

# Building your Net Zero roadmap

A guide for industry leaders  
and decision makers

July 2021



from **IGD**

# Our ambition at IGD is to accelerate progress towards a sustainable food system.

We are focused on mobilising the food and consumer goods industry to tackle climate change, reduce food waste and deliver sustainable packaging systems.

We do this by bringing people and different parts of the system together, helping everyone to build knowledge, reach consensus and co-create solutions to the complex challenges we face.



**Climate change is one of the greatest challenges facing the world.**

The UK Government has committed to achieving Net Zero greenhouse gas emissions by 2050 and its great news that an increasing number of UK businesses and industry organisations within the food and consumer goods industry are committing to Net Zero by 2040.

Having spoken with many leaders and decision-makers, from businesses of all sizes across our industry's supply chain, we know there is a huge appetite to innovate and lead our industry's transition to a Net Zero economy. We also know that for many businesses it's not always clear where to start the journey.

We have partnered with climate change specialists [South Pole](#) to create this new guide which is designed to help business leaders and decision makers kick start their Net Zero journey.

It includes the business case for urgent action and a new framework for a robust Net Zero strategy, including how to make a start and build momentum.

We hope you find this guide inspiring and helpful in driving action in your business and through your supply chain. We look forward to your feedback and to working closely with you on this issue.

**Susan Barratt** CEO, IGD

“ Simple, practical guidance is essential to engaging all businesses in the race to Net Zero and I very much welcome this guide developed by IGD.

We need UK businesses to be at the forefront of decarbonisation: given our heritage of innovation and our global supply chains, the positive actions we take here will cascade across the world.

”



**Andrew Griffith MP**

UK Net Zero Business Champion

# There is a huge opportunity for businesses of all sizes to innovate and lead the UK's transition to a Net Zero economy.

Use our free guide to make a start, build momentum and achieve a leadership position on your journey towards Net Zero.

You can contact us for more information, best practice guidance and to share your Net Zero journey progress at

[sustainability@igd.com](mailto:sustainability@igd.com)

**Social Impact** from **IGD**

# Contents

## Acknowledgements

We would like to thank the industry partners who contributed their time and insights in the preparation of this report.

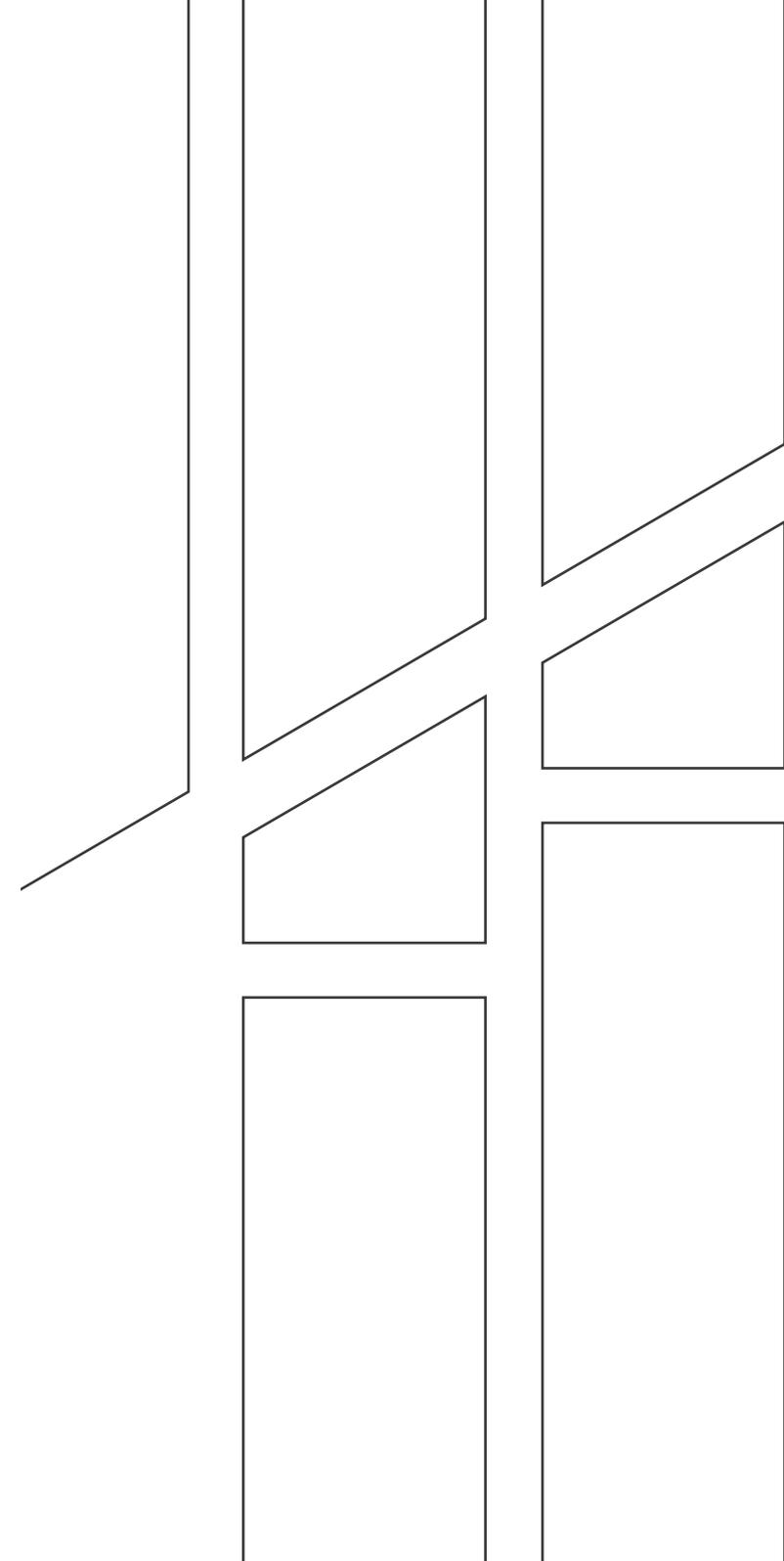
## **Climate change caused by human activities is one of the greatest challenges facing the world.**

The UK Government has committed to achieving Net Zero greenhouse gas emissions by 2050 and an increasing number of UK businesses and industry organisations are committing to Net Zero by 2040.

There is an opportunity for businesses of all sizes and across all parts of the value chain to work in partnership to tackle carbon hotspots and accelerate the UK's progress towards Net Zero. Businesses leading the transition to a Net Zero economy are set to benefit through gaining competitive advantage, building more resilient businesses models and exceeding stakeholder expectations.



There are five key areas where businesses of all sizes can act to accelerate progress towards Net Zero. For each of these areas, we set out how businesses can make a start, build momentum and achieve a leadership position.



**Climate change:**

The case for  
urgent action

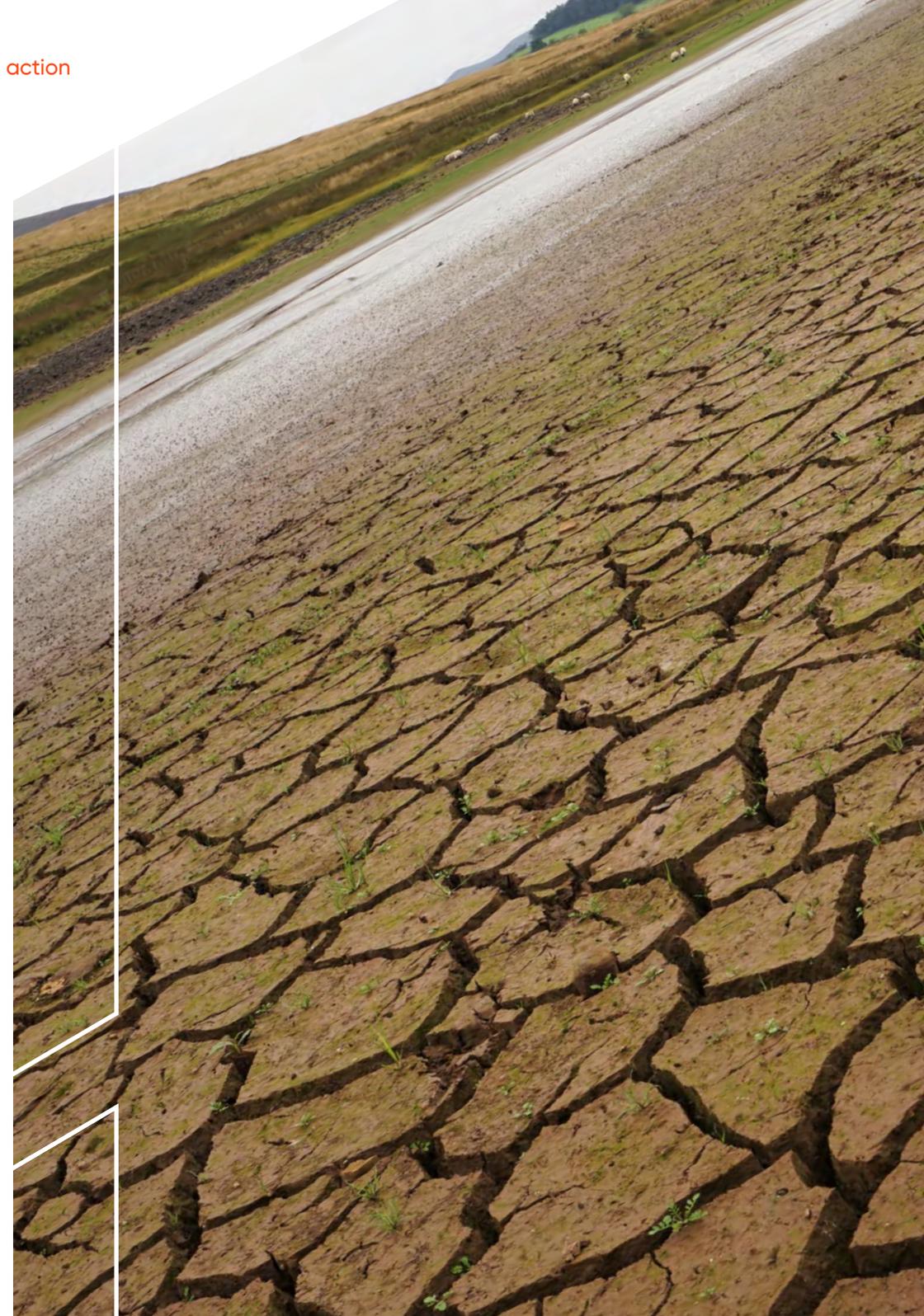
# The climate emergency

Climate change is one of the greatest challenges facing the world.

Greenhouse gases from human activity have already led to 1.2°C of global warming from pre-industrial levels, which has resulted in damaging impacts on lives, infrastructure, agriculture and ecosystems.

Global emissions of greenhouse gases will continue to rise without immediate action. Under current policies, global temperatures will rise by around 3°C by the end of this century.

The United Nations Intergovernmental Panel on Climate Change has concluded that we need to keep global warming to a maximum of 1.5°C to avoid irreparable damage and catastrophic consequences for people and our planet.





To do so, the world needs to reduce its emissions by 50% by 2030 and achieve – at a minimum – Net Zero emissions by 2050. Net Zero emissions will be achieved when all greenhouse gas emissions released by humans are counterbalanced by removing greenhouse gases from the atmosphere through nature-based or technology solutions.

The UK Government has committed to a 68% reduction in greenhouse gas emissions by 2030, 78% by 2035 and to achieve Net Zero by 2050. Close to 130 other nations, representing 70% of global gross domestic product, have also committed to Net Zero targets within the next three decades.

**Businesses across all industries have a central role to play in delivering greenhouse gas emissions reduction targets and achieving Net Zero**

# The pathway to Net Zero

For businesses, delivering Net Zero will involve two main elements:

**Deep carbon reduction – at least 50% reduction by 2030:** as a priority, businesses must rapidly reduce human-caused emissions – such as those from fossil fuel use or deforestation – from across their value chain be to as close to zero as possible

**Carbon neutralisation through removals – as a minimum by 2050:** once deep carbon reduction has been delivered, any remaining emissions that are difficult to avoid should be neutralised with an equivalent amount of carbon removal through nature-based solutions like restoring forests or technology such as direct air capture and storage

# The role of the food supply chain

The food supply chain is responsible for approximately 26% of global greenhouse gas emissions annually.

At the same time, the industry is on the frontline when it comes to experiencing the effects of climate change. However the industry also holds many of the solutions to delivering a Net Zero world, including:

- ▶ Ensuring sustainable and resilient agricultural systems
- ▶ Switching to renewable energy
- ▶ Promoting resource efficiency and circularity from farm to fork, including tackling food waste
- ▶ Making healthy and sustainable diets affordable and accessible to all

An increasing number of UK food businesses and industry bodies are committing to Net Zero by 2040 including:



[British Retail Consortium](#)



[Food and Drink Federation](#)



[National Farmers Union](#)

There is an opportunity for businesses of all sizes and across all parts of the value chain to work in partnership to **tackle carbon hotspots and deliver a Net Zero UK food industry**

# The business case

Businesses leading the transition to a Net Zero economy are set to benefit in three main ways:

## Gaining competitive advantage

Innovation and efficiency will lead to new revenue generation and cost saving opportunities. Immediate action will help businesses stay ahead of customer requirements and new regulatory and carbon tax/ pricing schemes. Strong commitments and their delivery will result in better access to financing and reduced insurance costs.

## Building resilient business models

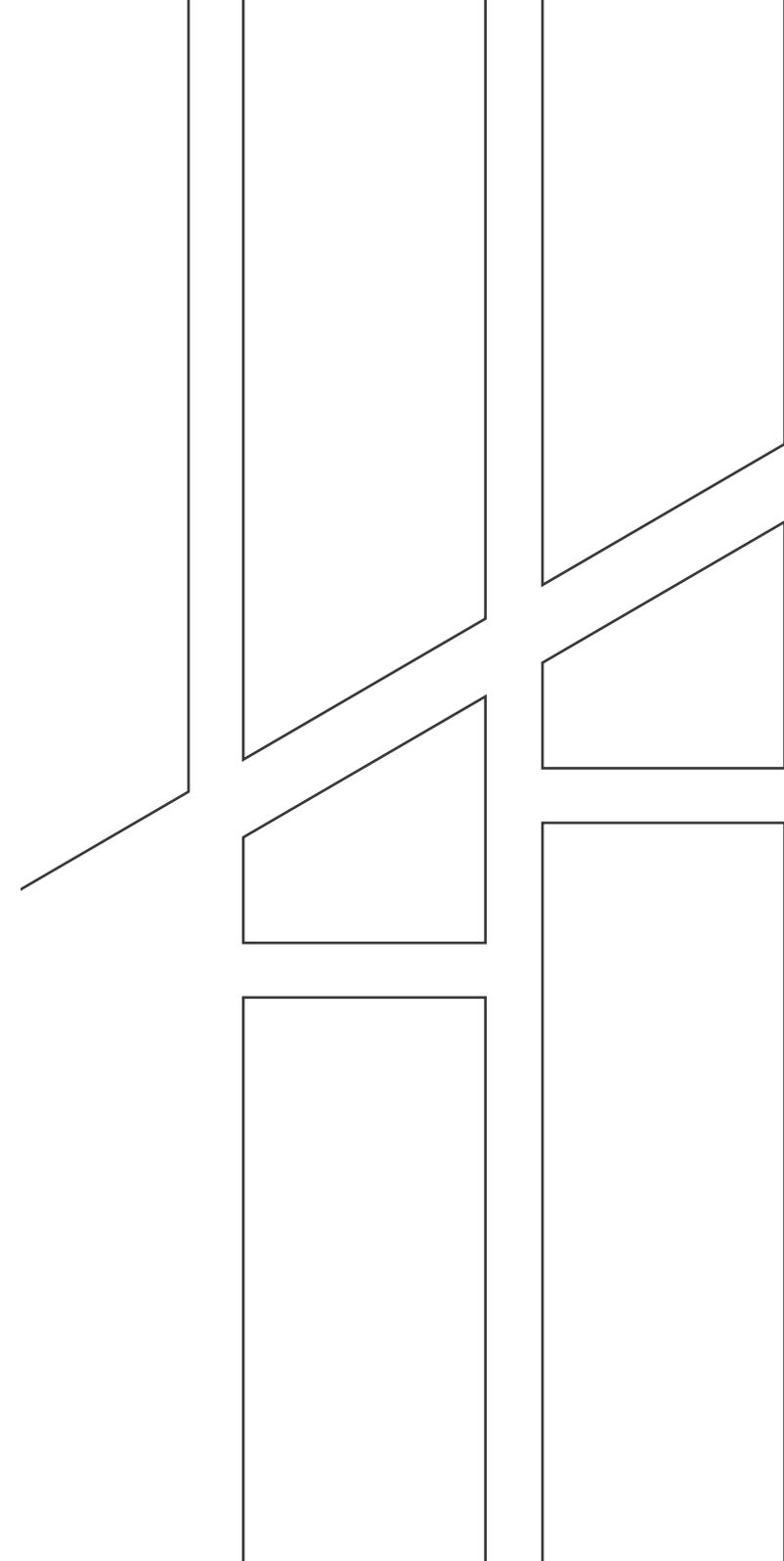
Building partnerships and investing in supply chains will help drive efficiency and increase resilience to existing and future impacts of climate change. Responding to growing consumer preferences for lower carbon products and services presents an opportunity for new business models and sustained growth.

## Exceeding stakeholder expectations

Leadership will build trust and drive engagement with customers, investors, colleagues, suppliers, consumers and communities.

# **A strategic framework for Net Zero**

There are five key areas where businesses of all sizes can act to accelerate progress towards Net Zero. For each of these areas, we set out how businesses can make a start, build momentum and achieve a leadership position.



# Measure

An important starting point is understanding the relationship between the activities delivered across business operations and the value chain, and the greenhouse gas emissions that are generated as a result.

This provides the basis from which to set targets and a roadmap for their delivery.





The [Greenhouse Gas Protocol](#) standard has been developed to enable businesses to calculate their greenhouse gas emissions across the full value chain.

A carbon footprint analysis involves two main steps:

1. Collecting the relevant business activity data related to the Scope 1, 2 and 3 emissions sources
2. Applying greenhouse gas 'emissions factors' to convert these activities into greenhouse gas emissions. The [Greenhouse Gas Protocol Agriculture Guidance](#) provides a list of tools to help calculate agricultural emissions

Based on this understanding, you can also start identifying and assessing the impact of current and emerging climate risks (physical, transitional, liability) using climate change scenario analysis, as per the [Task Force for Climate-related Financial Disclosures](#) (TCFD) guidelines.

In Spring 2021, the UK Government sought views as part of a consultation on whether to make TCFD disclosure [mandatory](#) for businesses with a turnover of over £36 million in the UK by 2025.

# Scope 1, 2 and 3 greenhouse gas emissions

Direct or 'Scope 1' greenhouse gas emissions are generated through producing products or delivering services. Common activities resulting in Scope 1 emissions include:

- ▲ Fuel used to operate equipment in processing sites and in company-owned vehicles
- ▲ Gas consumption for heating
- ▲ Use of refrigerant gases for cooling

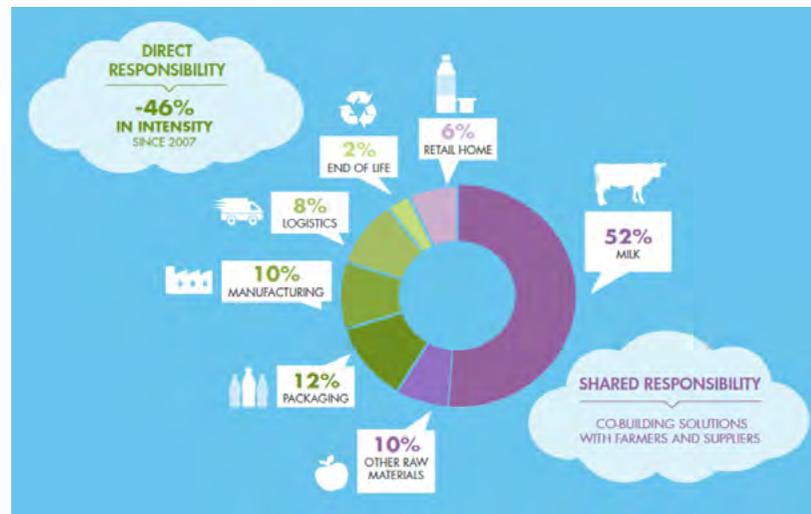
Scope 2 emissions are indirect emissions related to purchased electricity, heat, and/or steam used on sites.

Scope 3 emissions are indirect emissions from sources upstream or downstream of business' sites. Common activities resulting in Scope 3 emissions include:

- ▲ Production/extraction of raw materials (e.g. agriculture ingredients, minerals, chemicals)
- ▲ Processing and transport of upstream products
- ▲ Services acquired by the business (e.g. outsourced logistics, construction of new facilities)
- ▲ Energy emissions associated with the use of the product, and any end-of-life processing or treatment

# Example carbon footprints

Carbon footprint data reported through the Carbon Disclosure Project (CDP) reveals that supply chain greenhouse gas emissions are on average 11.4 times higher than emissions from the own operations of a business. The breakdown of emissions can vary greatly, depending on the nature of the business, and highlights the areas that require focus.



Danone's carbon footprint for scope 1, 2 and 3 as reported in its 2020 [CDP](#) submission. Footprint is 27,518,028 tonnes CO<sub>2</sub>e.

Source: Danone Climate Policy

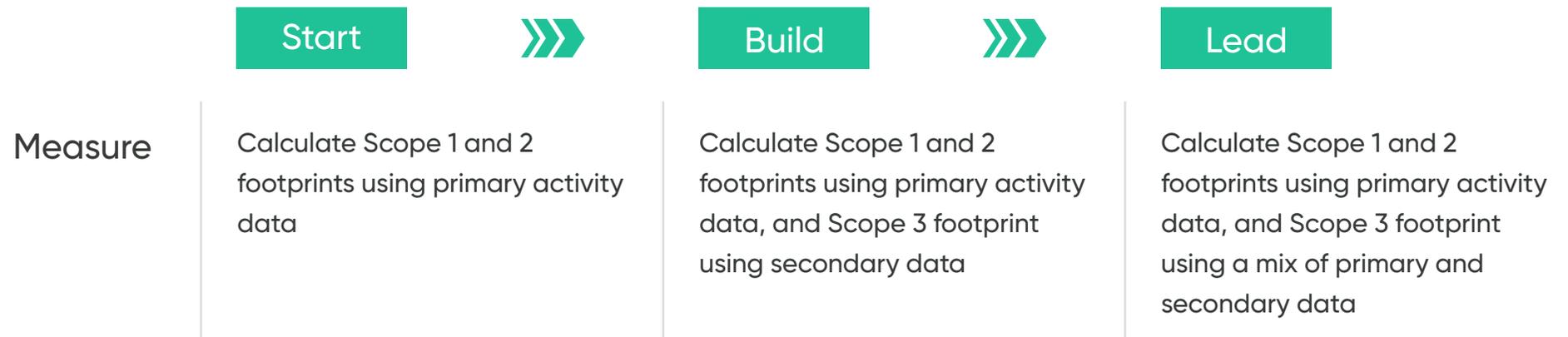


The Coca-Cola European Partners' carbon footprint for scope 1, 2 and 3 as reported in its 2020 [CDP](#) submission. Footprint is 4,260,142 tonnes CO<sub>2</sub>e.

Source: Coca-Cola European Partners

# Measure

Make a start, build momentum and achieve a leadership position



# Target

Setting a science-based Climate Net Zero target and developing a Net Zero implementation roadmap enables businesses to prioritise actions and reduce climate impacts at scale and pace.





## Setting a science-based Climate Net Zero target

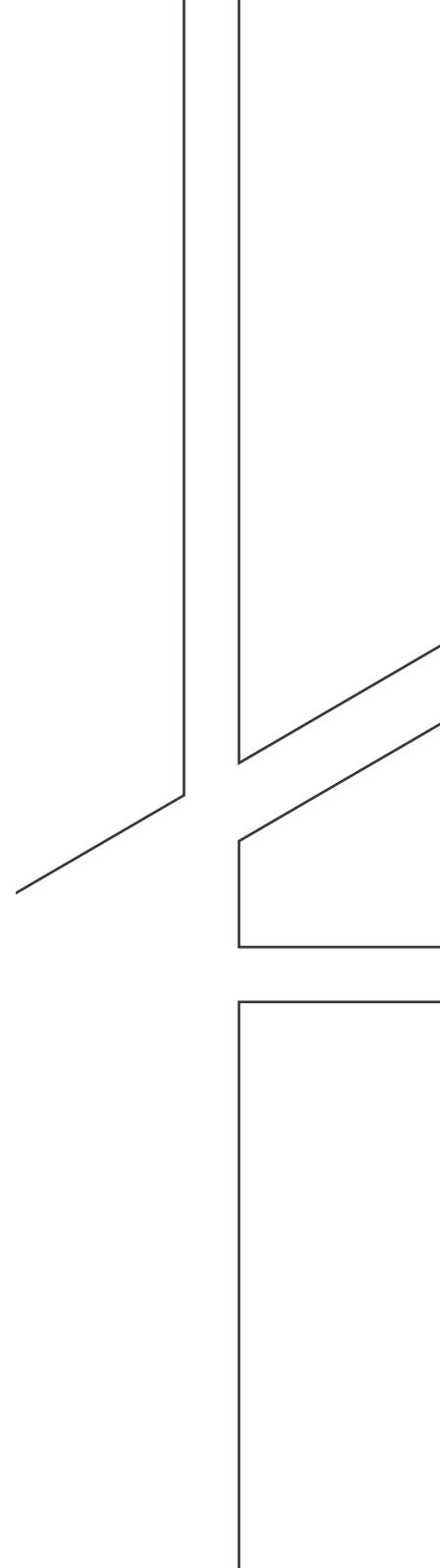
The [Science Based Targets initiative](#) has developed the most credible and widely accepted climate target setting approach, which has been applied by more than 1,500 businesses worldwide, representing over US\$15.4 trillion in turnover. It is currently finalising criteria for the setting and validation of a Net Zero target for businesses, to be published in advance of COP26 in November 2021.

The Science Based Targets initiative has developed a [new streamlined approach for SMEs](#), which only requires businesses to set targets for Scope 1 and 2 and take action on Scope 3. The organisation defines SMEs as a non-subsidiary independent business with fewer than 500 employees.

# Developing a Net Zero roadmap

Key actions to develop a robust Net Zero roadmap include:

- ▶ Identify your material carbon hotspots across your Scope 1/2/3 carbon footprint
- ▶ Identify the potential practical reduction activities that can significantly reduce these greenhouse gas emissions
- ▶ Assess in further detail these interventions and the associated carbon reduction potentials, implementation costs and savings
- ▶ Based on your ambition, strategy, science-based targets and finances, prioritise the carbon reduction interventions and develop your Net Zero roadmap and associated financing plan
- ▶ Develop a high level delivery framework including accountabilities and responsibilities across management levels and functions, an implementation programme and resources, and an approach to monitoring/ reporting/ verification (see the next section on implementation for further details)
- ▶ Share across the management team, build expertise, and gain full technical and financial buy-in
- ▶ Prepare to launch, communicate, build stakeholder buy-in and implement



# Target

Make a start, build momentum and achieve a leadership position

	Start	»»»	Build	»»»	Lead
Target degree pathway	Science-based targets for Scope 1, 2 and 3 emissions at a well below 2°C aligned pathway*		Science-based targets for Scope 1 and 2 at a 1.5°C aligned pathway and Scope 3 emissions at a well-below 2°C aligned pathway**		Science-based targets for Scope 1, 2 and 3 emissions at a 1.5°C aligned pathway**
Target goal year	Net Zero by 2050 (supported by interim science-based targets and a robust delivery plan)		Net Zero by 2040 (supported by interim science-based targets and a robust delivery plan)		Net Zero by 2030 (supported by interim science-based targets and a robust delivery plan)

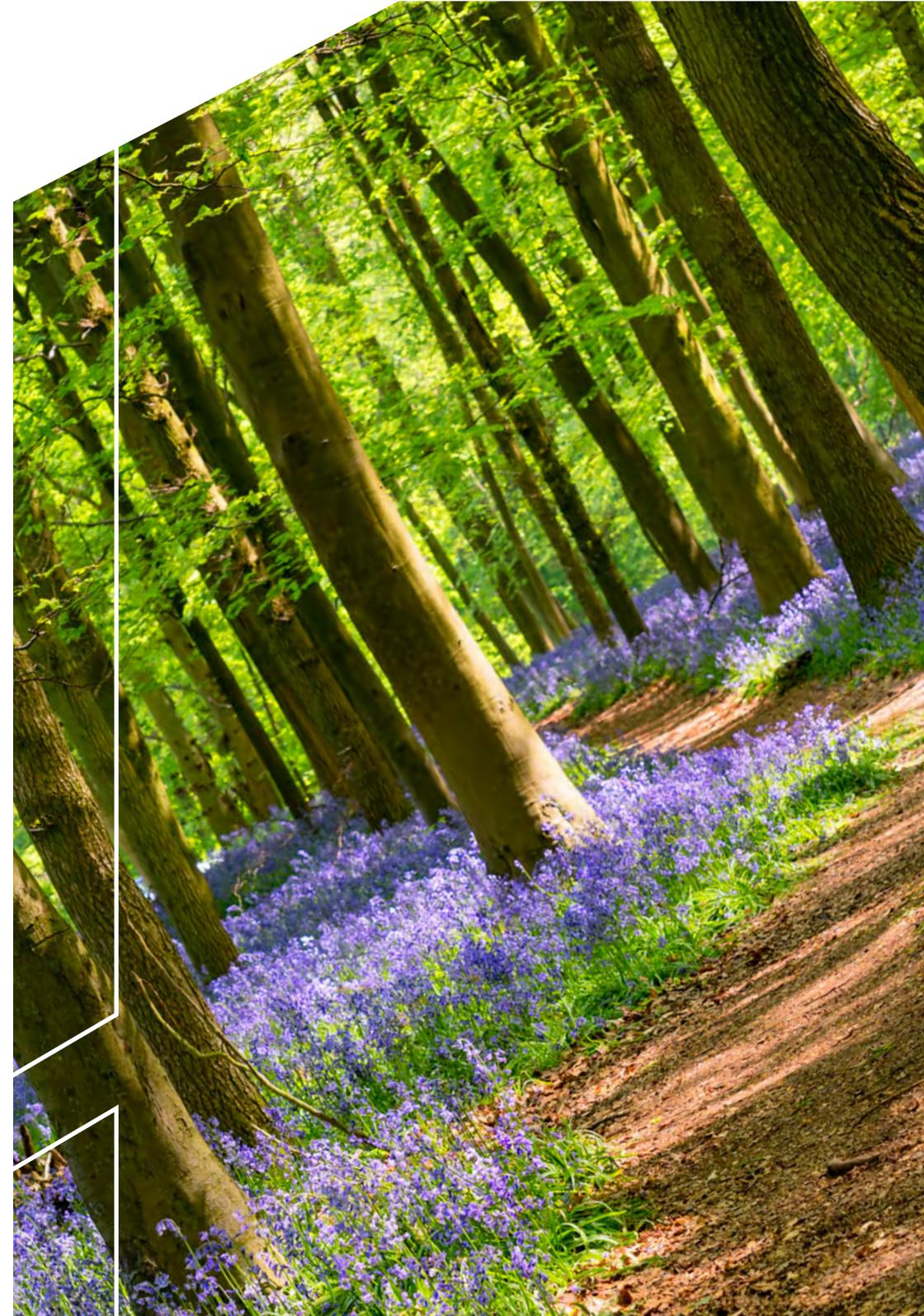
\* Target ambition **does not** qualify as part of a Net Zero claim under draft Science Based Target initiative guidelines

\*\* Target ambition **does** qualify as part of a Net Zero claim under draft Science Based Target initiative guidelines

# Implement

Climate action requires major changes to business operations and across your value chain. A robust Net Zero strategy is one that is deeply integrated into the overall strategy of a business and is fully embedded in different functions.

Working in partnership with suppliers will maximise impact and accelerate progress towards Net Zero.





## **Establish governance and embed climate action into your business**

- ▶ Ensure climate change is addressed at the highest levels of corporate leadership, including Board and CEO responsibility and oversight
- ▶ Assign clear accountabilities and responsibilities throughout the organisation for delivering carbon reductions, especially in each relevant function connected to your Net Zero roadmap
- ▶ Review and update business visions and mission statements to reflect climate targets and commitments
- ▶ Integrate carbon reduction criteria and metrics within your organisation's core processes to ensure decisions are made in line with your targets and defined roadmap e.g. capital expenditure/ operational expenditure, acquisitions, procurement, research and new product development

- ▶ Continuously improve the quality of your carbon footprint across Scope 1/2/3. Define specific KPIs to monitor performance by function and drive performance improvement
- ▶ Build expertise, capacity and empower colleagues to deliver your Net Zero strategy. Create climate champions for priority areas and foster friendly competition between teams and sites
- ▶ As best practice, align your governance and management of climate risks and performance to the recommendations of the [Task Force on Climate-related Financial Disclosures](#)



## Neutralisation through removals

In order to achieve Net Zero, businesses will have to first deeply decarbonise their Scope 1/2/3 emissions as per their science-based targets, and will then be able to neutralise their total remaining emissions through carbon removals.

Neutralisation through removals can be achieved through either nature-based (e.g. restoring forests/peatlands/ wetlands, biochar) or technology solutions (e.g. direct air capture and storage technology).





## 'Climate Neutral' vs 'Climate Net Zero'

The terms **'Climate Neutral'** and **'Climate Net Zero'** are very similar, in that they describe a point when a business balances their remaining greenhouse gas emissions with an equivalent amount of carbon credits. However, there can be key differences between these two performance claims.

Unlike **'Climate Net Zero'**, **'Climate Neutral'** claims do not always require deep decarbonisation of business' carbon footprints and can be associated with only a part of the business operations or an individual product, rather than the whole business or value chain.

**'Climate Neutral'** can be achieved through all types of carbon credits including projects which avoid, reduce or remove greenhouse gas emissions.

According to current draft Science Based Target initiative guidelines, **'Climate Net Zero'** claims can only be achieved using removals.

# Implement

Make a start, build momentum and achieve a leadership position

	Start	»»»	Build	»»»	Lead
Reductions	Meeting your interim and final science-based targets		Exceeding your interim and final science-based targets by 5-10%		Exceeding your interim and final science-based targets by >10%
Neutralisation through removals	Remove all remaining carbon emissions from the Net Zero target year onwards		In addition, deliver Climate Neutral operations/ products as a stepping stone towards Net Zero		In addition, become Climate Negative by removing more than all remaining emissions (either before or after the Net Zero target year)

# Finance

The transition to a Net Zero economy requires businesses to invest in transforming their own operations and value chains.

Harnessing internal and external financing can help accelerate progress and incentivise the delivery of a Net Zero target.



There are three broad types of financing instruments available to businesses:

### **Internal financing instruments**

Designed to set incentives within the organisation, these are often accounting mechanisms – such as an internal carbon price or carbon tax – that link monetary value to climate/ sustainability performance and ensure appropriate allocation of capital to low carbon investments.

### **Traditional external financing**

Typical corporate finance instruments (debt & equity) raised to finance interventions that have a positive Internal Rate of Return. In addition, with governments implementing national Net Zero targets, there is a significant opportunity to explore and access public-private funding schemes (e.g. grants and guarantees).

### **Climate/sustainability specific external financing**

Green/sustainable loans and bonds, and climate funds are designed to mobilise external resources to finance interventions within businesses. The co-financing of projects with supply chain actors (e.g. customers/suppliers or with public/development agencies) is another approach that could spread the investment cost and risk of decarbonisation activities.

# Finance

Make a start, build momentum and achieve a leadership position

## Financing climate action

### Start



Consider the carbon impact implications for major CAPEX and OPEX investments and select lower carbon options

### Build



Develop an internal carbon price/ tax mechanism and systematically apply this across the business, including into the CAPEX and OPEX investment process

### Lead

In addition, leverage climate and sustainability-specific external financing, such as green/ sustainable loans and climate funds

## Communicate and advocate

Leadership on Net Zero provides the opportunity to build trust and drive engagement with key stakeholders including customers, investors, colleagues, suppliers, consumers and communities.



## Reporting and disclosure

Raise internal and external awareness on climate action through reporting and disclosure of your total carbon footprint, scope, targets and progress.

Consider voluntary disclosure schemes endorsed by investors, such as [Carbon Disclosure Project](#), [Global Reporting Initiative](#) and [Task Force for Climate-related Financial Disclosures](#).

## Communicating progress and delivering shared value through climate performance

- ▲ Start with a solid foundation of tangible climate action
- ▲ Develop and spell out an authentic narrative that is accessible, inspiring, and resonates with key stakeholders
- ▲ Ensure claims are consistent with the Department for Environment, Food, and Rural Affairs' [green claims code](#), and guidance from the [Advertising Standards Authority](#)

## Leading and advocating for change

Implement employee and supplier initiatives to drive climate action within and beyond the business. Build collaborations with industry peers, NGOs and other community organisations to drive change across the industry.



# Communicate and advocate

Make a start, build momentum and achieve a leadership position

## Start



Reporting and disclosure, communicating, advocating

Reporting your carbon footprint, strategy and performance on your website/annual report/sustainability report in line the Global Reporting Initiative (GRI)

## Build



In addition, publicly disclose performance through the Carbon Disclosure Project (CDP). Communicate progress and deliver shared value through your climate performance

## Lead

In addition, advocate for change at global, national and industry levels and lead industry wide collaboration

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