

A guide to **Net Zero** for businesses



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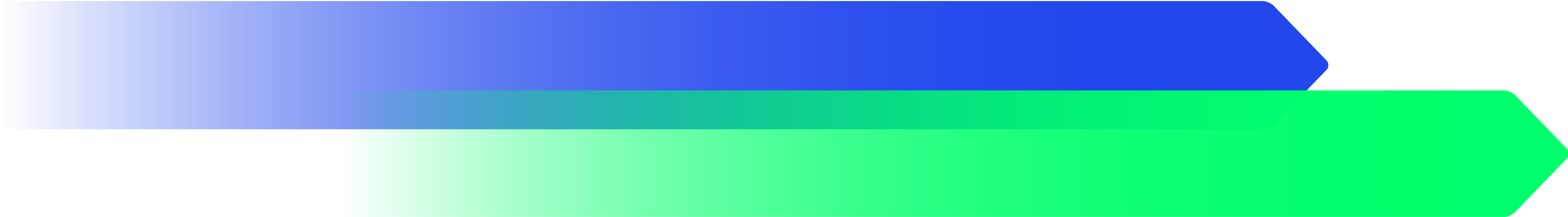
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Why Net Zero matters

At COP21 in 2015, the Paris Climate Agreement was approved by 197 nations. They agreed to halt the increase in global average temperatures to well below 2°C and pursue efforts to limit the increase to 1.5°C. Since pre-industrial levels, global temperatures have risen by 1°C.

Net Zero, which involves deep cuts to emissions and the permanent removal of any remaining greenhouse gases, is vital to achieving these targets and addressing climate change. The figures speak for themselves. Keeping warming to 1.5°C could mean 11 million fewer people are exposed to extreme heat, 61 million fewer people are exposed to drought and 10 million fewer people are exposed to rising sea level impacts compared to 2°C warming.

Net Zero is not a passing trend. It's a crucial lever for driving urgently needed ambitious climate action. It has the potential to limit temperature increases to lower than 1.5°C – by physically taking CO₂ out of the atmosphere and pursuing greater efforts of mitigation.

The widespread global adoption of Net Zero targets – from countries to companies – is part of a long-term shift to decarbonise economies in response to the climate emergency.

Science Based Targets. (2019, June 31). 1.5°C vs. 2°C – a world of difference.
<https://sciencebasedtargets.org/blog/1-5-c-vs-2-c-a-world-of-difference>

**By setting and achieving
Net Zero targets,
companies can help
accelerate global efforts
to limit warming.**

INTRODUCTION

Net Zero explained

Despite the surge in popularity of Net Zero emissions targets, historically there has not been a commonly agreed definition for companies to work to.

Science Based Targets initiative (SBTi)

The internationally recognised [Science Based Targets initiative \(SBTi\)](#) is a global partnership of organisations working with companies to take climate action. The SBTi is focused on halving emissions before 2030, and achieving Net Zero emissions before 2050. In its own words, the SBTi:

“defines and promotes best practice in science-based target setting, offers resources and guidance to reduce barriers to adoption, and independently assesses and approves companies’ targets.”

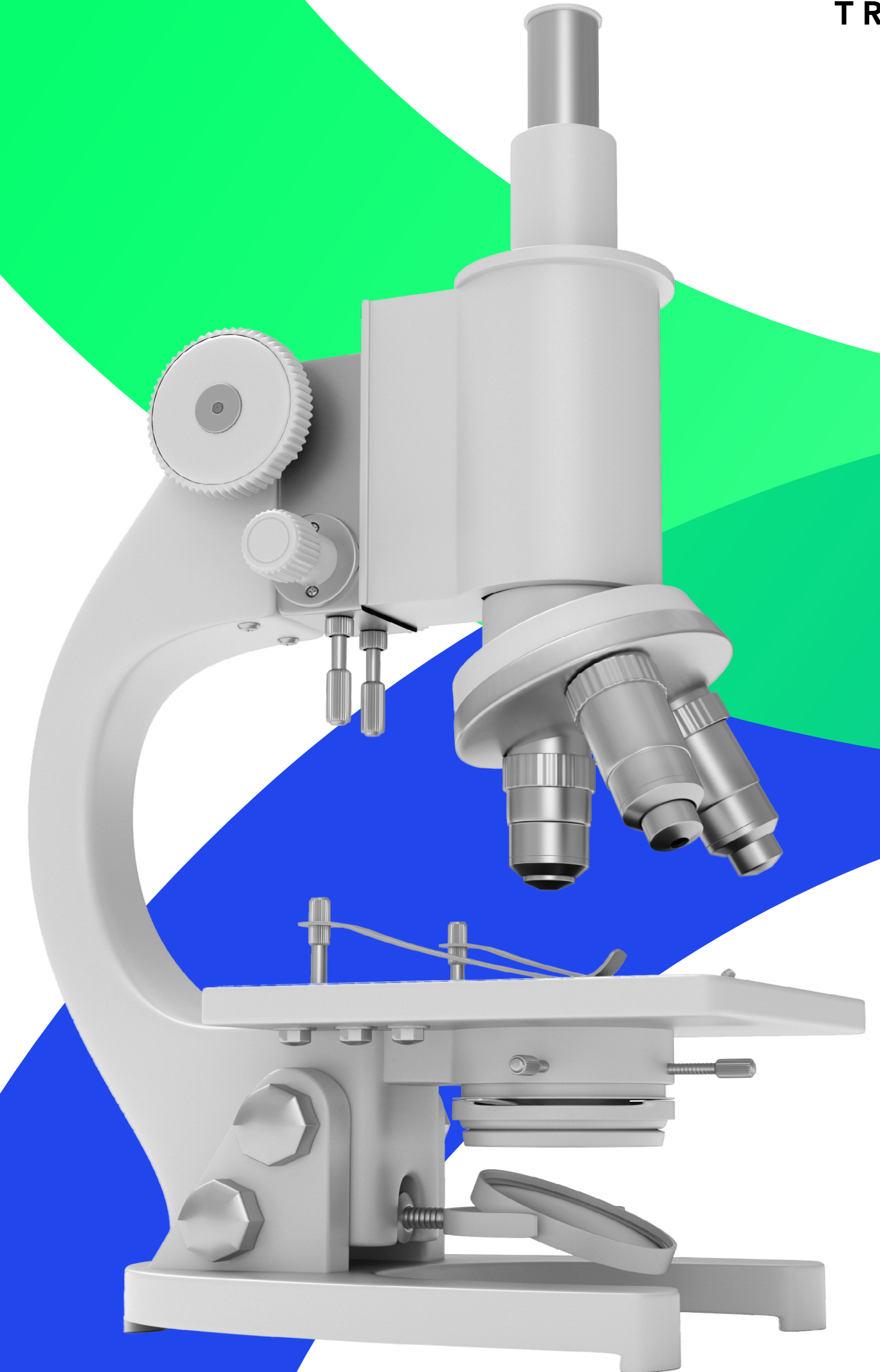
The SBTi’s target-setting methods are based on emission scenarios compiled by the United Nations’ [Intergovernmental Panel on Climate Change \(IPCC\)](#), which assesses climate change-related science. The Carbon Trust is a member of the SBTi’s Technical Advisory Group and follows their definition of Net Zero for corporates.

The SBTi states that to “contribute to societal Net Zero goals, companies must deeply reduce emissions and neutralise the impact of any emissions that remain.” The [SBTi Corporate Net-Zero Standard](#), which supports companies to set science-based Net Zero targets, defines corporate Net Zero as:

1. Reducing Scope 1,2 and 3 emissions to zero or to a residual level consistent with reaching Net Zero emissions at the global or sector level in eligible 1.5°C-aligned pathways. For further information on Scopes 1,2 and 3 please see [here](#).
2. Neutralising any residual emissions at the Net Zero target year and any greenhouse gas (GHG) emissions released into the atmosphere thereafter.

A need for consistency

The SBTi have highlighted that without a common definition, there can be inconsistency in Net Zero targets, which in turn can limit their collective impact on climate change. [Confusion around the differences between carbon neutrality and Net Zero](#) has also led to a lack of alignment. The SBTi says, “Business leaders need a robust, science-based framework for setting Net Zero targets ... otherwise, they risk continuing to invest in business models that are inconsistent with the goals of the Paris Agreement.”



Net Zero unpicked

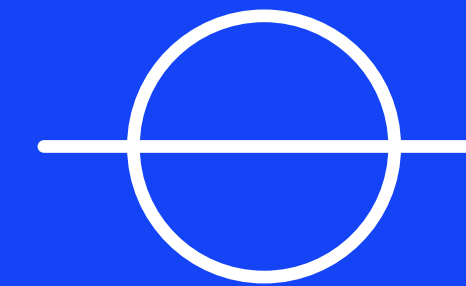
As the SBTi definition makes clear, there are two foundations to Net Zero – reducing emissions and neutralising residual emissions with permanent carbon removals. Companies should prioritise decarbonisation over and above offsetting on their journey to Net Zero.



Reducing emissions

To start driving down emissions, companies need a defined plan, known as a 'science-based target'. Targets are considered 'science-based' if they align with what the latest climate science says is needed to meet the Paris Agreement goals of limiting global temperature rises to 1.5°C. Carbon reduction targets should be aligned with the [requirements of the SBTi](#), which leads this area globally.

Greenhouse gas emissions are categorised into three groups or 'Scopes' by the most widely-used international accounting tool, the [Greenhouse Gas Protocol](#). Science-based targets set a trajectory reduction for Scope 1, 2 and 3 emissions (see [page 7](#)).



Neutralising residual emissions




According to the SBTi, residual emissions need to be neutralised with methods that remove carbon dioxide gases from the atmosphere for an extended period of time. Methods recommended by the SBTi can be grouped into three broad categories: biological, hybrid and engineered.

Greenhouse gas removals

Key criteria for near and long-term science-based targets

Summary of the greenhouse gas removals method, eligibility, target boundary, time frame and minimum ambition requirements for near and long-term science-based targets.

			Scope 1 and 2			Scope 3			
Near-term science-based targets	Target boundary		95% coverage of Scope 1 and 2			If Scope 3 >40% of total emissions: boundary to cover min.67% of Scope 3			
	Target year		5-10 years from date of submission			5-10 years from date of submission			
	Method eligibility and minimum ambition	Method	Absolute contraction	Physical intensity convergence	Renewable electricity (Scope 2 only)	Absolute contraction	Physical intensity convergence	Supplier or customer engagement	Physical intensity contraction and economic intensity
		Eligibility and min. ambition	4.2% linear annual reduction (LAR)	Depends on sector and company inputs (SDA)	• 80% RE by 2025 • 100% RE by 2030	2.5% LAR or 4.2% LAR	Depends on sector and company inputs (SDA)	e.g. 80% of suppliers by emissions by 2025	7% year-on-year (both options)
Long-term and net-zero science-based targets	Target boundary		95% coverage of Scope 1 and 2			90% coverage of Scope 3			
	Target year		2050 or sooner (2040 for the power sector)			2050 or sooner			
	Method eligibility and maximum ambition	Method	Absolute contraction	Physical intensity convergence	Renewable electricity (Scope 2 only)	Absolute contraction	Physical intensity convergence	Supplier or customer engagement	Physical intensity contraction and economic intensity
		Eligibility and min. ambition	• 90% reduction (cross-sector pathway) • 72% reduction for FLAG • Other sector pathways vary	Sector / commodity pathways vary	100% RE	• 90% reduction (cross-sector pathway) • 72% reduction for FLAG • Other sector pathways vary	Sector/ commodity pathways vary	Methods are not eligible for long-term SBTs	97% reduction (both options)

 1.5°C ambition  Well-below 2°C ambition  Not eligible



Why should you set a Net Zero target?

Your contribution matters

This is your opportunity to become a climate leader by playing your role in the global decarbonisation journey.

Strengthen your reputation

Companies are increasingly expected to take climate action. Setting Net Zero targets shows you're taking responsibility.

Increase investor confidence

Financial institutions are increasingly factoring in carbon reductions when making investment decisions. They value credible commitments like a Net Zero target.

Shape your business strategy, drive innovation and increase your competitive edge

As the momentum for businesses to set Net Zero targets continues to grow.

Help manage future risks

Setting targets now can boost resilience to future emissions-related regulation.

Reduce costs

Delivering on Net Zero targets can deliver savings through lower energy costs.



When

...should you set a Net Zero target?

Corporate commitments to Net Zero emissions have increased rapidly in recent years. Of the largest 1,000 listed companies across Europe's major stock indexes, one-third have already pledged to reach Net Zero by 2050 (Accenture, 2021).

While innovation is still required in some sectors to achieve science-based targets that are in line with a 1.5°C trajectory, this should not prevent companies taking action now to minimise greenhouse gas emissions while also actively considering significant shifts in their business model.

Of the largest 1,000 listed companies across Europe's major stock indexes, one-third have already pledged to reach Net Zero by 2050 (Accenture, 2021).

What

...should your Net Zero target date be?

Setting a target date for Net Zero emissions is an important step for a company, and the SBTi draft criteria states that the Net Zero target year should be no later than 2050. Some companies are choosing to set a Net Zero target year earlier than 2050 and whilst this greater ambition is encouraged, companies should also consider the feasibility of accelerating reductions in value chain emissions beyond 1.5 degree pathways and the potential financial implications of the required carbon removal.



The steps to setting a Net Zero target



Measure your company's global Scope 1, 2 and 3 emissions (your own operations and value chain)

With a deep enough understanding, an organisation can measure its own emissions independently. These can then be reviewed to check alignment with the Greenhouse Gas (GHG) Protocol, required for validation by the SBTi.



Set Net Zero targets, including a long-term science-based target

Targets should be in line with limiting temperature rise to 1.5°C. When setting a 1.5°C aligned science-based target you should consider the feasibility and decarbonisation initiatives necessary to meet the trajectory before committing to a Net Zero target. The SBTi says: "A company is only considered to have reached Net Zero when it has achieved its long-term science-based target." [Once a company has committed to the SBTi to set a science-based target](#), it has a maximum of two years to set the target, submit for approval by the SBTi and communicate externally. [The SBTi has more details on getting started](#).



Make commitment to Net Zero by neutralising residual emissions

Net Zero targets should be accompanied by a science-based target aligned to 1.5°C, but also bring in an additional aspect of compensating for residual emissions using greenhouse gas removals. By 2050, organizations must produce close to zero emissions and will neutralise any residual emissions not possible to eliminate by permanently removing an equivalent volume of atmospheric CO₂.

Communicate your Net Zero target

Net Zero targets demonstrate to your clients, employees and other key stakeholders how your organisation is transitioning towards a Net Zero economy and committing to ambitious action on climate change. But as more and more companies announce Net Zero targets, your communication will be under increasing scrutiny. It is vital for you to be transparent about the work you will be undertaking to achieve Net Zero. Despite the surge in popularity of Net Zero emission reduction targets, historically there has not been a commonly agreed definition for companies to work to.

Make it clear what reductions you will achieve in reported Scope 1, 2 and 3 emissions

What percentage reduction will be achieved, and by when, for the different Scopes?

Explore how your company may invest in beyond value-chain mitigation opportunities

What type of investments would support the journey to Net Zero or similar?

Share that you are committed to neutralising your residual emissions in the target year and beyond

What credible and measurable removal methods will you use?

Publish information about the target on your website, including any progress you make along your journey

This will help support announcements in the media.

Keep your communication and marketing colleagues informed

Ensure they understand the work you are doing to mitigate any brand risk or greenwashing concerns, plus what terms can and can't be used.



The Route to Net Zero Standard

Certifying your journey to climate leadership

What is it?

With many companies worldwide setting science-based emission reduction targets, the challenge now is creating and delivering the action plans to achieve success. To help address this, the Carbon Trust's [Route to Net Zero Standard](#) is a key driver in the mission to accelerate the move to a decarbonised future.

The Route to Net Zero Standard will support companies in the development and evolution of their action plans, helping to measure and manage their emissions, inform carbon reduction strategies and align targets for the future – all with tailored advice from our trusted experts.

Whether you're just getting started, or leading the way on the route to Net Zero, we'll independently verify your carbon reductions and guide you in taking the next steps towards decarbonisation. We'll provide all the support you need to clearly and confidently communicate your commitment to a global audience.

How is it unique?

The Route to Net Zero Standard is the only certification that recognises an organisation's progress on their route to Net Zero, acknowledging that companies in different industries, geographical locations and facing diverse challenges, may be at different stages.



The Route to Net Zero Standard



How does it work?

We've developed three certification tiers to guide you on your journey to Net Zero.

As you progress through the tiers, the qualifying requirements will become more challenging and cover more aspects of carbon management. Companies will receive tailored support from our experts to increase their climate ambitions over time, and guidance on how to align to science-based targets and best practices. We will also help organisations communicate their progress to stakeholders through marketing communication resources.



STARTING YOUR JOURNEY

The Route to Net Zero Standard



ROUTE TO
Net Zero
STANDARD

Demonstrate your
progress towards Net
Zero with confidence.

Why the Carbon Trust

Our mission is to accelerate the move to a decarbonised future. We are your trusted, expert guide on the route to Net Zero, sharing our experience from the climate change frontline. We have been pioneering decarbonisation for more than 20 years, driving real change with leading businesses, governments and organisations. We are one global network, drawing on the skills and know-how of over 300 colleagues across five continents.

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