

Software

Prepared by



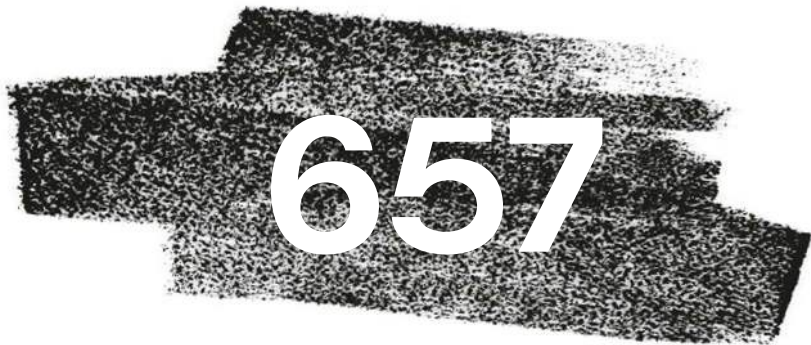
Jun-24

2023 Carbon Footprint Report.

Overview

The climate crisis is the single biggest threat to humanity. As a forward-thinking company, Softwire recognises this. You've partnered with Supercritical to measure, reduce, and offset your emissions.

The first step is to understand your current impact. We've calculated **Softwire's carbon footprint for 01/01/2023-12/31/2023.**



Total tonnes CO₂ emitted

That's the equivalent of powering 188 homes [for a whole year](#)

19%
of emissions were created from Employee remote working

Emissions associated with Softwire's Employee remote working generated 128 tonnes of CO₂e emissions.

1.8 t CO₂e
per employee

LOWER THAN AVERAGE

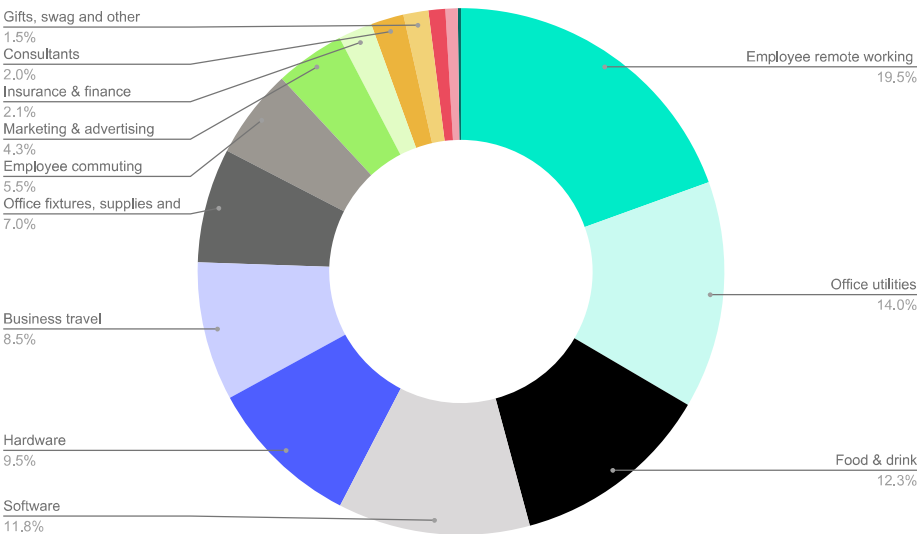
Your total footprint equates to 1.8 tonnes CO₂e per employee over 2023. The average footprint for a person in the UK is 12.7 tonnes per year, and the average footprint of an employee in a tech company is ~3.5–5.5 tonnes.

0.02
GHG intensity ratio

LOWER THAN AVERAGE

The ratio between your footprint and revenue in 2023. This is an industry standard way to normalise your footprint so you can track progress over time.

Emissions breakdown



GHG protocol breakdown by scope

	t CO ₂ e
Scope 1 Direct emission from fuel combustion in own buildings and vehicles	0
Scope 2* Emissions from electricity and heating use in control of the company	41
Scope 3 Emissions from the corporate value chain	616

* Market-based
Reporting period: 01/01/2023-12/31/2023
Emission boundary: Financial control
Notes on scopes:
Location based Scope 2 emissions = 135.41 tonnes CO₂e

(See Appendix A for data and categorisation by scope)

Our methodology

Supercritical's methodology is aligned with the [GHG Protocol standard](#), the standard developed by the World Resources Institute (WRI), and used by governments & cities all over the world as well as over 92% of Fortune 500 companies.

Base year footprint

We begin by calculating a base year footprint; the total CO₂e emissions released as part of a company's activities over the period of a specified year. Companies choose the base year as the earliest whole year for which they have reliable data: for Softwire this is 2023. Calculating a base year footprint is necessary to set and track progress towards future emissions reduction goals. But since 2023 was a highly unusual year, you can expect many emissions categories to change going forward. We can use backcasting next year to help you understand which of the changes are due to your climate actions, and which are due to other background changes.

Emissions calculations

Most business activities don't have a direct measurement of the GHG emissions recorded for them. Instead, we use [emission conversion factors](#) to calculate the equivalent emissions created for activities. A number of governments & organisations create and maintain official GHG conversion factors, and the majority of emissions factors we've used to calculate Softwire's footprint have been provided by the [UK Government's Department for Business, Energy & Industrial Strategy](#) (BEIS) team.

For example, converting a 15km taxi ride into the amount of CO₂e emitted into the atmosphere, using the BEIS taxi km/kg CO₂e conversion factor (0.20369):

$$\text{GHG emissions} = \text{activity data} \times \text{emission conversion factor}$$
$$3.05 \text{ kg CO}_2\text{e} = 15 \times 0.20369$$

Our approach to emissions scope

We use a comprehensive and progressive approach to mapping emissions, aiming to capture the majority of emission sources in your sphere of influence. Emission sources such as home-working emissions are often overlooked. However, they present a huge opportunity for your positive influence!

Deeper dive: Remote working approach

We wanted to provide more information on our remote working methodology, so you can understand one of the largest contributors to your footprint.

Working from home uses additional electricity (charging laptops and powering external monitors) and heating compared to homes being empty during working hours.

To calculate the impact of employee home-working, first we estimate the additional electricity used. This additional electricity comes from [laptops, lighting and monitors](#).

We have estimated the hours that the Softwire team worked from home from the data collected in your employee survey.

$$\text{Total home office usage (kWh)} = 150 \text{ watts} \times \text{number of employees working from home} \times \text{working hours per month}$$

Next we translate energy use into CO₂e emissions using the conversion factors. We take into account the prevalence of renewable electricity providers in the team and their geographical distribution using national grid intensity factors. For example, in the UK this is set by BEIS at 0.212 kg CO₂/kWh.

We then calculate the impact of the additional energy required to heat employees' homes during this period. An average gas boiler uses 0.5 kW to heat a home. We used information from your employee survey to calculate the total hours of additional heating. Using this information, we can calculate additional heating:

$$\text{Total heating usage (kWh)} = 0.5 \text{ kW} \times (\text{Total number of hours employees had heating on while working from home})$$

Lastly, we translate additional heating into CO₂e emissions using the BEIS natural gas conversion factor (0.184):

$$\text{Work from home gas emissions (kg CO}_2\text{e)} = \text{Total heating usage (kWh)} \times 0.184$$

This gives us the total emissions created as a result of your employees working from home.



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