Supercritical

Net zero in a time of recession

Why leaders cannot afford to put off climate action

Contents

Introduction

Climate change is *the* defining challenge for this generation, and innovative businesses play a key role in fighting it.

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Working with companies at the forefront of this movement, it has been inspiring to see how seriously leaders take their responsibilities. When we survey our customers, the overwhelming majority say they work with us because they have a moral obligation to reduce their emissions.

But as we enter a period of profound economic unrest, there is a risk that the big picture gets forgotten. With the cost of living crisis and a looming recession, many businesses have assumed that economic challenges must be prioritised—and climate concerns can therefore wait.

Yet there is little evidence the current economic situation has dampened public support for action on climate issues. In fact, a recent study found that **66%** of citizens believe net zero policies will help the UK become energy independent faster—ultimately helping avoid similar economic crises in the future.[1]

We undertook a large-scale survey of our own to discover exactly how employees feel about their organisations' climate policies—and whether they really do want employers to de-prioritise climate issues. The answer was a resounding 'no'.

In this report, we present those results and explore the challenges and benefits of net zero in an uncertain economic climate - as well as how leaders can get there. We have put the report together for the many who don't consider themselves to be 'climate experts'. If we are to be successful in our fight, it's the actions of the many that will make the difference.

1. More In Common

Net zero is the new DEI

Ten years ago, 'diversity' was little more than a buzzword. Few companies had truly substantive Diversity, Equity and Inclusion (DEI) policies in place, and fewer still could claim to have done everything in their power to truly embrace diversity.

That is where net zero is today: while most recognise the concept, vanishingly few leaders have truly reckoned with what it means for their business. Many companies are still in denial, believing they can just keep kicking the environmental can down the street. While reports find that up to 78% of companies have some form of sustainability strategy, fewer than 10% outline how they will reduce their carbon emissions[2]—and 64% of companies have no net zero plan at all.[3]

But just as DEI is now a central concern for most successful organisations, net zero will inevitably go from a 'nice to have' to an 'organisational essential' faster than many leaders realise.

Few people would forgive companies for putting off DEI because of Brexit or the pandemic, just as few in the future will accept the cost of living crisis as an excuse for not acting on net zero. Goldman Sachs currently faces multiple gender discrimination lawsuits—some going all the way back to 2005.[4] Failure to act on its climate risk may similarly return to haunt businesses far into the future—and do more than merely inflict reputational damage.

What is net zero?

Put simply, reaching net zero means that the total greenhouse gas emissions a particular entity is responsible for are zero: their activities do not result in a net increase in the volume of greenhouse gases in the atmosphere.

Achieving net zero has two components: reduction (reducing your carbon footprint going forward) and removal (purchasing permanent carbon removal for the emissions you are unable to reduce).

While the concept has been around for years, it has become the dominant paradigm for climate action in recent years. The UK was the first country to create a legal commitment to reach net zero emissions by 2050[5]; the majority of countries have followed, either with their own laws, policy documents or public pledges.[6]

This has created a huge increase in public awareness, and placed pressure on companies to act now. But realising these ambitious goals has put leaders in a challenging position.

2. Consultancy 3. Telegraph 4. Bloomberg 5. Gov UK 6. Energy and Climate Intelligence Unit

The business case for net zero

Leaders cannot afford to de-prioritise net zero

False narratives

As energy prices surge and a recession looms, the climate has been dislodged as the most urgent political priority.

Many media outlets have taken the opportunity to rail against net zero, blaming decarbonisation policies for the crisis,[7] questioning the scale of these efforts[8] and even claiming that they disproportionately impact poorer households.[9]

In fact, the research shows that the current level of inflation can actually be blamed in part on decisions to slow decarbonisation efforts and scrap climate policies. This includes cutting energy-efficiency subsidies and scrapping the zero-carbon homes standard. Analysis suggests energy bills are nearly £2.5 billion as a result.[10]

The public still support net zero

The cost of living crisis may in fact be driving *more* support for net zero policies.

66% of UK citizens believe net zero policies will help the country become energy independent faster and be less sensitive to similar shocks in the future.[11] In another recent poll, both millennials and Gen Z ranked climate change as their second priority behind the cost of living.[12] In our research, 32% of employees said they were not comfortable with their company cutting its sustainability budget to save money—and 35% said they would consider leaving their current employers if it took no action to reduce carbon emissions.

The reason is simple: net zero and the cost of living crisis are not at odds with one another. Indeed, they are complementary: modelling carried out by Cambridge Econometrics has demonstrated that tackling the cost of living while simultaneously accelerating the UK's low-carbon transition would create 'win-wins'. It could lead to lower bills now, a stronger economy later and a healthier environment in the long-term.[13]

7. Net Zero Watch 8. GWPF 9. Telegraph 10. Economics Observatory 11. More In Common 12. Deloitte 13. Corporate Leader Group

Five reasons leaders should embrace net zero during times of uncertainty...

1 Access top talent

As climate change awareness grows, workers expect their employers to be more amibitious.

Some companies we've worked with report that this is among their team's top priorities: one Supercritical client recently surveyed their employees, and 55% of their team claimed that they would only work at a company with a clear net zero strategy.

Top talent rewards climate action

Studies have found that 62% of workers would be more likely to move to a company that has committed to environmental causes[14]; that 40% would be more likely to stay at a company with a net zero strategy[15]; and that 71% of all employees and employment seekers now find environmentally sustainable companies more attractive.[16] One survey even found that 51% of young people would accept lower pay if they believed their employer was environmentally responsible.[17]

Of course, most people's priority is covering their own bills. But they also want their employer to reduce and remove their carbon footprint. Not only that: employees want to be actively involved in those efforts.

A win-win for businesses

57% of employees currently say that their organisation is not doing enough to involve them in cutting their carbon emissions.[18] Our own research found that 26% feel dissatisfied with the opportunities they are given to share feedback on their employers' climate action—while 21% say they are not given any opportunities at all.

This is crying out for collaboration: not only will employees be happier at companies that take stronger climate action, but they are keen to actively contribute—making it easier and cheaper to make enduring, sustainable changes.

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14. Morgan Lovell 15. Infogrid research 16. IBM 17. New York Times 18. Positive Planet

2 Securing investment

As we enter a period of economic uncertainty, leaders should ensure they have access to the widest possible pool of investors. But we are already seeing that environmental credentials play a big role in who gets funding.

ESG investing is the new normal

More than 70% of leaders already say pressure from investors is compelling them to focus more on sustainability.[19] Studies show that 85% of firms consider Environmental, Social and Governance (ESG) factors in their investment decisions,[20] and startups should expect proper due diligence from prospective investors.

This makes sense: investors are generally looking for companies with long-term potential. Those that demonstrate a lack of commitment to environmental concerns likely signal poor judgement or a lack of long-term vision—especially if they shirk their environmental responsibilities as soon as economic conditions worsen.

Some founders dismiss this as rhetoric; they might cite recent research showing that just 7% of VC funded startups have a net zero strategy, and just 11% actively measure their emissions.[21] But this fails to learn the lessons of DEI.

The world of investing can shift extremely quickly

In a very short period, DEI went from a 'nice to have' to a non-negotiable essential. Considering that 77% of institutional investors in Europe expect to stop buying products that do not align with their ESG goals,[22] it is fair to assume early-stage investors too will soon be taking a much tougher tone on net zero and carbon emissions.

We are already seeing this with the EU's Sustainable Finance Disclosure Regulation (SFDR). This forces asset managers to reveal differing levels of sustainability integration, providing clear metrics for investors to understand the environmental and social impact of different companies in which they might invest.

'Article 6' funds, for example, will include stocks excluded by Environment, Social and Governance (ESG) funds—things like tobacco companies and coal producers. Investors will likely steer clear of such funds, in favour of funds that qualify as 'Article 8' or 'Article 9'—both of which are environmentally and socially friendly.

> As an investor, we have a role to play in the climate fight by supporting our portfolio companies to reduce their carbon footprint. We are excited when companies reduce their climate impact and share our passion for doing so as they help us as the investor meet our climate goals.
>
> **Kate Bingham DBE,** Managing Partner, SV Health Investors

19. WeForum 20. Gartner research 21. ESG_VC 22. PwC

3 Driving revenue

When comparing similar products, sustainability is a strong differentiator and can unquestionably tip things in your favour.

43%

of consumers say they actively choose brands based on their environmental commitment

A recent Deloitte survey found that 43% of consumers actively choose brands based on their environmental impact, and over a third of consumers say having a socially responsible supply chain is important to gain their trust.[23]

Many B2B businesses will already be finding that their customers require their suppliers to provide data on emissions and have net zero plans in place. Today, all NHS procurement decisions include a net zero and social value weighting; companies that want to become suppliers must prove they are taking action on climate change. From April 2023, suppliers on contracts over £5 million will have to publish carbon reduction plans. By 2030, suppliers will only qualify for NHS contracts if they can clearly demonstrate their progress on climate issues.[24]

However, nearly half of all consumers say they don't know what commitments businesses have made with regard to climate change[25]

This knowledge gap is crucial: research from PwC has found that just 56% of consumers are even aware of net zero, but when it is explained to them, 80% are passionate about reducing emissions.[26]

The lesson is clear: companies should take it upon themselves to not only commit to net zero, but help educate their consumers about what that means and why it matters. This will build trust and loyalty from consumers. If the numerous studies about consumers' preference for sustainability are to be believed, it should help drive a big increase in revenue, too.

23. Deloitte 24. NHS 25. Deloitte 26. PwC

4 Incoming regulation

Environmental regulations will become more of an issue in the coming years. This will make net zero efforts more than just a commercial or ethical necessity—it will make them a matter of legal compliance.

Many organisations are already feeling this

Based on recommendations from the Taskforce on Climate-related Financial Disclosures (TCFD), climate-related financial disclosures are now mandatory for over 1,300 of the UK's largest organisations. There is also a roadmap in place to expand this regulation to a wider range of companies in the coming years.[27]

Soon enough, the majority of organisations will find they have legal obligations to demonstrate their climate commitments. Companies that take net zero seriously today will have an easier time with regulation when it inevitably arrives. This is particularly important for early-stage businesses: the cost of changing environmental policies, overhauling supply chains and fundamentally altering operations will only grow over time.

Take pre-emptive action

A huge number of voluntary initiatives have taken off in recent years, such as the Race To Net Zero, Transform to Net Zero and Tech Zero which are being led by tech businesses in the UK. These programs have been embraced by companies across the globe as a way of self-imposing pressure to take net zero more seriously.

27. Gov UK

5 Establish future credibility

The reality is companies that do not take control of their emissions will pay the cost—either in future expenses or obsolescence.

Even if they do eventually take accountability for their emissions, they may end up losing credibility, appearing to simply be following the trend or ticking a box.

The risks of inaction may include losing employees to more forward-thinking companies; missing contracts to companies that are able to more clearly demonstrate their climate credentials; and struggling to access funding from wary investors.

This is where the parallel with DEI is clearest

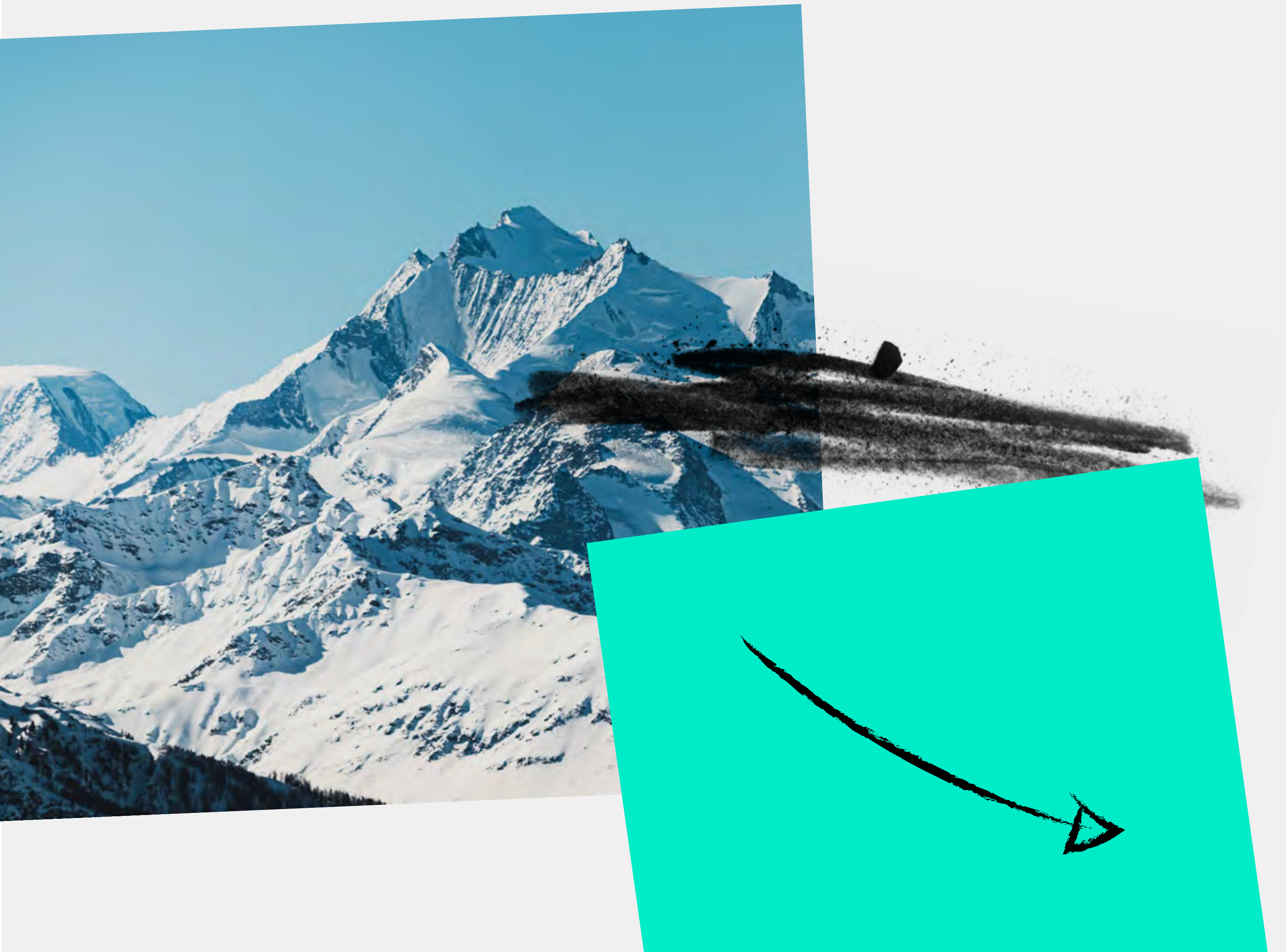
Companies that were slow to act on DEI are still suffering as a consequence—even when they have made efforts to address the problem. Whether it's Abercrombie and Fitch or Goldman Sachs, the perception that DEI was embraced for the wrong reasons can do significant damage to a company's reputation. The same will be expected of net zero policies.

Leaders should therefore consider net zero an important investment towards their future reputation. 63% of executives believe their company is leading on climate change.[28] But it is only those that are able to back those beliefs up with data and action that will actually be seen as leaders.

28. WeForum

Four challenges for leaders

Why enacting net zero policies proves so difficult



1

Time and complexity

You know climate change matters, are frustrated at its slow progress, but how do you keep up with the research while running a business?

The climate crisis is complex and ever-evolving; the latest IPCC climate report was based on 14,000+ academic papers.[29]

Two-thirds of small business leaders are worried they don't have the right skills or knowledge to tackle climate change[30]

Even those with sufficient climate knowledge would have to dedicate themselves full-time to digesting all of the relevant information, and inaccurate media reporting is often buffered by errors and oversights on the part of researchers.[31]

This is a source of frustration for leaders: they understand how important net zero is and genuinely want to 'leave no trace'. However, without a proper understanding of the challenge and clear direction on the path forward, it's difficult for them to commit to a programme.

2

Cost concerns

You want to invest resources into becoming more sustainable, but how can your business make the transition affordable?

Reaching net zero requires most companies to radically rethink how they operate, scrutinising their Scope 1, 2 and 3 suppliers, as well making a range of alterations to their daily behaviour and accessing innovative carbon capture methods. It is hard to know how to budget for this especially when you are not clear on what your carbon footprint looks like.

Many companies create sustainability committees to tackle these problems. In many cases the individuals on those teams generally don't have domain specific expertise—so they still lack clarity on the cost or expected impact of any given initiative.

Leaders don't want to invest large sums of money in efforts that may not produce results

Leaders often suspect reaching net zero will blow up their budget. This is probably driven by reports that reaching net zero will cost $3.5 trillion each year,[32] as well as an awareness that companies offering climate-friendly solutions are able to charge a premium for their services. As a side note it should also be said that these reports fail to consider how much inaction on climate change would cost.

Without confidence, leaders are reluctant to put a proper budget aside. And without a proper budget, little can be done to make a real difference.

29. The Conversation 30. SMEClimateHub 31. LSE 32. World Economic Forum

3

Carbon accounting

Visibility of your emissions and decarbonisation efforts are essential. So the obvious question is, where do you begin accounting for your full carbon footprint?

Most businesses don't have the time or in-house expertise to accurately map their emissions. This can lead to inconsistent data collection or a lack of understanding about suppliers' emissions. Without access to the right data set, it is virtually impossible to produce an effective strategy for reaching net zero.

This is a problem for organisations of all sizes. A recent review looked at the net zero pledges of 25 top global companies, including Amazon and Google. It found that the changes these companies had committed to would add up to an average 40% reduction in emissions. This would mean 60% of emissions would need to be covered by carbon removal—which is just not realistic.[33]

Such failures are driven by a lack of knowledge and transparency about their emissions. Many only measure Scope 1 and 2 emissions, leaving out their supply chain's emissions (which fall into their Scope 3. For context, Scope 3 emissions can to between 80–95% of many companies' emissions.

Too many leaders think they can put off their carbon accounting

Most companies are still operating on intuition with regards to their climate impact, but those intuitions can easily lead them astray. 57% of companies that haven't made a net zero pledge believe they simply don't emit much carbon[34]—but without proper accounting, how can they know that?

Even many of those that have made net zero pledges haven't done robust carbon accounting. Only 35% of UK-based businesses with net zero targets have collected their emissions baseline data and are prepared to measure their emissions going forward, while just 12% have had their net zero plans verified by a third party.

4

Accountability vacuum

Net zero requires accountability and leadership. But how can organisations ensure their people take ownership of the problem?

Net zero requires organisational change, and that requires accountability. When nobody knows who is responsible for internal climate policies or ensuring those policies are enacted, inertia is likely to kick in.

Leaders often don't have the time to dedicate themselves to these tasks—even if they would like to. However with multiple stakeholders affected by policies related to net zero, it is easy for responsibility to be diluted throughout the team.

Even in businesses that do have a sustainability team, it tends to be a 'second job'

This is especially true in growing businesses and startups; the fluidity of the culture and speed of change makes it easy for climate action to slip through the cracks while leaders are busy putting out fires elsewhere. Many teams try to unite around the cause. Without a single senior leader in charge of the problem, action often fails to materialise.

33. Reuters 34. Financial Times

A credible pathway to net zero

What it means to truly reach net zero

Net zero is a surprisingly controversial topic. There is a lack of consensus around the definition of net zero as well as the standards that govern it. There is also some controversy around offsetting: some claim that it is simply an 'accounting trick' that allows businesses to continue polluting without consequence.

They have a point: with pressure mounting to reduce emissions, a huge number of companies have turned to carbon offsetting as a quick fix. The idea is to invest in projects which reduce emissions by installing renewable energy and protect from deforestation. But carbon offsetting allows companies to continue increasing their emissions whilst appearing to 'go green'.

At its root, the problem is a misapprehension about what achieving net zero really means. Busy leaders rarely have the time to properly vet them—meaning they end up increasing their overall emissions. Whether it's using avoidance offsets; the wrong removal offsets; or simply becoming over-reliant on offsets as a means to achieve net zero, many companies are at serious risk of greenwashing without even realising it.

Companies like Arla in Sweden and BNY Melon have been taken to court for making unsubtantiated green claims[35, 36]

The market for carbon offsetting has reached $100 billion, but it is filled with flawed or downright fraudulent companies looking to take advantage of business's desire for a way to avoid making difficult operational changes that would actually reduce their emissions.[37]

So how do you avoid investing in the wrong methods or the wrong people?

35. Financial Times 36. Food Manufacture 37. Bloomberg

The greenhouse gas protocol

Tackling a complex large scale problem like climate change requires a unified, consistent system of measurement—and clear rules about how to account for emissions.

This is why the Greenhouse Gas Protocol is so important: it provides a single global standard for what should be included in carbon accounting. This means different companies in different countries are all held to the same standards and can defer to an impartial body when making sense of their situation.

The system isn't flawless though

Some find the terminology confusing—even the concept of Scope 1, 2 and 3 emissions can be unclear to some. They also feel that the accounting method is unduly negative; even when they make savings by, for example, switching to wind turbines, the GHG Protocol still demands that they include the emissions associated with this new energy source—including the steel used to make the turbines and the energy used to transport it.

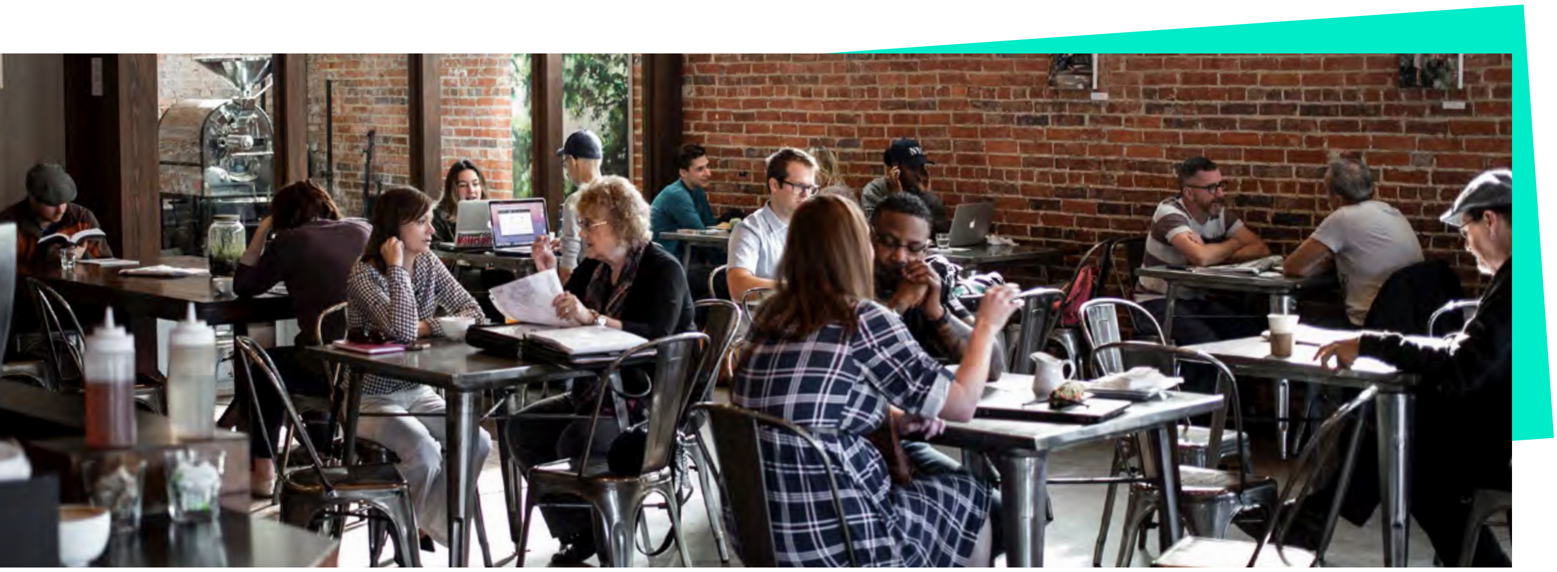
There are frustrations about the imprecision of accounting for Scope 3 emissions, too. The GHG Protocol dictates that companies account for every stakeholder in their supply chain. This means the same emissions might be counted by numerous different companies—multiplying the volume of emissions being counted overall.

Many leaders find this tough to swallow

They have to count emissions which are also counted by other companies. It seems unfair, as if the rules of carbon accounting are rigged against them. The harsh reality is, this is the only way to ensure all emissions do get properly accounted for—and the effects on individual organisations are actually extremely small.

Ultimately, the GHG Protocol is the best system we have; it provides the only realistic and credible pathway to net zero. While inevitably imperfect, it provides a consistent, unified method for all companies to be held to the same standards—and work together to reach our goals.

Everything must be accounted for (but make it material)



The biggest shock leaders face when starting their net zero journey is realising quite how widespread their emissions are.

The entire supply chain must be included in your carbon accounting, including activities which most people don't instinctively associate with environmental harm.

If people work from home, their electricity usage counts; if you have a leaky air conditioning unit, that will also contribute to your emissions. From the consultants you work with to the food you serve in the canteen, every single part of the value chain has to be accounted for—these 'hidden' emission sources have a surprisingly large impact.

Accounting for all of this can be overwhelming; you start to get why so many companies have been tempted into falsifying their data. But there is no way around this, and it's better to swallow the bitter pill now than later.

At Supercritical, we see tech customers with simple supply chains surprised by their total emissions when they account for Google or Facebook ad spend

Reduction is not enough

Reaching net zero purely by reducing emissions is unrealistic; the vast majority of businesses are simply unable to operate without generating any emissions at some point in their supply chain.

This is why carbon removal is so important: by developing the means to remove carbon from the atmosphere, we are able to remove any business-critical emissions and mitigate the worst effects of climate change.

Carbon removal is essential for stabilising climate at 1.5°C warming

On the planetary level, we will need to reduce our current emissions by about 85%, but to achieve net zero we will also need to develop technologies that will be able to remove about a sixth of our current emissions. These removal methods require investment and innovation—providing an opportunity for businesses to prove themselves as early adopters.

For years, dissenters argued that these methods would never be able to scale fast enough. However, in the 18 months or so, radical breakthroughs have made them not just plausible but essential to a comprehensive net zero strategy.

As new technology and methods emerge, being able to identify and adopt them will be a key strategic skill for organisations that want to achieve net zero faster and cheaper.

1/6

carbon removal will likely make up around ⅙ of the total efforts required to mitigate the most severe consequences of climate change

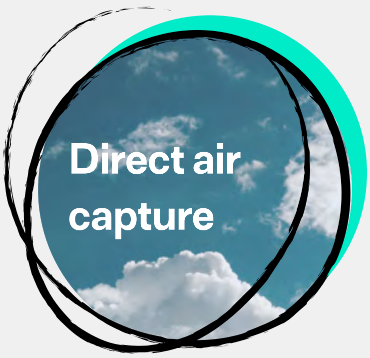
Here are three common methods from a fast expanding list...

This method utilises biogenic waste material—such as bark, sawdust or agricultural byproducts like husks. These materials are heated up in the absence of oxygen, which turns it into a charcoal material called biochar. Biochar can then be spread on land as soil enhancer, helping to improve the fertility, water retention as well as reduce nitrous oxide emissions from soils.

Doing this locks CO_2 out of the short carbon cycle. Biochar processing facilities are increasingly common near to sources of biogenic waste, like lumber mills or rice processing factories. It is one of the cheaper carbon removal methods; companies such as Microsoft have invested heavily in using it.

As trees grow, they perform photosynthesis to create energy. When they do this, they essentially breathe in CO_2 from the air. Planting trees therefore offers a fantastic means of absorbing carbon from the atmosphere.

It is important to note that this only counts as carbon removal if you are planting totally new trees—not replacing those that have been felled. And because we cannot guarantee the trees will be there in ten years' time—they may die of disease, or be caught in a fire—planting trees is not considered a particularly robust carbon removal method and should not count towards making a net zero claim as the emissions are likely to outlive the carbon stored in the tree.



Direct air capture (DAC) employs a machine which blows out air and draws out CO_2 from the air. The result is a tank of pure CO_2 that has been extracted from the air. This is then liquified and injected underground—where it stays.

This ultimately removes CO_2 from the atmosphere. However, it requires advanced machinery, plenty of renewable energy and a safe place to store it. This makes it quite expensive, though there is currently a lot of investment in bigger plants that will enable the process to become more efficient over time.

4 simple steps to net zero that you can take today

1 Set a budget

The single most important way businesses can accelerate their net zero journey is setting aside a budget for carbon reduction and removal efforts. This will help guarantee accountability; the business is committed, and you have full visibility of the costs associated with your environmental efforts.

We have found that a budget of between £400 and £600 per employee per year is what most companies need, though this will vary depending on the specific organisation.

2 Involve your whole team

We've already discussed the benefits that employers can see as a result of reaching net zero. It's also important to note that getting your whole team behind the cause can help make it far more manageable both economically and in terms of time. Often, what this looks like in practice is forming a sustainability committee to take ownership of these issues.

Leaders often shudder at the prospect of kicking off their carbon accounting efforts, assuming it will be a mammoth undertaking. The reality is, with the right people involved, we have found that most businesses can provide all the data required for comprehensive carbon accounting in the space of a few hours.

> We've created a team of Sustainability Champions. Sharing the responsibility has democratised the 'top down' decision-making and empowered everyone to ensure all teams and levels throughout the business have sustainability top of their agenda.
>
> **Oliver Sidwell,** Co-Founder, RMP Enterprise

3 Focus on alternatives

Many businesses can gain easy environmental wins by making small changes to their procurement and operations. A few examples include flights, food and meetings.

Business flights produce three times more emissions than economy flights—as well as costing more. From an environmental and an economic perspective, this is a huge win-win. Similarly, serving exclusively vegan or vegetarian meals in the workspace will often have a material impact on your footprint; as will opting for video calls when possible, to reduce unnecessary use of transport.

4 Buy removal through expert partners

Most carbon removal technology is still in its infancy, which means it is generally very expensive. However, using an expert partner like Supercritical can massively reduce these burdens. We provide expert advice, reducing the risk of you wasting money on bad offsets and ensuring you obtain the most cutting-edge, best value offsets possible.

With Supercritical, you also receive support across a range of related areas, including internal communications, carbon accounting and research. This simplifies the process, as well as saving time, energy and money.

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