

Howells is on the path to net zero and our offsets are 100% permanent carbon removal.



Here's how & why.

Howells has purchased 100% permanent, high-quality carbon removal of our 2021 emissions, and begun ambitious reduction plans to work towards our net zero target. This is best in class climate commitment, and we are very proud to have worked with [Supercritical](#) to achieve it.

We're hoping to see three positive knock-on effects:

- 1 We want to encourage other companies to take responsibility for their emissions
- 2 We hope that the demand signal this sends to carbon removal suppliers helps scale the carbon removal market
- 3 We want to see the tech industry lead the charge to a sustainable future, and pass on our 'zero footprint' to the brick & mortar businesses we supply



- Biochar
- Direct air capture

REMOVAL TYPES

- Downsizing office
- Hardware recycling
- Azure migration
- Remote working (tbc)

REDUCTION PLANS

## Why we've measured and removed our emissions

Earlier this year we faced a problem: we were acutely aware of our climate impact but we were not sure how to address it. The writing is on the wall, and we knew commercial pressure to reduce our carbon footprint was imminent as our clients began implementing plans towards their own ESG targets (as suppliers we contribute to our

clients' "Scope 3 Emissions"). We want to be ahead of the curve.

In order to exceed expectations, we knew we needed to take environmental action. This is also something our team is really engaged with, so the effort was also valuable from an employee

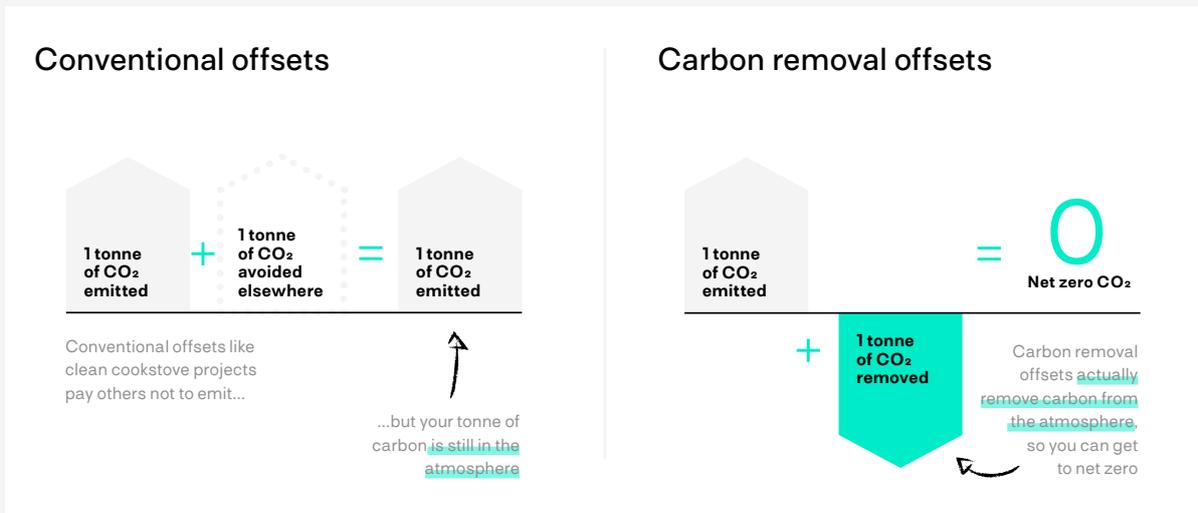
engagement perspective. But most importantly, we wanted to **take responsibility** for our [carbon emissions](#) and their effect on the planet.

This meant investigating best in class climate action! We believe in the dual role of radical **emissions reduction** and investment in **carbon removal** technologies to address the climate crisis and reverse global warming. We wanted to set ambitious reduction targets and timelines and implement tracking systems to measure our progress (see below for how we're doing this!). Beyond this, we wanted to **remove the carbon we've emitted** from the atmosphere and directly reverse the negative warming effects of our emissions.

Purchasing high-quality, permanent removal has the **dual benefit** of **removing the carbon** we've emitted so it stops heating the atmosphere, but also contributing to the **scaling and development** of the **carbon removal market**. A recent [IPCC report](#) (the Intergovernmental Panel on Climate

Change, the UN's international body of scientists working on climate change) reiterated the urgent need for **both reduction and removal** in order to hit the targets outlined in the Paris agreement. For context, removal offsets are typically **~10x the price** of conventional offsets, for good reason: conventional offsets involve paying someone else *not* to emit carbon (but your emissions remain in the atmosphere), whereas removal offsets directly remove your carbon emissions from the atmosphere, meaning you reach a state of net zero emissions. This market needs to **scale radically, soon**. In order to stay below 1.5°C we need to **annually remove 10 billion tonnes of CO<sub>2</sub>e** by 2050: to date, **500,000 tonnes of carbon** have been removed. We wanted to contribute to this growth and sending a demand signal to carbon removal suppliers is the fastest way to help carbon removal scale.

[Here's](#) a helpful summary of the stark difference between conventional and removal offsets, and you can read more [here](#).

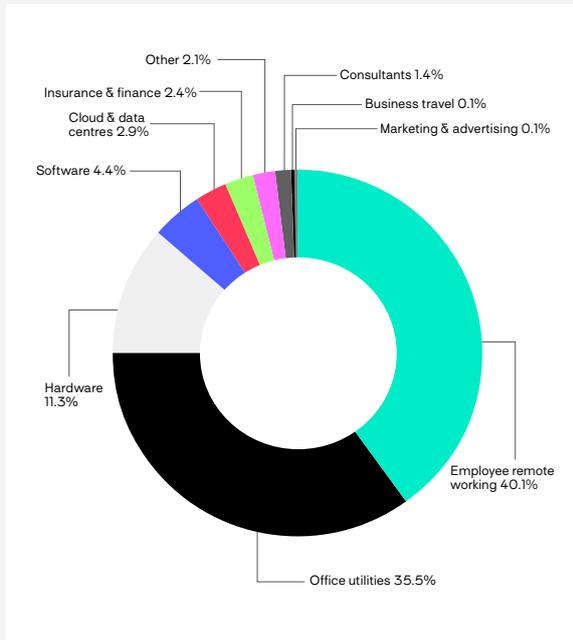


We chose to work with Supercritical since we were impressed by their innovative approach, making it as simple as possible for us to comprehend our footprint and then facilitate direct carbon removal. The super friendly and knowledgeable team laid out the process in our first call, and it was quick and straightforward enough to make what was a daunting ambition a no-brainer.”

— ALEXANDER WALSH, CEO OF HOWELLS



# Understanding our emissions



HOWELLS 2021 EMISSION BREAKDOWN

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We worked together to **footprint our entire scope 1-3 emissions** (i.e. 'direct' all the way through to 'Other indirect' emissions, per the [GHG protocol](#)). Their software and in-depth, bespoke footprinting showed us that Howells generated **22 tonnes CO<sub>2</sub>e** ([carbon dioxide equivalent](#)) in 2021.

Supercritical produced a **comprehensive breakdown** of our emissions which allowed us to analyse the main drivers behind our emissions. They also highlighted major areas for emission reduction.

## How we're reducing our emissions

Once we understood our footprint, we could get to work pulling the various internal levers at our disposal to reduce our emissions.



### Downsized our office

First, we have significantly **downsized our office**: this represented 36% of our emissions so this was a huge opportunity for us to reduce. This **also made business sense** since we had been considering moving towards a more remote hybrid working model. Supercritical's analysis confirmed that this change was smart from both an environmental and business perspective.



### Implemented a hardware recycling policy

Next, we have **implemented a hardware recycling policy**: we've begun recycling old computers, monitors and cabling. Hardware has significant embodied emissions associated with their manufacture and distribution, so extending the life of these items by recycling them felt like an easy win.



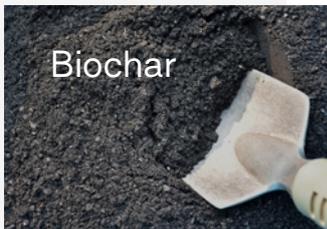
## Moved to Microsoft Azure

Third, we **moved to Microsoft Azure** to benefit from Microsoft's climate commitments. Moving to the cloud has a myriad of technical and security benefits for us commercially, and additionally, Microsoft's pledge to offset all historical emissions chimed with our ethos moving forward.

We're currently looking into a number of next steps, including investigating how to tackle our team's remote working emissions. We're aware that moving energy providers in the current climate might be difficult, but we're looking into other solutions such as heat pump installation, insulation improvements or seasonal working policies.

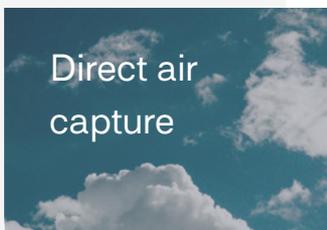
## What removals we bought and why

We purchased biochar and direct air capture carbon removal. These are highly impactful, nascent technologies that permanently remove our carbon emissions from the sky. All the providers we work with have been highly scrutinised and vetted by the climate experts at Supercritical, so we can feel certain that these are making a real impact.



Biochar

Biochar is a charcoal-like substance produced by pyrolysis of biomass (organic material from agricultural and forestry waste), which generates a very stable form of carbon which can then be spread on soil. This is a safe, mature and durable way of storing carbon today, as confirmed by the IPCC, and is a great method of removing carbon immediately. Supercritical has a rigorous vetting process in order to ensure we only purchased from verified, trustworthy carbon removal projects: we bought [Freres Biochar](#), a family owned lumber producer based in the Santiam Canyon in Oregon.



Direct air capture

We also bought direct air capture; a technology to pass air through a filter and withdraw carbon dioxide using solvents. The carbon dioxide is then converted into a liquid and stored underground through mineralisation, reacting with basalt rock and turning to stone within a few years. This is an exciting new technology with enormous scaling potential, since it uses ~100x less land and ~200x less water than nature-based solutions.

## This is just the beginning!

This is our first year of what we hope is a long and successful climate journey. We feel immensely proud of the genuine impact of both our reductions and removals, and have loved working with Supercritical to make these happen. Beyond the immediate need to remove our carbon emissions, we are hoping to see other companies like ours take climate action to measure and remove their carbon footprints. In doing so we not only better the world of business, but make meaningful, sustainable change to improve the planet for future generations.

**Are you ready to reach net zero?**

**BOOK A DEMO**