Carbon Audit 2022



HUTCHINSON & PARTNERS

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Introduction

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Overview



This document has been prepared by Hutchinson & Partners Sustainability Team to illustrate our internal carbon review and analysis process. It provide an overview of our annual carbon spend, identifies areas of improvement, and outlines our methods of measurement and key assumptions.

It is our view that the process of preparing the information, and reviewing its contents is pivotal in ensuring that we have a responsible and forward looking approach to the management of the business in a way that looks to minimise our impact on the environment. By understanding the impact of our actions and decisions, we are able to take steps to ensure that we improve the basis on which those decisions are made, to put in place checks and balances that allow us to reduce our impact, and take the steps that we need to ensure that our impact on the planet is appropriately minimised.

Carbon Summary

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Carbon Summary



23,365 kgCO₂e

Total Carbon for 2022

1,252 kgCO₂e

Total Carbon per employee

44%	Utilities Incoming: Waste: Work From Home:	10,162 kgCO₂e Energy (Electricity) - Energy (Gas) - Water Recycling - Food Waste - Non Recyclable Waste Energy (Electricity) - Energy (Gas)
17%	Tools IT: Furniture:	3,847 kgCO ₂ e Laptops - Desktops - Monitors - Servers - Peripheries - iPhones Chairs - Desks - Kettle - Microwave
15%	Gatherings Parties & Exhibitions: Business Development: Staff Socials:	3,506 kgCO ₂ e Exhibition Design - Flights - Rail - Hotels - Meals - Drink - Activities Meals - Drinks - Coffee Meals - Drinks - Coffee
10%	Commuting General:	2,443 kgCO ₂ e Rail - Underground - Car/Taxi - Bus - Cycling - Walking
10% 9 %		

Key Items



At the beginning of 2022 we started to record our carbon usage as a business, and have been conducting a detailed internal audit across our London and Berlin offices. The figures cover Scope 1, 2 and 3 emissions, but exclude any emissions associated with the projects that we design. The figures are shown irrespective of any carbon offsets by others, such as where these are offset prior to sale of a product, as it allows us to understand our true impact.

We believe that every kWh, kilometre and coffee been has been accounted for over the course of 2022. We have measured where we could and projected and extrapolated where we are not able to do so, and so giving an accurate picture for the year as a whole.

All conversion factors are taken from reputable bodies, which are given at the end of this document, then multiply these totals by conversion values published by scientifically advised bodies, including the Department for Business, Energy & Industrial Strategy and the Institution of Civil Engineers (ICE).

Offsetting



32% of our total carbon expenditure is offset by others, as many of the products and services we use have existing carbon policies in place to minimise their impact on the environment. This includes:

- Our offices utilities are supplied by a green energy supplier, and our electricity comes from 100% renewable sources.
- Coffee & Tea supplied by Taylors of Harrogate who claim to use renewable gas and electricity and also carbon offset with offsetting projects
- Flights Taken with Easyjet who claim to carbon offset the fuel from all their flights.
- Brewdog Beer is a B-Crop and claim to be a Carbon Negative Company
- Azure (Microsoft) Cloud storage claim to be carbon Neutral since 2012

Once these have been accounted for Hutchinson and Partners is responsible for offsetting 15,778 kgCO₂e, this is 68% of our total annual expenditure for 2022. Of the 68% of which we are responsible for offsetting. Whilst we recognise that offsetting is not an effective means of reduction, we also recognise its benefit.

Detailed Analysis

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Utilities & Building



Our total annual energy consumption in our offices, both London and Berlin, is similar to that of **1.5 typical medium UK households** (3 or 4 people in a semi-detached house, combined electricity and gas kWh values). However, it is considerably lower than that which would be typically expected of an office of this size.

The key to this is the use of shared office space, which allows common resources to be shared with the other tenants, so reducing our individual carbon consumption. The other aspect that allows us to reduce our carbon consumption is that our London office, The Record Hall, is part of a recently refurbished development with high sustainability credentials. The building is rated BREEAM Refurbishment and Fit-Out "Excellent" certification, and alongside the fabric upgrades to the existing building, it also benefits from energy efficient lighting, low-flow water fittings, and an all electric servicing strategy.

The Berlin office has had a recent fabric upgrade, and we subscribe to a green electricity tariff, but it's performance does not match that of the UK office.

Working From Home





The events of 2020 changed the way that we work as a business, as it has for many others, and we are now operating on a more flexible basis whereby people work from the office for a minimum of three days a week.

Whilst there are some carbon inefficiencies to this approach, notably in the winter months where home heating is required, there are many positives. These include staff wellbeing, greater flexibility to accommodate the wider aspects of our lives, and those of our respective families, and a reduction in the need for commuting. The flexible approach has also allowed us to rationalise the office space that we have, and reduce this to suit our more flexible working approach and remote working opportunities.

We believe that the government issued carbon conversion value, based on national averages, is a high representation of the actual carbon cost of working from home in London, where home sizes are smaller and more densely positioned and thus more efficient to heat. This value is something which could be researched more deeply in 2023.

International Travel





International travel, by plane, remains as one of the highest singular items within our annual carbon consumption. We have seen a reduction in air travel by the team when compared to 2019, which has been aided by the increase in the use of remote working tools, and a rise in the use and acceptance of online meeting technology. 2022 also brought an increase in the number of long journeys taken by train that would typically have been made by plane, which has also served to reduce the number of flights.

The majority of the flights taken were purchased through operators that offset their carbon use, and so this

Office Location



In both London and Berlin, our project focus is typically on local projects, where we have a good understanding of the local area and communities. We are based in two highly urban, global cities, and so are able to focus on highly complex, large-scale projects, whilst also ensuring that we have a deep understanding of the context within which these projects are situated.

One effect of this is that we typically do not need to travel long distances to service the projects on which we work, lowering our carbon consumption. Furthermore, our location means that we have a large local pool of talented architects with whom to work, so ensuring that we are not reliant on a high number of people travelling long distances in their commute to the office.

Office Supplies



Within the supplies category we spend $1,283 \text{ kgCO}_2 e$, this is 6% of our total annual expenditure for 2022. Interestingly 45% of this has been created by our office coffee consumption, 17% by dairy milk, and a further 11% by tea.

Our coffee and the majority of our tea is produced by Taylors of Harrogate, we were happy to discover that this producer claims to use renewable gas and electricity and also carbon offsets the remainder with offsetting projects. Although carbon offsetting is a useful tool, we understand that reduction of consumption is the only true means to reduce carbon expenditure. And so have made our company aware of this and will allow staff to decide themselves what reduction they may be able to make.

Tools & Hybrid Working



Within the supplies category we spend $3,847 \text{ kgCO}_2 e$, this is 17% of our total annual expenditure for 2022. This is our second largest expenditure category, but also one of the hardest to reduce as these are the machines and elements we use to complete our daily tasks.

The single largest spend was the cloud based backup system we employed up until July, although this Microsoft product claims to be carbon neutral, by procuring our own server and installing that off-site give us greater control to extend the operational life span of that tool, allowing us reduce carbon emissions in the long run.

The second largest spend is the carbon cost of the laptops that have been required to enable the hybrid working system we currently employ. Whilst the uptake of remote working has led to a shift towards greater levels of IT infrastructure, there has also been a reduction in the need for printing, physical stationary and paper, a trend that we expect to continue as the whole team transfer to a more digital workplace environment.

Reducing Our Future Impact

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Identifying the Key Opportunities



The categories shown above are the single largest carbon spends within the business, and so these are the areas of primary focus. The process of recording and analysing our carbon expenditure throughout the year has been an instructive process, and whilst there are a number of aspects in which we already perform well, we have identified some areas in which we can perform better.

This chapter sets out our goals and ambitions for 2023, and outlines the processes that we can put in place to help us achieve these aims.

Raising Awareness



The single most important aspect of carrying out this analysis has been to allow us to understand how we can affect our carbon use, and to allow us to take the decisions in the future that will help us to further reduce this. As with our architectural project work, this is a shared endeavour that requires the collective efforts of the team as a whole, and should permeate through the decision making process at every level.

We hope to engender this sense of responsibility, and the tools with which to effect change, through the sharing of this report with the team, alongside talks and workshops to discuss the ways in which individual tasks can be adapted to better consider their impact on our collective carbon consumption.

Furthermore, whilst the team as a whole have a good level of carbon literacy, we will also encourage further learning through Continuing Professional Development sessions, and an encouragement of the team to carry out audits of their personal carbon consumption.

Reviewing the Supply Chain



Hutchinson & Partners recognise that offsetting carbon is not a suitable substitute for genuine reductions, and so our goal is to reduce carbon expenditure wherever possible. However, it is recognised that it will not be possible to reduce our emissions to zero, and so we will likely always require some offsetting to allow us to be a Carbon Zero company, whether this is carried out by our suppliers or carried out by ourselves.

32% of our total carbon expenditure is offset by others, as many of the products and services we use have existing carbon policies in place to minimise their impact on the environment. We will look to maintain or exceed this figure in 2023. Of the **68%** of which we are responsible for offsetting We have identified a series of purchases where we could have made a more Carbon Neutral decision but missed the opportunities, as we progress into next year these known reductions will help us to make improved decisions. The final **54%** of our total carbon expenditure required further research into alternatives in order to reduce, our goal in 2023 is to establish how this remaining **54%** can be reduced, or failing that, offset at source.

International Travel



International travel is the most significant items within our annual carbon expenditure. Whilst we are travelling less by plane than we were in 2019, prior to the pandemic, there is clearly some way to go. The use of international travel is typically used for the exceptional purposes of attending events, whether this is the Berlin Team travelling to London for the Summer Party or the team attending MIPIM or EXPO REAL, we recognise that there is a value to face-to-face interaction in certain circumstances. However, this needs to be balanced, and so we propose to introduce the following measures:

- Before booking flights, a review of whether a flight is absolutely necessary should take place.
- An annual carbon budget is to be set for flights that totals 2,750 kgCO₂e, a 25% reduction from 2022.
- At the booking stage, the flight comparisons should include the carbon figure, alongside prices and times.
- Where possible, alternative means of transport are to be used: international trains, the use of linked trips.
- The team is to research new initiatives, such as the emerging European Sleeper train service.

IT Equipment



IT equipment, most notably our laptops and servers, account for a significant proportion of our carbon use. Whilst these items are central to the function of the business, and support our ability to work remotely, there are measures to be taken to reduce their impact. These items typically have a long lifespan and so sourcing decision, maintenance and good care are key to extending the lifespan of these items, so reducing their annual carbon expenditure. We shall be looking to take the following measures in 2023:

- The battery is one of the key carbon generating components of laptops, and so care should be taken to extend its lifespan The use of battery care programmes, such as Arroe, can help extend this.
- Faults and problems should be identified and flagged early to allow for repair work to take place.
- Records are to be kept of the real-term lifespan of equipment to allow products to be benchamrked.
- When sourcing new equipment, carbon values should be provided, alongside price and technical information, to allow for appropriate comparisons.

Coffee & Tea



The consumption of coffee and tea are a significant source of carbon within the practice. Whilst it is recognised that caffeine plays an important role in the business of architecture, and so this can be considered a contentious items, we do need to recognise their impact. We already have a coffee supplier that produces net carbon zero coffee, and this helps us to reduce our carbon usage. However, we should look to implement the following measures in 2023:

- · Consider carbon in the sourcing of products, notably tea, and review what options are available.
- Reduce any unnecessary wastage, it is better to ask before serving, to ensure that the quantities of tea and coffee made are appropriate.
- Try to use at point water heaters, as opposed to a kettle, where possible.
- Consider the use of dairy milk alternatives

Target for 2023



As we enter 2023, we have a strong basis on which to understand the impact of our business in terms of carbon. We have made steps and improvements in 2022 that allow us to further reduce our impact in the coming year, and so we are aiming to set ourselves the target of reducing the carbon consumption, per person, of the business by 20%.

Whilst this figure could be considered ambitious, given that we are currently operating at a level below that of a typical service industry business of our size in the UK.

We will also work towards formally achieving the PAS 2060 Carbon Neutrality certification.

Methodology & Approach

SOURCES

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Sources



Transport, Utilities UK, Waste, Misc Electrical Items, Hotel Stays, Office Paper:

https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022

UK Energy:

https://www.ofgem.gov.uk/publications/decision-typical-domestic-consumption-values-2020

Technology:

https://www.apple.com/environment/ https://azure.microsoft.com/en-us/global-infrastructure/sustainability/#faq https://www.serverchoice.com/sustainability https://www.dell.com/en-us/dt/corporate/social-impact/advancing-sustainability/sustainable-products-and-services/productcarbon-footprints.htm#tab0=0

Furniture:

http://www.healthyworkstations.com/resources/Environment/FIRA.CarbonFootprint.pdf

Food:

https://www.taylorsimpact.com/annual-sustainability-report https://www.taylorsimpact.com/annual-sustainability-report https://www.wwf.org.uk/sites/default/files/2018-03/Food_in_a_warming_world_report.PDF https://www.brewdog.com/uk/brewdogplanet https://www.oatly.com/en-gb/sustainability https://ourworldindata.org/environmental-impacts-of-food https://www.dairyuk.org/wp-content/uploads/2021/11/Dairy-Roadmap-Climate-Ambition-Final-Version.pdf

Materials:

https://circularecology.com/embodied-carbon-footprint-database.html#.XKX_oJhKhPY