



Tech Zero

TOOLKIT 2022

allplants


Habito

 onfido

 **babylon**

 **hopin**

 **Starling
Bank**


 **Citymapper**

faculty

Revolut

GoCardless

Moneysupermarket
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OLIO
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Led and Powered by **TECH**
NATION 

Tech Zero is a group of innovative tech companies who are taking bold action to fight the climate crisis. We're accelerating progress to net zero, supporting tech companies in making a climate action plan and using tech to help individuals live more sustainably.

ABOUT THIS TOOLKIT

We know setting a net zero target can be daunting. Our Tech Zero toolkit aims to demystify climate jargon and make it simpler for companies to set a net zero plan.

We wanted to share some resources that we've found helpful, as well as best practice and companies who can help you. It isn't exhaustive, and we'll be updating the toolkit as climate science evolves. We've taken advice from climate experts, and have included ideas and advice from our own experiences. We hope it helps you on your journey to net zero.

The Tech Zero taskforce

ACHIEVING NET ZERO REQUIRES THREE STEPS

1

Measure your baseline emissions

2

Reduce your emissions in line with limiting global warming to 1.5°C

3

Remove the emissions you can't reduce

WHAT IS NET ZERO?

Net zero is a state where a company has reduced their greenhouse gas emissions as far as possible, and has compensated any remaining hard-to-decarbonise emissions using certified long-term carbon removals.

This means that the overall greenhouse gas emissions going into the atmosphere are balanced with the amount of greenhouse gases being removed, resulting in no net impact on the climate.

WHY GO NET ZERO?

Talent

You'll attract and retain the best talent: [66% of people](#) aged 16–34 said sustainability credentials are important when choosing a company to work for.

Finance

You'll improve **efficiency**, reduce waste and reduce costs; attract investments; and mitigate financial risk.

Risk

You'll build **resilience** to climate and transition risk, and comply with future regulations.



WHY GO NET ZERO?

Reputation

You'll build trust and your **reputation**: Businesses are expected to lead the way when it comes to social problems, and 58% of stakeholders will buy or advocate for brands based on their beliefs and values.

Growth

You'll align with existing customers, **attract new customers**, and **identify new markets**: products marketed as sustainable have been growing 5 to 6 times faster than the average market, and consumers say they're willing to pay "a little or even a lot more for products that have been sustainably sourced and produced."



WHY GO NET ZERO?

It's necessary.

Businesses, the economy, society and the natural world are interconnected. If we're to keep warming below 1.5°C, we need to rapidly reduce emissions before 2030. ([IPCC](#))



TECH ZERO COMMITMENTS

1

Annually measure and publish all your greenhouse gas emissions, and get started on reductions

2

Publish your net zero action plan on your website within 12 months, including a net zero target, and short-term targets

3

Appoint a member of your executive team to be responsible and accountable for your net zero target

4

Communicate your climate commitments in other meaningful ways, including to customers

5

Annually report progress on short and medium term targets on your website

A photograph of a stream flowing over dark, mossy rocks. A fallen log lies across the center of the stream, partially covered in green grass. The water reflects the surrounding environment, and the scene is dimly lit, suggesting a forest setting.

ONE |

Measure
your
emissions

Measure your emissions

You can't reduce what you don't measure, so the first step in any net zero plan is to measure your emissions. These are categorised into scope 1, 2 and 3 emissions.

You'll need to measure emissions from each scope.

We recommend measuring your emissions according to the [Greenhouse Gas Protocol](#).

Scope 1, 2 and 3 emissions

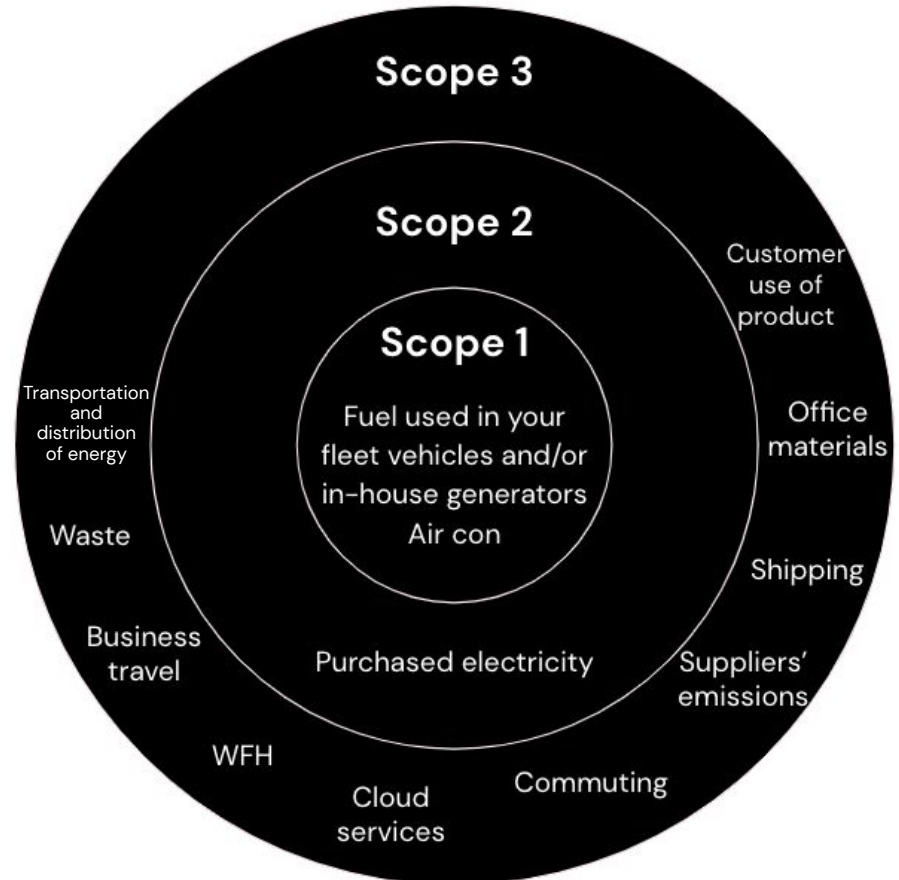
- Scope 1 covers your direct emissions. These emissions come from things you own or control, like burning gas in a boiler for heating, and the fuel used in company cars.
- Scope 2 covers your indirect emissions from the electricity you use, that you buy from an electricity provider.
- Scope 3 covers all other indirect emissions in your company's value chain. These can include goods and services you buy, business travel, your employee's commutes, investments you hold, and how your customers use your product.

Scope 3 emissions

For tech companies, around 80% of emissions will fall into scope 3, so it's important you measure as much as possible! It's also important to make it clear if you've excluded any of your scope 3 emissions, and why (for example if you can't get data on them or there are other limiting factors).

You can read more about [what's in scope 3 in the glossary](#).

Overview of Scopes 1 – 3



Measuring your emissions

You can do this yourself using online tools and resources.

There are many tools available if you choose to do it yourself: [GoCardless](#) and [Carbon Footprint](#) offer handy free tools for small businesses, and the [Greenhouse Gas Protocol](#) also has many resources to help with measuring emissions, including a [GHG emissions calculations tool](#).

Measuring your emissions

If you don't want to do it yourself, you can work with a carbon footprinting company. See [‘Sustainability services’](#) at the end of the Toolkit for recommendations.

Most companies use software to measure scope 1 – 3 emissions, or provide a platform for you to easily measure them in-house. They'll provide practical advice on the steps you can take to reduce your climate impact, and some also offer offsets and carbon removals.

Costs to use a carbon footprinting company will vary depending on the size and type of your business.

A low-angle photograph of a forest with sunlight filtering through the trees. The sun is positioned in the upper center, creating a bright starburst effect. The tree trunks are dark and silhouetted against the bright light, with some branches showing small, light-colored blossoms or leaves. The overall color palette is dominated by greens and blues, with the bright white of the sun providing a focal point.

TWO

Set a
science-based
target

Set a science-based target

Now you've measured your emissions, you should make a plan to reduce them in line with limiting global warming to 1.5°C. The IPCC states **we have 3 years to reach peak emissions to keep 1.5C possible, so urgent action is needed.**

Set an ambitious but achievable net zero target and make a plan to get there. You should aim to **halve your emissions across all scopes by 2030**. This sounds daunting, but the first halving is often the simplest.

Your net zero plan should also **include short-term targets** to reduce emissions. This includes what actions you'll take in the next 12 months, the next 2–3 years, and by 2030.

How to set a science-based target

We recommend setting your target through the [Science-based Targets Initiative](#) (SBTi). The SBTi is *the* standard for setting net zero targets, and will align your actions with environmental science.

If you're doing it yourself, look at your emissions measurements and identify what contributes the most CO₂ – your emissions 'hot spots' – and where there could be easy wins. To prioritise possible actions, lay them out in terms of effort and impact.

The UN Race to Zero recommends prioritising the most emission-intensive activities.

How to set a science-based target

For example, [Staze](#) measured their emissions and saw that 50% of their emissions were in their server costs and their office building.

Straight away they could set a target to reduce that 50% to almost 0 by switching to renewable energy in their offices and using a cloud provider powered by renewable energy.

They could set that target to achieve within the next few months.

How to set a science-based target

If you used a company to measure your emissions, it's a good idea to work with the same company when it comes to setting your net zero plan.

[Spherics](#) can help you measure all three scopes of emissions, and present you with the actions that can bring your company in line with the latest science-based targets.

[Supercritical](#) makes it easy for tech companies to get to net zero by providing software to measure, reduce, and offset your climate impact.

[Watershed](#), the all-in-one climate platform trusted by the world's leading companies, can help you set ambitious net zero goals in line with the rigorous SBTi standards.

We've listed [many more services](#) at the end of this toolkit.

Short-term targets

The [SBTi](#) and Tech Zero partner, [UN Race to Zero](#), recommend that net zero plans should have short-term (or 'interim') targets to make them more credible.

You should include goals, and the actions you'll take to reach them, for the next 12 months, the next 2-3 years, and for 2030.

Short-term targets show you're serious about climate action right now. They also help embed climate action into your business strategy, rather than seeing net zero as something that can be tackled later.

Examples of good interim targets

Pawprint

Overall target: Net zero by 2050

Baseline year: 2020

Short-term targets:

- a 21% reduction in Scope 1, 2 & 3 emissions by 2025
- a 42% reduction by 2030 (ideally this would be 50%!)
- a 63% reduction by 2035

Pawprint
eco companion

GoCardless

Overall target: Net zero by 2035

Baseline year: 2019

Near-Term Target: 2027

Short-term targets:

- 82% reduction per employee for Scope 3
- 90% absolute reduction Scope 1 & 2

GoCardless

Certifying your net zero target and plan

It's a good idea to have your net zero target accredited by the [Science Based Targets Initiative](#) to make sure you'll be able to do what you say you'll do.

SBTi accreditation costs £4,000, or £750 for SMEs.

Joining industry groups like Tech Zero will give you access to peers, industry experts and companies who are well on their way to reaching net zero. Sharing best practice, tips and learnings has helped all of our founding members when setting their climate action plans.

Board accountability and governance

You should report on your environmental impact and emissions at every board meeting.

Organisations like [Carbon Trust](#) and the [World Economic Forum](#) provide advice on how to set up effective climate governance on corporate boards. Also, the Taskforce on Climate-related Financial Disclosures has a [free training framework](#) on climate resilience.

If you're based in the UK, it's worth noting that the government plans to make TCFD reporting mandatory for all companies.



THREE

Reduce your emissions as
much as possible

Ways to reduce your emissions right now

You don't need to wait to start reducing your emissions. This section will go into detail on reductions including:

- Making sure your office or shared offices are [net zero aligned](#)
- Implementing a train-first travel policy and switching to low-carbon commuting where possible, like bikes or electric vehicles
- Helping employees reduce energy use when working from home
- Incentivising employees to eat plant-based lunches
- Avoiding food waste being sent to landfill

Ways to reduce your emissions right now (cont)

- Engaging employees to reduce their own emissions and rewarding sustainable behaviours ([Greenr](#), [Giki](#) and [Ailuna](#) can help!)
- Switching to a net zero pension provider
- Talking with your suppliers about your net zero goals
- Lowering your digital emissions

[This guide](#) from Green Element is a good place to start, as is the UN Framework on Climate Change on [Reducing Emissions for Companies and Organisations](#).

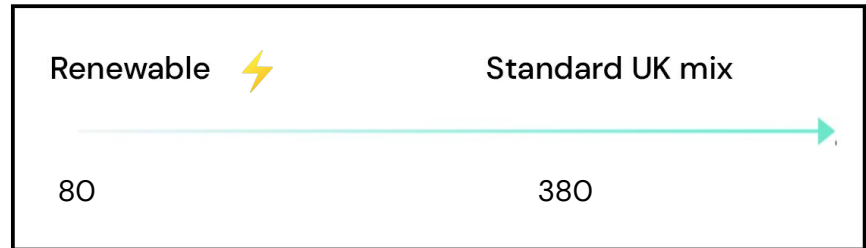
Incentivise offices to switch to renewable energy

Most energy suppliers now offer renewable electricity tariffs. We recommend finding a supplier who purchases renewable energy directly from the generators, using Power Purchase Agreements (PPAs). To incentivise your office to switch providers, you can:

- Prepare an email highlighting the benefit of swapping suppliers, including a list of potential options and organisations to make the swap simpler. If you share a building or office space, encourage the other companies to send a similar email
- If the landlord doesn't want to switch, request a breakdown or estimates of your energy use
- Explore purchasing REGOs from the [Big Clean Switch](#) to cover your usage
- Consider moving to a more sustainable office

Office with Renewable Energy vs Standard UK energy mix

Per desk /
employee
emissions
(kg CO₂e)



3

* These are illustrative and may differ per company. Emissions per desk includes sources such as electricity, heating, upstream energy emissions, water, and wastewater (which apply to both the Renewable and Standard energy mix). Source: [Supercritical](#)

Net Zero Offices

Making sure your office is a low-emission space is a fundamental part of your net zero strategy. A net zero office:

- Uses 100% renewable energy (ideally generated on-site through solar panels, for example, but it can also be by purchasing renewable energy from a provider)
- Ensures AC systems are well maintained, and are topped up with refrigerants with [low Global Warming Potentials](#)
- Is as energy efficient as possible – for example, by using climate control facilities
- Has measured emissions, and a clear reduction strategy
- Has a comprehensive recycling, compost and [zero waste policy](#)
- Uses [sustainable materials in construction](#)

Check out [London's most sustainable shared office spaces](#).

Sustainable Travel

Having a [low-emission travel policy](#) is a great way to reduce your emissions and show climate leadership. This includes:

- Having a train-first policy, meaning your team must take the train for any journey that would take under 6 hours by train
- Optimising unavoidable travel: try to include all relevant meetings within a single trip
- Promoting virtual meetings and invest in digital tools (such as [Miro](#)) to make remote meetings more productive
- Investing in credible carbon offsets for unavoidable flights, ideally verified by [Gold Standard](#), [Verified Carbon Standard](#) or [UNFCCC's Clean Development Mechanism](#)

Take a look at [WWF's best-in-class sustainable travel policy](#).

Comparison of travel emissions

Example journey –
1 person, London → Edinburgh

Total emissions
(kg CO₂e)

Video call*



Train

Economy flight

1.2

45.7

291

3

* Assumptions based on typical video call length and quality. Source: [Supercritical](#)

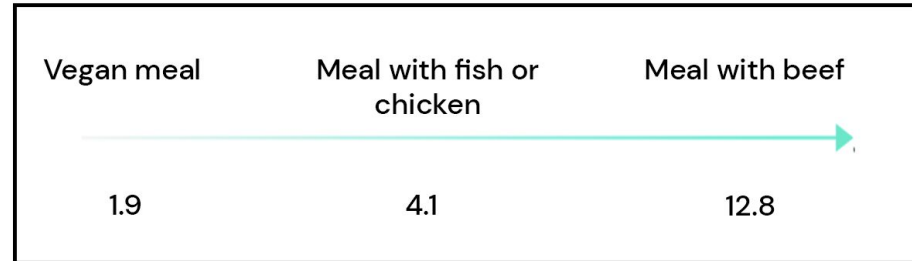
Sustainable Food

Meat consumption has a significant negative impact on the environment; [a meat-based diet produces double the carbon emissions of a vegetarian one.](#)

- Arrange a 'lunch and learn' or opt-in discussion to educate your team on the benefits of plant-based eating.
- Run a survey or discussion to gather employee opinion and engagement potential.
- Only allow plant-based meals to be expensed to the company.
- Discuss practical next steps with your operations team (e.g. purchasing more plant-based foods and milks)

Comparison between plant-based and meat-based diets

Total emissions
(kg CO₂e)



3

* Assuming a meal with some carbohydrates, vegetables, and the three different protein sources.

Source: [Supercritical](#)

Encouraging your team to reduce emissions

Remote working can improve employee wellbeing, but the sustainability of homeworking depends on how much heating and energy your employees use, how often they commute, and their mode of transport. Depending on these factors, homeworking may be less sustainable. **Many UK employees and companies could save energy by working more from office in winter, providing they turn off the heating at home when they do.**

Educate employees on how to make their homes energy efficient and switch to renewable energy. Giving half a days leave to switch their home energy supply to renewables can be a great way to incentivise employees to act.

Variable tariffs can currently protect you through the [price-cap](#) and energy crisis. Take a look at this [guide on choosing tariffs](#).

Switching to a net zero pension provider

The average pension finances 23 tonnes of CO2 emissions every year. So choosing the right pension can be a powerful tool in the fight against climate change. According to the [green pensions guide](#), pension funds should:

- Target net zero across its portfolio and halve emissions by 2030
- Invest in climate solutions
- Divest from companies that are not reducing emissions

To take action, sign up to the [green pensions charter](#). Set up a meeting with your pension provider, and ensure the default fund for your employees is covered by a net zero target. If it doesn't, look to switch providers.

[MakeMyMoneyMatter](#) can help you understand the impact of your pension fund and communicate with them if necessary.

Engaging suppliers

A large part of your company's footprint is likely to be the emissions released by your suppliers when they produce materials – also known as 'embodied emissions'. The best way to reduce these emissions is to encourage your suppliers to measure their own emissions. To do this:

- Identify the suppliers that significantly contribute to your footprint
- [Prepare an email](#) to send to suppliers, asking:
 - If they have measured their emissions (and which emissions sources were included). If they haven't measured them, suggest [companies or resources](#) they can use
 - What their net zero target is, if they have one
 - Details of their carbon reduction and removal strategy
- Draft a procurement policy that requires suppliers to measure their footprints by 2024 and have a net zero target by 2025.

Lowering your digital emissions

Global emissions from cloud computing make **up to 3.7% of all global greenhouse gas emissions** – higher than the emissions from commercial flights. To reduce your digital footprint:

- **Engage your staff** – share an article, video or organisation such as the [SDIA](#) or the [Green Web Foundation](#) with your team
- **Use a website carbon calculator** – measure your website's footprint and see how to reduce it with [Greenpixie](#) or [Website Carbon](#)
- **Measure and reduce your Cloud usage** – [Google](#), [AWS](#) and [Microsoft](#) have their own carbon measurement tools. You can also use free and open source code such as [Cloud Carbon Footprint](#).

Lowering your digital emissions (cont)

- **Move workloads to data centres with low emission intensities** (e.g. Iceland, Ireland, Nordics, US West Coast)
- **Reduce image and video compression** to reduce file sizes
- **Engage your software suppliers** on the importance on digital sustainability

[Our blog](#) has more tips on how to reduce your digital footprint.

Examples of good reduction measures

Tech Zero member GoCardless has [targeted ambition reductions](#), and has already seen progress since their 2019 baseline. They've set targets of reducing absolute scope 1 and 2 emissions by 90% by 2027, and reducing scope 3 emissions by 82% per employee by 2027.

They've been able to reduce their scope 1 and 2 footprint by 99% by:

- Switching to a 100% renewable tariff (31.4 tCO₂e reduction)
- Ensuring no leakage from AC systems (160 tCO₂e potential avoided)
- Purchasing renewable energy via [Big Clean Switch](#) for serviced offices (2.85 tCO₂e reduction)

Examples of good reduction measures (cont)

GoCardless has also seen scope 3 reductions from:

- Business travel: 72% reduction per employee through their Travel Policy and general post-COVID behavioural change
- Digital emissions: 87% reduction per employee via Digital Sustainability principles, [Wholegrain Digital](#) masterclass, and data improvements
- Waste: 65% reduction by installing segregated food waste, avoiding sending food to landfill, and using [Terracycle](#)
- Homeworking: 70% emissions reduction through educating team members, providing access to energy saving measures, and [decarbonising home heating](#).
- Commuting: 67% reduction per employee through cycle to work schemes, [Human Forest e-bike initiative](#), and increased remote working
- Choosing a [Smart Pension](#) provider
- Increasing employee engagement using [Couch to Carbon Zero](#) and [Ailuna](#)

A lush green forest with a rocky riverbank and water in the foreground. The scene is filled with dense foliage and trees, with sunlight filtering through the leaves. The foreground shows dark, mossy rocks and a calm body of water reflecting the surrounding greenery.

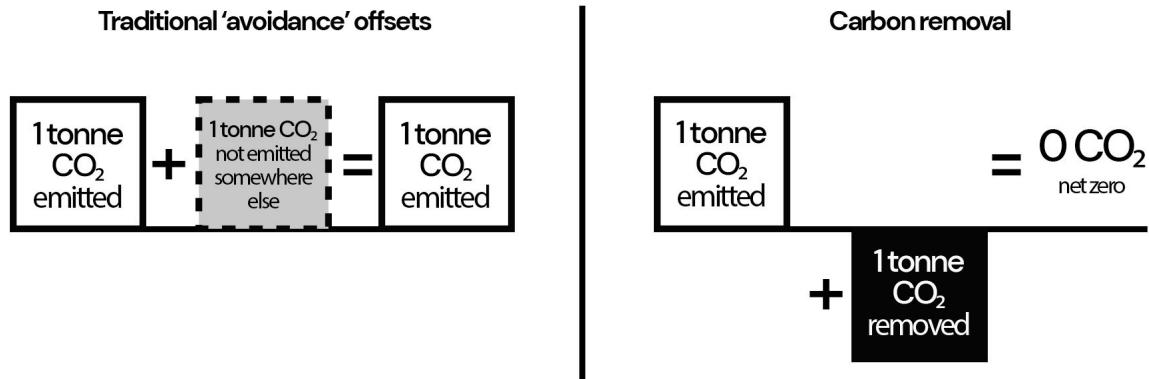
FOUR

Remove the
emissions you
can't reduce

Remove the emissions you can't reduce

You should always prioritise reducing your emissions, but some emissions are unavoidable. To 'neutralise' these emissions, you should use high-quality, long-term carbon removals, not avoidance offsets, and make sure that they don't exceed 10% of your total baseline emissions.

Remove the emissions you can't reduce



4

Most offsets available today are 'avoided emissions' – in other words not emitting a tonne of CO₂ that you were going to emit. But climate science demands that we must actually take CO₂ *out* of the atmosphere, and keep it out.

Remove the emissions you can't reduce

Long-term carbon storage means that carbon dioxide is removed from the atmosphere and stored permanently, or for as long as possible. This is achieved by storing **CO₂** back in the earth, in reservoirs, or 'mineralised' into solid forms. Keeping emissions out of the atmosphere in the long-term is essential to avoid contributing to climate change.

Many carbon removal techniques are short-term, including reforestation and regenerative agriculture. These are much cheaper than long-term solutions, but don't guarantee that emissions aren't re-released into the atmosphere.

Best practice for carbon offsets

You're probably familiar with **conventional offsetting methods such as renewable energy projects, rainforest protection, or clean cookstoves**. While, these are highly impactful and worthwhile projects to invest in, they are more associated social rather than environmental benefits. **Both SBTi and the [Oxford Offsetting Principles](#) say that these offsets do not count toward net zero.**

A robust net zero plan will include setting targets to increase the percentage of long-term removal offsets between now and your company's net zero target year.

Beyond permanent carbon removals

Investing in the more 'traditional' offsets like renewable energy projects and clean cookstoves is still a great thing to do while you get to net zero. Buying offsets from projects that help communities and have additional social value is known as going 'beyond your value chain'.

You can read more about the different types of offsetting in [the Glossary](#).

Best practice for carbon removals

[Patch](#) connects you to the largest marketplace for trusted carbon removal projects, including biochar, mineralisation, kelp sequestration and more.

[Supercritical](#) vet and exclusively sell high-quality carbon removal (from biochar to direct air capture) because it's the only legitimate route to net zero.

[Sylvera](#) can help you verify your carbon offsets and give you a better idea of the effect they're having on the planet.



PUBLISHING YOUR PLAN

What to include in your plan

Once you've measured your emissions, identified how to reduce these emissions, and set science-based targets, you'll need to publish your plan. This plan should be made public and easy to find on your website.

In line with the UN Race to Zero's minimum criteria, your plan should include:

- Your scope 1-3 emissions
- A clear baseline year (the year you'll compare all emissions measurements and progress against)
- A net zero target date
- Short-term/interim targets – what you'll do in the next 12 months, the next 2-3 years, and by 2030.
- Sign-off by a board/executive member

What to include in your plan

The following aren't necessary but are 'nice to have' as part of your plan:

- Aim to halve emissions by 2030
- An explanation of how your emissions were calculated
- An explanation of *how* you'll reduce emissions
- Mentions of your company's limitations (i.e. what isn't possible for you to do right now, or things you'd like to do but can't just yet. This a really good way to show transparency and guard against any appearance of greenwash)
- Evidence of high-quality carbon removal
- Evidence of going carbon neutral or supporting projects beyond your value chain

Examples of good net zero plans

These plans from Tech Zero members showcase best practice when it comes to a net zero plan.

[Altruistiq's Sustainability Strategy](#) states *why* they're focusing on each aspect, *what* they're doing about it, and the way they're going to do it. Their scope 1-3 emissions are detailed, and they have clear short-term targets and action steps to achieve those targets.

[GoCardless' Environmental Sustainability Strategy](#) ticks all the boxes – clear emissions measurements, a clear net zero target and short-term targets, and a clear explanation of reduction measures and how they plan to reach net zero. They've even been nominated for BusinessGreen's '[Net Zero Strategy of the Year' 2022!](#)

[Pawprint's Carbon Report](#) is full of detail – breaking down their emissions by source, scope, and greenhouse gas – and they have set yearly emissions targets.



RESOURCES

RESOURCES WE LIKE

Oxford Net Zero [tools library](#).
Free to access, with hundreds of
high-quality, science-based tools.

The B Corp Climate Collective [database](#).
Useful tools to help businesses of all sizes.

SME Climate Hub. [Resources](#) designed for
small and medium sized businesses.

[EcoAct](#). “An armoury of specialist
technical tools” to get you from A to Zero.

[Net Zero Tech Services Protocol](#) – A
detailed guide on net zero for the tech
sector. The organisation also provides
accessible carbon accounting [services](#).

RESOURCES WE LIKE

The [Greenhouse Gas Protocol](#).

Resources to help with measuring emissions, including a [GHG emissions calculations tool](#).

[Carbon Footprint](#). A range of carbon calculators for different-sized businesses, including a tailored option.

The [Carbon Analytics Platform](#). Takes data from your accounts and calculates its the carbon emission equivalent.

This free FutureLearn course on [How to Measure, Reduce, and Offset your Company's Carbon Footprint](#)

SUSTAINABILITY SERVICES

These Tech Zero members are **carbon accounting experts** recommended by other members, and can help you measure, reduce, and offset your carbon emissions.

[Altruistiq](#)

[Carbon Analytics](#)

[Compare Your Footprint](#)

[Earthly](#)

[Lune](#)

[Patch](#)

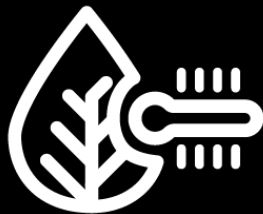
[Spherics](#)

[Supercritical](#)

[Watershed](#)

GLOSSARY

We know climate jargon can be confusing, so we've done our best to simplify it. Here are some of the terms you'll hear when setting your net zero plan.



NET ZERO

A state where an organisation has reduced its greenhouse gas emissions as far as possible (by 90–95%), and have compensated any remaining, hard-to-decarbonise emissions by using certified long-term carbon removal credits.

The result is no net impact on the climate from greenhouse gas emissions. Companies can achieve this by reducing their emissions with an ambitious, science-based target aligned with limiting global heating to 1.5°C .



SCIENCE-BASED TARGET

An emissions reduction target is defined as 'science-based' if it is in line with the scale of reductions required to keep global warming well below 2°C from pre-industrial levels. Current best practice will achieve a 1.5°C pathway, in line with [the latest climate science](#).



'CARBON' FOOTPRINT

Though it has 'carbon' in the name, a carbon footprint is the total greenhouse gasses (GHGs) emitted directly, or indirectly, by an individual, organisation, product, or event. Almost everything we do will have a carbon footprint.

So when we say 'carbon', we're using it as shorthand for 'carbon dioxide equivalents' (CO₂e). That's because several greenhouse gases contribute to global heating, and their effects on the atmosphere are measured in CO₂e.

Along with carbon dioxide (CO₂), your carbon footprint will typically include methane (CH₄), nitrous oxide (N₂O) and hydrofluorocarbons (HFCs), among others.



CARBON NEUTRAL

A state where greenhouse gas emissions are offset with the equivalent amount of verified carbon credits. For example, you emit 100kg of carbon, so offset with 100kg-worth of carbon credits.

Being carbon neutral is *not* the same as being net zero. Net zero involves *actively reducing emissions* in line with limiting warming to 1.5°C, and permanently removing any left over emissions.

If you're not actively reducing your carbon emissions, and are instead relying on offsets such as clean cookstoves and forest protection, you're likely carbon neutral.

By slowly incorporating more removal offsets, you'll find you move from carbon neutrality to net zero as you progress through your action plan.



CARBON 'NEGATIVE'

This means offsetting more CO₂ from the atmosphere than your company emits.

Confusingly, you might see this be called 'climate positive' or 'resource positive'.

This is usually achieved on a yearly time frame, but some companies are aiming to remove or offset their historical emissions – the emissions they've created since the company started (e.g. [Microsoft](#)). Of course, we encourage members to go this extra mile!

CARBON REMOVAL VS AVOIDED EMISSIONS



Carbon removal projects are those that *take carbon out of the atmosphere* and lock it away permanently, or for a very long time. For every tonne of CO₂ effectively removed, a carbon credit is issued.

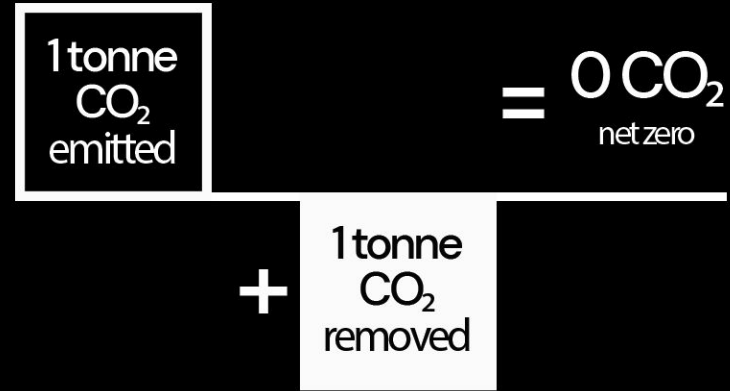
These projects include Carbon Capture and Storage (CCS), biochar, and enhanced weathering. These solutions are in their early stages so can't be bought as cheaply or easily as traditional offsetting credits, but there's some exciting work happening in this space from companies like [Climeworks](#) and [Capchar](#).

Avoided emission projects are those that 'balance out' your company's emissions by paying someone else *not* to emit elsewhere. This results in fewer emissions compared to a hypothetical business-as-usual scenario. Carbon credits are issued for every avoided tonne of CO₂ equivalent.

Traditional 'avoidance' offsets



Carbon removal



CARBON REMOVAL VS AVOIDED EMISSIONS EXAMPLES

Long-term carbon removal →

Direct Air Carbon Capture and Storage
Bioenergy with Carbon Capture and Storage
Mineralisation
Enhanced weathering

Short-term carbon removal →

Tree planting
Soil enhancement
Ecosystem restoration

Short-term emissions reduction ~~~~~→

Avoided damage to ecosystems
Changes to agricultural practices

Avoided emissions ~~~~~→

Renewable energy projects
Clean cookstoves



'SOCIAL IMPACT' OFFSET PROJECTS



'Social impact' offset projects are projects that contribute to the [17 UN Sustainable Development Goals \(SDGs\)](#). These are projects that have social benefits beyond just saving carbon emissions.

A good offset programme recognises that projects don't operate in a vacuum – they must be managed within their wider socio-economic context. For example, projects that improve air or water quality, energy access, and/or community employment opportunities.

The social impact of offsets can be a good deciding factor if you're confident in the environmental integrity of your offsetting options.

SCOPE 3



Scope 3 emissions will likely make up most of your business' carbon footprint, as it looks every aspect that transforms your product or service from an idea into a reality – i.e. your value chain. Here are the main things to look at when measuring your scope 3 emissions:

- The goods and services you buy to run your business and make your products or services
- Transportation and distribution, in terms of both getting products and services to your business, and getting your products or services to your customers
- Waste
- Business travel
- Employee commuting
- The assets you lease
- How customers use your products or services
- What happens to your products at its end-of-life
- Franchises
- Investments

The background is a high-resolution photograph of a rugged, rocky terrain. The ground is covered with numerous dark, flat rocks of various sizes, interspersed with patches of green moss and small tufts of grass. The lighting is soft and diffused, creating a natural, earthy atmosphere. Overlaid on this background is the text 'BEST PRACTICE' in a large, white, sans-serif font. A vertical white line is positioned to the right of the word 'PRACTICE', separating it from the subtitle text.

BEST PRACTICE |

Tips from
Tech Zero
members.



Tips to help with your climate action plan:

Get your team engaged. We plant a tree in employees' names on their work anniversary, and we offer a Cycle to Work scheme for employees. It's a great way for team members to get fit, reduce commuting costs, and be good to the environment!

Take advantage of the resources available: There are a number of great initiatives out there – we're members of the Tech Zero Taskforce, but have also worked with Bankers For Net Zero and are working with the Task Force on Climate-related Financial Disclosures (TCFD).

Be selective about who you do business with: We don't lend to businesses that are engaged in oil or gas production or mining. We lend primarily to new housing and new growth trading businesses that tend to be more technologically advanced and aim to meet or exceed the applicable energy efficiency standards.



Start today. It's easier building sustainability into your business now rather than later. Once you start, momentum will build quickly.

Set an ambitious goal. You'll do more training if you sign up for a marathon than if you sign up for a 5k.

Don't go it alone. Your peers may have overcome the challenges you're facing today, so you don't have to reinvent the wheel. See what solutions are already out there. Reach out, ask for help, collaborate.

The logo consists of the words "Tech" and "Zero" stacked vertically in a white, sans-serif font, enclosed within a white square border.

Tech
Zero

TOOLKIT 2022

Want to add to our toolkit?

We're just getting started. If you have simple, clear information that will help companies set a robust climate action plan, let us know.

If you know of any companies or resources that have helped you, send them our way so we can help other Tech Zero members.

You can reach us at techzero@technation.io