Carbon Reduction Plan

October 2024

C1126-241031-V00 [Carbon Reduction Plan]

First Issue	Date	Description Prepared		Reviewed
00	31.10.24	First Issue (baseline report)	LE	LC
Revision Nr.				

This document has been produced by Karakusevic Carson Architects Limited. If you have any questions or require further information, please contact:

Karakusevic Carson Architects

Studio 501, 37 Cremer Street, Hackney, London E2 8HD

Tel.: +44 (0) 20 7566 6300 mail@karakusevic-carson.com www.karakusevic-carson.com

Contents

About Karakusevic Carson Architects	4
Executive Summary	6
Baseline Emissions Footprint	7
Emissions Reduction Targets	10
Carbon Reduction Projects	11
Methodology	13
Declaration and Sign Off	15

About Karakusevic Carson Architects

We are architects and urban designers at the forefront of public housing design and major civic projects in the UK and internationally. We formed two decades ago with an aim to raise the standard of social housing in the UK after almost 40 years of neglect, and have since worked almost exclusively with the public sector to adapt, repair and create equitable and liveable homes and neighbourhoods that reflect civic need.

Having pioneered meaningful ways of working with residents and local communities, we collaboratively evolve and refine designs, exploring considerations of context, scale, light and materiality to produce exceptional housing and urban strategies that are unique to each site. From individual affordable housing to larger urban schemes, our focus is on the creation of beautiful and elegant buildings that are intelligently planned, highly-crafted and detailed and bring delight to the people who live there.

We understand the social and economic value of environmental design. Our team work with clients, stakeholders, and communities to create truly sustainable homes and neighbourhoods. We know that sustainability requires holistic thinking, and recognise the connection between sustainable, future-proofed homes, greener lifestyles, and quality of life. Each of our projects is reviewed through the four pillars of our practice's sustainability strategy and oversight: Design for Resilience; Low Energy Design; Healthy Neighbourhoods; Social Equity & Engagement.

We are proud to have delivered some of the most sustainable masterplans and housing schemes in the UK, including large scale Passivhaus projects.

Commitment to achieving Net Zero

We are committed to improving our environmental performance by reducing our carbon emissions and the impact that our activities, services and operations have on the environment. Although our influence on carbon is primarily through our project work, we are also committed to minimising the carbon footprint of our own business.

We are developing our environmental strategy with the aim of becoming a net zero carbon business by 2050.



The Studio



Retrofit Social Housing: A Practical Guide for Local Authorities & Registered Providers of Social Housing



Social Housing – Definitions and Design **Exemplars Exhibition**



The Model Workshop



Community engagement event

Executive Summary

As a business we recognise that organisations of all kinds are, increasingly, determined to achieve and demonstrate sound environmental performance by controlling the impact on the environment by their activities, products and services. This is in the context of growing environmental awareness, increasingly stringent legislation and other factors promoting environmental protection and best practice.

We have held ISO 14001 compliance since 2007, using the auditing process to set environmental goals. However in light of the UK Government Net Zero by 2050 initiative and the release of PPN 06/21, we realise that we need to take further action to meet the 2050 target. The aim of this report is to outline the findings of our Carbon Emissions Assessment, to identify our main emissions contributors, and to set reasonable carbon reduction targets for the coming years.

This Carbon Reduction Plan covers the year 2023-2024 (1 July 2023 - 30 June 2024) as the first year we have reported on our carbon emissions in line with PPN 06/21, using the GHG Protocol guidance and methodology. This year forms the baseline for all future reporting comparison.

Emissions reporting covers 2 locations; our main offices in Hackney (E2 8HD), and our model workshop in Kings Cross (N1C 4PD). Our combined scopes 1, 2 & 3 carbon emissions during this first reporting period amounted to 164.15 tCO2e, an average of 3.16 tCO2e per person. Our scope 3 emissions accounted for 88% of overall emissions. We identified our biggest carbon contributors within the scope 3 categories to be:

	tCO2e	% of Scope 3 tCO2e	% of total tCO2e
Category 1 - Purchased Goods & Services	102.89	71%	63%
Category 6 - Business Travel	17.59	12%	11%
Category 2 - Capital Goods	14.05	10%	9%
Category 7 - Employee Commuting	9.28	6%	6%

These will be the areas of focus for carbon reduction during the next reporting period (2024-2025). The following sections in this report show a breakdown of our baseline emissions, our carbon reduction targets, and measures we aim to implement to achieve net zero by 2050.

Baseline Emissions Footprint

Baseline Year: 2023-2024 (1 July 2023 - 30 June 2024)

Emissions	tCO2e	% of total tCO2e
Scope 1		
Gas	1.61	1%
Scope 2		
Electricity	18.57	11%
Scope 3*		
Included categories (see below)	143.98	88%
Total tCO2e	164.15	

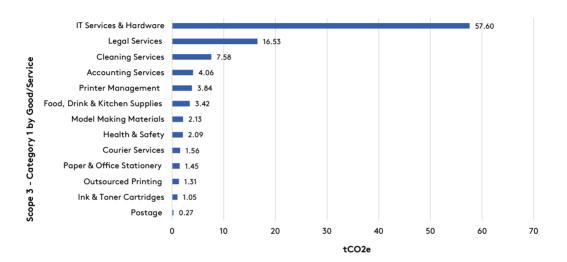
Our scope 3 baseline emissions are broken down below:



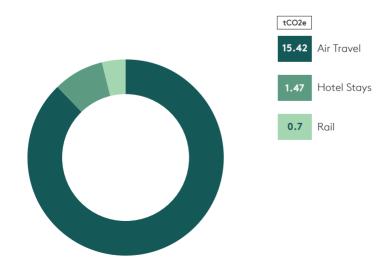
^{*}PPN 06/21 requires Categories 4, 5, 6, 7 and 9 to be included in Scope 3 reporting. We have excluded Categories 4 and 9 due to non relevance. Our methodology notes on page 13 explain this reasoning in more detail.

Key Insights

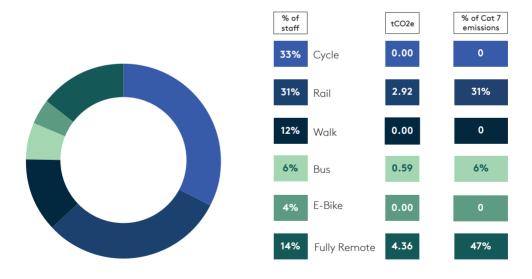
 Category 1 - Purchased Goods & Services is the largest contributor to our Scope 3 emissions (102.89 tCO2e), within that IT Services & Hardware is the largest single contributor, making up over half of Category 1 emissions (57.60 tCO2e or 35% of total tCO2e).



 Category 6 - Business Travel is the second largest single contributor to scope 3 emissions (17.59 tCO2e) with air travel making up almost 90% of Category 6 emissions.



- Category 2 Capital Goods is the third largest contributor to emissions at 14.05 tCO2e. The purchase of a new server infrastructure was the main element and is not a typical annual requirement.
- Category 7 Employee Commuting is the fourth largest single contributor at 9.28 tCO2e. 92% of staff participated in a commuting survey. It was reported that:
 - 31% of staff use rail as their main commuting mode. Total emissions from rail and bus commuting was 3.52 tCO2e
 - 14% of staff are fully remote (4.36 tCO2e) and 12% work a hybrid schedule, part of the week from home and part of the week in the office (1.41 tCO2e was calculated for the time worked from home). The total emissions from home working is calculated to be 5.77 tCO2e
 - 33% of staff cycle to work
 - 12% of staff members walk to work
 - 4% use an e-bike



Our main office and workshop is centrally located in relation to our employee's homes. There is little potential to reduce carbon by encouraging modal shift as journeys are generally by active or public transport.

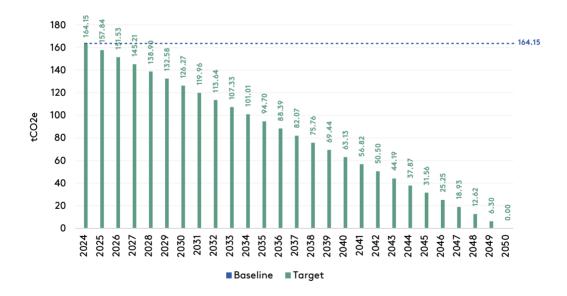
Emissions Reduction Targets

In order to progress to achieving Net Zero, we have adopted the following carbon reduction targets.

Our aim is to decrease our overall carbon emissions over the next five years to 126.27 tCO2e by 2030. This is a reduction of 23%. The graph below shows that a reduction of about 6.3 tCO2e per year is needed to reach Net Zero by 2050.

Our emissions for Scope 3 - Category 2 (Capital Goods) was high this year due to the purchase of a new server infrastructure. We expect our Category 2 emissions to be significantly lower during the next reporting year.

Due to the significant proportion purchased goods and services play in our carbon performance, this will be the main focus of our reduction targets for the next 5 years.



Carbon Reduction Projects

Completed Carbon Reduction Initiatives

As 2023-2024 is the first year we have reported on our emissions, the performance of the environmental measures we implemented previously cannot be measured against the baseline. This will be measured in the next reporting vear, 2024-2025.

The following measures have been implemented in recent years as part of our environmental goal setting in line with our ISO 14001 accreditation:

- We undertook a thorough audit of our suppliers and made necessary substitutions, prioritising suppliers with recognised sustainability credentials such as B-Corp, Fair Trade, Zero Waste, or companies who use recycled materials in their products
- Reduced use of desk lamps, preferring overhead lighting and natural light from windows. Any remaining desk lamps were switched to energy saving light bulbs
- Oyster cards provided to encourage the use of public transport over taxi's for travelling to meetings and site visits
- Added an additional cycle-to-work scheme that offers e-bikes
- Increased recycling signage in the office to promote environmental awareness
- Reduced office space that was underutilised, thus lowering our electricity consumption.

In the future we aim to implement the following measures:

- Further interrogation of our purchasing habits with the aim of reducing the amount we spend on certain goods/services where practical. Continue to scrutinise our suppliers with comprehensive supply chain assessments and make as many substitutions as necessary, if our suppliers are not in the process of making meaningful carbon reduction themselves
- Travel for studio study trips to be restricted to rail only
- Vegetarian only catering for all internal meetings and social events

- Practice-wide international travel policy; utilise and prioritise remote technology over air travel when liaising with overseas clients and design teams
- Continue to promote climate awareness across the office through signage and internal communications - encourage staff to consider their own personal contributions to emissions
- Make better use of our print management software generate monthly or quarterly reports to track our paper usage and set realistic reduction targets
- Investment in accredited carbon off-setting projects, such as reforestation, clean water and sustainable cooking methods. Get further involved in local volunteering opportunities that benefit the community and environment surrounding our project sites
- Continue educating ourselves on carbon reporting and our value chain impacts, and improve data collection methods for more accurate reporting.

Methodology

We followed the guidance and methods set out in the GHG Protocol Technical Guide and the GHG Accounting and Reporting Standard.

We used the DEFRA 2024 ghg conversion factors 1 and the Conversion factors KgCO2 per £ spent, by SIC code 2021 when calculating emissions.

Scopes 1 & 2 - Direct & Indirect Emissions

Gas and Electricity usage data for our main office was collected from building management, and electricity data was collected direct from the supplier at our model workshop.

Scope 3:

Category 1 – Purchased Goods & Services, and Category 2 - Capital Goods

We used the spend-based method of calculation to work out the emissions for these categories. Purchased goods and services included subsistence, stationery, paper, and services such as IT support, legal, and health and safety.

Capital Goods purchases included IT equipment and a server replacement.

Category 3 - Fuel and Energy Related Activities

Not applicable. These are accounted for in Scopes 1 & 2 reporting.

Category 4 – Upstream transportation and distribution

Not applicable. As per GHG Protocol guidance, the emissions from the transportation and distribution of purchased products (upstream) are included in the emissions reported in Category 1 and are not required to be reported separately.

Category 5 – Waste generated in operations

Our main office building management record waste data for the whole building only, so individual data is unavailable. There is no data on waste water quantities or treatment. We collected data for the workshop direct from the waste collection company.

Category 6 – Business travel (inc. hotel stays)

This category accounts for emissions produced from both UK & International work related travel. Our baseline includes tCO2e produced via national rail (UK) and air travel (international & domestic), as well as hotel stays.

Category 7 – Employee commuting (inc. working from home)

Employee commuting and homeworking data was collected through a survey that helped us to understand the distance between employee's homes and the office, the number of days per week that employees use different vehicle types, the number of days per week employees work from home and whether their home energy is renewable.

Category 8 - Upstream Leased Assets

Not applicable. We have no upstream leased assets.

Category 9 – Downstream transportation and distribution

Not applicable. As a service based business, it is not typical for us to sell or distribute any physical products.

Categories 10-15 are not applicable to our business.

We are aware that carbon auditing is an imprecise science and that benchmarks and methodologies are evolving. We have followed established methodologies for the sake of transparency and robustness.

https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2024

² https://www.gov.uk/government/statistics/uks-carbon-footprint

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.

This Carbon Reduction Plan has been reviewed and signed off by the Governing Director.

Paul Karakusevic Director

Paul Se

31 October 2024

