

- Americas
- EMEA
- Australasia



3. EMISSIONS BY BUSINESS UNIT

The following pages show how the previously shown emissions are broken into each Business Unit and Business Support Team. Each page includes Scope 3 only as every business unit uses the studios and therefore it is not possible to associate the emissions from the studios (scopes 1 & 2, procurement & studio water and waste)to each business unit.

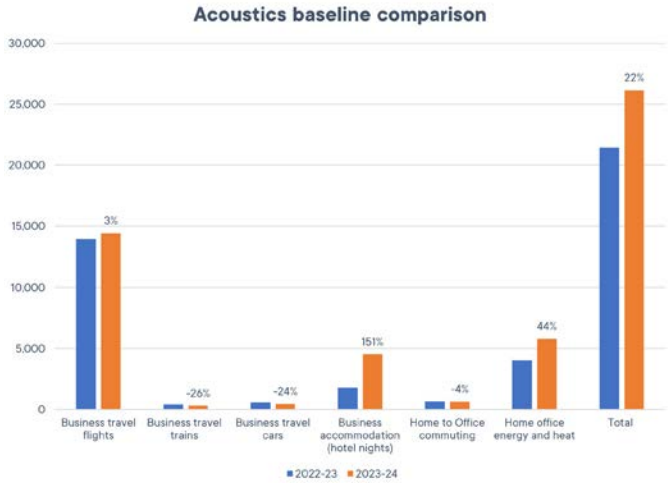
ACOUSTICS

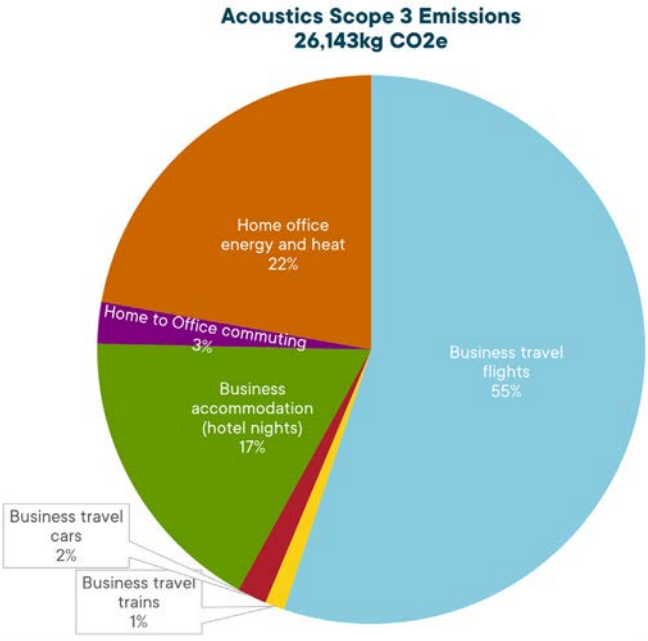
The Acoustics team are a global team with staff located in Bristol, London, New York, Chicago and Melbourne. During the period of May 2023 – April 2024 there was a total of 12 staff.

The total emissions for the Acoustic business unit were 26,143kg CO2e. This is a 22% increase in emissions from the baseline report.

Dividing this total with the total number of staff (12) the carbon footprint per person is 2,178.59kg CO2e which is slightly under the average for the entire Charcoalblue company.

Flights were the main contributor to the overall emissions for the Acoustics Business Unit with 55% of the total.

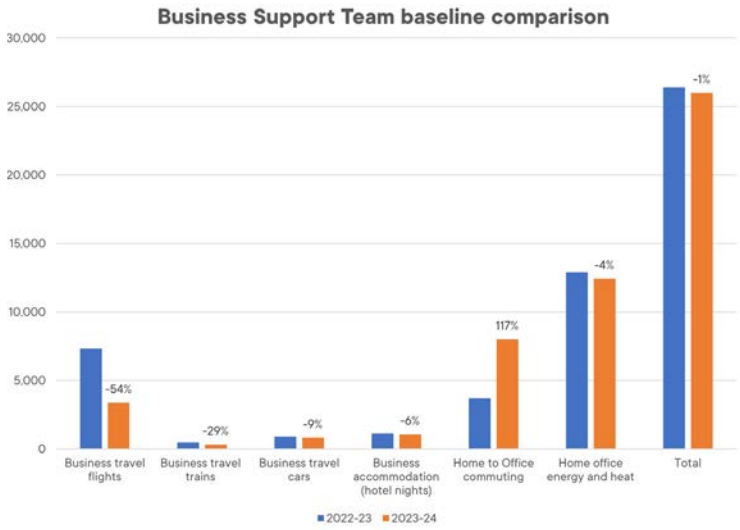


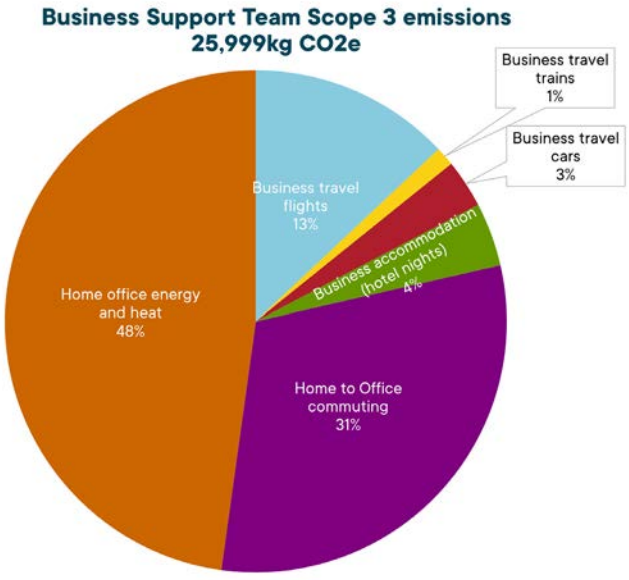


BUSINESS SUPPORT TEAM

The Business Support Team operates across the US, UK, and Australia, with a total of 36 employees during this period.

Their total emissions amounted to 25,999 kg CO2e. When divided by the number of staff, this results in an individual carbon footprint of 722.2 kg CO2e per person. This relatively low figure is expected, as the team does not travel for projects. The primary contributor to emissions is home office energy and heating, accounting for 48% of the total.



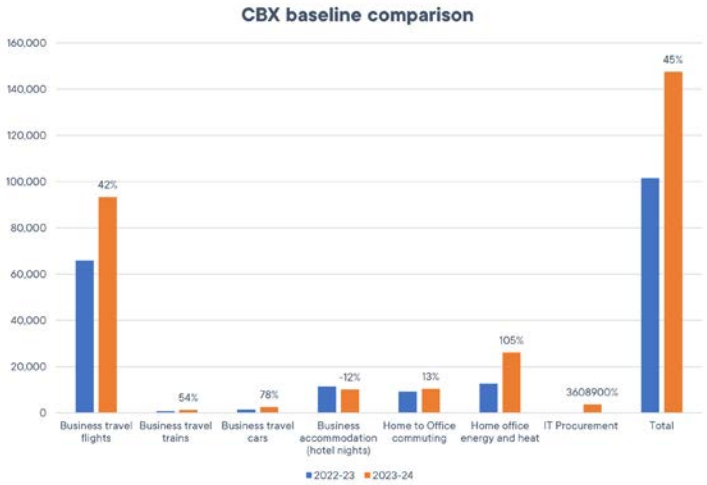


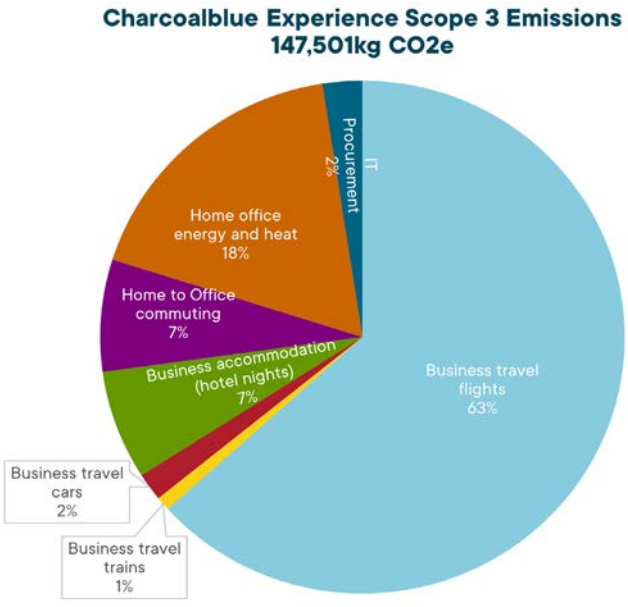
CHARCOALBLUE EXPERIENCE

Charcoalblue Experience, the largest business unit of Charcoalblue, operates across the US and UK, with a total of 49 staff during this period.

The unit's total emissions were 147,501 kg CO2e, resulting in an individual carbon footprint of 3,010.23 kg CO2e per person. This represents a 46% increase in emissions. Due to the amount of travelling and hotel stays this high individual footprint is expected.

The majority of emissions, 65%, come from flights, while home office energy (including work at Google offices) accounts for 18%. IT Procurement was not included in the baseline report but has now been and therefore appears as a large percentage increase in emissions.



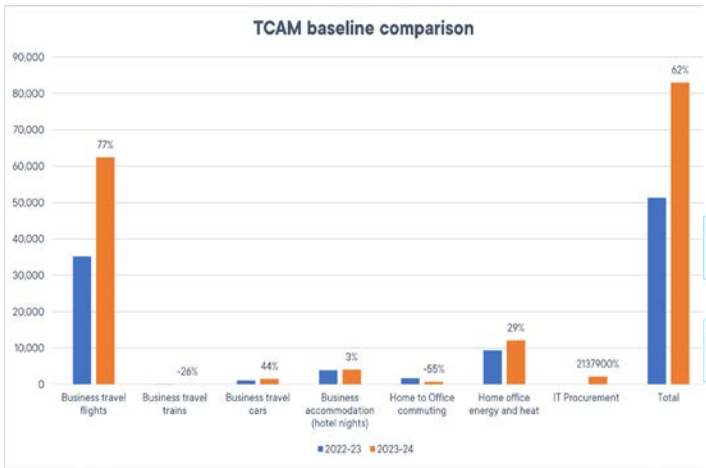


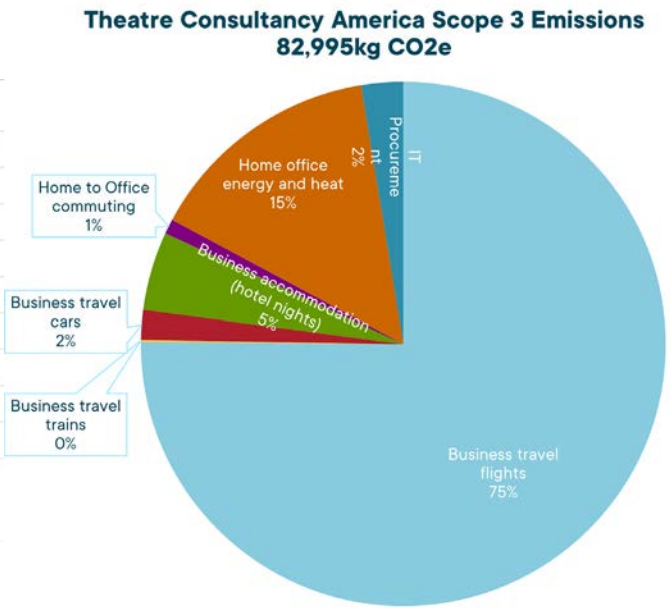
THEATRE CONSULTANCY AMERICAS

Theatre Consultancy America operates with staff based across North America, with 22 employees during this period.

The reported total emissions for this period is 82,995 kg CO2e, resulting in an individual carbon footprint of 3,772.52 kg CO2e per person. These figures show an increase from the baseline report of just under 62%.

Flights are the primary contributor, accounting for 75% of the total emissions, while home office energy represents 15%. IT Procurement was not included in the baseline report but has now been and therefore appears as a large percentage increase in emissions.

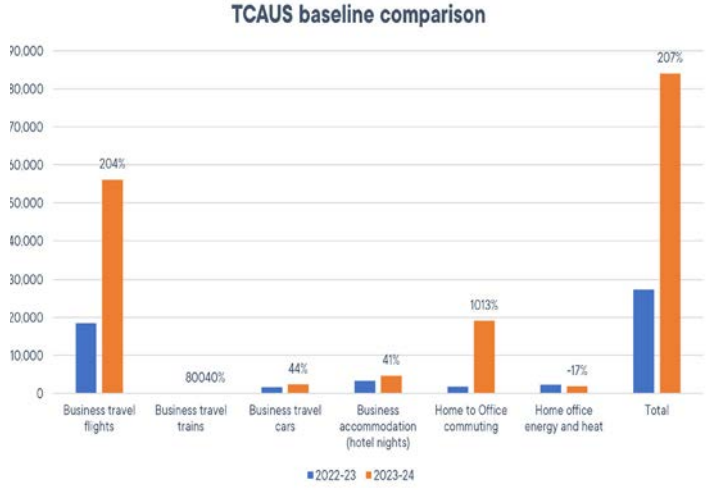


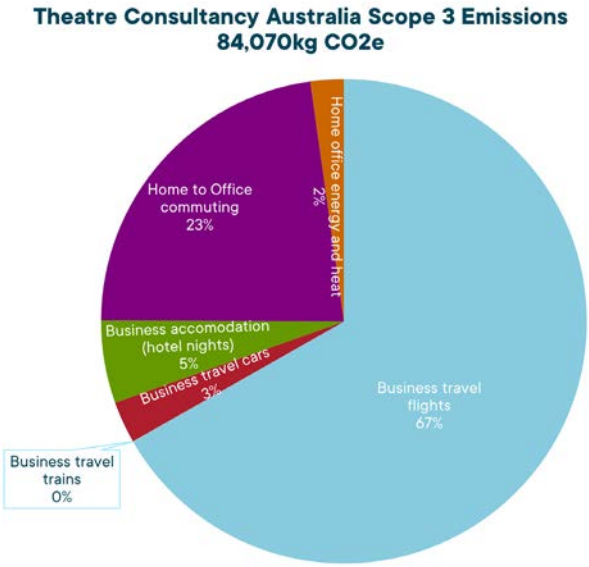


THEATRE CONSULTANCY AUSTRALIA

Theatre Consultancy Australia primarily has staff based in Melbourne, with one employee in Brisbane. During this period, the unit employed 5 staff members and reported total emissions of 84,070 kg CO2e. This results in a significant carbon footprint of 16,814.10 kg CO2e per person, reflecting a 207% increase from the baseline report.

The majority of these emissions, 67%, come from flights, with commuting contributing an additional 23%. The high amount of air travel is driven by the large geographical area covered, involving frequent long-distance trips to and from the UK and back and forth across Australia to/from project sites.



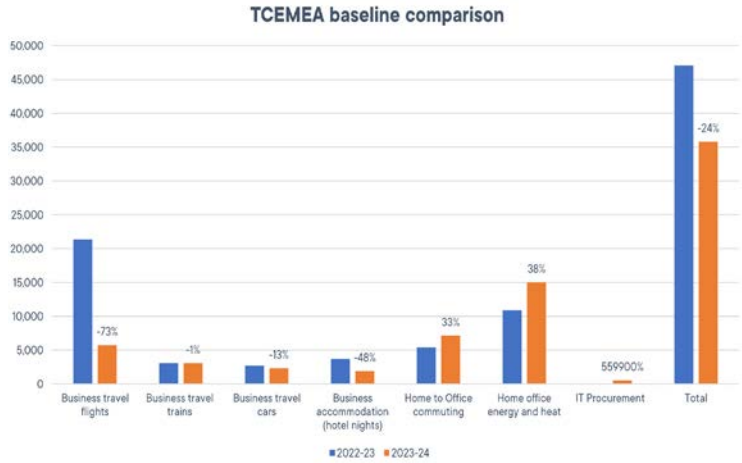


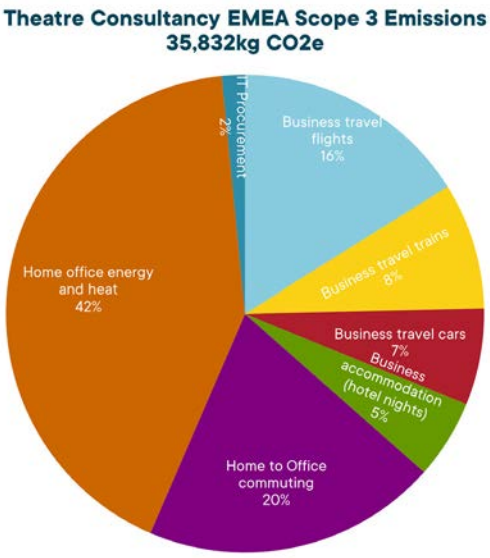
THEATRE CONSULTANCY EMEA

Theatre Consultancy EMEA has staff spread across the England & Wales. A total of 33 staff worked for this business unit during the period.

The total emissions are 35,832kg CO2e which equates to a carbon footprint per person of 1,155.87kg CO2e. This shows a 24% decrease in emissions, the only Business Unit to decrease emissions year on year.

Home office energy is the main contributor making up 42% of the emissions. Emissions from flights have significantly dropped by 73% and now only take up 16% of the overall emissions. IT Procurement was not included in the baseline report but has now been and therefore appears as a large percentage increase in emissions.

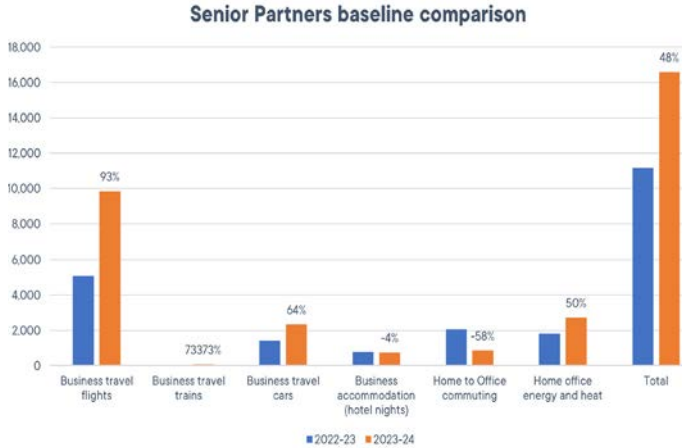


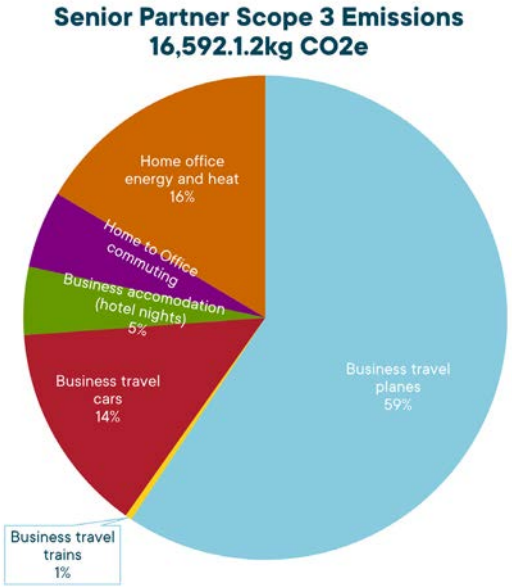


SENIOR PARTNERS

The Senior Partners' overall emissions was 16,592.1kg CO2e. This accounts for 4% of the total emissions for Charcoalblue. As shown on the graph on this page, 59% of these emissions are from business flights. Car use is again high with 14% of the overall emissions coming from this area. The overall emissions are a 48% increase from our baseline.

There are 4 Senior Partners and 1 Personal Assistant. The carbon footprint per person for the Senior Partners is 3,318.42kg CO2e.





4. CARBON REDUCTION PLANS

This report has shown that Charcoalblue have increased overall emissions by 30% based on the baseline emissions.

This is not unexpected as the baseline report was calculated and issued during the financial year of 2023/24 and therefore it was not possible to action any carbon reduction targets for this period. As this report is being issued part way through the financial year of 2024/25 again it can not be fully expected that emissions for this period can be reduced significantly. As noted earlier in the report, Charcoalblue's main emissions are through travel and in particular flights. The majority of these flights are taken due to project requirements and therefore it can be very difficult for Charcoalblue to reduce the number of these flights. Charcoalblue partners and boards intend to review and analyse if there are ways that a reduction in project-related flights can be made.

TRAVEL

- Analyse when travel is required rather than expected. The Charcoalblue "When to travel" matrix within the travel policy gives guidance of when travel should be considered. Ensure that teams are utilizing this document as a framework for travel plans on a project.
- When planning either all staff or business/ regional events, consider the lowest emissions methods for staff travel to the event. Also take into account the amount of time it takes to travel to allow staff to travel more slowly.
- For EMEA, travel by train instead of air when travelling within 500 miles of the destination. Allowing staff more time to travel will further encourage this.
- Due to the train networks not being as wide ranging within North America and Australia it will be more difficult for staff to travel around 500 miles easily using this method of transport. Therefore, we recommended that staff located within these regions should in the first instance research if travelling by train is an option (and emits less carbon), particularly for distances of less than 250 miles/ 400 km.
- Travel economy or premium economy when travelling by plane. Flying business class produces 3 times more CO2e emissions per passenger than flying economy class. Flying first class produces 9 times more CO2e emissions.
- Limit the total number of international flights to be taken per person, per business unit, across all projects, while ensuring our contractual commitments are met

PROJECTS

- For international projects, look to use more local freelance consultants that can carry out onsite meetings/visits.
- Furthermore, investigate the use of live streaming equipment that can be used by the onsite representative with all other consultants dialling into the stream to view progress/testing etc.

STUDIOS AND AT HOME

- Although this is not part of our audit - encourage all staff to change to a renewable tariff at their home (where this is possible).
- Reduce the amount of air conditioning being used in hotter months by using desk fans (at home and in the studios).
- Encourage all studios to host a "meat free" day to promote the lower impact of switching to a plant-based diet.
- Change all light fittings to LED in all studios.
- Create local switch-offs for use at the end of the working day, including monitors, TV's, fans, etc.
- Where possible, add more recycling bins for items such as: soft plastics, electronics, toner etc.
- Encourage staff to bring in any items that cannot be recycled at home to use our recycling facilities (where possible).
- Offer food waste/compost bins if this waste can be taken separately by the associated waste contractor.

CARBON REDUCTION PLANS CONTINUED

STAFF

- Remind all staff about the cycle to work scheme to encourage alternative green travel to and from the studios (where applicable).

PROCUREMENT

- Reduce the total number of new pieces of IT equipment procured and investigate repairing more items if possible, as long as equipment enables our contractual commitments to be met.
- Limit updates of mobile/cell phones to every 3-4 years instead of every 2 years (where Charcoalblue offers this benefit).

GROUP

- In person AGM regularity is changed to once every 3-5 years.
- Change some or all future AGMs to be hybrid with each region coming together but dialling into one video conference (this happened for the 2021 AGM), as long as this enables us to continue to observe our other cultural value commitments.

TARGETS

To ensure we reduce our overall emissions we must set absolute targets. As this is the start of our reduction scheme, we must balance these efforts with maintaining the efficiency of our day-to-day business, . The following targets will start to be brought into practice from May 2024.

- Reduce the overall number of higher class of business flights per business unit unless there are exceptional circumstances. Noting that the current travel policy is based on health and wellbeing guidelines. For example, staff with mobility issues may require a larger seat and need to use a higher class of travel.
- In EMEA, introduce the no-fly guidance within 500 miles/800 km of the destination unless under exceptional circumstances.
- In the US & Australia, introduce the no-fly guidance within 250 miles/ 400km of the destination unless under exceptional circumstances.
- Research and develop better live streaming options for onsite meetings and testing.
- Include all business travel into the CRIF (currently only business flights are included).

APPENDIX A.

EMISSIONS BY REGION

AMERICAS REGION EMISSIONS

Within the Americas region the breakdown of staff was as follows:

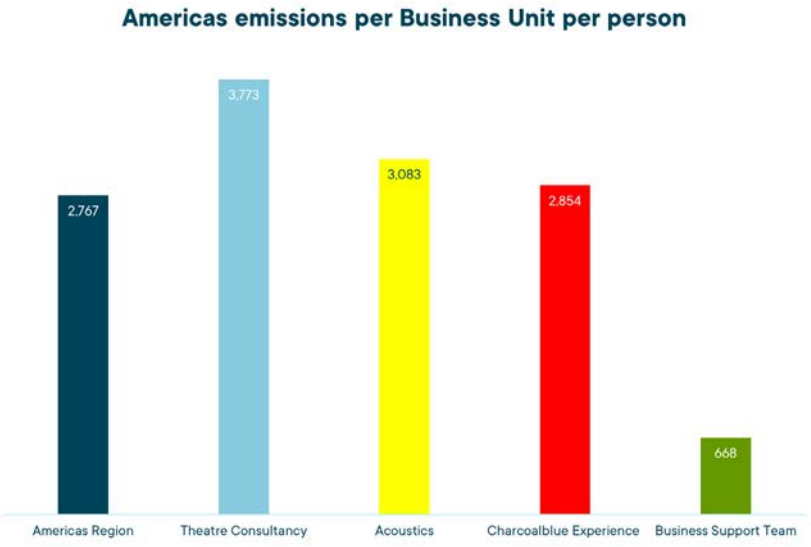
BUSINESS UNIT	NUMBER OF STAFF	PERCENTAGE OF REGION
Acoustics	7	9%
Business Support Team	15	19%
Charcoalblue Experience	35	44%
Theatre Consultancy	22	28%
Total	**79**	

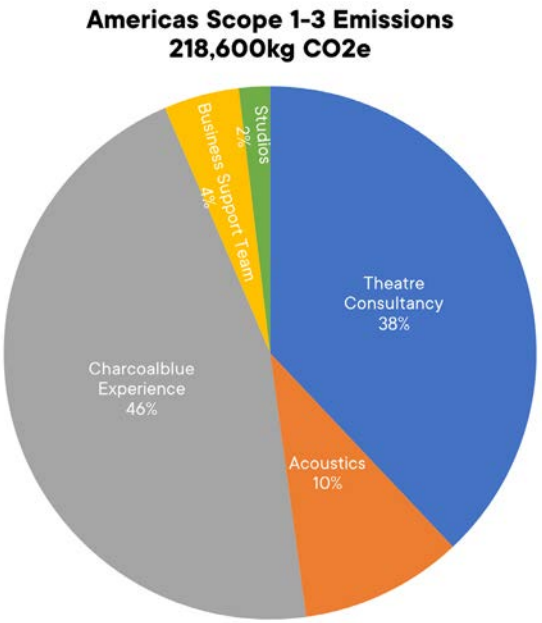
With a total Carbon Footprint of 218,600kg CO2e the average America's region employee has a carbon footprint of 2,767kg CO2e. This is a 55% increase in overall emissions.

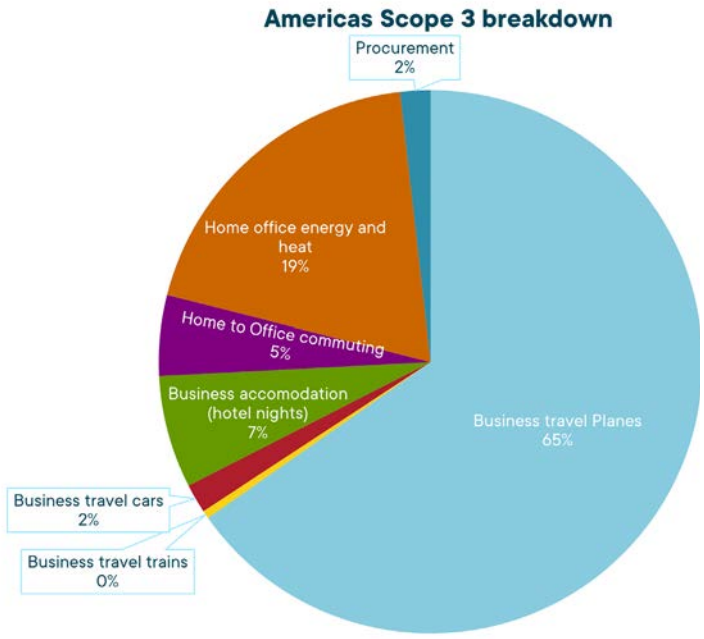
Charcoalblue Experience business unit accounts for 46% of all emissions for the America's region. However, the total number of staff for this business unit accounts for around 44% of all of the Americas' region staff so it's expected that Charcoalblue Experience take up so much of the overall percentage of emissions. The below table shows the carbon footprint for each Americas region Business Unit per person. Theatre Consultancy America has the highest footprint per person.

The largest emissions category for this region is from business flights which account for 65% of the Scope 3 emissions.

The largest emission for this region is again from business flights which drive 70% of the Scope 3 emissions.







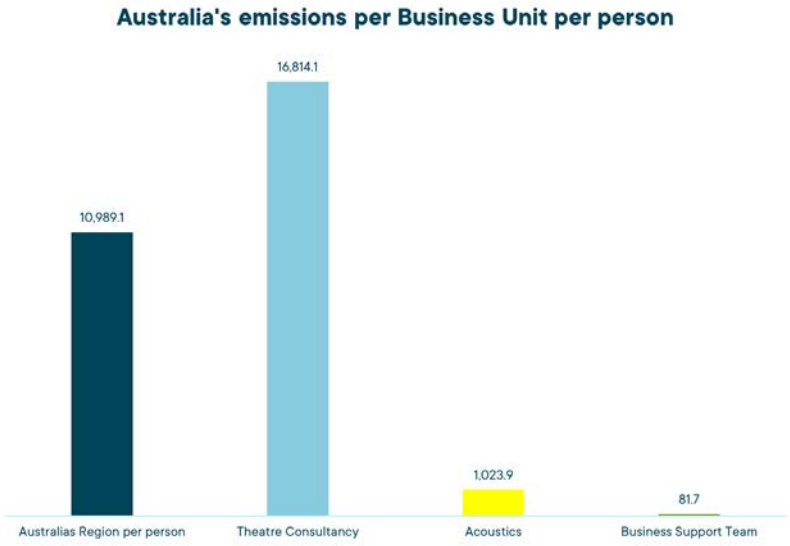
AUSTRALIA REGION EMISSIONS

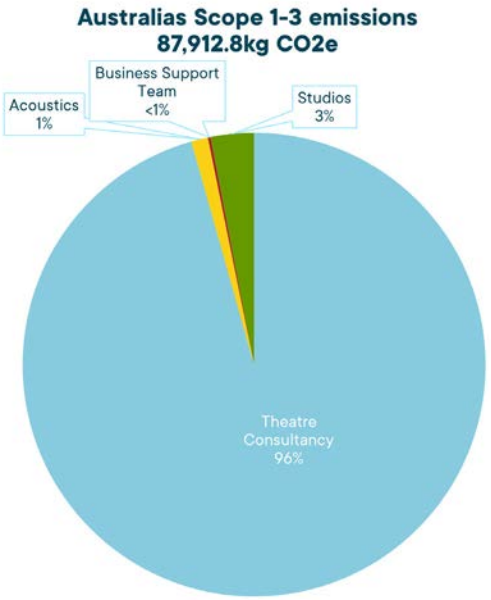
Within the Australia's region the breakdown of staff was as follows:

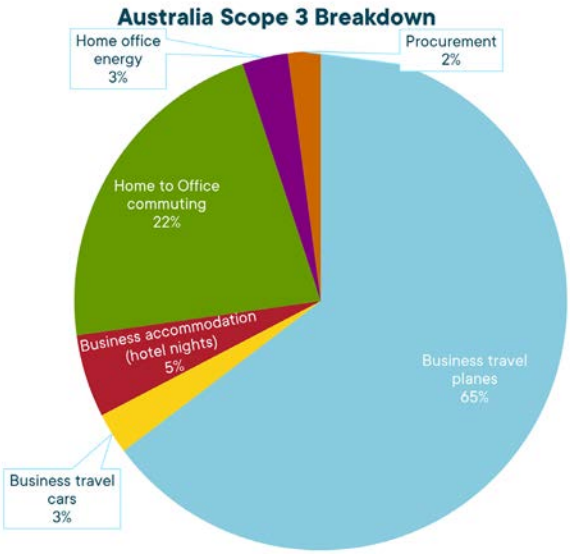
BUSINESS UNIT	NUMBER OF STAFF	PERCENTAGE OF REGION
Acoustics	1	13%
Business Support Team	2	25%
Charcoalblue Experience	0	0%
Theatre Consultancy	5	63%
Total	**8**	

With a total Carbon Footprint of 87,912.8kg CO2e the Australia's region per person carbon footprint is 10,989.1kg CO2e. This is the highest carbon footprint per person across the Charcoalblue company and is a 204% increase from the baseline. This is primarily due to a large increase in the number of flights to and from the UK during this period.

Business flights again dominate the overall emissions with 66% of Scope 3 coming from this. This is expected due to the sheer size of the country and the location of the Australia staff (8 members in Melbourne and 1 in Brisbane).
The below table shows the average Carbon Footprint for each Australia's region Business Unit.







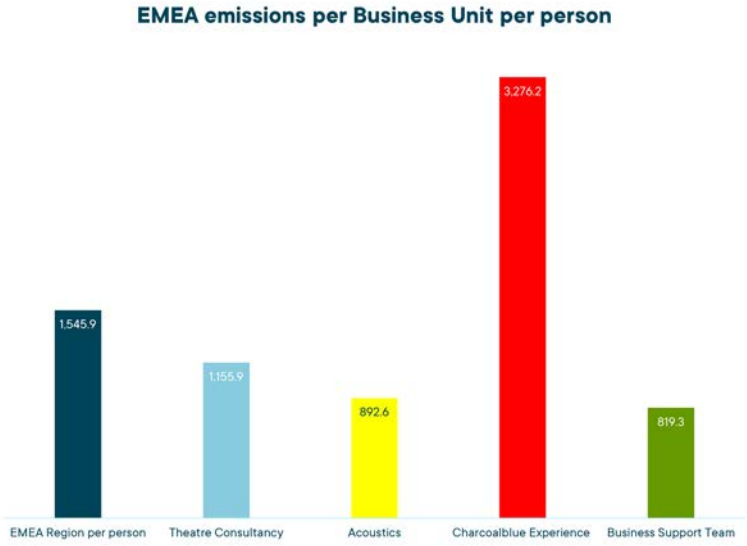
EMEA REGION EMISSIONS

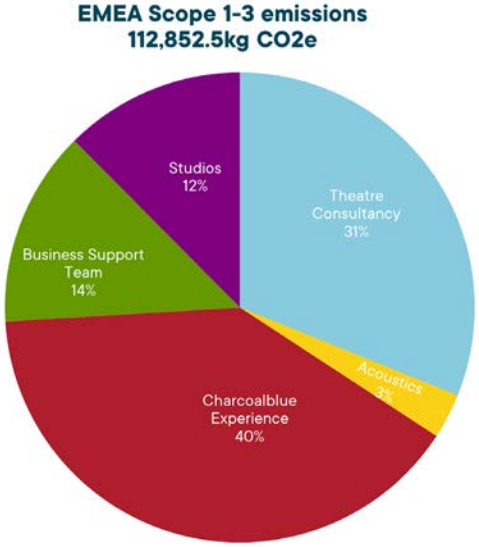
Within the EMEA region the breakdown of staff during the reported period was as follows:

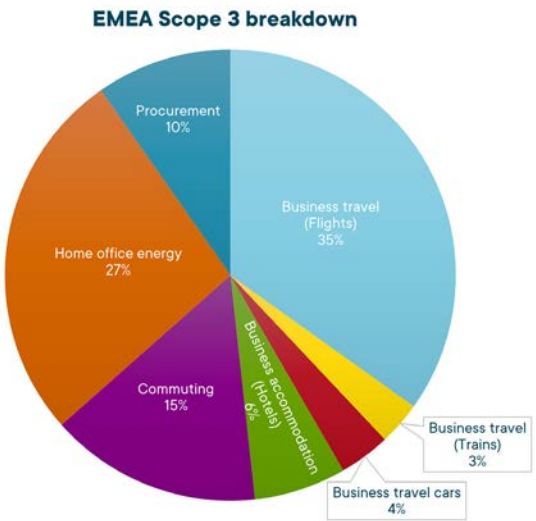
BUSINESS UNIT	NUMBER OF STAFF	PERCENTAGE OF REGION
Acoustics	4	6%
Business Support Team	19	28%
Charcoalblue Experience	14	21%
Theatre Consultancy	31	46%
Total	**73**	

With a total Carbon Footprint of 112,852.5kg CO2e the EMEA region per person carbon footprint was 1,545.9kg CO2e. This is a 42% increase on the baseline emissions.

Charcoalblue Experience has the largest footprint including the largest per person footprint which will need to reviewed given they account for only 21% of the total staff for the region. Business flights (36%) and home energy (27%) are the main contributors to the emissions for EMEA







EMISSION BREAKDOWNS

ADDITIONAL EMISSION BREAKDOWNS

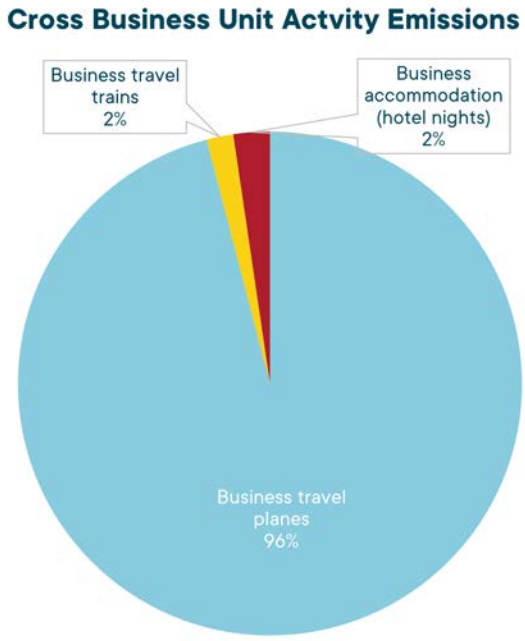
Cross Business Unit Activities

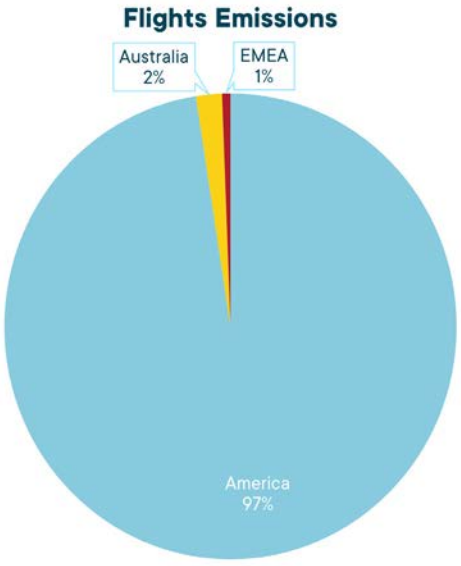
In an attempt to lower our emissions, it was decided to have in person AGMs every other year with the alternative years being hybrid local in-person and online meetings.

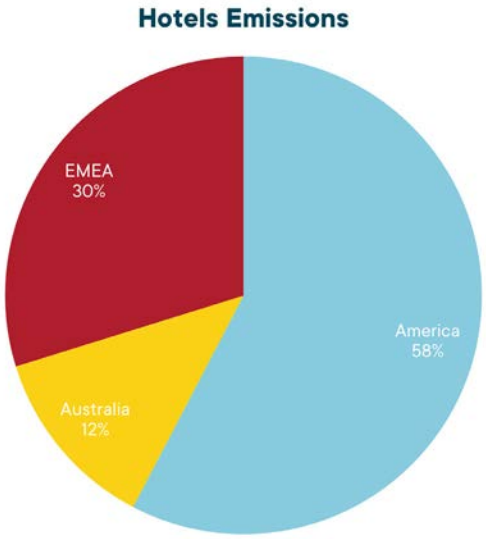
To ensure we remain as connected as possible it was decided for FY 23/24 that each Business Unit and region would meet in person every quarter (Q1 and Q3 each Business Units meet separately and Q2 and Q4 each regional all meet together).

The total emissions for these activities is 23,929.6kg CO2e. In comparison, the 2022 AGM emitted 61,158kg CO2e so these activities represent a 61% reduction in emissions.

The associated emissions from these activities are flights, trains and hotels. Any additional travel, food and beverage emissions have not been calculated. Flights represent 96% of the emissions with trains and hotels 2% each.

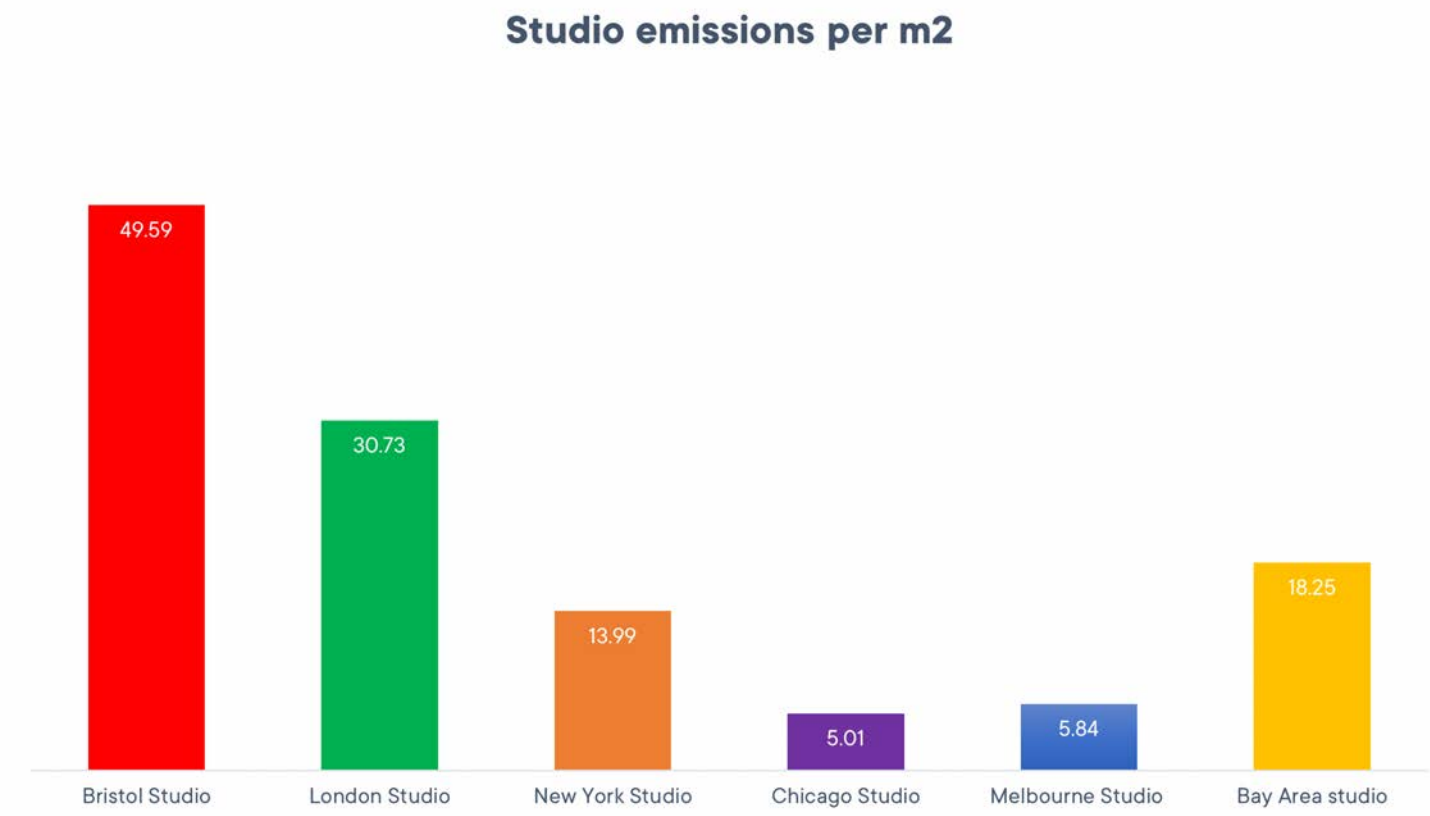


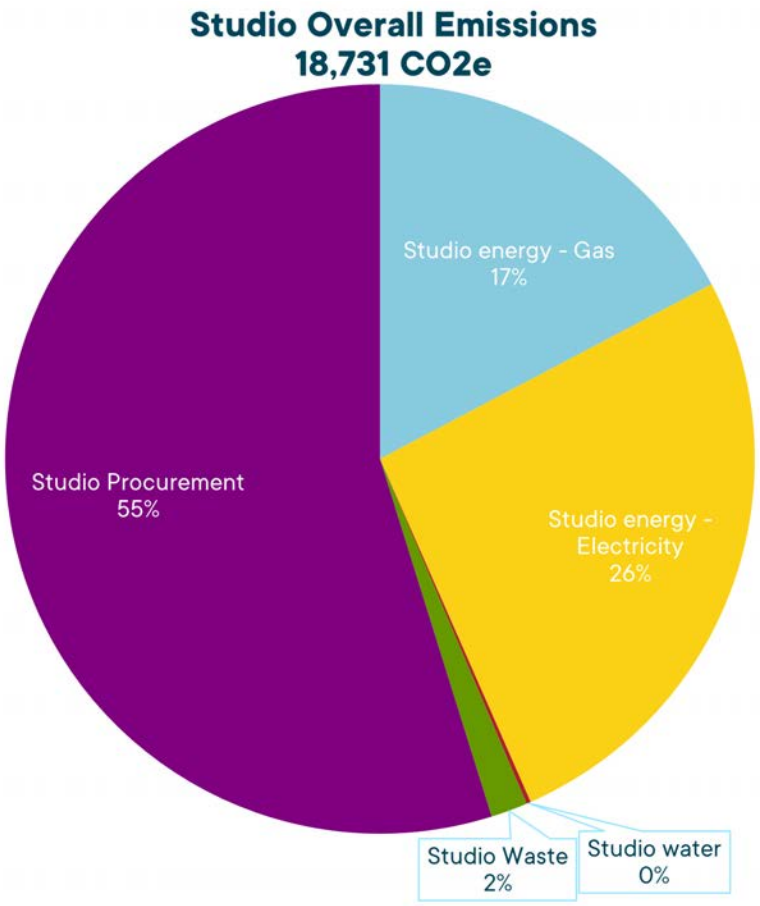




STUDIOS

The overall studios emissions totals 18,731kg CO2e.
These emissions cover all 3 scopes, with Gas and Electric accounting for 43% and procurement 55%.
With both of the UK studios using renewable electricity the electricity emissions have been more than halved.
Studio water is included in these calculations, however due to the low emissions created it shows as less than 1% of all emissions with studio waste accounting for 2% of the overall emissions.
Comparing the emissions per m2 for each studio on the baseline figure, the London studio has reduced its overall emissions by nearly 50%. The Bay Area studio was not included in the baseline report as it was not active then so therefore is showing as a large increase.




Studio Overall Emissions
18,731 CO2e
Studio energy - Gas
17%
Studio energy -
Electricity
26%
Studio water
0%
Studio Waste
2%
Studio Procurement
55%

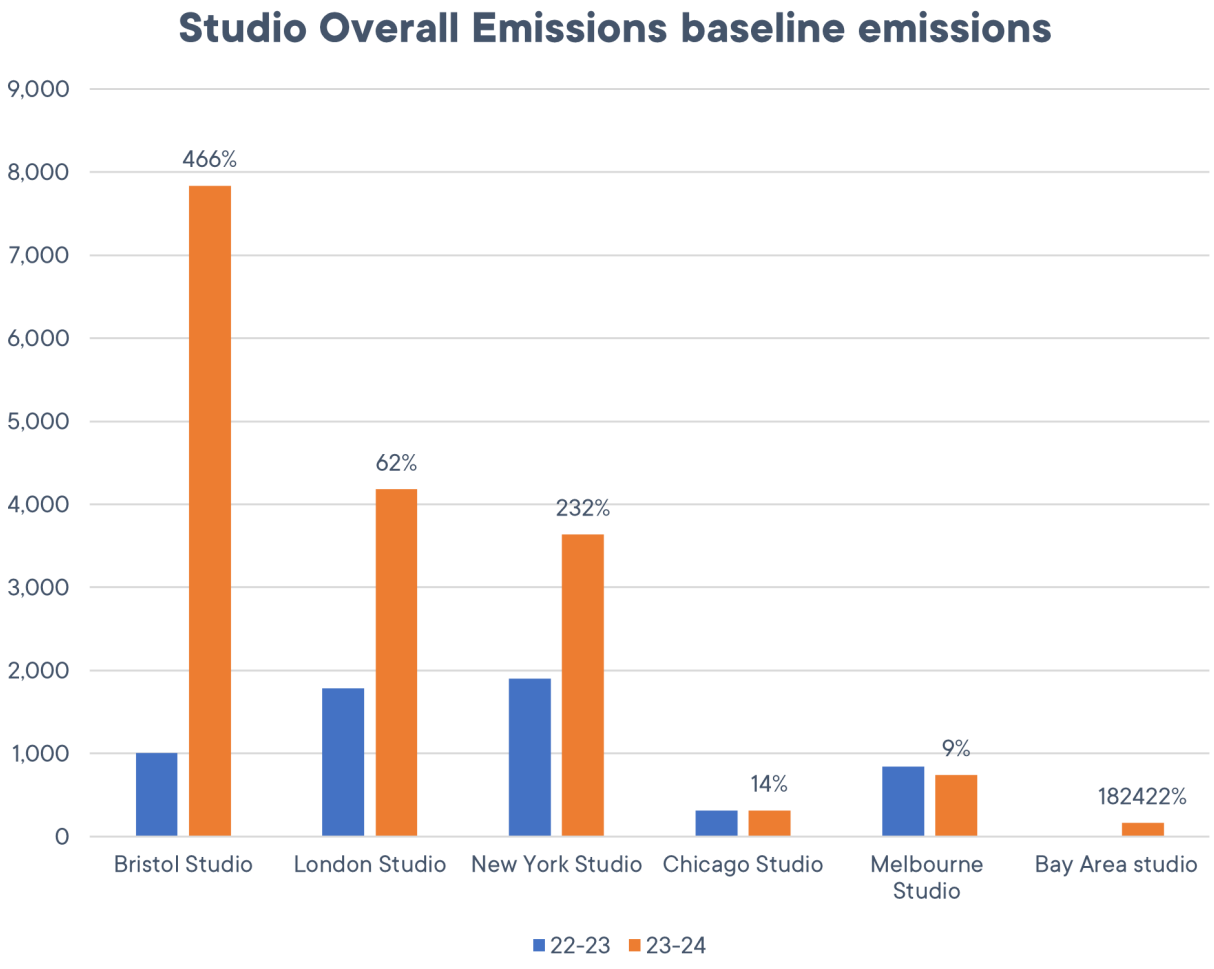

Studio Overall Emissions baseline emissions
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
466%
62%
232%
14%
9%
182422%
Bristol Studio
London Studio
New York Studio
Chicago Studio
Melbourne
Studio
Bay Area studio
22-23
23-24

TABLE OF EMISSIONS BY BUSINESS UNIT

THE FULL TABLE OF EMISSIONS ACROSS EACH BUSINESS UNIT, SENIOR PARTNERS, AGM AND STUDIOS ARE SHOWN HERE

Scope	Emissions from	TCAM	TCAUS	TCEMEA	ACOUSTICS	CBX	BST	SENIOR PARTNERS	STUDIOS	X-BU DAYS	TOTAL	SCOPE TOTALS
												SCOPE 1
1	Office energy - Gas								3,637		3,637	3,637
												SCOPE 2
2	Office energy - Electricity								3,187		3,187	3,187
3	Business travel flights	62,376	56,115	5,767	14,421	93,383	3,376	9,847		22,957	268,242	
	Business travel trains	85	8	3,056	299	1,290	319	73.47		411	5,543	
	Business travel cars	1,507	2,350	2,345	452	2,589	810	2,334			12,387	
	Business accommodation (hotel nights)	4,024	4,655	1,920	4,525	10,160	1,067	753		558	27,662	
	Home to Office commuting	758	19,076	7,152	640	10,419	8,000	858			46,902	
	Home office energy and heat	12,107	1,866	15,032	5,805	26,051	12,428	2,728			76,017	
	Office water								39		39	
	Office Waste								333		333	SCOPE 3
	Procurement	2,138	0	560	0	3,609	0	0	11,535		17,842	454,967
Total GHG Emissions		**82,995**	**84,070**	**35,832**	**26,143**	**147,501**	**25,999**	**16,592**	**18,731**	**23,927**		

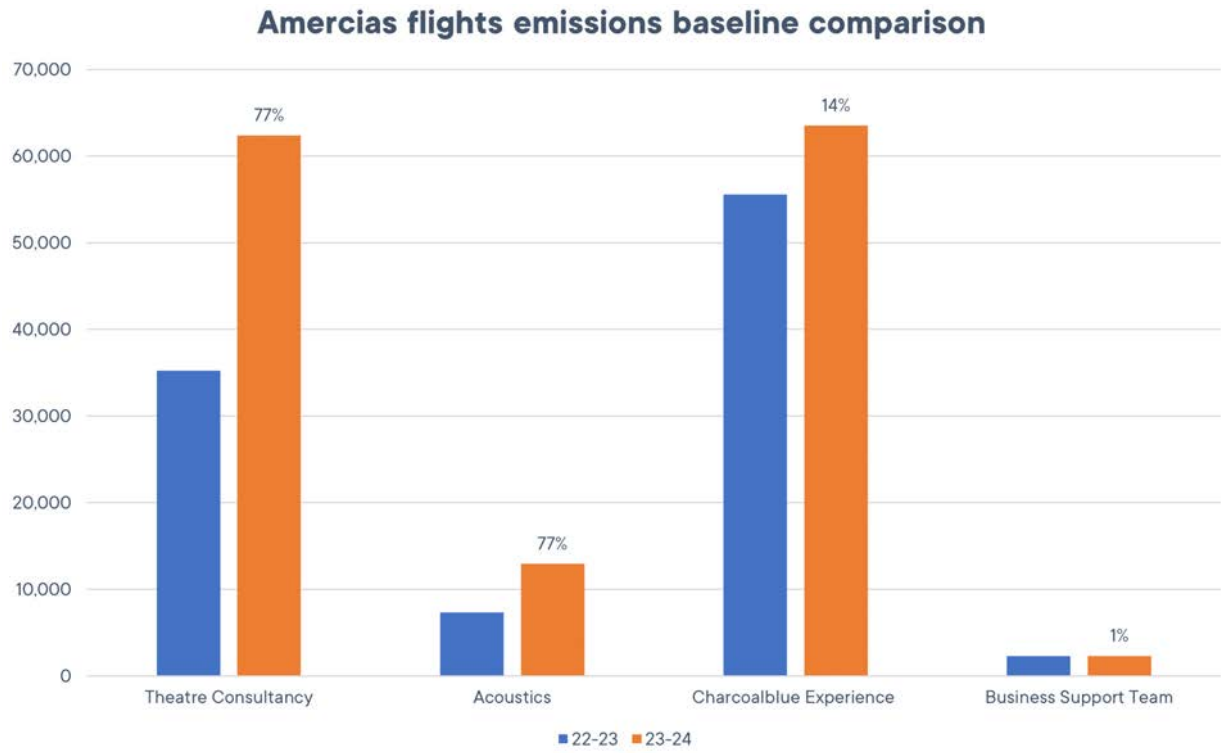
Charcoalblue GHG Emissions	**461,791**	**CO2e kg**

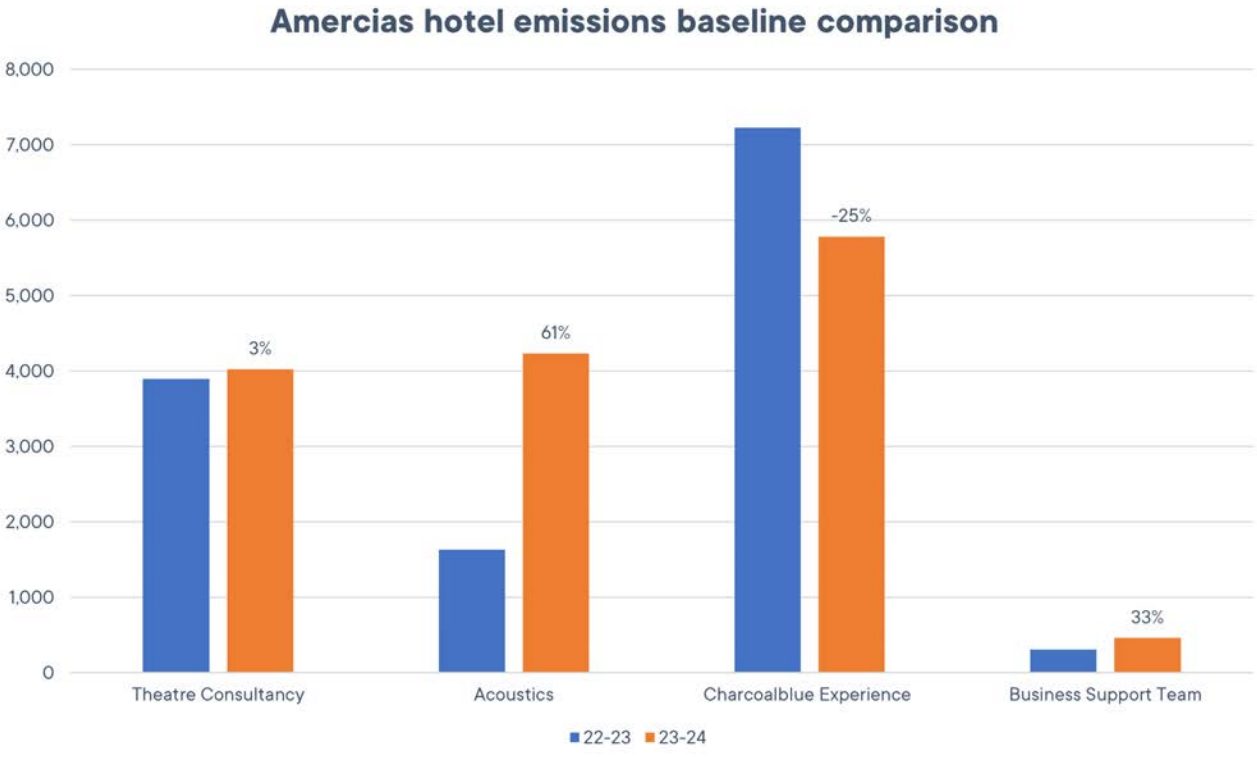
REGIONAL FLIGHTS AND HOTEL EMISSIONS BY REGION

AMERICAS REGION

For this period, the region of the Americas region emitted 141,122kg CO2e from flights. Theatre Consultancy America and Charcoalblue Experience emitted 44% and 45% of the overall total emissions respectively. Theatre Consultancy America and Acoustics America have both seen 77% increases in flights from the baseline with Charcoalblue Experience America showing a 14% increase.
The large increase in these emissions is largely due to project requirements but also class of travel has now been included in the emissions which has added to the overall figures.

The associated emissions from hotel use was 14,497kg CO2e. This is just under a 13% drop from the baseline. Acoustics have the largest increase of 61% with Charcoalblue Experience reducing their emissions from hotels by 25%



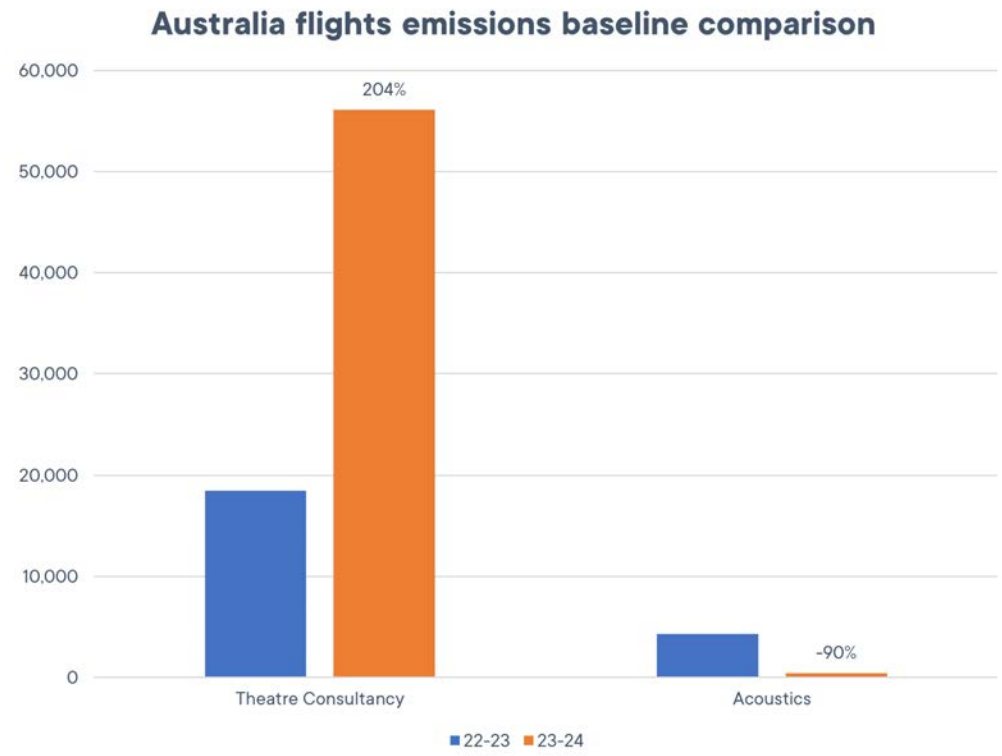


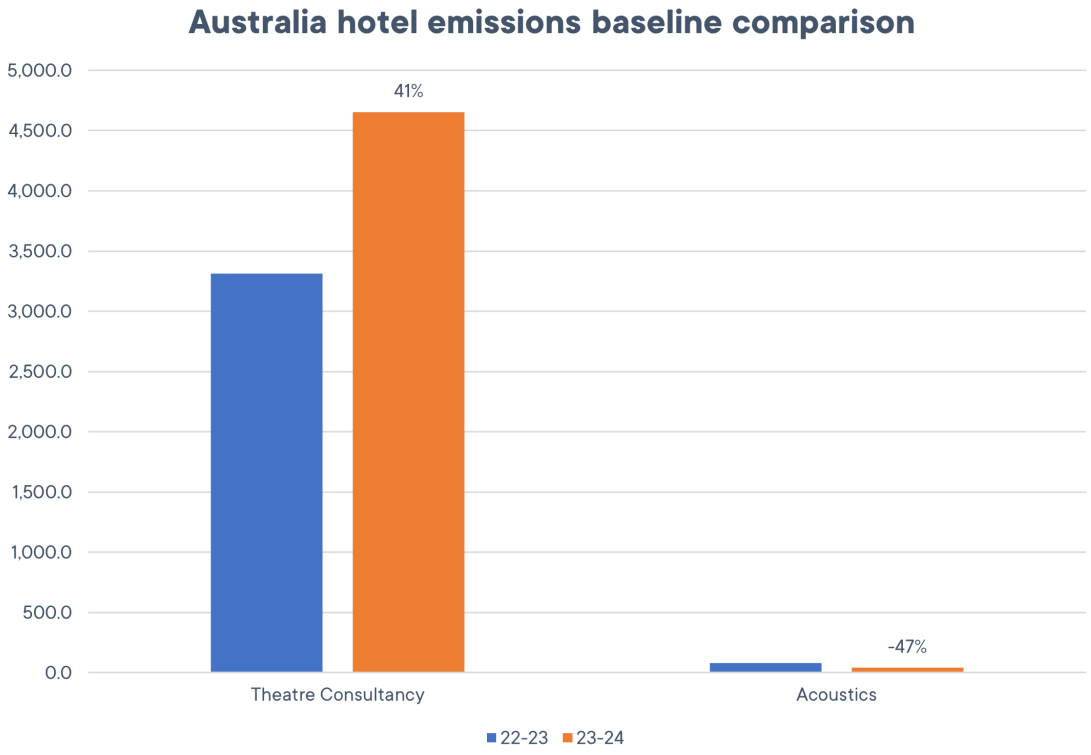
AUSTRALIA REGION

Theatre consultancy accounts for 62.5% of all of the staff in Australia so unsurprisingly the emissions from both flights and hotels are dominated by this business unit.

In comparison to the baseline figures, Theatre Consultancy has increased emissions by 203%. This significant increase is largely due to the number of flights taken between London and Melbourne during this period. Furthermore, as per the Americas emissions, class of travel has now been included which has added to the overall emissions figures.

Theatre Consultancy have also increased by 40% in hotel emissions, but Acoustics have reduced their emissions by 46%.

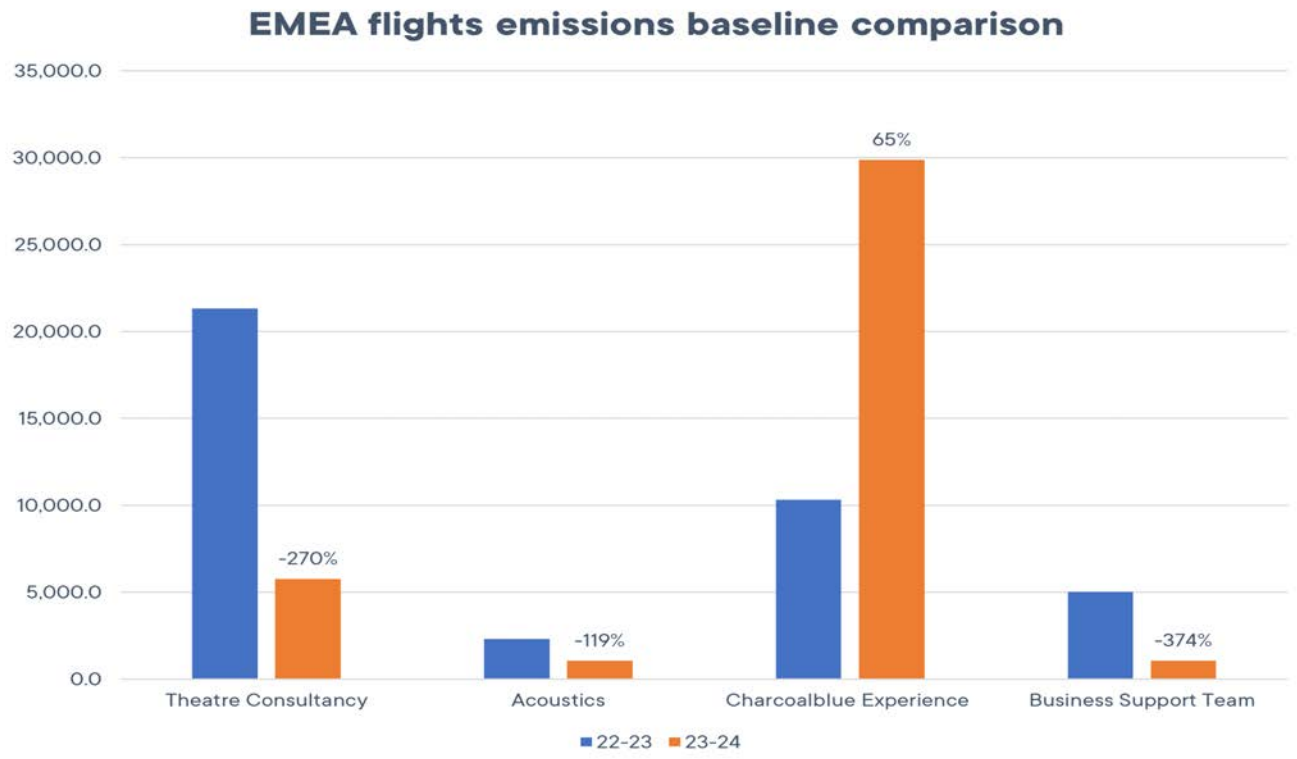


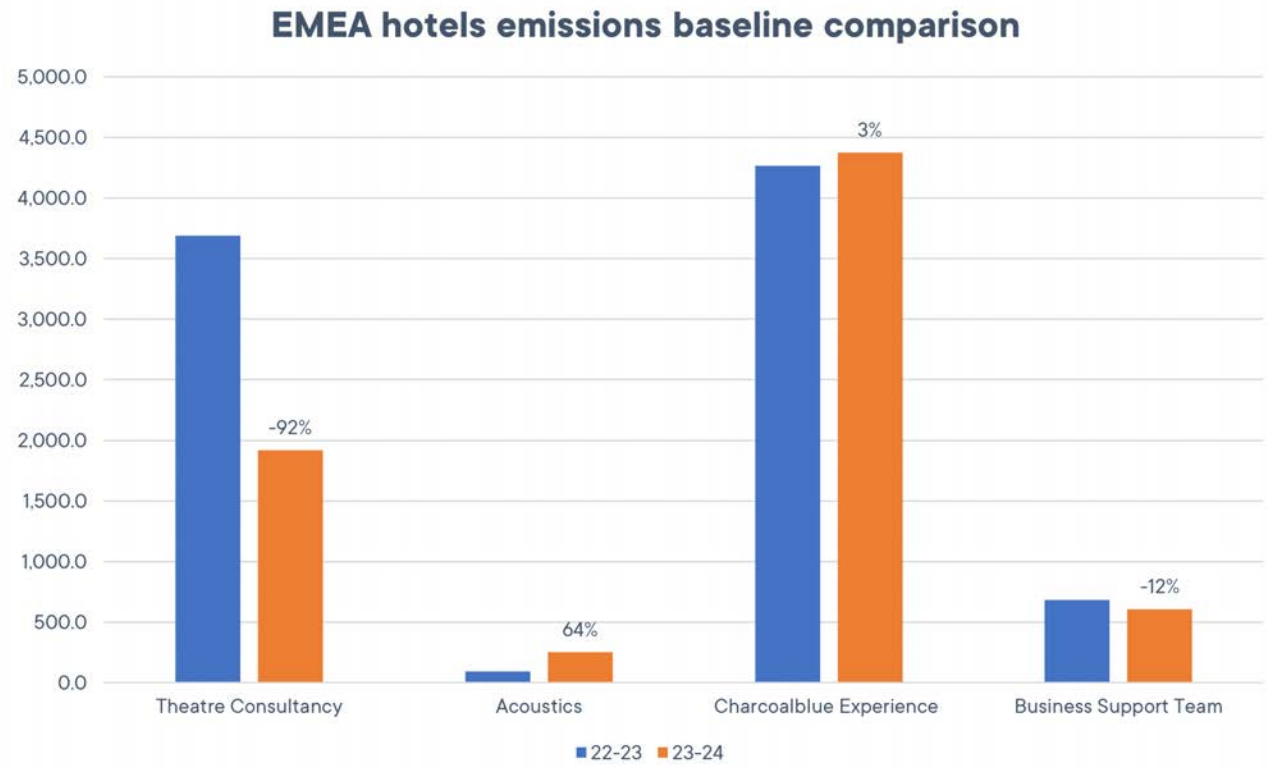


REGIONAL FLIGHTS AND HOTEL EMISSIONS BY REGION

EMEA REGION

In the EMEA region, the Theatre Consultancy business unit have reduced their emissions from flights by just under 73%. This reduction has not resulted in an increase in train use though so this reduction is largely to do with the lack of required travel for projects. Charcoalblue Experience, however, have increased their emissions from flights by 189%. Overall, the EMEA region have reduced their totals emissions from flights by 4%. It's a similar picture for hotel use with Theatre Consultancy reducing their emissions by just under 48%. Acoustics have increased their emissions though by 174%. Charcoalblue Experience and the Business Support Team have plateaued with a small increase of 2.5% and reduction of 11% respectively.





APPENDIX B.

EXCLUSIONS AND NOTES

- All business flights taken over this period have been offset using Charcoalblue's own offsetting fund.
- Associated emissions from oil-fired boilers in our New York, Chicago and Melbourne studios have not been included in this report. As these studios are part of much larger buildings and the billing for this is included in the overall rental agreement these is currently no way to calculate the overall use for heating in these studios. For our next report we intend to develop a methodology to calculate these emissions.
- Recording of car usage during this period only accounts for distance logged within expenses claims. The use of rental cars and their associated travel emissions has not been included.
- Train travel booked by staff and expensed was not included.
- The working-from-home carbon rate has been taken from UK guidance and applied to all staff.
- All train use including subway/underground etc. has used the same carbon rate of national rail per passenger per km.
- All water usage in our studios has been averaged based upon the London usage. No other studios have the ability to measure usage.
- Waste emissions have been calculated by weighing waste bags over a period of a week in each studio.
- Train emissions have been calculated using a combination of data and averages for each region.
- Emissions relating to any 3rd party organisation Charcoalblue uses like banks, insurance companies etc. have not been included.
- Emissions relating to any of the construction of the building projects that Charcoalblue were part of the designs for are not included.

METHODOLOGY

- Scopes 1 & 2, train, car, hotel, working from home, water & waste base emission factors have come from the UK Government GHG conversion factors 2023. And Greenhouse Gas Protocol tool
- Business flight emissions have been calculated using the UN carbon offset tool
- Food and procurement base emissions factors have come from:
  - University of Cambridge
  - Business moves
  - Food carbon footprint calculator
  - How bad are bananas book
- The carbon rate use for working from home is from the UK government document and includes electricity, heat and water usage.
- Commuting emissions were calculated following the staff survey and using the average per regional Business Unit (TCEMEA, TCAM, TCAUS, CBX (US & EMEA), Acoustics (US, EMEA, AUS), BST (US, EMEA, AUS) to create a full sum.
- As part of the data collection for this report, a staff survey was sent out asking for information regarding travel and working from home. We have used this information to bases the calculations on. This calculation takes into account the number of staff who only work from home. For Charcoalblue Experience staff any days worked at Google premises have not been included in this calculation.
- Office equipment is an estimation of energy used by a homeworking employee.

GHG conversion factors for electricity consumption come from the UK GHG Conversion factors model outputs for UK Electricity. There are 3 assumptions:

1. assumed that a homeworking employee only uses energy for a laptop or PC, monitor, phone, printer and lighting;
2. assumed that the energy used by a homeworking employee is 140W, same as the energy used by a workstation (a laptop or PC, monitor, phone and printer). Electricity use data for a workstation came from CIBSE Guide F (CIBSE, 2012);
3. assumed that the energy used for lighting is 10W per homeworking employee (an assumption by EcoAct);

- Home heating is an annual average of energy used for heating estimated using data from "Typical Domestic Consumption values 2020" (Ofgem, 2020) and "Estimates of heat use in the United Kingdom in 2013" (DECC, 2014). GHG conversion factors for natural gas consumption come from the UK GHG Conversion factors model outputs for fuels.

There are 4 assumptions:

1. assumed that all home heating in the UK is powered by natural gas (survey showed that 86% of UK homes are heated by natural gas (DLUHC, 2021);
2. assumed that in the UK, heating is used 6 months per year (October to March);
3. assumed that heating is used 10 hours per day during heating season; and
4. assumed that one-third of the employees have at least one household member who would normally remain at home during the day (result from an internal staff survey done by NatWest Group in 2020), therefore only two-thirds (66.7%) of the employees moving to homeworking would result in incremental heating energy.

- The emissions relating to working from home have been calculated thus:

g = (a x b = c), (d x e) x f x g = Americas region WFH emissions per year.

- o (a)Total working days of 229 (52 weeks x 5 working days = 260 days – 11 public holidays – 15 days minimum annual leave)
- o (b)Average days working from home (between 2-4 depending on location and Business Unit)
- o (c) Average days working from home per year
- o (d) Carbon rate of working from home 0.33378 kg CO2e per person per hour
- o (e) Number of staff in a Business Unit region (TCAM, CBX (US), Acoustics (US), BST (US)
- o (f) 8 hour working day

g = (a x b = c), (d x e) x f x g = Australia region WFH emissions per year.

- o (a)Total working days of 229 (52 weeks x 5 working days = 260 days – 11 public holidays – 12 days minimum annual leave)
- o (b)Average days working from home (between 2-4 depending on location and Business Unit)
- o (c) Average days working from home per year
- o (d) Carbon rate of working from home 0.33378 kg CO2e per person per hour
- o (e) Number of staff in a Business Unit region TCAUS, Acoustics (AUS), BST (AUS)
- o (f) 8 hour working day

g = (a x b = c), (d x e) x f x g = EMEA region WFH emissions per year.

- o (a)Total working days of 227 (52 weeks x 5 working days = 260 days – 8 public holidays – 20 days minimum annual leave)
- o (b)Average days working from home (between 2-4 depending on location and Business Unit)
- o (c) Average days working from home per year
- o (d) Carbon rate of working from home 0.33378 kg CO2e per person per hour
- o (e) Number of staff in a Business Unit region (TCEMEA, CBX (EMEA) Acoustics (EMEA), BST (EMEA)
- o (f) 8 hour working day

LONDON
+44 (0)20 7928 0000
17 Short Street, London, SE1 8LJ, UK

NEW YORK
+1 212 645 0790
330 7th Ave, Suite 2002, New York, NY 10001, USA

MELBOURNE
+61 (0)3 9417 6524
Suite 1.02 153-161 Park Street, South Melbourne, VIC 3205, Australia

BRISTOL
+44 (0)117 325 9280
6 King Street, Bristol, BS1 4EQ, UK

CHICAGO
+1 312 766 7790
53 W. Jackson Blvd., Suite 1538, Chicago, IL 60604, USA

BAY AREA
+1 669 348 2800
1250 Borregas Avenue #212, Sunnyvale, CA 94089, USA

CHARCOALBLUE.COM

Illustrations: Christian Wallace

THE QUEEN'S AWARDS FOR ENTERPRISE: INTERNATIONAL TRADE 2020

CHARCOALBLUE
THEATRICAL INNOVATION | ESTD 2004