



# Decarbonisation Roadmap Summary

April 2024  
Version 1



# Welcome to our Decarbonisation Roadmap

As one of the UK's busiest rail networks, Southeastern facilitates sustainable travel choices and serves as a vital link connecting communities across London, Kent, and parts of East Sussex. We are proud custodians of a network that has the power to shape the lives of generations to come. Recognising this responsibility, we are committed to take action to reduce our carbon footprint.

Our extensive network, which includes the UK's first domestic high-speed service, serves 180 stations, which are connected by 540 miles of track. We carry more than 400,000 passengers every day, operating over 1,600 passenger trains, all of which are electric. However, our operations are still energy intensive, making it essential that we reduce our carbon footprint in line with the latest climate science.

This summary document outlines our strategic path towards achieving net zero carbon emissions from our operations by 2035, with an extended ambition to become net zero across our entire supply chain by 2050.

The climate crisis is undoubtedly one of the most pressing challenges of our time, demanding immediate

action to address its far-reaching impacts. Whilst we are already witnessing the consequences of climate change, there is still time to reduce our greenhouse gas emissions to limit further global warming and its devastating impacts. The latest climate science from the IPCC - described by the UN as "code red for humanity" - shows it is still possible to limit global temperature rise to 1.5°C, but we are dangerously close to that threshold.

Whilst rail transportation is comparatively less carbon intensive than other modes of travel, it is important to acknowledge that it is not emission-free. As such, we have a responsibility to demonstrate leadership and collaborate with others to accelerate the industry's approach to decarbonisation and climate adaptation.

By taking proactive steps towards decarbonisation, we support the ongoing development of our network for years to come. Our vision is of a future where transportation not only connects communities but supports them in transitioning to net zero.



# Our science-based targets

## Near-term target

Reduce absolute Scope 1 and 2 emissions by 70% by 2029 from a 2019 base year.

## Long-term target

Reduce absolute Scope 1 and 2 emissions by 90% by 2035 from a 2019 base year.

## Overall net-zero target

Reach net-zero greenhouse gas emissions across the value chain by 2050.

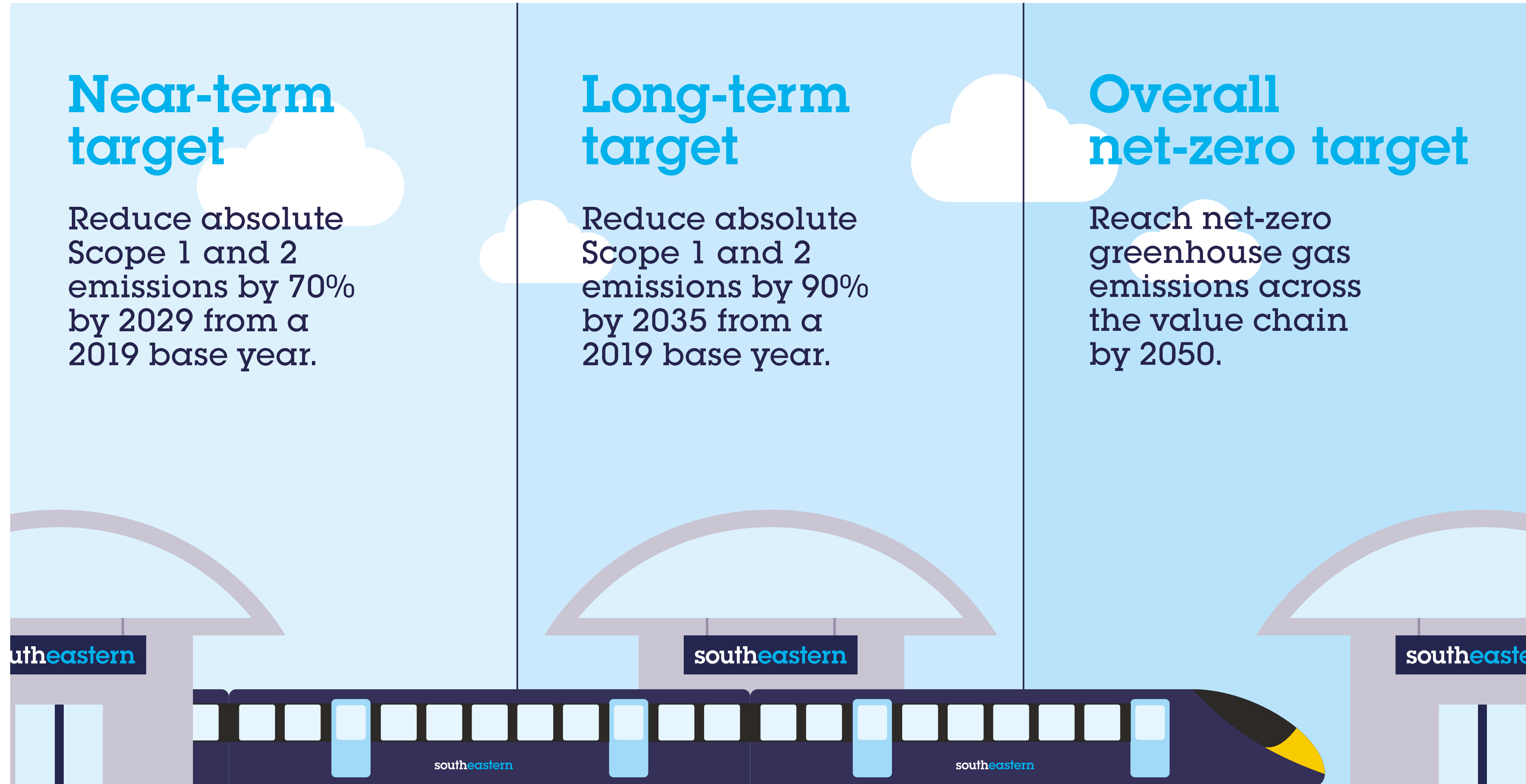
### Agreed science-based targets:

**Overall Net-Zero Target:** SE Trains Limited commits to reach net-zero greenhouse gas emissions across the value chain by FY2050.

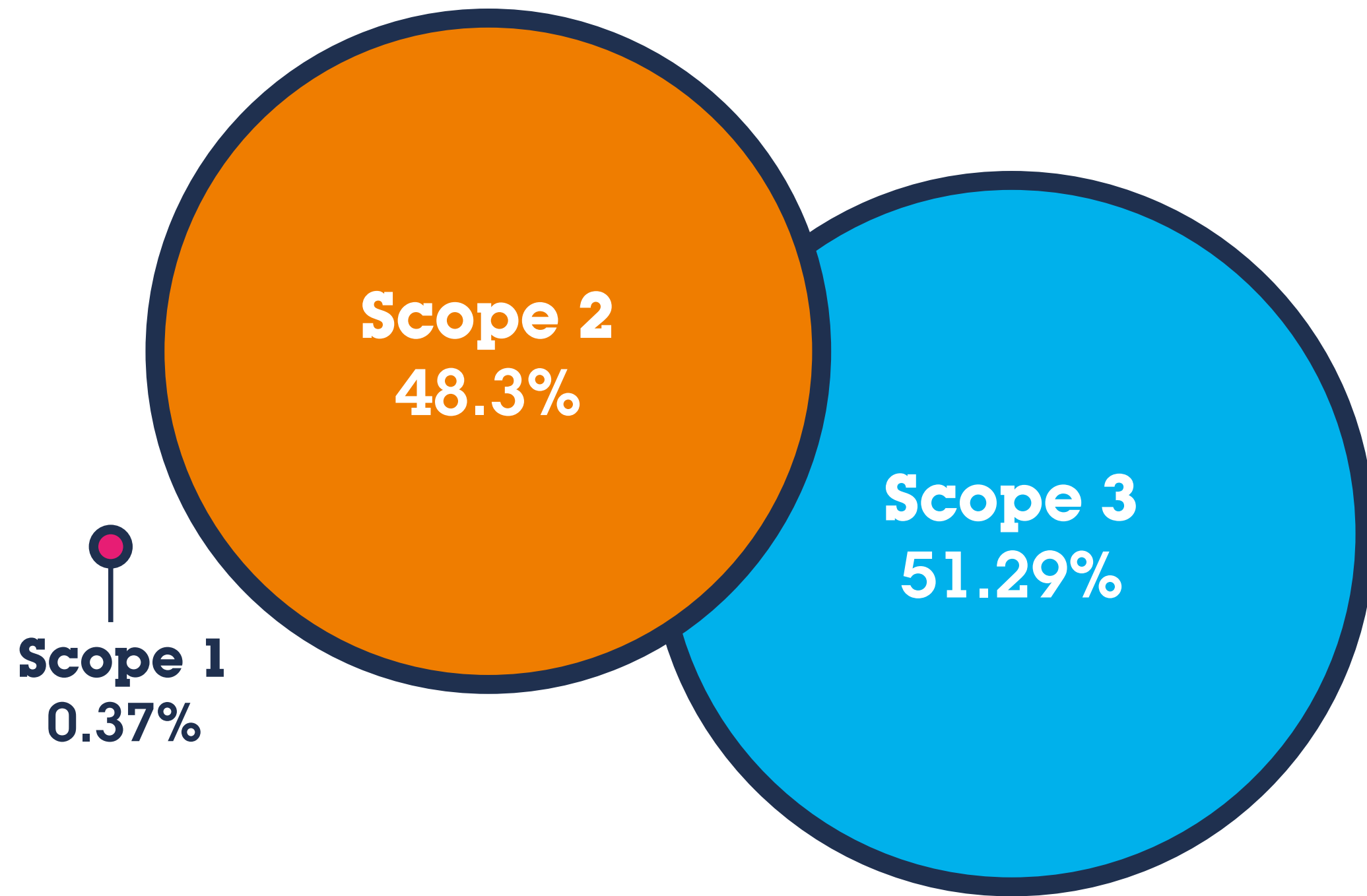
**Near-Term Targets:** SE Trains Limited commits to reduce absolute scope 1 and 2 GHG emissions by 70% by FY2029 from a FY2019 base year. SE Trains Limited also commits that 74% of its suppliers by emissions covering purchased goods and services, fuel and energy related activities and upstream transportation and distribution, will have science-based targets by FY2029.

**Long-Term Targets:** SE Trains Limited commits to reduce absolute scope 1 and 2 GHG emissions by FY2035 from a FY2019 base year, and maintain at least 90% reductions through FY2050.\* SE Trains Limited also commits to reduce absolute scope 3 GHG emissions 90% by FY2050 from a FY2019 base year.

\* The targets boundary includes land-related emissions and removals from bioenergy feedstocks.



# Our carbon footprint



Type of emissions	Kilotonnes* of carbon in 2019 (baseline year)	What's covered in this category?
<b>Scope 1</b>	1.24kt	Scope 1 emissions refer to direct greenhouse gas emissions that occur from sources that are owned or controlled by our organisation. These are emissions from the combustion of fossil fuels such as natural gas in our stations and buildings. Fuel used by our vehicle fleet and F-gases used by our AC systems.
<b>Scope 2</b>	160.25kt	Scope 2 are the indirect greenhouse gas emissions associated with the generation of purchased electricity used for operating our trains and powering our buildings.
<b>Scope 3</b>	170.07kt	Scope 3 refer to indirect emissions that result from our supply chain activities. These emissions are related to all our purchased goods and services, our waste, business and employee travel, transmission and distribution of electricity and well to tank for fuels used.
<b>Total</b>	<b>331.56kt of CO<sub>2</sub>e</b>	

\* One kiloton (kt) is a unit of mass equal to 1,000 metric tonnes. To put this in perspective, 1 kilotonne = 1,000 tonnes

# High level plan for the next 5 years

## Actions to support decarbonising our trains

Energy efficiency and climate resilience principles have been factored into our specification for new train fleets

## Actions to support decarbonising our stations and buildings

We will continue to expand the implementation of LED lighting across our facilities to enhance energy efficiency, reduce carbon emissions and operational costs.

Expand our solar PV installations across our sites where feasible.

## Actions to support supply chain decarbonisation

Encourage our strategic suppliers to align with our net-zero goals and to set their own science-based targets by 2029.

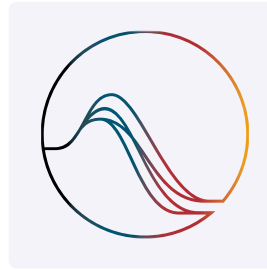
Supporting key SMEs in our supply chain to transition to net zero carbon.

## Overarching actions

Publish our Climate Transition Action Plan. This will holistically consider decarbonisation and climate adaptation.



# Decarbonisation terminology explained



## What is the Science Based Targets initiative (SBTi)?

The Science Based Targets initiative (SBTi) is a collaboration between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). The SBTi defines and promotes best practice in science-based target setting and independently assesses companies' targets.



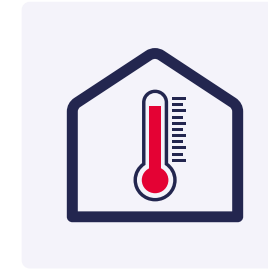
## What are science-based targets?

Science-based targets provide a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions, helping prevent the worst impacts of climate change. Targets are considered "science-based" if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels.



## Carbon Dioxide equivalent (CO<sub>2</sub>e)

Carbon dioxide equivalent also known as CO<sub>2</sub>e is a way to measure and compare the impact of different greenhouse gases on the environment. It represents the amount of carbon dioxide (CO<sub>2</sub>) that would have the same global warming effect as another greenhouse gas, like methane or nitrous oxide, over a specified period of time. Using CO<sub>2</sub>e helps us understand and communicate the overall impact of various greenhouse gases in terms of their contribution to climate change.



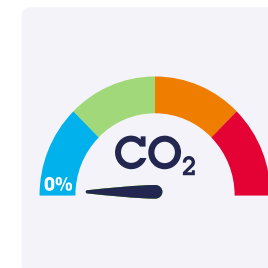
## Greenhouse gases

Greenhouse gases are gases in the atmosphere that trap heat from the sun, warming the planet like a blanket. They include gases like carbon dioxide, methane, and nitrous oxide. Whilst these gases are naturally present and important for keeping the Earth warm enough to support life, human activities such as burning fossil fuels, have increased their levels leading to global warming and climate change.



## Absolute reduction

Absolute reduction means a reduction in the total emissions. To tackle climate change total emissions must go down so an absolute reduction is the most relevant measure.



## Net-zero

means achieving a balance where the amount of greenhouse gases emitted into the atmosphere is equal to the amount removed from the atmosphere. In simpler terms, to achieve net-zero, any remaining emissions when the long-term science based target is achieved (no greater than 10%) must be neutralized through carbon removals.



## Carbon footprint

The carbon footprint for an organisation refers to the total amount of greenhouse gas (GHG) emissions generated directly or indirectly by all its activities.