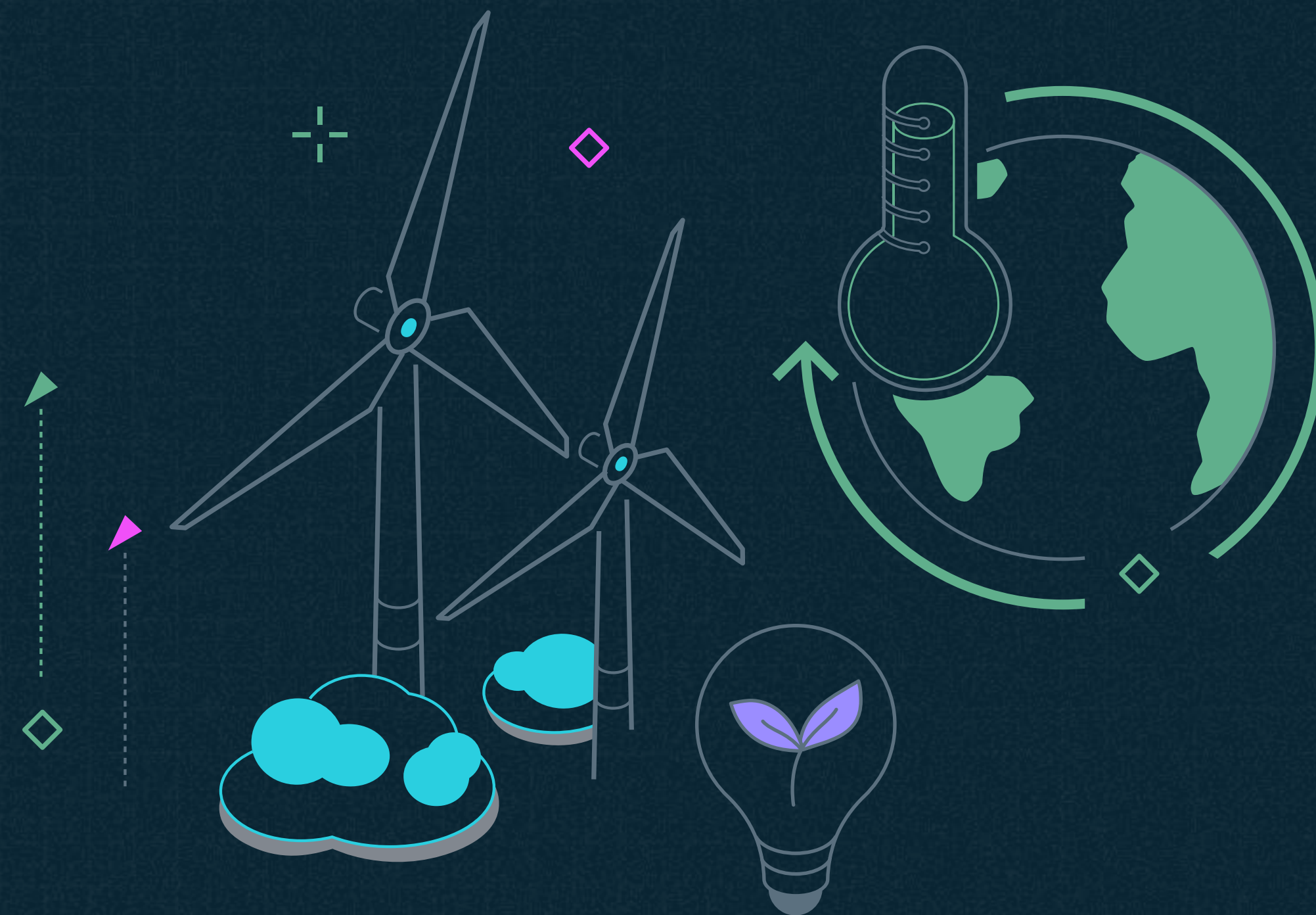




The Tech Sector's Road to Net Zero



The Tech Zero Report 2024

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Startup Case Studies | CSO Interviews | How To Reduce Your Carbon Emissions



octopusenergy

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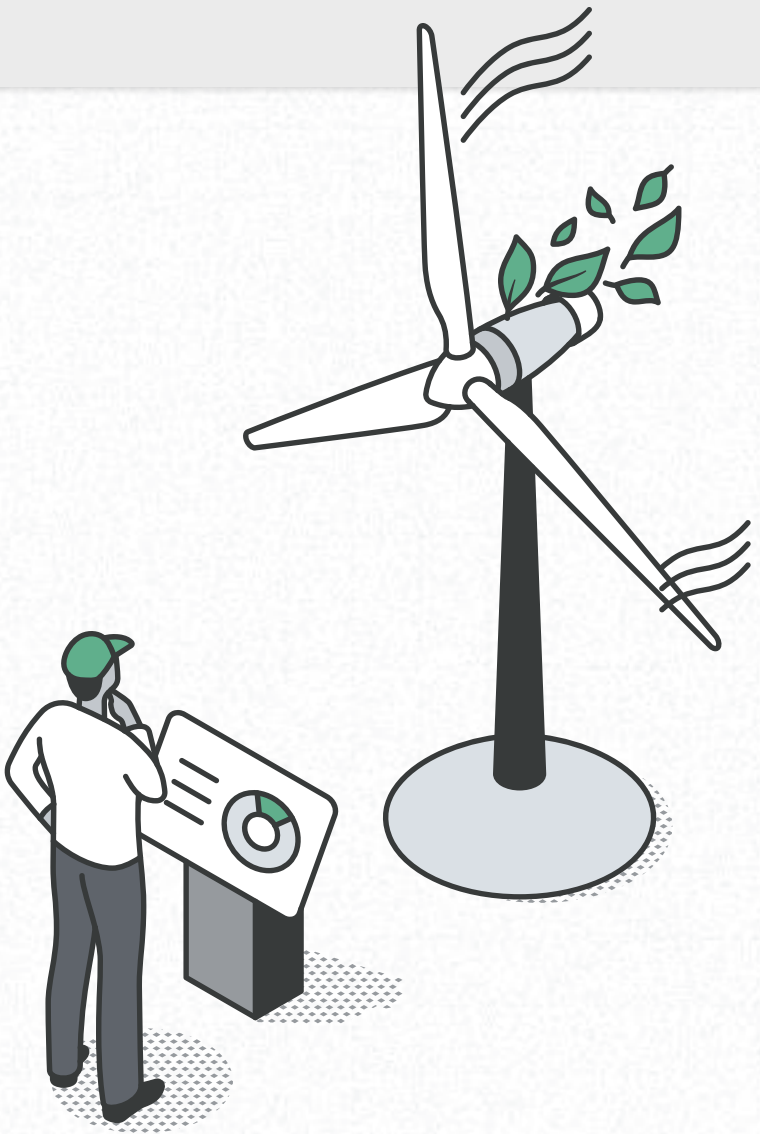
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Foreword I

By Carolyn Dawson, CEO, Founders Forum Group

When [Tech Zero](#) was started by Tech Nation and a group of leading tech companies, they knew that by working together, we could make faster progress to net zero. Today, Tech Zero boasts 350+ members across 33 countries, including unicorns like Monzo, Skyscanner, and Wise.

As we drive the climate action group for the tech industry forward, we're now delighted to be working alongside Octopus Energy in supporting companies on their net zero journeys. Since 2021, Tech Zero members have reduced their carbon emissions by 24% on average. In 2024 alone, Tech Zero members reduced their emissions by 11%.

As new technologies like AI increase the need for compute power, companies across the tech ecosystem must take steps to tackle their own emissions. But tech can also be one of the biggest enablers for climate action; improving efficiencies, decarbonising supply chains, and driving the clean energy transition.

The Tech Zero Report 2024 tells the story of the tech sector's road to net zero, including behind-the-scenes startup case studies, exclusive interviews with sustainability leaders at the Big Tech firms, and a comprehensive guide for tech companies on how to reduce their carbon emissions, starting today.

At [Founders Forum Group](#) and [Tech Nation](#), our goal is to support founders at every stage of their journeys. In the climate space, many founders are just at the beginning of that journey, but the potential impact of their disruptive technologies is huge and far-reaching.

In fact, more than 45% of the emission reductions needed to reach net zero by 2050 will arise through the adoption of climate technologies that are still under development. Tech Nation's [Climate](#) programme was set up to tackle this problem. In the past three years, we've supported more than 140 climate tech startups who scale 2.5x times faster than the industry average. Our programme alumni have raised more than \$1.5b between them and six startups have since exited.

COP29 provides another opportunity for the world's leaders to come together to tackle the climate crisis. In driving progress to net zero, the tech industry can be a critical part of the solution.



Carolyn Dawson OBE
CEO, Founders Forum Group

Foreword II

By Greg Jackson, CEO, Octopus Energy

In my career from coder to founder of a global green energy innovator, it's become unavoidably clear that technology must be designed for the future we want, not just the world as it is today. At Octopus Energy, we are harnessing technology not simply to keep the lights on, but to power them in a way that's fit for a net-zero future.

As technology becomes increasingly woven into every part of our lives, the energy required to power it must come from renewable sources. Data centres, AI systems, and digital infrastructure drive incredible innovation but also demand vast amounts of energy. If we want technology to support a sustainable future, shifting to renewable energy to power these systems is not just an option; it's a necessity.

We launched Octopus Energy with the belief that technology, applied with purpose and urgency, can transform entire industries. That's why we created Kraken, our green tech platform, to make renewable energy affordable, accessible, and adaptable. It's a tool built to power real progress, not just for Octopus, but now for over 50 million customer accounts around the world. And what we've seen, time and again, is that when you put the right tools in the right hands, change happens fast.

But we need to make sure that emissions don't grow as rapidly as the tech industry. We must address the industry's emissions head-on, which is why we support Tech Zero. Addressing these emissions starts with building systems and communities powered by renewables, rooted in sustainability, and guided by transparent, responsible supply chains.

In that spirit, Octopus Energy is working with industry to develop new standards, most notably pioneering the concept of Zero Bills Homes – homes so efficient and self-sustaining that they generate as much energy as they consume, effectively eliminating energy bills. By making sure new homes are fitted out with the right kit – solar panels, batteries, heat pumps – and using advanced technologies to align home energy consumption with renewable energy production, Zero Bills Homes is an example of how technology can be harnessed to create an affordable net-zero future.

The tech industry excels in rapid problem-solving; innovation is woven into its DNA. And so, with the right focus and accountability, we can accelerate the transition to a sustainable future—not in decades, but in years.

I believe that by aligning our technology with our climate goals, we'll not only meet the net-zero challenge but, ultimately, thrive as businesses and as a global community. The solutions to so many of the world's toughest issues—whether energy, efficiency, or resource scarcity—lie in how we innovate from here forward.

A photograph of Greg Jackson, CEO of Octopus Energy, speaking at a podium. He is wearing a dark blue t-shirt and has a microphone clipped to his ear. He is holding a white piece of paper in his hands. The background is a solid blue color.

Greg Jackson
CEO, Octopus Energy

The Tech Sector's Road to Net Zero



The tech industry accounts for 3–4% of global carbon emissions – and counting.

The rise of AI models has seen a corresponding rise in data centre emissions, as the higher demand for compute power means higher demand for energy, and for more data centres to be built.

Microsoft’s greenhouse gas emissions have grown by 29% since 2020 due to the construction of data centres designed to support society’s ongoing demand for digitisation, some of which is now driven by AI.

Google’s greenhouse gas emissions in 2023 were 48% higher than in 2019, which Google attributes to data centre energy consumption and its supply chain.

But that’s not to say data centres and AI are inherently bad news for reaching global net zero goals. Both are integral to the tech industry, and to supporting the tech industry’s critical positive role in bringing emissions down.

By 2050, digital technologies alone – including AI, cloud computing, and the IoT – have the potential to cut global emissions from the highest-emitting sectors – energy, materials, and mobility – by 20%.



CARBON EMISSIONS

3–4%

The tech industry’s current contribution to global carbon emissions.

Source: UNEP



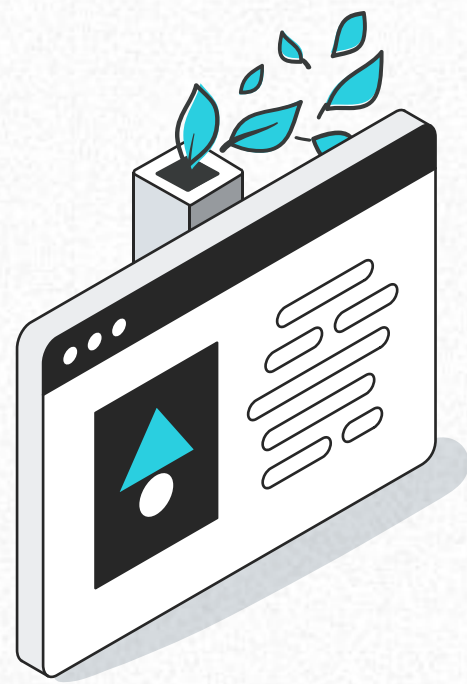
INNOVATION DRIVES CHANGE

By 2050, new innovations in digital technologies alone have the potential to cut global emissions by:

20%

Source: World Economic Forum

Carbon Impact



Tech companies are already contributing to reducing emissions across industries.

According to the World Economic Forum, the highest-emitting industries can reduce emissions by 4-10% by 2030 by accelerating the adoption of digital technologies today.

According to Google, AI has the potential to help mitigate 5-10% of global greenhouse gas emissions by 2030 – the equivalent of the total annual emissions of the European Union.

New innovations in AI, quantum computing, semiconductors, plus a booming ecosystem of climate tech startups, are increasing energy efficiency, optimising industrial and agricultural processes, making carbon tracking easier and more transparent, and enabling smart grids.

Even with the growing demand for data centre services, improvements in computational energy efficiency means net energy use has remained flat at 1-2% of global electricity usage.

Key digital technologies to reduce carbon emissions:

 **Smart decision-making tools** like AI, machine learning, and digital twins that help people make better choices.

 **Sensing and control technologies**, like automation, robots, and smart devices (Internet of Things), which gather data and adjust processes to be more eco-friendly.

 **Key digital tools for modern businesses**, such as cloud computing and 5G, that help them operate smoothly and efficiently.

 **Basic technologies already in use**, like data analysis, measurement, and reporting, that support everyday operations.

Source: [World Economic Forum](#)

Driving Change

While the world's biggest tech companies are major emitters, they also lead the way in setting voluntary net zero goals and climate progress. Google was the first company in the world to reach carbon neutrality in 2007. In 2022, six out of the top 10 US purchasers of renewable energy were tech companies.

However, the majority of high-growth tech companies are less active in terms of their climate goals. In 2019, only 1 in 7 hyper-growth unicorns had a climate target.

Companies signed up to Tech Zero are exceptions to the rule; driving change in the industry and tracking towards net zero goals. Most are reducing their emissions by switching to renewable energy, implementing sustainability training, and purchasing carbon removal credits.

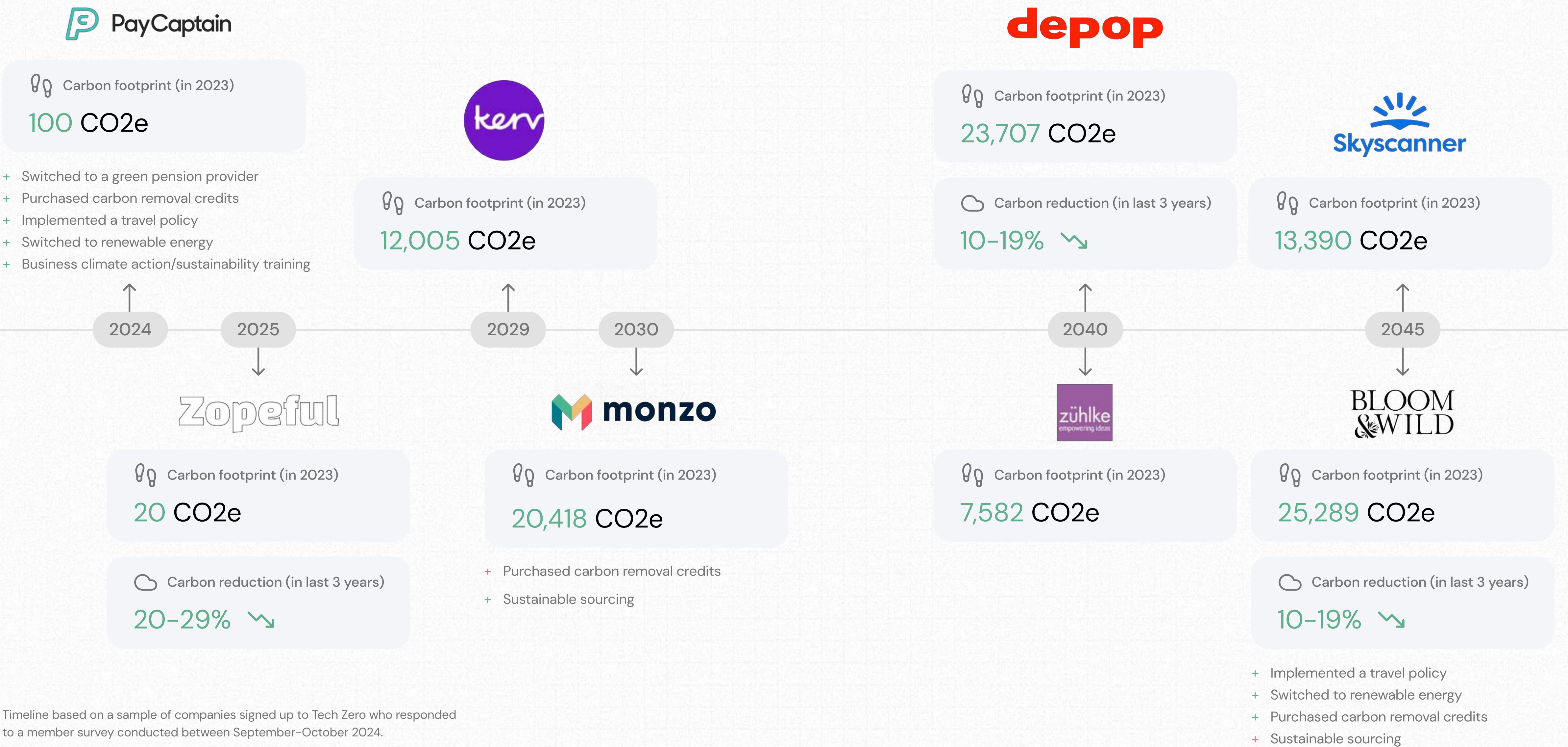
Tech Zero members have reduced their emissions by 24% on average since 2021, and by 11% in 2024 alone. One in three Tech Zero members have published a report on their annual greenhouse gas emissions, outperforming comparable schemes which track at less than 10%.

For Tech Zero companies, purchased goods and services (Scope 3) is by far their biggest source of emissions, and the majority of Tech Zero members point to data centres and cloud services as significant contributors.

When it comes to reducing emissions, the biggest challenges these tech companies face include processes taking a significant amount of time; uncertainty around whether to do carbon accounting in-house or with a provider; not knowing how to calculate emissions; and the need to educate teams.



Tech Zero Members: Net Zero Commitments



Timeline based on a sample of companies signed up to Tech Zero who responded to a member survey conducted between September–October 2024.

Time for Action



85%

of companies increased their sustainability investments in the past year.

Source: [Deloitte](#)



68%

of job-seekers are more likely to accept job offers from environmentally sustainable companies.

Source: [IBM](#)



37%

of UK SMEs received a request to supply carbon emissions data in the past 12 months.

Source: [UK Net Zero Business Census](#)

Tech has come to underpin almost every aspect of our daily lives, and underpins almost every other industry. Because of its ubiquity, and the fact that most of the world's wealthiest companies are tech companies, it is imperative that the tech industry reaches net zero quickly.

To do this, the growth of the technologies must be decoupled from the growth of their emissions. For tech to drive change, new technologies must be developed sustainably, and be supported by sustainable supply chains.

When board members commit to a 2050 net zero goal, it's unlikely they'll all still be there in two decades time. So, rather than delaying action or making it 'someone else's problem', it's important that board members commit to taking action to reduce emissions now, across Scopes 1, 2, and 3.

85% of Tech Zero members signed up because they think taking climate action is 'the right thing to do'. But reducing emissions is not just about 'doing good'. In today's business environment, having a sustainability strategy is increasingly critical to a company's success.

Disclosure requirements for larger companies are flowing down through supply chains to affect SMEs. In the last 12 months, 37% of SMEs in the UK have received a request from a customer or tender application to supply carbon emissions data.

IBM has also found that employees are more likely to accept job offers from sustainable companies. Plus, according to Deloitte, one in two companies have increased their sustainability investments in the past year due to changing consumer preferences.

As the world's leaders come together for COP29, there is a huge opportunity for tech companies to use their expertise in rapid innovation, and their growing wealth and influence, to accelerate progress towards global net zero emissions.



Read on for how tech companies can take actionable steps to reduce their carbon emissions!

Case Study I:

Bloom & Wild



Bloom & Wild is Europe’s largest direct to consumer flower company, re-inventing the \$60b global flower industry.

Active in eight countries, more than 98% of its emissions are Scope 3, mostly down to growing flowers, transport, and bouquet production, packaging, and delivery.

Bloom & Wild is committed to reaching net zero emissions from its own operations by 2045 or sooner and halving its Scope 1 and 2 emissions by 2030, which it achieved this year, six years ahead of schedule. It’s also on track to reduce the footprint of its bouquets by 7% year-on-year, having moved from its baseline of 7.2 kg CO2e per bouquet in 2020 to 5.36 kg CO2e per bouquet in 2024.



100%

of Bloom & Wild packaging is recyclable or compostable.



12.5 tonnes

of plastic waste saved from going to landfill.



300,000+

emissions-free deliveries completed last year.

SOURCE: BLOOM & WILD



Sibbe Krol

Director of Sustainability



We look to engage every single team member of Bloom & Wild Group to think how and where we can do better.



Key Actions

We have different activities per Scope. For Scope 1, we are particularly looking at our vehicles and the types of gas we use in some of our buildings. By switching to electric vehicles and green gas, we have been able to cut back on emissions here. For Scope 2, we have made very significant inroads by installing solar panels on our biggest warehouse and by switching over to green electricity contracts.

Our biggest footprint sits in our Scope 3 however, and here we cut back by focusing on a number of activities. For one, we have integrated carbon budgets in our bouquet designs. We use these budgets to reduce our footprint year on year, based on individual flower footprint data, which helps us choose low carbon options for our designs. We also look at minimising the use of packaging materials and low/no emissions delivery options.



Biggest Challenges

Having a physical supply chain with horticultural products means the vast majority of our carbon footprint comes from our sourcing decisions. This means that most of our most material interventions take place here. But we don't want to lose sight of other opportunities. That is why we look to engage every single team and team member of Bloom & Wild Group to think how and where we can do better. By collaborating with other partners and thought leaders like the ones we encounter in the Tech Zero network, we can unlock other savings, like reducing our cloud carbon emissions.

Operating in a VUCA world also presents us with unforeseen challenges and developments. One of the big unlocking initiatives for decarbonising our supply chain had been sea freight for flowers from Kenya. However, the deteriorated security situation in the Red Sea now makes this unfeasible for the coming period. In part, we look to counteract this by scaling up sea freight from Colombia and other sourcing destinations.

We continue to keep a close eye on global developments. Fortunately, we also see that sustainability can help boost resilience. Our suppliers with the best environmental practices and technical innovations tend to be the most resilient in the face of uncertainty. By fostering long term relationships with suppliers, we can share insights and anticipate challenges ahead.



Learnings

Don't go at it alone. Seek partners and partnerships with like-minded businesses (think of the B Corp community) and multi-stakeholder platforms. These bring a wealth of knowledge and can help set a direction for your company.

Take a data-driven approach where you can, and create a clear single point of truth. It helps to build a robust data set that you can use to analyse your business processes and products. For us, using the Ecolnvent LCA data as a starting point was extremely helpful.

Don't let the perfect be the enemy of the good. If you're going to wait on perfect data and zero uncertainty, you'll never get started. Make sure you have enough information to make decisions that are directionally correct, and focus on the most material impacts you have as a business.

Case Study II:

Depop



Depop is the community-powered circular fashion marketplace where anyone can buy, sell and discover desirable, affordable secondhand fashion.

Together with its community of approximately 35 million registered users, Depop is on a mission to make fashion circular, encouraging more people to choose secondhand and extend the lives of their clothes, redefining fashion consumption.

The company was founded in 2011 and is headquartered in London, with offices in New York and Manchester and a team of approximately 400 employees. In 2021, Depop became a wholly-owned subsidiary of Etsy, the global marketplace for unique and creative goods – and continues to operate as a standalone company.

Depop's main contribution to a net zero world lies with the emissions its users displace when choosing second hand rather than new. Over the past three years, Depop has estimated an emissions saving of more than 300,000 metric tonnes of CO₂e – the equivalent of 12.5x Depop's footprint in 2023 (24,000 mt). Depop is committed to reducing its absolute Scope 1 & 2 emissions by 90% and its intensity-based Scope 3 emissions by 97% by 2040.



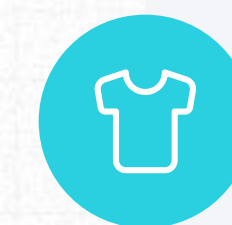
25 million

items that already existed that have been given a second life by Depop users since 2021.



9 in 10

purchases made on Depop prevent the purchase of a brand new item elsewhere.



300,000+

metric tonnes of CO₂e have been saved by Depop's circular fashion model in the past three years.

SOURCE: [DEPOP](#)

**depop**

Justine Porterie

Director of Sustainability & DEI



Key Actions

We've set science based targets and made our commitment to net zero by 2040 a fundamental part of our Impact strategy. To achieve our ambition, we focus our efforts on the biggest drivers of our Scope 3 emissions, such as shipping, packaging and purchased goods and services – also known as our corporate supply chain.

We notably do this through advocacy and direct engagement with our carriers, continuous collaboration with our suppliers to improve data quality, and also by offering our US users eco-friendlier packaging options in the US. Through Etsy, our parent company, we're also working to trial a supplier carbon fee to incentivise our suppliers to reduce their emissions.

In 2024, we supported California's finalisation of the Advanced Clean Fleets rule, including a testimony to the US Environmental Protection Agency. We partner closely with our shipping carriers on decarbonisation and integrate their emissions data into our own methodology and reporting. We've also added sustainability considerations into the selection criteria of new suppliers and office workspaces.

Conscious of the climate emergency and whilst we work towards long-term reductions, we're also taking immediate action to address our impact through our commitment to purchase carbon offsets in an amount equal to our quantified scope 1, 2 and 3 annual emissions, in partnership with Etsy.*

SOURCE: [METRIKUS CLIMATE IMPACT REPORT 2023-2024](#)



Biggest Challenges

Achieving net zero is a significant challenge for many businesses; and for ecommerce and retail businesses, shipping is a critical area to consider. Emissions from the shipping of items between sellers and buyers represent the largest source of Depop's quantified Scope 3 emissions (64% in 2023).

As a marketplace without centralised distribution, many of the typical levers to reduce shipping emissions – like delivery vehicle, fuel type, or route optimizations – sit outside of our direct control. However, we do have the power to influence the carbon intensity of our shipping through other routes such as advocacy and product design.

In 2023, we advocated for the US postal service's commitment to exclusively purchase electric vehicles starting in 2026. On the product side, we are exploring opportunities to nudge our buyers to shop locally.



Learnings

First, start with the data. You can't manage what you can't measure. Having a baseline of your emissions, and continuously improving the accuracy of your reporting, will help assess the effectiveness of the actions you're taking. Goal setting, a detailed audit, and carbon tracking tools are vital levers for success.

At Depop, we started with a simple spreadsheet in-house in the early days, and then leveraged the help of external consultants to improve the scope and accuracy of our footprint. Now, further down on our journey, we've onboarded to Watershed to help us better measure and track progress. We've also gone from once a year measurements to quarterly.

Foster internal and external buy-in to support your reduction efforts. Internally, we set annual targets and health metrics to promote continuous progress and accountability across the business. Externally, we released educational content and guidelines to encourage our sellers to do their part, by reusing packaging or opting for more sustainable materials for instance.

Remember that progress is better than perfection. Start somewhere and be transparent about the journey you're on.

*Investments in 468,924 verified emissions reductions, See Etsy Inc., 10K, p22.

Case Study III:

Metrikus



Metrikus is a building efficiency platform providing organisations with data insights to make spaces efficient, creating positive change for occupants and the environment.

As a software company, a large part of Metrikus' emissions are cloud-related. Metrikus' greenhouse gas emissions totalled 287 tonnes of CO₂e between April 2023 and March 2024, and the vast majority were Scope 3 emissions from purchased goods and services.

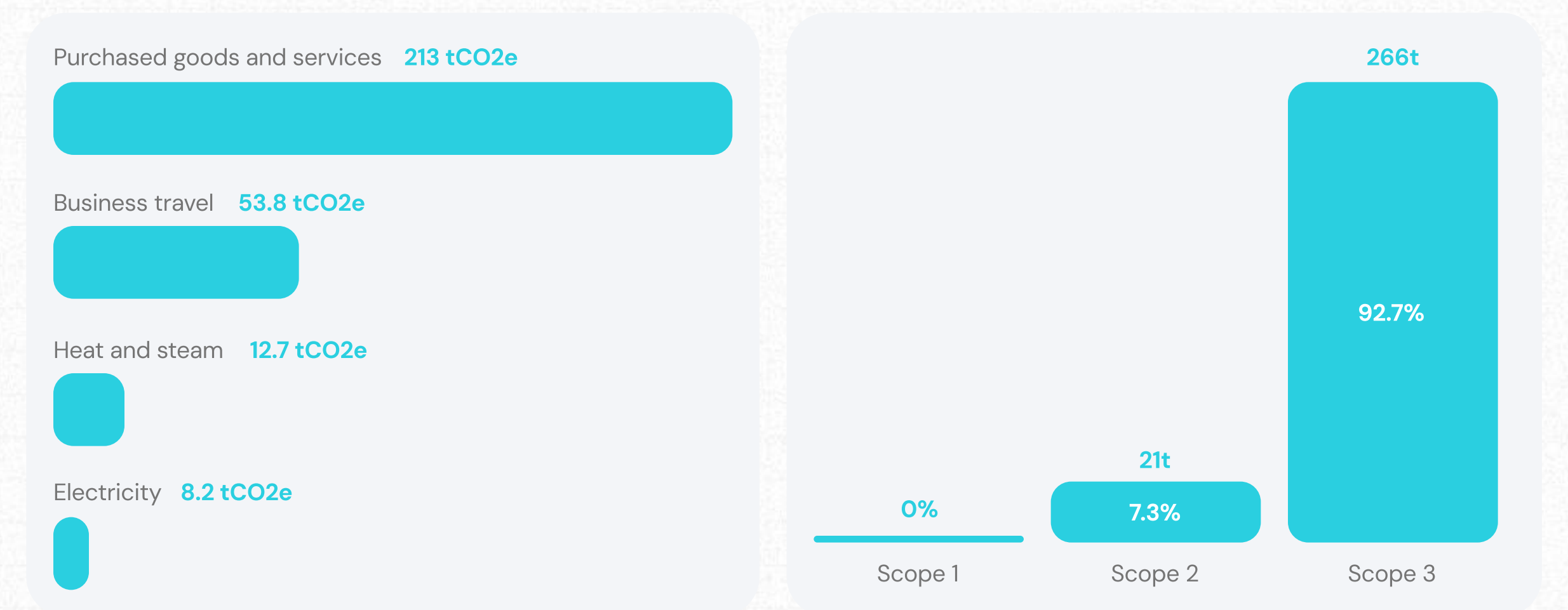
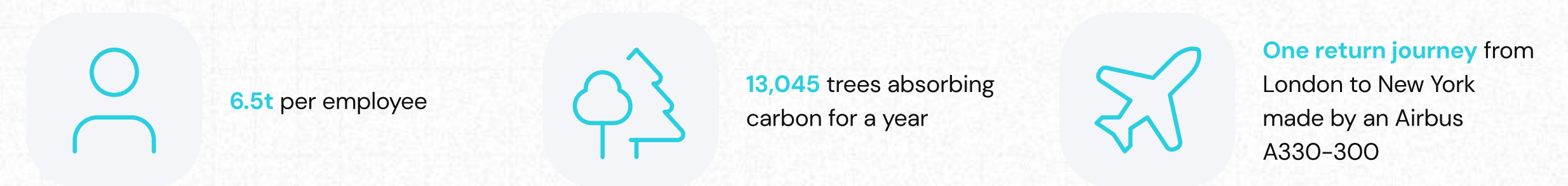
Metrikus uses its intensity ratio – comparing emissions to revenue – as the main benchmark to set goals and track progress. Its goal is to keep its intensity ratio equal to or lower than it was in its baseline year of 2020 – achieved this year, with a 13% reduction.

Metrikus is also working towards net zero as per the Science Based Targets initiative's definition for SMEs (fewer than 500 employees), by eliminating scope 1 and 2 emissions. Its scope 1 emissions are already 0, and the team is working towards eliminating its scope 2 emissions by changing its office energy to a renewable tariff.

287 tonnes of CO₂e

for the period April 2023 to March 2024

It's equivalent to:





Charlotte Laing

CMO

metrikus



Good quality data is key to good carbon reduction plans, and the majority of your emissions will be calculated from company spend data. Get your finance team involved as soon as possible.



Key Actions

The main action we took, as we rebuilt a new version of our platform, was fully migrating our cloud hosting from AWS to Microsoft Azure. Azure will be run on 100% renewable energy by 2025, and will be water positive and zero waste by 2030. They are also net zero since 2012 through offsets.



Biggest Challenges

At the start it can be tricky to get buy-in for sustainability initiatives. Particularly when the company is relatively new and resources are limited and would rather be put into growing the business – this is normal. It's important to find common ground and reconcile sustainability initiatives with business growth. And often there's a lot of overlap, it's just important to frame the sustainability benefits as wider business benefits. Employees prefer to work at companies that prioritise sustainability, for example, or that businesses with ESG considerations perform better in the long run.

Given a lot depends on our suppliers and bigger industries decarbonising (like energy and transport), ensuring we stay on course with our net zero goals is definitely tricky. 'Control the controllables' is a very apt saying in this scenario – we firstly looked at our own sources of emissions and looked to minimise these as much as possible, but we also did a lot of work to engage with our supply chain.

We amended our Sustainable Procurement Policy, adding a clause that stated preference to suppliers actively working towards a net zero goal. We then got in touch with our suppliers, asking to see their net zero plans and/or sustainability policies, making them aware that we have a preference for conducting business with more sustainable organisations.



Learnings

Good quality data is key to good carbon reduction plans. Particularly at the start, the majority (if not all) of your emissions will be calculated from company spend data. Get your finance team involved as soon as possible, and use the most granular data available. Let them know which data you'll need, and what they need to keep track of.

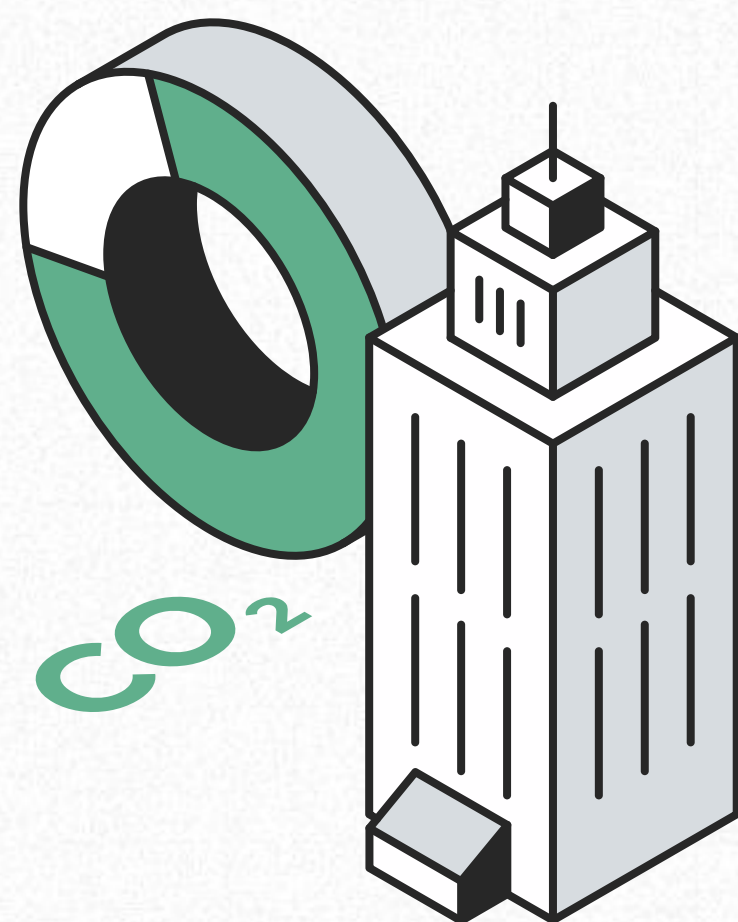
There are lots of free resources available to help you get started! Groups like Tech Zero and the SME Climate Hub are great for connecting with other companies and sharing ideas, and also offer free tools and frameworks for carbon accounting and reporting. If you don't immediately have the budget to implement initiatives, focus on engaging your workforce and engaging your supply chain. Talk to them about their own net zero plans, as well as what you're planning and how it will impact them.

Many hands make light work! Get members from all departments involved in decarbonising the company. You don't need to be a sustainability professional to get involved with sustainability, and everyone can offer valuable input to make your organisation more sustainable.

Spotlight on Big Tech



The Big Tech firms are some of the world's biggest emitters, mostly due to their large global supply chains. But they're also some of the most actively engaged companies in reducing emissions and setting net zero targets.



Amazon, Google, and Meta are the largest corporate purchasers of renewable energy in the world. In 2023, Apple cut its emissions by 30% and Meta by 12%, while Microsoft and Google saw increases in carbon emissions, mostly due to expanding their number of data centres to accommodate AI usage.

Because companies offset their emissions in different ways, total emissions increase and reduction figures (tCO₂e) do not necessarily mean one Big Tech company is doing better than another.

Some companies use renewable energy certificates from anywhere in the world to offset their energy use, for example, while others look to match their energy consumption with clean energy from the same grid and time of day as their usage. This latter approach ensures a more accurate and impactful carbon footprint reduction.



Read on to discover how CSOs and climate leaders at major tech firms are driving their net zero strategies.

Big Tech's Road to Net Zero



 Net Zero Goal

2040

 Carbon footprint

68.82m

 Emissions in 2023

3% reduction ↘



 Net Zero Goal

2030

 Carbon footprint

15.6m

 Emissions in 2023

30% reduction ↘



 Net Zero Goal

2030

 Carbon footprint

14.3m

 Emissions in 2023

13% increase ↗



 Net Zero Goal

2030

 Carbon footprint

7.5m

 Emissions in 2023

12% reduction 



 Net Zero Goal

2030

 Carbon footprint

15.4m

 Emissions in 2023

25% increase 

“There is not as much conversation today as you’d expect between Big Tech and ‘Little Tech’. Big Tech firms are comparatively some of the greenest major companies in the way that they resolve problems and aim towards net zero. Small Tech is often trying to scale new solutions that don’t yet have big footprints. They can both learn from each other and work together in the years ahead.”



Irena Spazzapan
Systemiq Capital

*All data is sourced from company sustainability reports released in 2023–2024.

*CO2e stands for tonnes (t) of carbon dioxide (CO2) equivalent (e), used to compare emissions from various greenhouse gases.

Adam Elman

Head of Sustainability, EMEA



 Net Zero Goal

2030



“

We’re in a decade of climate action with a goal to achieve net zero by 2030.

”



Reaching Net Zero

We have a long standing commitment to sustainability, with a key focus on sourcing clean energy. Globally, we’ve been matching our electricity use with renewables since 2017, but we want to go further and source 24/7, locally-sourced, carbon free energy for every hour of the day.



Overcoming Challenges

Achieving net zero is a hugely ambitious goal. Like many companies, a large proportion of Google's emissions come from our value chain, so we're working very closely with organisations and governments across the value chain to overcome that challenge. We recently established the Google Renewable Energy Addendum, asking our largest hardware suppliers to commit to sourcing 100% renewable energy by 2029.

We've also partnered with BlackRock's Climate Infrastructure business to add a gigawatt of new solar capacity to the Taiwan electricity grid, where currently 85% of energy is from fossil fuel sources. That'll help us in terms of our own emissions, but also generate cleaner energy for our suppliers.

Navigating AI

We're focused on sustainability across every part of our AI value chain, including the models themselves where we've managed to reduce energy use by 100x, and emissions by 1000x. We're also focused on the infrastructure and even the chips themselves.

Advice

The science is clear in terms of the impacts of climate change, the trajectory, and the significant amount of work and pace that needs to happen to tackle the challenges we face. Technology can be part of the solution. Tech companies need to put in place robust climate goals and partner across the value chain to figure out collectively how to make progress against those goals.

Christopher Hook

Global Head of Sustainability Strategy

Uber

 Net Zero Goal

2030 in Canada, Europe & US; 2040 Globally.



The challenge is about making change happen as quickly as possible.



Reaching Net Zero

The big thing for us is to get people to cater for the transition to net zero. Almost all the emissions on our platform are Scope 3 as they're associated with trips or deliveries, so we need to make it make sense for the individual Uber driver or courier to get an electric vehicle, plus work with industry and policymakers to aid the transition.



Overcoming Challenges

For our particular part of the net zero transition, the technology already exists in the form of electric vehicles. We're not inventing a new type of car or motorbike, but the technology is still expensive, it's still not available everywhere, and it's still unfamiliar to some people.

The biggest challenge is investing wisely so that the company is financially and environmentally sustainable. We try to be as technology agnostic as we can; we're not placing all our bets on one particular model of car. We recognise that within the 2040 timeline that we've committed to, things might move. What makes sense today might not make sense in ten years time, so we're more focused on the outcome of reaching a zero emissions way to move around the world and less focused on the how.



Advice

Know where the big problems are. As a founder, you know the things you can do that will have the biggest impact, so try not to get distracted by the smaller stuff. Whatever your business is, understand where your emissions are largest, and work top-down rather than trying to solve all the problems at once.

Also, understand what your customers want, but don't expect them to solve your problems for you. At Uber, we can't expect our customers to pay more for sustainability as we know we're a convenience product. But there are ways that we can engage them on our net zero journey. Whether your customers are consumers or other businesses, building that relationship is going to be important.

Lewis Richards

Chief Sustainability Officer



 Net Zero Goal

2030



We're committed to powering our data centres with 100% renewable energy by 2025.



Reaching Net Zero

When we announced our carbon negative commitment in 2020, we likened it to a moonshot – a grand goal that will require organisational focus, innovation, and global collaboration. To make this commitment a reality, we are reducing our scope 1 & 2 emissions to near zero by increasing energy efficiency, decarbonising our operations, and reaching 100% renewable energy by 2025. We are also reducing our value chain emissions, and aiming to have 100% of our electricity consumption matched by zero carbon energy purchases by 2030. These actions are just some of the ways we are playing our part to help accelerate the world's transition to a more economically and environmentally sustainable future for us all.



Overcoming Challenges

One of the biggest challenges we face is addressing our Scope 3 emissions, which are the indirect emissions that come from our supply chain. These emissions make up over 90% of our total carbon footprint and are harder to measure and manage than our direct emissions.

Our challenge is in part unique to our position as a leading cloud supplier that is expanding data centres, and we have launched a company-wide initiative to identify and develop the added measures we'll need to reduce our Scope 3 emissions. We're working with our high-volume suppliers to use 100% carbon-free electricity for their Microsoft delivered goods and services by 2030, forging partnerships to accelerate technology breakthroughs including greener steel, concrete and fuels, and building markets by using our purchasing power to accelerate market demand for these types of breakthroughs.

Navigating AI

We recognise that AI and other emerging technologies have tremendous potential to accelerate sustainability solutions, but also pose challenges for energy demand and resource consumption. That's why we are committed to powering our data centres with 100% renewable energy by 2025 and matching our electricity consumption with zero carbon energy purchases 100% of the time by 2030.

We are also actively seeking innovative ways to improve the efficiency, durability, and scalability of our data centres, such as using hydrogen fuel cells, modular designs, and liquid cooling systems. For example, in the UK, our newest own-design data centre in West London is reusing an existing brownfield site to prevent further loss of the countryside to development.

Advice

The first step to reducing emissions is to have a clear picture of all environmental, financial and operational ESG data that makes up an organisation's carbon footprint. Organisations that can holistically manage their data are more prepared to respond to regulation, create a more resilient business, and critically, deliver on ESG commitments and reduce carbon emissions.

For example, the BBC are using Microsoft's Cloud for Sustainability tool to better understand the carbon footprint of their broadcasting and production services. Once this clear data picture is in place, organisations can then take action to reduce carbon emissions in a targeted way.

Nancy Powell

UK&I Sustainability Lead



 Net Zero Goal

2040



AI has the potential to rapidly scale proven applications and technologies designed to reduce emissions.



Reaching Net Zero

Achieving net zero will involve interventions at every stage of our manufacturing and operating process. A big priority is going to be sourcing 100% of our electricity from renewable sources and we have a 2035 target for this. We aren't just purchasers of renewables but also actively investing in solar, wind, and other projects to power our facilities globally.

Operations are one aspect but what our customers are experiencing are products designed to be more energy efficient and have a lower environmental impact. This involves using recycled materials, reducing packaging waste, and ensuring products are easier to recycle at the end of their lifecycle. It is also really important to take our value chain with us, either through working closely with suppliers on our thinking and with Partner businesses through programmes like Amplify Impact where we have open sourced our own internal training programmes and materials on all sustainability themes.



Overcoming Challenges

Like any manufacturer we use a lot of energy in production and as a result have a big carbon footprint. Driving this footprint down will be key and definitely a challenge, but in many ways that work is well understood and most large businesses are increasingly well organised in their thinking around that. A big challenge will be to encourage conversations to be had within our sector and the business community more broadly around nature, biodiversity, water, and their interconnectedness with carbon and climate. HP has had a Forest Positive programme in place for some years and has directed significant investment in the long-term health, protection, and biodiversity of global forests but much of this kind of work is eclipsed from a net zero conversation that focuses very much on carbon.

Navigating AI

These are incredibly interesting times for an emerging tech that brings both challenge and opportunity when it comes to net zero: compute power requirements versus what AI may help us solve. In fact, the energy demands of AI should really help focus minds on energy and accelerating decarbonisation patterns. On the flip side, AI has the potential to rapidly scale proven applications and technologies designed to reduce emissions.

At a business level. I think short term expectations are that the integrations of AI should quickly improve, grow, and evolve the ESG data we rely on and share with customers and then help us quickly get to solutions and adaptations that not only support our transition plans but provide additional routes to get there.

Advice

Use data! Analytics and telemetry tell you so much about your device fleets and usage. Do you have people inside your organisation with more compute power than they need that you could deploy differently? Outside of the longer term design and infrastructure changes we will experience in tech, I would also ask every tech customer: How is your product packaged, delivered, and disposed of at the end of its life? Bulk packaging, shipment by sea, refurbishing and recycling hardware – these are wins that we have right now that we don't need to wait for AI to give us an answer for!

Matt Manning

Head of Circularity & Net Zero



 Net Zero Goal

2031, core business; 2041, supply chain & customers.



We have the second biggest commercial fleet in the UK, so replacing our vehicles with electric or low-carbon alternatives is a key priority.



Reaching Net Zero

For our operational emissions, key levers to help decarbonisation are:

- Switching our fleet to low/zero carbon fuelled alternatives. We have the second biggest commercial fleet in the UK, so replacing our ICE vehicles with electric or low-carbon fuels is a key priority
- Reducing the impact from our buildings and networks, consolidating our estate (fewer and better buildings), improved energy efficiency of networks, and removal of fossil-based heating and back-up power via electrification.

For our Scope 3 emissions:

- Addressing our supply chain and scaling up more circular business practices such as sourcing refurbished equipment and extending the life of assets through take-back and repair helps reduce overall emissions in this area.
- Plus, for customer emissions, we support and advocate for continued decarbonisation of the UK grid. We also support customers to extend the life of existing hardware (through repair and asset life extension).



Overcoming Challenges

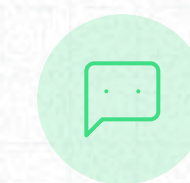
Our biggest challenge is upstream Scope 3 emissions linked to our suppliers. We engage with those suppliers who make up the majority of our upstream Scope 3 emissions through the CDP Supply Chain programme and industry associations such as JAC (Joint Alliance for CSR) and GSMA. These associations aim to share resources and best practice to develop and implement long-term corporate social responsibility across our supply chains.

In FY24, we refreshed our climate change policy, which forms part of our expectations and generic standards applicable to suppliers working with us. It requires them to conduct climate risk assessments, set 1.5°C aligned science-based targets and to report on progress annually. And we continue to engage with key suppliers on carbon reduction through contract clauses.



Navigating AI

Whilst AI-related emissions will increase the reported emissions for certain suppliers we deal with (e.g. Microsoft, Google, AWS), which we will see within our scope 3 reporting, we've yet to quantify the impact of AI across our physical networks. As most networks already operate with capacity built in, increasing data doesn't necessarily directly correlate to an increase in energy usage. The greater challenge comes when there are big, unscheduled spikes in network demand which cause greater issues.



Advice

Measure your baseline emissions and understand where your sources of emissions are, otherwise you won't know what to tackle or know how significant they are. Utilise digital tools early for measuring and reporting carbon emissions so they can easily be embedded and/or linked with other systems such as finance. Plus, connect with others in your industry to learn and share best practice – you're most likely using the same suppliers and have the same challenges.

George Barrett

Senior Sustainability Manager



 Net Zero Goal

2030, own operations; 2040, across the value chain.



We need to find ways to incentivise and encourage suppliers to drive change through their organisations and value chains.



Reaching Net Zero

Our big focus will be to work with our suppliers to ensure they have their own climate transition plans in place. We're also continually exploring how we can extend device lifecycles. We've seen an 80%+ sales increase in refurbished device sales so there's definitely demand there, both from consumers and our business customers.



Overcoming Challenges

I think the challenge is always going to be communicating change and expectations over time. We will need to find ways to incentivise and encourage suppliers to drive change through their organisations and value chains. There will also inevitably be times when improved data quality leads to emissions temporarily rising and not falling. So messaging is absolutely key.



Navigating AI

You're already starting to see the impact that AI is having on certain companies' emissions. It's brilliant that the UK government and leading businesses remain committed to grid decarbonisation and renewable energy procurement, yet we also need to recognise and find ways to suitably manage the energy demand of AI.

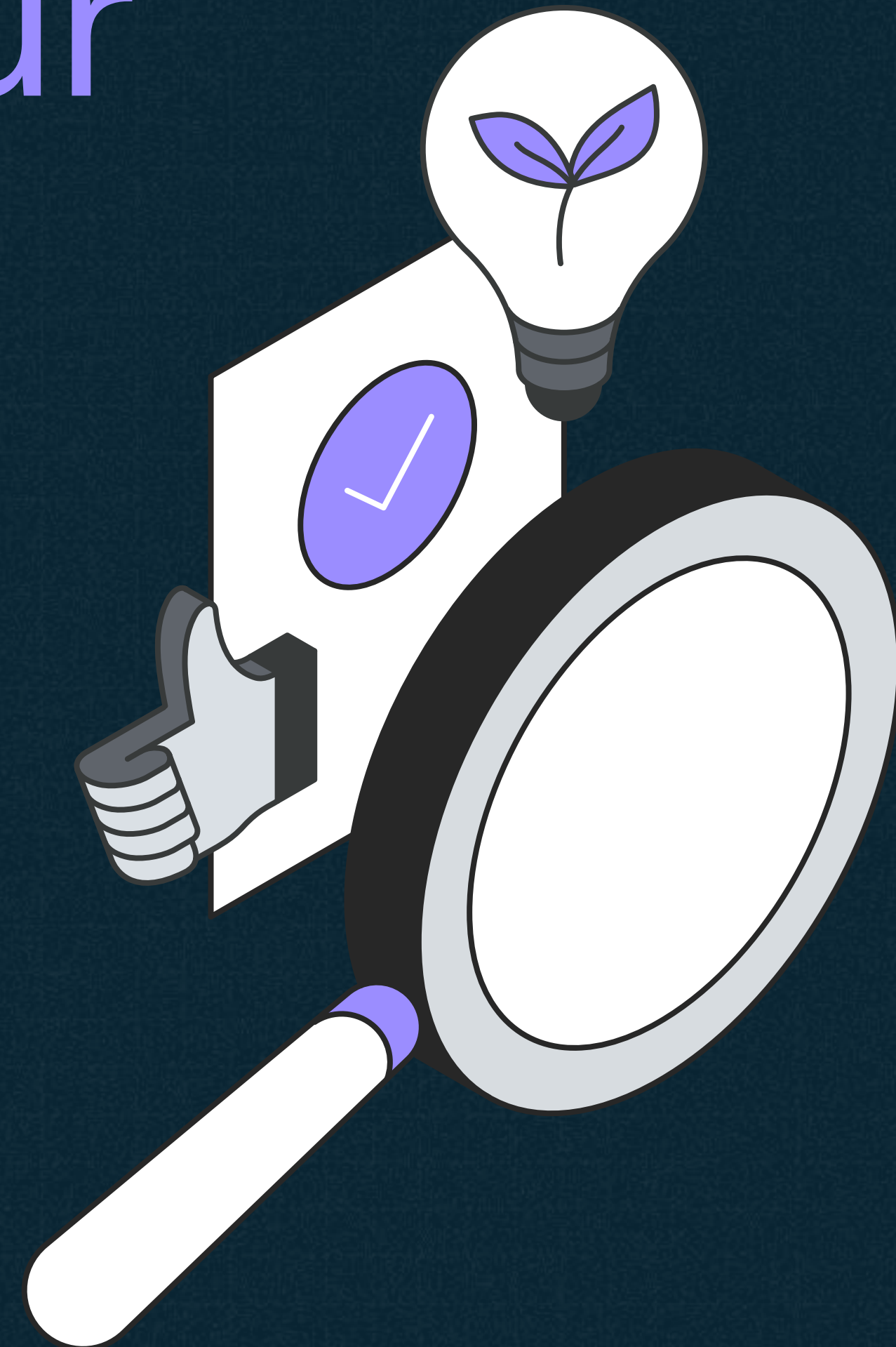


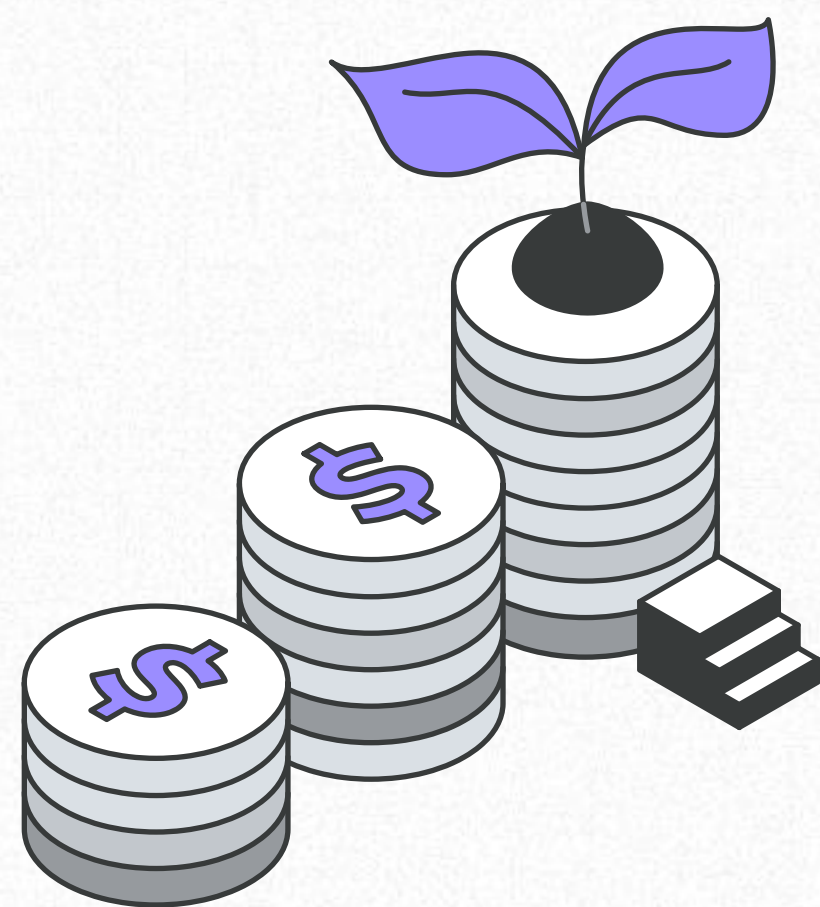
Advice

To achieve net zero, large corporations have to retrofit and transform established business models which can prove challenging. Startups should therefore take advantage of their size and build in sustainability from the get go. Your net emissions are going to become more of a hygiene factor, and the seeds you plant now will be your reputation for the future.

How to Reduce Your Carbon Emissions

A comprehensive guide for tech companies.





Scientists estimate that up to 10 billion tonnes of CO₂ will need to be removed annually from the atmosphere to achieve net zero by 2050. We are making progress in pushing climate action to the forefront – more than 90% of global GDP today is committed to some form of Net Zero target. Now is the time for action.

What can your company do? Based on our research and insights from our conversations with tech industry sustainability leaders, we highlight the six key areas where companies will face net zero challenges and explain how to overcome them, so that founders and business leaders can start making greener decisions today.

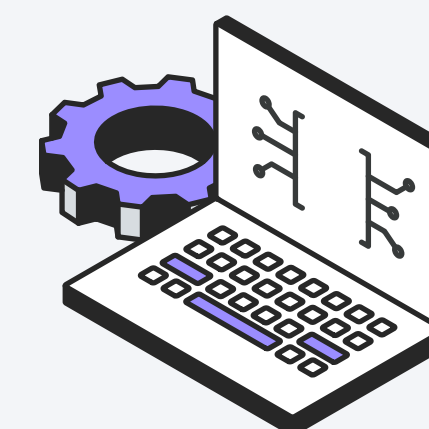
10 Billion

tonnes of CO₂ need to be removed annually to achieve net zero by 2050.

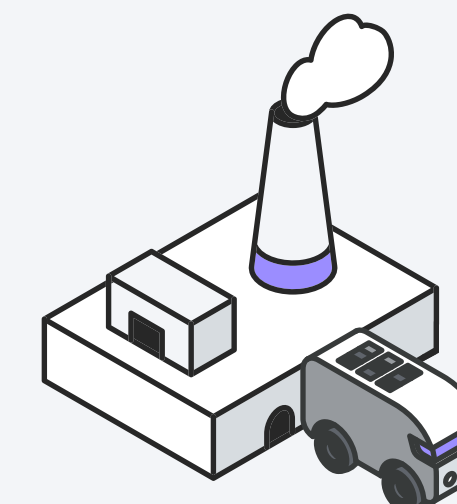
Key emissions challenges:



1 Data Centres & Cloud Providers



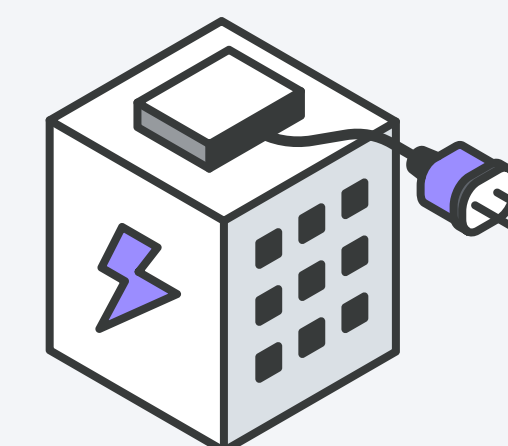
2 Hardware



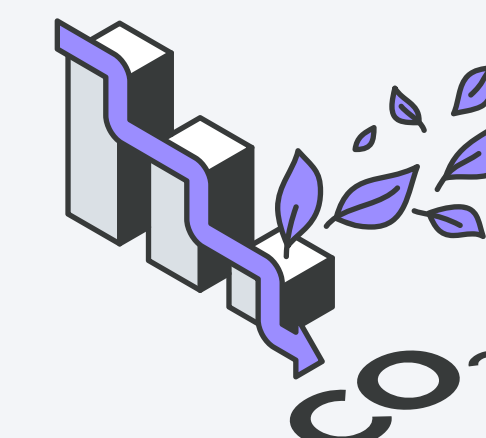
3 Supply Chains



4 Financing



5 Energy Use

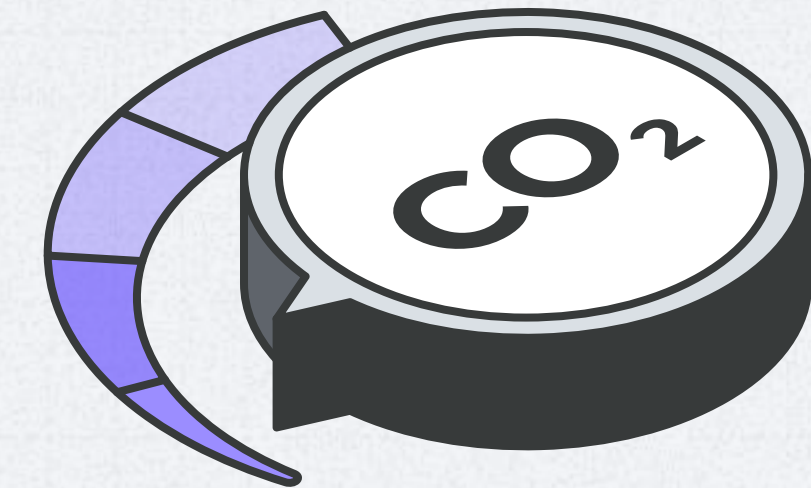


6 Carbon Removal

Measuring Your Emissions

The first step to reducing your emissions is understanding how to measure them. To help kickstart your journey, here's the key takeaways from our Tech Zero guide:

[How to Calculate Emissions.](#)



Get to know the jargon

Scope 1

Your 'direct' greenhouse gas emissions from sources that your company directly owns or controls.

Scope 2

Emissions from the electricity your company purchases from an energy supplier.

Scope 3

All other emissions from the activities that are necessary for your business to run.

Emissions factors

Emissions factors – also called ‘conversion factors’ – are numbers that convert activity data into GHG emissions data. You can find almost all the emissions factors for the UK on [the UK Government website](#), but we’ve also made a [basic list for you](#).

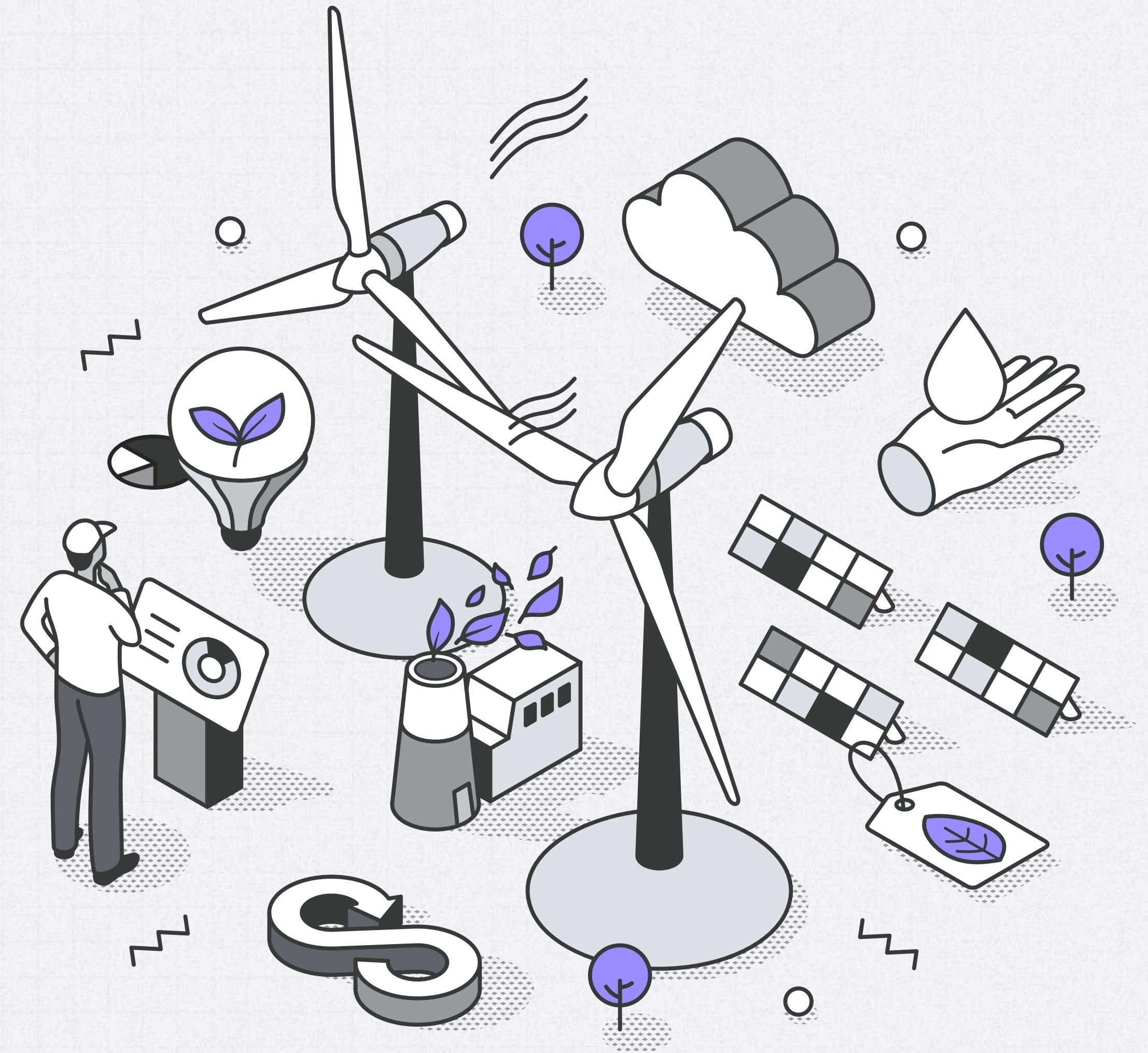
There are two different ways you can calculate your emissions:

‘Activity-based’ is where you use your specific activity data and multiply it by the emissions factors associated with that activity. The ‘spend-based’ method simply takes how much you’ve spent on products and services, and multiplies it by the related emissions factor.

Define your boundary

The ‘boundary’ of your organisation defines what’s included in your calculations, and what isn’t. It must:

- Cover a 12-month period.
- Fairly represent the total GHG emissions of your business.
- Cover all activities directly related to your business, and that are essential to its functioning.
- Include all entities related to and controlled by your business.



Gather the data

You'll need to gather all relevant activity data from the last 12 months, this may be the hardest part of the journey. It will involve reaching out to different teams within your organisation. To streamline the process, try to assign one person for each of the areas to tackle, and use surveys and existing resources such as our [supplier footprint request template](#) to help. You'll need to gather data on the following:

Scope 1

- Amount of fuel consumed in boilers, furnaces, and turbines owned by your company.
- Amount and type of fuel consumed by your generator and vehicles.
- Emissions released in manufacturing processes.
- Amount and type of refrigerant used in air conditioning.
- Estimated leakage of gases.

Scope 2

- How much electricity you've used in your offices/sites.

Scope 3

- Office commodities
- IT
- Services
- Business Travel
- Employee Commuting
- Waste
- Transport of goods
- Use of your products
- Investments
- Upstream leased assets



Calculate!

To calculate Scope data, multiply the activity data by the emissions factor, and add together all the emissions in each subsection to total your overall footprint.

You can now identify which areas are responsible for the bulk of your emissions – now it's time to do something about it!

1 Data Centres & Cloud Providers

Data usage and storage requires an incredible amount of energy consumption, making up a large part of a tech company's Scope 3 footprint.

~2%

of total global energy consumption was from data centres in 2022.

Source: [IEA](#)

2.5b tCO₂e

will be emitted from data centres globally by 2030.

Source: [Morgan Stanley via Reuters](#)

1 in 2

Tech Zero members say data centres and cloud services are their largest emissions sources within Scope 3.



What can you do?

- Switch to data and cloud providers powered by renewable energy.
- Improve efficiency of your software and hardware.
- Use your software & hardware and run bigger jobs at times when the grid is greenest.
- Design software and hardware with the future in mind and strive for zero-carbon design.





Here to help:

GoCodeGreen

World-leading, data driven solutions designed to help decarbonise digital products and services. Screens your tech usage, assesses your technical leaders, and trains your teams to reduce emissions.



Data centre company that repurposes heat energy for social good. Builds vital compute infrastructure, deploys decarbonised data furnace technology into hosts who require free heat energy, whilst providing significant quantifiable ESG benefits.

measurable•energy

Eliminating wasted energy in buildings through machine learning powered plug sockets that automatically identify and eliminate the small power waste of your devices, reducing your carbon emissions and electricity bills.

greenpixie

Leading provider of usage-based sustainability data for hyperscale cloud users. It measures customer's cloud emissions with independent GreenOps experts, helping them to make sustainable, data-driven decisions in the cloud.

“Reaching net zero is a marathon not a sprint. It takes many small actions and processes over time, and the collaboration of people internally and externally to reach it. Buy-in from leadership, so they can give the required directives and help work around blockers is the most important factor allowing us to reduce emissions. Whether that's someone in the Finance team looking at our carbon removal strategy, in our Engineering team looking at server efficiencies, or in our Marketing team understanding how supplier selection affects our net zero goals.”



Carmel Owen
Skyscanner

Principal Legal Counsel

Key Emissions Challenges

2 Hardware

Manufacturing new hardware produces a lot of carbon (from mining to metal working) and extracting rare earth elements is linked to significant environmental damage. When it comes to getting rid of 'old' hardware, electronics are also particularly difficult to recycle. Many devices contain harmful components, there are a lack of standardised e-waste policies, and many common devices have relatively short life cycles. All this means we are currently producing more e-waste than we can recycle.

62 billion kg

of e-waste was generated globally in 2022.

Source: [ITU](#)

Equal to 1,100

laptops being thrown into a landfill every second.

Source: [ICT Reverse](#)

316 kg of CO₂

190,000l of water

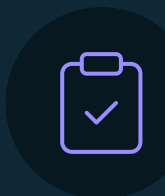
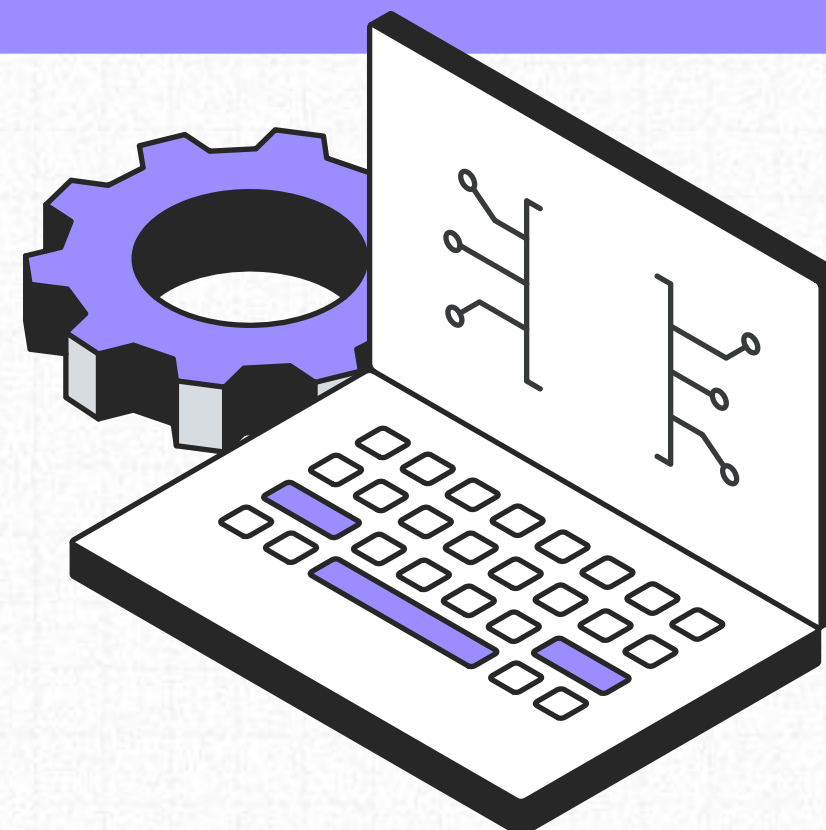
1,200kg of mined earth and rock
is consumed when one laptop is created.

Source: [Circular Online](#)

160,000

Laptops are disposed of everyday in the EU.

Source: [Circular Computing](#)



What can you do?

Purchase second-hand hardware.

Design and build with a circular economy in mind – use recycled elements, and/or make sure your products are recyclable.

Lease products rather than buy them outright.

Use existing hardware as long as possible, and refurbish if possible. The most sustainable tech is the tech you already own!



Here to help:

Back Market

Online retailer of reliable refurbished smartphones, laptops and tech, 70% cheaper than buying new and far more sustainable.

RAYLO.

Technology platform enabling the lease-and-reuse of consumer goods, which makes them more sustainable, accessible, and affordable, accelerating the transition to a circular economy.



IT services to save money, reduce waste, and save the planet. Allows you to re-purpose, re-use, and extend the life of existing desktop hardware investments.



Audit-grade data and advisory services that enable you to simply measure, report, and act on nature risk.



Key Emissions Challenges

3 Supply Chains

Scope 3 emissions across the supply chain typically account for the majority of tech companies' carbon footprints. For many businesses, measuring, reducing, and reporting on Scope 3 emissions is the most challenging part of achieving a net zero target.

75–99%

of companies' greenhouse gas emissions on average are Scope 3.

Source: [WRI](#)

78%

of Tech Zero members report Purchased Goods and Services as their biggest source of emissions.

The tech industry's Scope 3 emissions are:

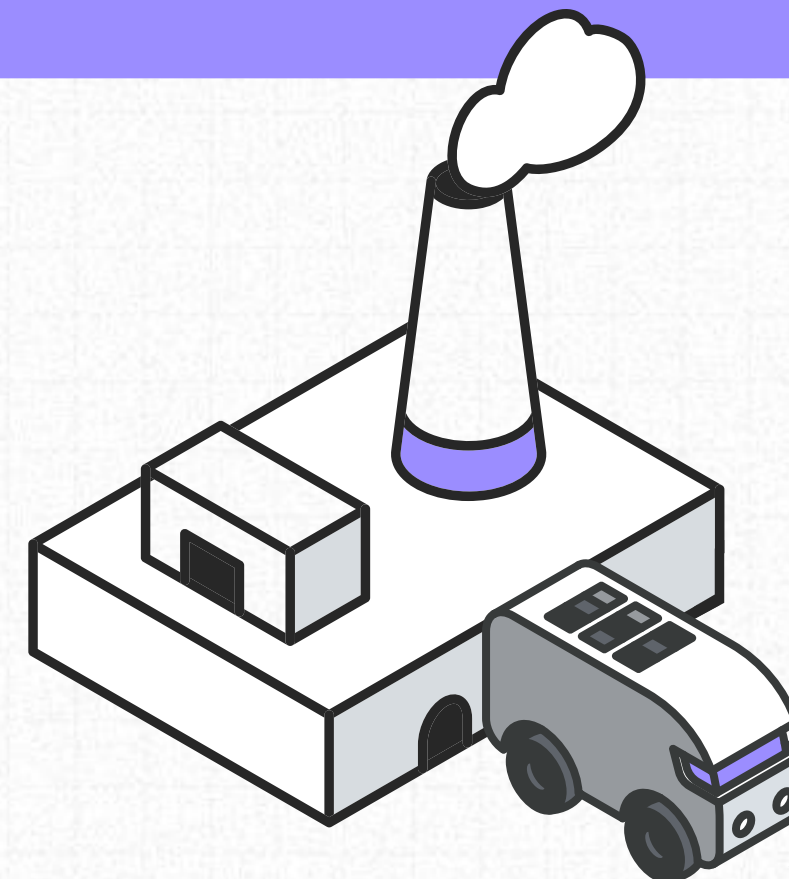
24x higher

will be emitted from data centres globally by 2030 than the industry's Scope 1 emissions..

13x higher

than the industry's Scope 2 emissions.

Source: [Accenture](#)



What can you do?

Make emissions reductions and green credentials part of the recruitment process.

Implement policies that will reduce emissions and limit supplier options, such as a travel policy (encourage train journeys and flights based on lowest carbon emissions).

Prioritise which suppliers and partners you're targeting first.

Share knowledge and encourage suppliers to join organisations like Tech Zero!



Here to help:



Carbon Intelligence Platform powering actionable data to decarbonize the marketing supply chain – the industry's leading solution for corporate measurement and supply chain management.

GOODF!ND

Connects shoppers with sustainable choices for whatever they want, curates ethical alternatives and compares brands' sustainability.

“Achieving meaningful emissions reductions requires a long-term commitment to both internal change and throughout the value chain. Start by thoroughly understanding your emissions sources and set bold but achievable goals based on science – our transition from setting internal targets to aligning with Science-Based Targets helped us shift to prioritising tangible reductions in our carbon footprint.”



Helen Lambe

Version 1

Sustainability Manager

4 Financing

Large private banks have historically pumped money into big carbon emitters. Opting for sustainable financing can therefore make a huge difference to your company's net carbon emissions, benefiting both the environment and your bottom line.

\$6.9t

committed to the fossil fuel industry by the world's largest banks since the Paris Agreement in 2016.

Source: [Banking on Climate Chaos](#)

131 million tonnes

The total carbon emissions financed by FTSE100 company pensions.

Source: [Make My Money Matter](#)



What can you do?

Use a green bank for your business (and personal!) accounts.

Switch to green pensions.





Here to help:

tred

Green business current account which automatically calculates your footprint based on your detailed transaction data from all your accounts.



**Starling
Bank**

Digital-first bank transforming traditional banking with sustainability at its core. Branchless and paperless from the very beginning.

OakNorth 

Net Zero Scope 1 and 2 emissions, and Scope 3 to be included by 2035. Aims to support at least 75% of business trading customers in adopting a net zero target of their own.

GoCardless

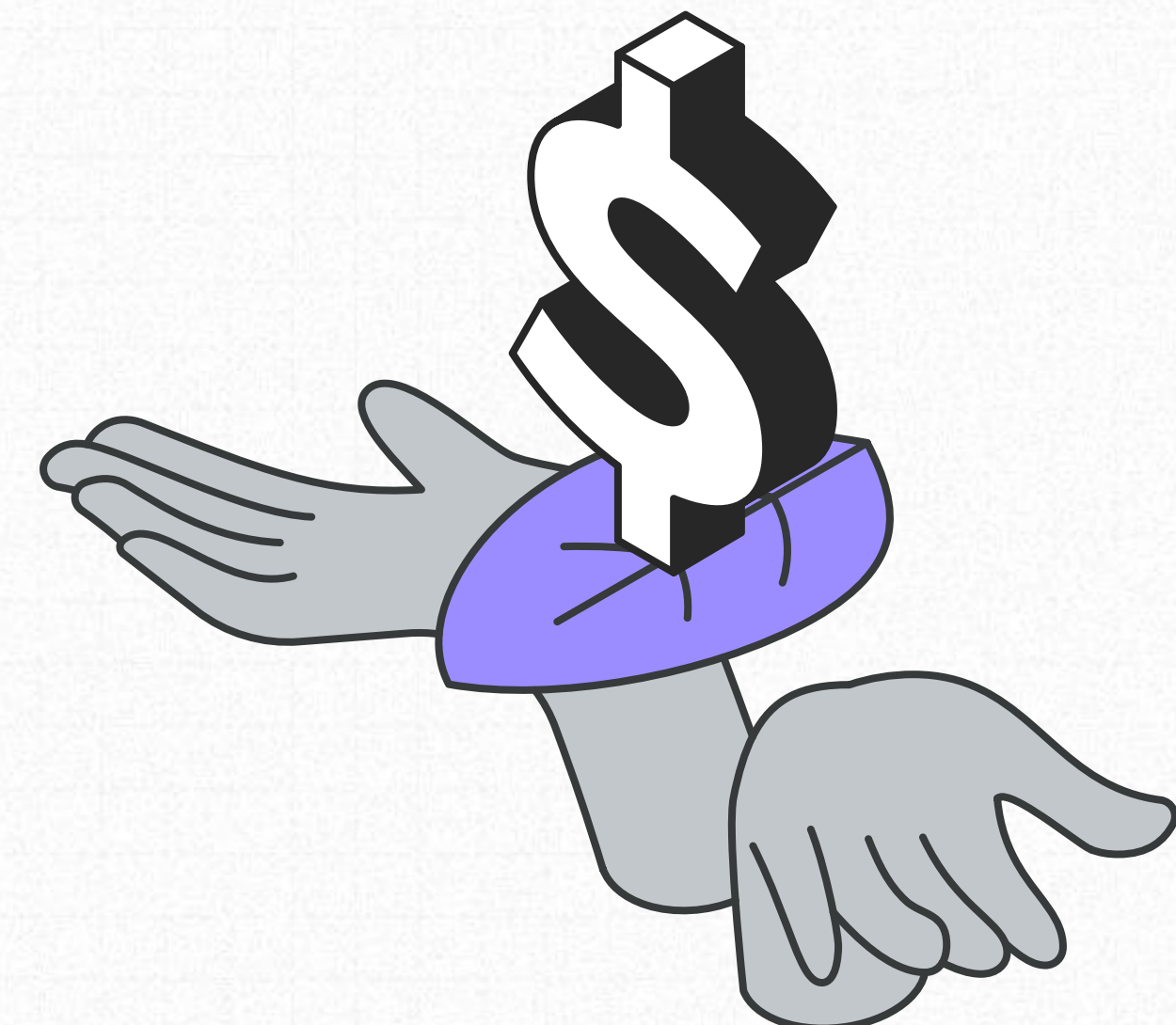
The leading online payment gateway, which plays an important role in creating economic sustainability for customers and the wider economy.

 **monzo**

Net Zero by 2030, with a mission to make money work for everyone with a commitment to sustainability at its core.

path

Ethical financial advisers focused on green pensions and investments, ethical wealth management, and ESG and impact strategies.



Key Emissions Challenges

5 Energy Use

Efficient energy usage is integral to mitigating carbon emissions. This involves prioritising green suppliers all throughout the supply chain, but also in day-to-day business operations. For example, office buildings are a major contributor to carbon emissions as they are mostly hardly used and are inefficiently heated and cooled. Similarly, inefficient light bulbs, extensive business travel, and employees commuting by car can all be mitigated as environmental costs.

1/3

of global energy consumption is accounted for by buildings.

Source: [Energy Reports](#)

1/4

of global CO2 emissions are accounted for by buildings.

Source: [Energy Reports](#)

1/2

of the 10 leading tech companies based on market capitalisation are powered by 100% renewable energy sources.

Source: [Statistica](#)



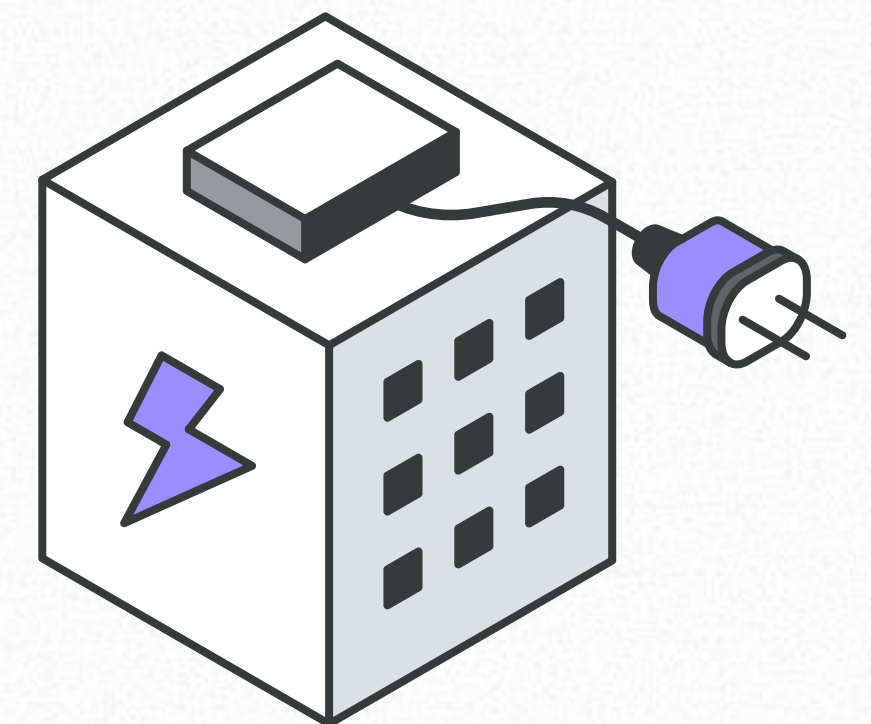
What can you do?

If possible, switch to a 100% renewable energy provider.

Use energy flexibly and shift energy use – especially big jobs such as running large AI queries – to the cleanest, greenest times of day.

Make your workplace ‘smart’ by using sensors and internet-connected devices to automate processes, monitor energy efficiency, and provide actions and feedback.

Encourage cycle to work schemes.





Here to help:

octopusenergy

You get fairly-priced greener tariffs today, while they help build a smart, sustainable, low-carbon energy system for tomorrow.

metrikus

Provides the insights on demand that you need to make your building efficient. Understand where your energy is being wasted, and exactly how your space is being used to improve your building's efficiency by over 35%.

unifi.id

Seamlessly identifies all occupants in buildings, zone-by-zone, allowing organisations to understand their occupancy data and make their building smarter.

 **UpGreen**

Suggests upgrades that reduce energy bills by 10-30%, making your building unit more comfortable and lowering your carbon footprint.

“Our journey to net zero is challenging, especially as all of our 17 global locations are leased from landlords, and we are tied into contracts, some of which are lengthy. We know education is key, as well as a core team to help decarbonise and green our sites, which is why we set up a group wide Green Ops team to be our eyes and ears on the ground and help tackle this.”

“Scope 3 is where we create the biggest impact, and that is a main focus for us. We started understanding our top supply chain impacts by researching publicly available ESG information and capturing this. Next steps will be direct contact with key suppliers. Our biggest challenge with this is understanding how to collaborate with suppliers and move forward together, to create the greatest positive impact we can.”



Jess Hibberd

Zühlke Group

Sustainable Operations
Lead

Accelerating the Renewable Energy Transition

In many cases, technology is only as green as the power it runs on and it's created with. And for most businesses, this can feel like an insurmountable source of scope 3 emissions – after all, the electricity grid is not within their direct control. But the good news is that the energy transition is happening, and there are ways businesses can accelerate it to be even cheaper and greener.

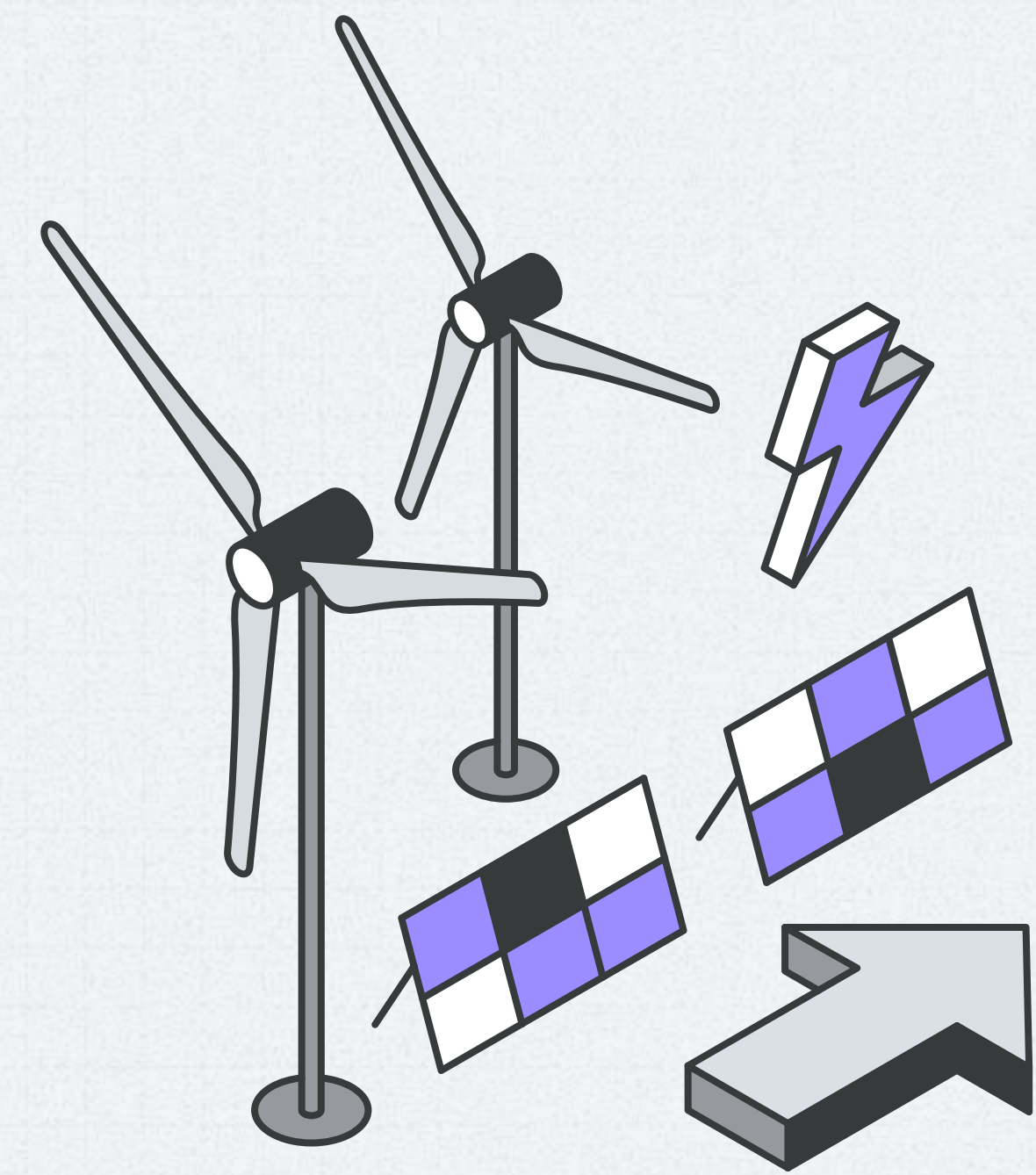
Wind and solar are the cheapest forms of energy generation humanity has ever known. But we can't control when the wind blows or the sun shines. A renewable-powered energy system will have long periods of abundant energy with short periods of scarcity. The grid is in charge of keeping the balance, and historically it's done that by switching on more gas-powered stations when we need more energy, and turning them off when we need less.

But thanks to digitally connected devices, like batteries, electric vehicles and heat pumps, renewable demand can be flexibly shifted around the weather, without the need to turn to fossil fuels.

Turning on gas plants to balance the grid has also led to the UK having a single, country-wide price for electricity, meaning consumers across the country paying much more for their energy than they need to.

One fix being considered by the UK Government is zonal pricing, where prices vary across the country based on available network capacity and how much renewable energy is being generated in a particular area.

This would replace the 'one size fits all' model with a fairer system where electricity prices vary by area, to reflect what it costs to produce and supply the energy in that area.



This would...

- Make bills cheaper (or no worse off) in every area of the UK
- Save at least £2 billion in energy bills per year for customers
- Give areas with plenty of renewable generation, like Scotland, some of the cheapest electricity in Europe
- Encourage new businesses to move their operations to these areas, creating jobs and helping the economy

Octopus Energy has found that:

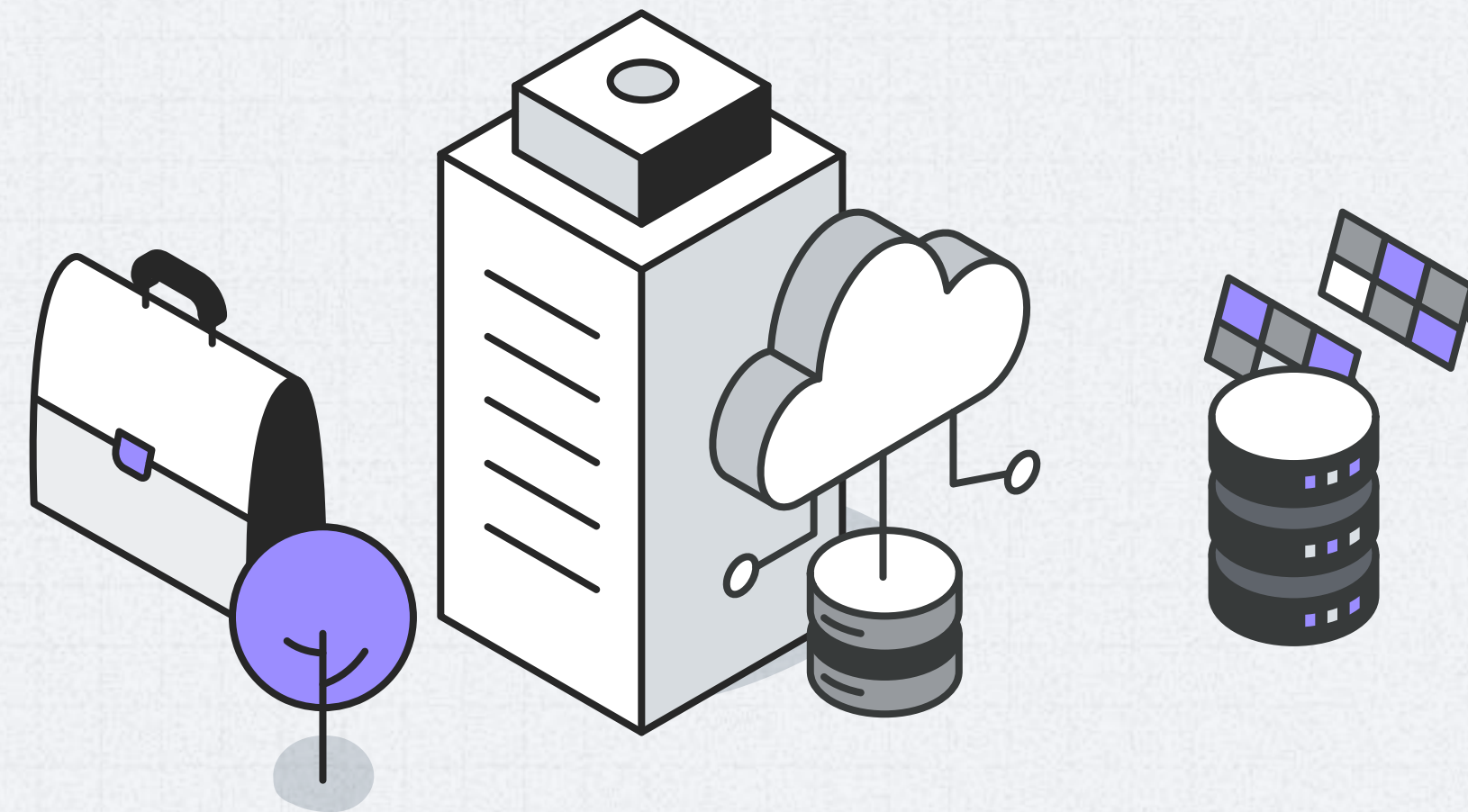


Zonal pricing would save enough wind energy to power 46,000 households each year.



It would cut bills for all UK consumers by making the most of green energy that would've gone to waste: unlocking £500–900 million in bill savings for everyone over the next 10 years.

We'd make much better use of our local renewables. Switching it off when too many green electrons are being generated is costing us millions each year.



So, what can your business do?

Businesses must work together with government and industry leaders to create this new forward-thinking system. Already there's been exciting and decisive action from the new government to almost entirely remove fossil fuels from UK electricity production by 2030.

Consider joining policy groups like the [Cleantech for UK](#) or [techUK](#) that participate in government consultations on issues that will affect businesses. Join in on policy discussions to make sure your business' voice is heard, including keeping an eye on and participating in [open consultations](#). Being a member of Tech Zero will also mean you're updated with the latest opportunities to be involved in policy discussions.

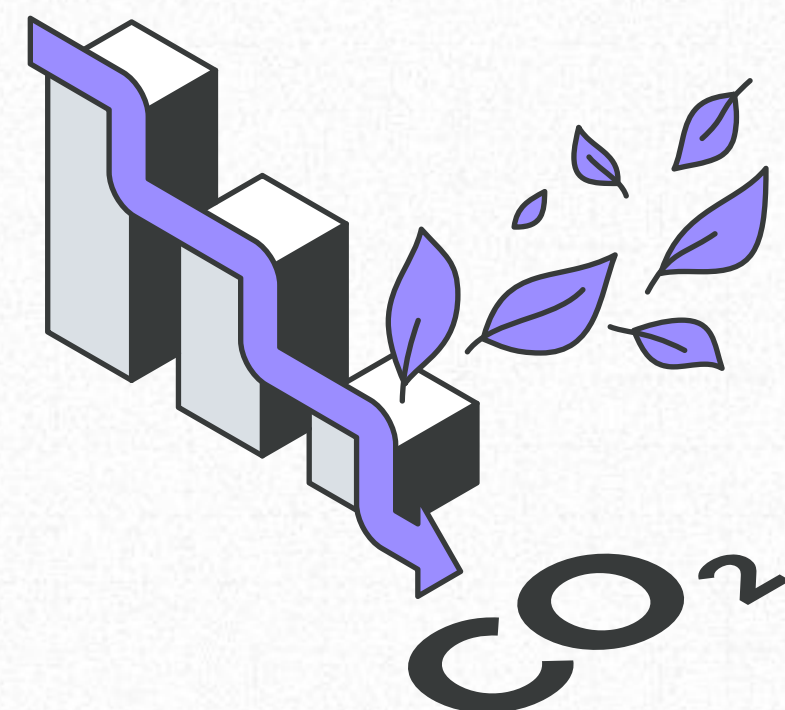
Key Emissions Challenges

6 Carbon Removal

At a certain point, it can become difficult to reduce emissions any further. This is where carbon removals come in. Carbon removal technologies are those that actively take carbon out of the atmosphere through various processes, and are likely to be the only way many businesses can truly become net zero.

Businesses can purchase carbon removals in the form of carbon removal credits, which guarantee that a tonne of carbon has been removed from the atmosphere, or will be removed within a certain timeframe.

There are several burgeoning carbon removal technologies that companies can tap into, but they need funding to scale and make the necessary impact on the climate. Companies can also find it confusing to navigate these markets and determine which projects or technologies are genuinely impactful and right for them.



\$5t

invested annually in nature-negative practices, such as construction, electric utilities, real estate, oil and gas, and food and tobacco.

Source: [UNEP](#)

\$200b

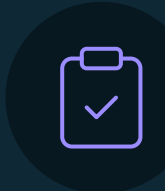
invested in nature-based solutions in 2022. (Less than a third of the \$582b required by 2030).

Source: [UNEP](#)

\$1.2b

invested in the carbon removal industry in 2023.

Source: [CDR.fyi](#)



What can you do?

Remove what you can't reduce by investing in well-managed, certified carbon removal technologies and projects.

Look for credits and markets labelled as 'high-impact' from suppliers recognised by the 'Gold Standard', Verra's 'Verified Carbon Standard', and the 'Puro Standard'.

Create a diverse portfolio: technology-powered techniques such as direct air capture and bioenergy are effective, but investing in natural means of carbon removal, such as afforestation, soil carbon sequestration, and enhanced mineralisation, is also important. These techniques often have several 'co-benefits', meaning they positively impact the communities in the global south, for example, and enhance biodiversity as well as reducing emissions. Patch has an excellent guide on how to build a high-impact carbon credit portfolio for your business.



Here to help:



Platform scaling unified climate action and a global network of climate solutions.



Marketplace helping corporate buyers navigate the carbon removal market with confidence.



Building platinum standard proposals helping companies reduce CO2e.



Carbon removal with a mission to verify the removal of 1m+ tonnes CO2e by the end of 2030 using a decentralised network of biochar operations.



Carbon removal via enhanced rock weathering, with a mission to spread enough rock by 2025 to remove 1 million tonnes of CO2.

“Quantifying emissions has been made simple by using established partners such as Supercritical and Plan A, who have both been immensely helpful. We have struggled to get below a bare minimum of 20 tonnes per annum – that seems to be the carbon cost of 15 people in a remote 1st tech business! Offsets in permanent sequester technologies have been our go-to, and the options are endless and affordable to all business sizes. We have taken the opportunity to invest in future tech, Direct Air Capture, to turbo charge future carbon reduction endeavours.”

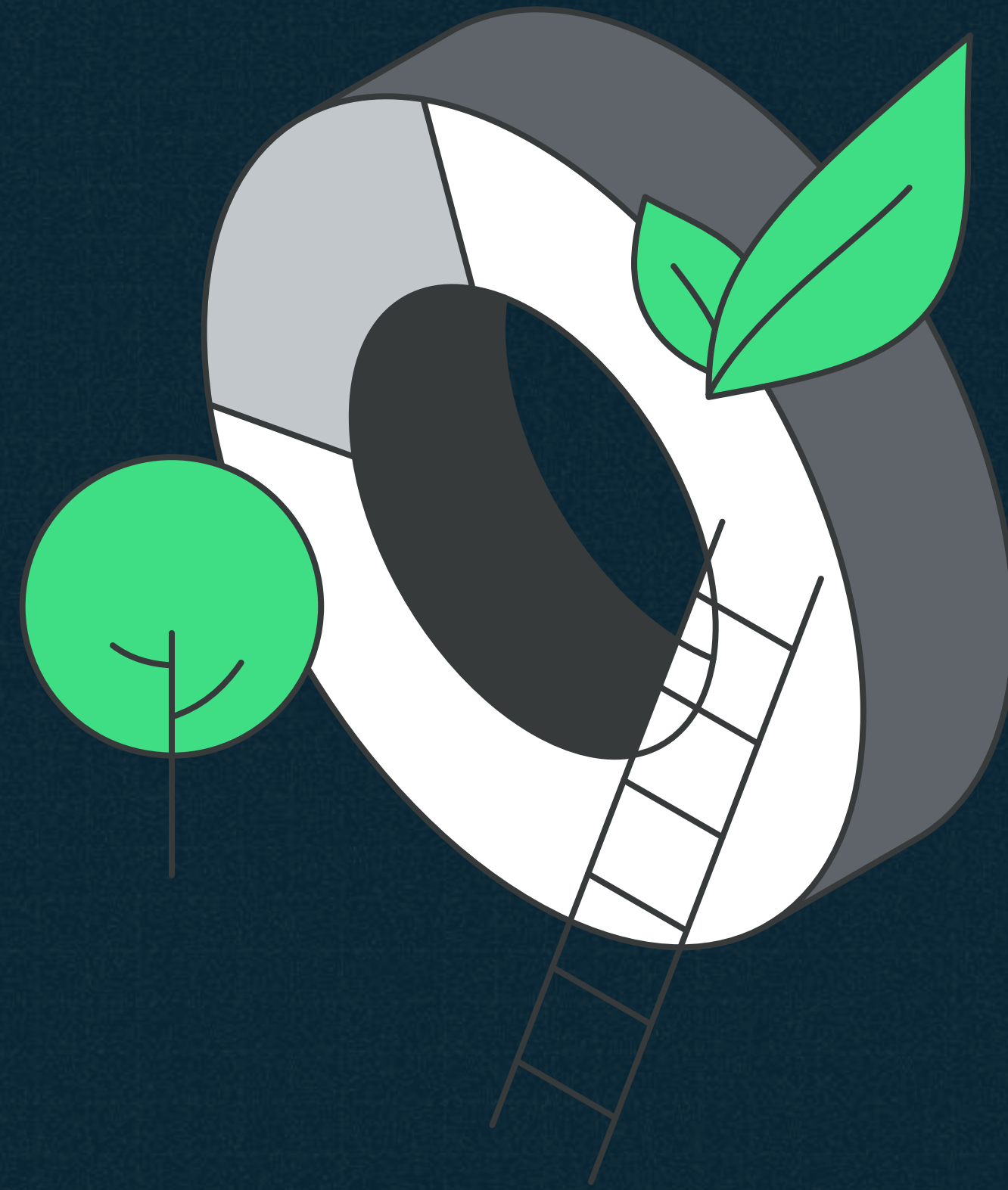


Alex Walsh

Howells

CEO

Why Tech Zero?





Tech Zero, powered by Tech Nation and Octopus Energy, is the climate action group for tech companies of all sizes committed to fighting the climate crisis. We believe that by joining forces, we can make faster progress to net zero.

Since we started, in 2021, tech companies across the world have signed up to Tech Zero's climate commitments and are building a sustainable future.

358

Members

*As of 30 September 2024

33

Countries

18+

Industries

158

Micro-
businesses

(10-250 employees)

31

Large
businesses

(250-1,000 employees)

158

SMEs

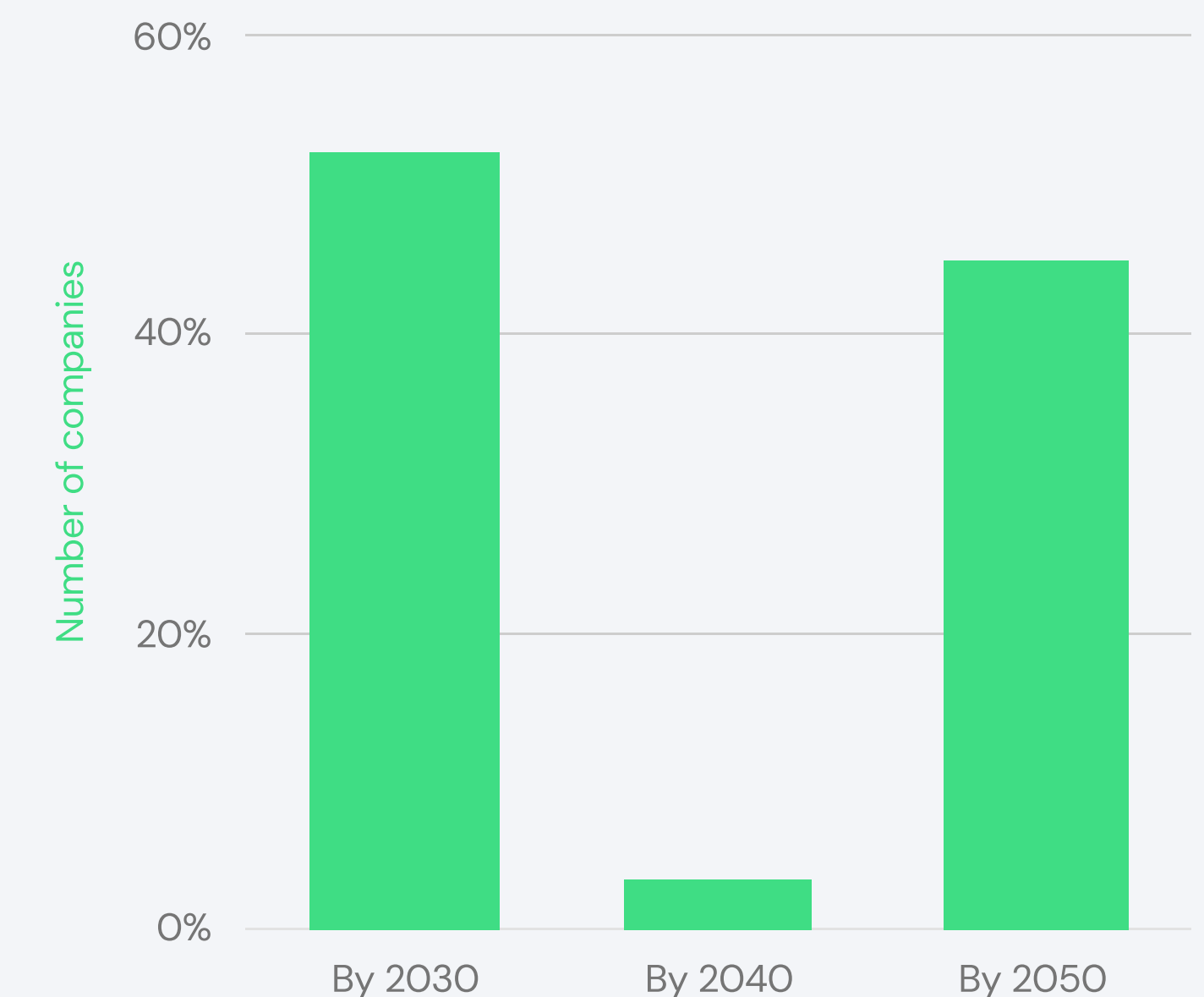
(10-250 employees)

11

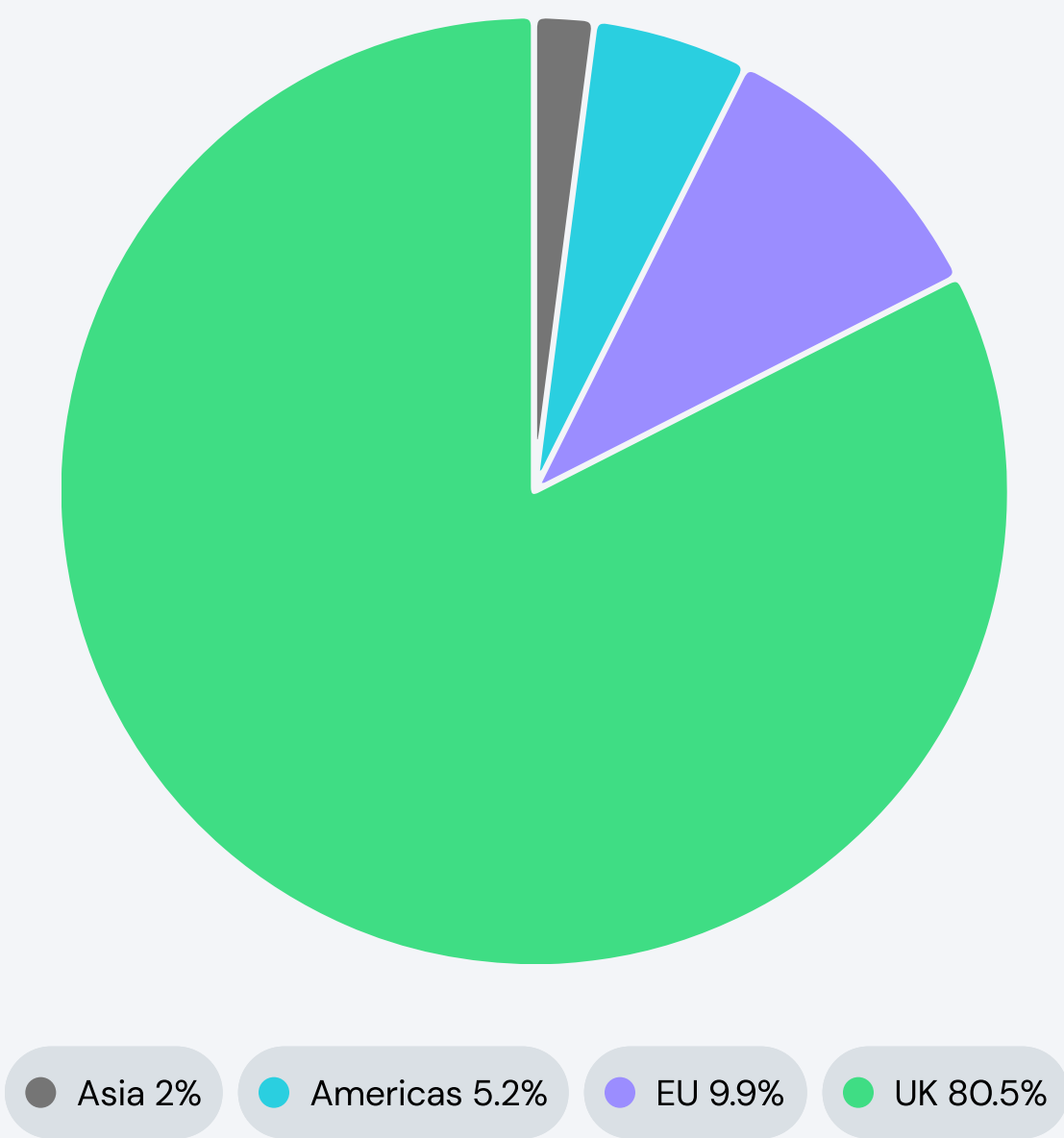
Major
corporates

(1,000+ employees)

Net Zero Targets



Geographical Spread of Tech Zero Members



BLOOM
& WILD

faculty

forest

GoCardless

honest

monzo

ODDBOX

OakNorth

Revolut

Starling
Bank

vodafone

7wise



Companies who join Tech Zero commit to:

- Annually measure and publish their total greenhouse gas emissions.
- Publicly publish a net zero plan within 12 months of joining.
- Appoint a member of their executive team to be responsible and accountable for their net zero target.
- Publicly communicate their climate commitments and progress to net zero.
- Align their policies and partnerships to their net zero goals.

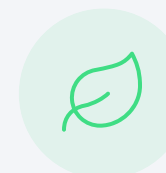


Tech Zero members benefit from:

- Access to exclusive, invite-only events connecting leaders in the climate and sustainability space, including top corporates and CSOs, investors, founders, and policymakers.
- Access to the Tech Zero toolkit and resources to support tech companies on their net zero journey.
- On-demand, tailored advisory and support services to help reduce carbon emissions.

85%

of Tech Zero members signed up because taking climate action is 'the right thing to do.'



1 in 2

want to future-proof their business against climate change and gain an improved understanding of net zero and what's required of their business.



40%+

sign up to enhance their branding opportunities and differentiate themselves.





“Tech Zero exists to help the tech industry get to net zero as soon as possible. As the window of opportunity to mitigate the worst effects of climate change closes, we’re becoming increasingly reliant on solutions offered by digital and hardware technology. If we’re to reach net zero, it’s imperative that companies that offer these technologies reduce their emissions. Tech Zero is here to support them every step of the way.”



Sophia Kesteven

Sustainability Project Manager / General Manager
Octopus Energy / Tech Zero



Sammy Fry

Head of Climate / Co-Creator
Tech Nation / Tech Zero

“Decoupling the rise in AI and technology with the growth in emissions is imperative. As the tech sector continues to grow, as will its energy demands. However, there is a plethora of innovation breaking through, alongside many leading tech companies investing in solutions, to ensure the sector can grow sustainably.

“Since its launch in 2021, Tech Zero has sat at the heart of this revolution, and it's pleasing to see the progress Tech Zero members have made in real emissions reduction. Moving forwards, our aim is to grow our membership and support, showcase the solution providers and engage with Big Tech to ensure what can be done is being done to achieve rapid decarbonisation of the sector.”

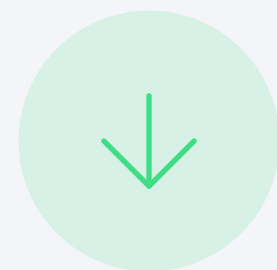
Tech Zero Impact



1 in 3

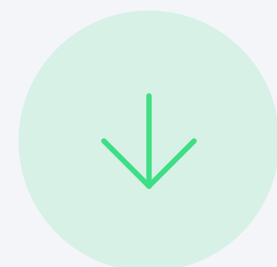
Tech Zero members have published a report on their annual greenhouse gas emissions.

There's still work to do, but we outperform comparable schemes, which track at less than 10%.



24%

Average emissions reduction of Tech Zero members since 2021.



11%

Average emissions reduction of Tech Zero members in 2024 alone.

1 in 2

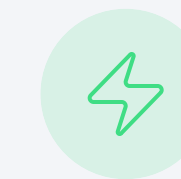


say taking climate action has enhanced their branding and marketing opportunities and improved their business' reputation.

92%



would collaborate with a competitor company to reduce carbon emissions.



Switched to renewable energy



Business climate action/sustainability training



Purchased carbon removal credits

Most common actions companies have taken to reduce emissions and embed sustainability.

*Data is from a survey of Tech Zero members conducted between September–October 2024.

“As a society, there are a lot of climate challenges that we have to tackle, and nobody can solve them alone. It is truly inspiring to witness the collaborative efforts of academics, suppliers, and external experts as we evolve our increasingly sophisticated climate strategy.”



Sibbe Krol

Bloom & Wild

“As a pre-revenue startup operating for just over a year, it's been important from day one to work to understand, measure, and set targets around our emissions. The support offered through Tech Zero has proved very useful to date and we look forward to producing our first report very soon.”



Lisa Stanley

Zero Fintech

“Tech Zero strengthens the ecosystem and brings together the right people in the room.”



Sarah Mackintosh

Cleantech for UK

“Tech Zero has provided a great community and support, allowing us to meet other like-minded people and teams committed to enabling the tech sector to decarbonise.”



Adam Oskwarek

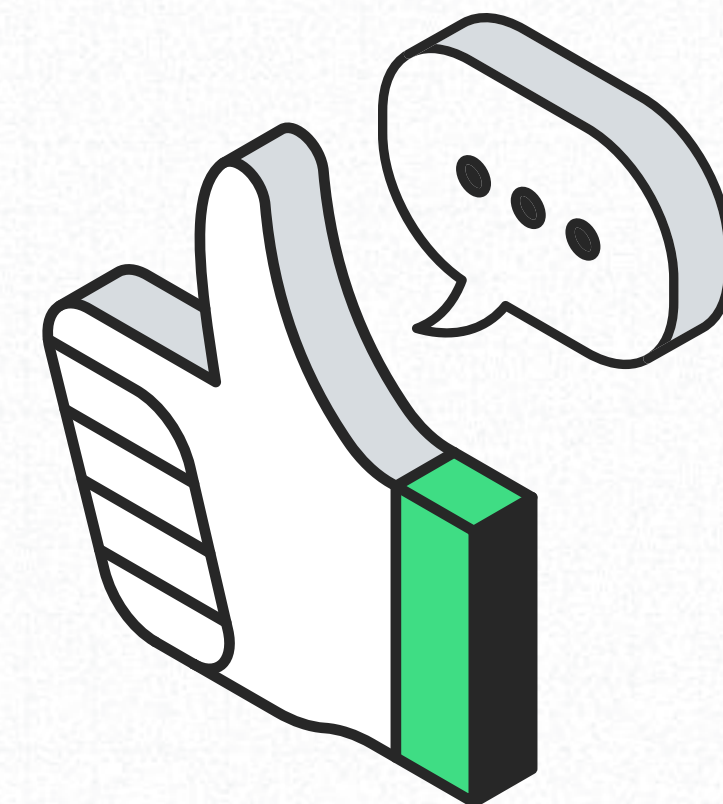
Zopeful Climate

“Using the webinars, guidance booklets, and Tech Zero resources has really helped us to measure our emissions effectively and accurately.”



Matthew Sochor

ethy



Tech Zero

Tech Zero was started in the UK by Tech Nation, Bulb, and a group of leading tech companies, including Allplants, Babylon, Citymapper, Faculty, GoCardless, Hopin, Habito, Money Supermarket, OLIO, Revolut, what3words, and Wise.

We knew that by working together, we could make faster progress to net zero. We want companies of all sizes from around the world to join us by making Tech Zero commitments and taking action to reduce their emissions.

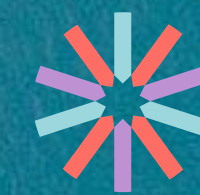
Join Tech Zero



powered by



octopus energy



TECH NATION

powered by





octopusenergy

8 million

customers worldwide

£7 billion

worth of renewable generation

£1 billion

worth of electric vehicles

**and *still* Britain's most awarded
energy company**



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