



Healthcare in the spotlight  
**5 steps to net zero**



**The healthcare industry has a surprisingly high carbon footprint. Reducing emissions helps address climate change and directly benefits human health, improving outcomes and reducing costs.**

Much less attention has been focused on the global carbon footprint of the healthcare sector compared to other industries. However, as studies are beginning to highlight healthcare's impact, it's a bigger problem than many realise.

### **High emissions from the healthcare sector**

The healthcare sector has been reported to contribute to 4.4% of global net emissions – two gigatons of CO<sub>2</sub>e. That's more than the aviation or shipping sectors contribute. To give even more perspective, it would be equivalent to the fifth-largest emitter if it were a country.

Meanwhile, the pharma industry has been estimated to generate around 52 megatons of CO<sub>2</sub>e annually, with analysis suggesting

it is far more intensive than the automotive sector. By 2025, an estimated reduction in emissions intensity of 59% from 2015 levels is required for the pharma sector. Setting clear targets to reduce emissions and ultimately reach net zero will have far-reaching benefits for human health and companies alike.

Globally, the healthcare market worldwide is expected to reach US\$ 83.4 billion by 2025, while the prescription medicines market is expected to reach US\$ 1,562.1 billion by 2026. However, managing the impact of health issues influenced by air pollution, extreme temperatures, and other environmental factors contributes to healthcare costs (an annual estimated US\$ 800 million in the US), creating a self-fulfilling circle.





## A wider impact

There are other factors at play, such as rising healthcare costs, the impact of deforestation and an increase of diseases, including those that cross animal-human barriers. Surprisingly, perhaps, these three elements are linked. A '[radical listening](#)' study in the mid-2000s looked at the drivers of deforestation and found a driver to be illegal logging in order to pay for healthcare. Fast-forward, and since the creation of a health clinic, deforestation has decreased by [70% over a decade](#).

Retaining forests has clear benefits for [carbon sequestration](#), but there's another consideration: that of constraining infectious diseases. Removing the complex ecosystems through land-use change, such as deforestation, can result in an [increase in transmissible diseases](#) from mammals to humans, as well as a rise in [vector-borne diseases](#) from mosquitoes and ticks.

Consider also the significance of the UN Sustainable Development Goals that include [good health and wellbeing](#), with a target to substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination by 2030, as well as the goals for [Life on Land](#) and [Climate Action](#). Actions for these goals address the issues of climate change, forest degradation and health.

By lowering emissions, health systems and related organisations may indeed contribute to better health. This might not only reduce the cost of care – one of the biggest woes in the global health system – but also help tackle climate change.



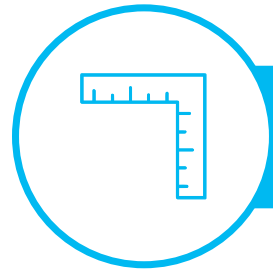
So, how can your organisation set a credible path towards net zero and play your part in this global challenge?



“Tackling climate change could be the greatest global health opportunity of the 21st century.”

– The Lancet





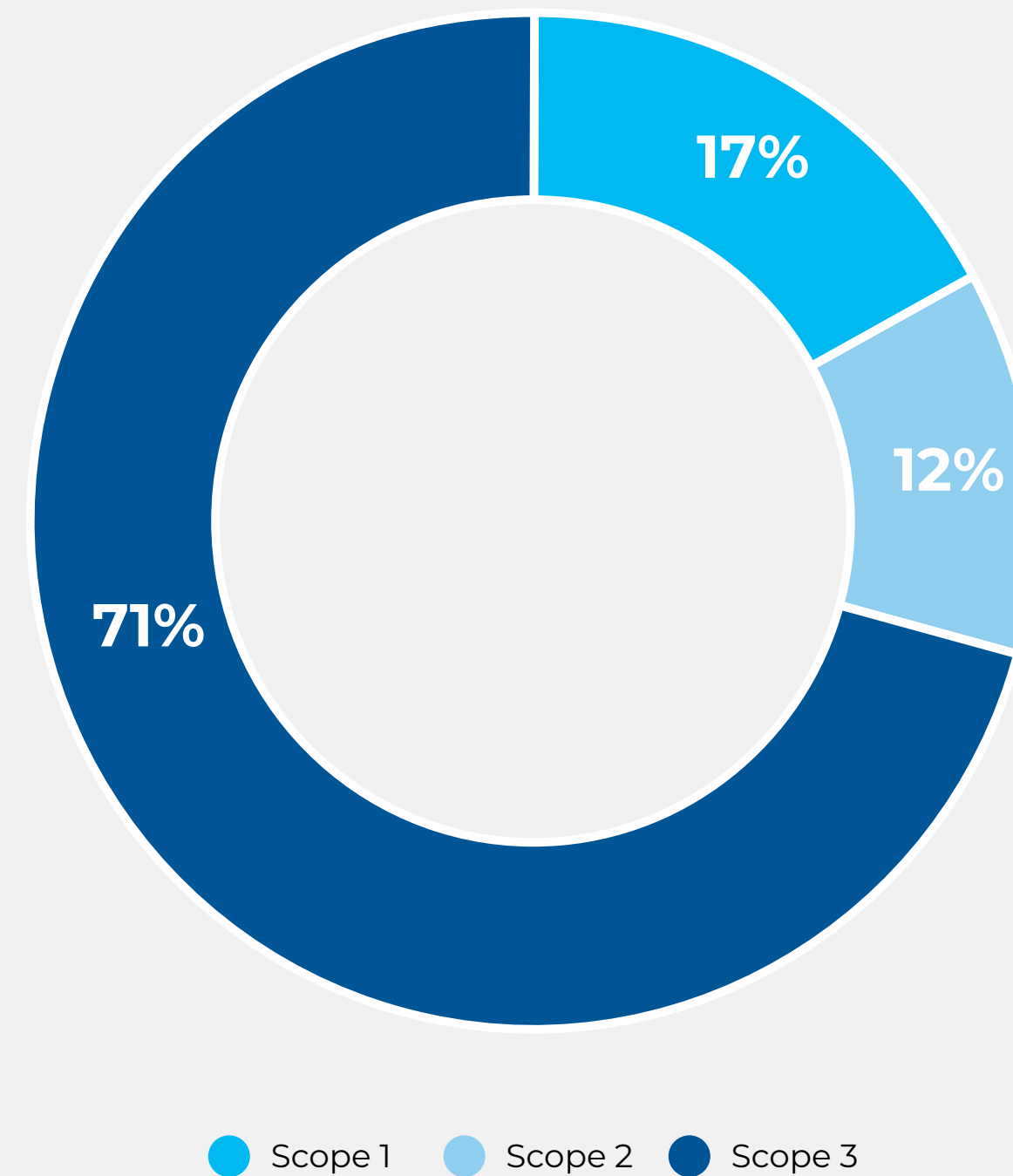
## Step 1: Measure your emissions and risks

The first step on the journey to net zero is to understand and quantify climate impacts by measuring greenhouse gas (GHG) emissions across operations and supply chains.

For organisations throughout the healthcare industry, capturing and reporting scope 1 and 2 emissions is generally straightforward. However, with a large upstream and downstream supply chain, measuring scope 3 often presents a challenge.

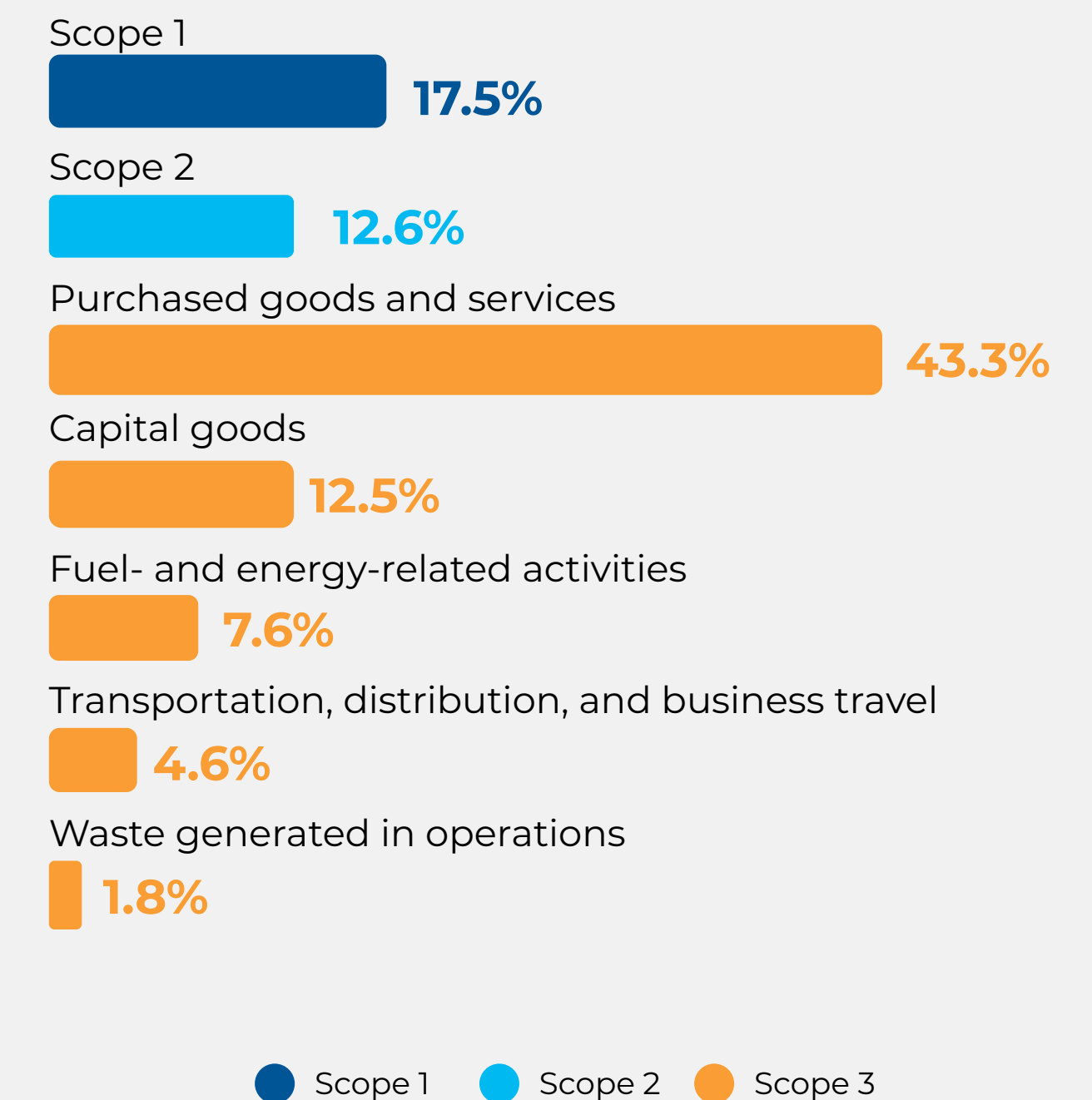
A [2019 study](#) mapped the global healthcare carbon footprint (see figure 1), showing over 70% of emissions are from scope 3 and the supply chain. This number is not surprising given the many elements involved in production (e.g. raw material use, manufacturing discharges to the environment), product or service use, transportation of goods and patients, and end-of-life processes such as waste management. However [complex scope 3](#) may be, companies in the sector must take steps to quantify their upstream and downstream emissions and understand their risks.

Figure 1: Global healthcare carbon footprint



Source: [Health Care's Climate Footprint](#)

Figure 2: Healthcare global emissions footprint by GHG Protocol supply chain categories and sub-categories



Source: [Healthcare Climate Action](#)



In addition to carbon emissions, healthcare and pharma organisations are becoming increasingly exposed to the impacts of climate change, such as extreme temperature variations, flood risk and [water scarcity](#). Physical healthcare sites, such as hospitals, need to consider the suitability of their infrastructure and accessibility, while manufacturing sites should review the [placement of their operations](#) for climate resilience. The impact of [climate on the workforce](#) is a further consideration.

Climate change scenario analysis is emerging as an essential tool for understanding physical and transition risks. Disclosure in line with the Task Force on Climate-related Financial Disclosures (TCFD) framework is [soon](#) to become mandatory for companies in the [UK](#), and countries such as New Zealand and Singapore, which have already mandated disclosure for financial institutions, are likely to follow suit. The [number of TCFD supporters](#) has grown in the past four years from 513 to 2,616. However, only eight companies in the [healthcare](#) and [pharma](#) sectors have included their reports in the TCFD database, and five of these have assessed their business models against a 1.5°C warming scenario.

Running climate change scenarios generates valuable insights into business resilience, for example, by highlighting potential financial impacts and shareholder losses associated with achieving the goals of the Paris Agreement, while highlighting the risks of capital allocation towards infrastructure or reserves. Opportunities can also be identified such as improved business models or product development, which can unlock new value streams for companies.



## Case Study



### **Taking the first steps toward becoming a sustainable healthcare organization**

Natera provides cell-free DNA (cfDNA) testing for more personalised health decisions, specialising in women's health, oncology and organ health. It aims to innovate with integrity while making personalised genetic testing and diagnostics a standard part of healthcare.

As an organisation that strives to help people on their health journeys, Natera recognises the importance of getting started on its climate journey. South Pole worked with Natera to guide the company through its climate ambitions and figure out how to take the first steps on its journey. Before setting targets or making any claims, the first crucial step was to be transparent about its GHG emissions.

South Pole guided Natera in performing its first full GHG accounting for scopes 1, 2 and 3 emissions in 2021 and submitting it to CDP for the first time. South Pole provided flexibility and guidance to Natera's sustainability team to enable the team to request data from hundreds of suppliers as part of Natera's ongoing sustainability strategy.







## Step 2: Set SBTs and define the reduction roadmap

The SBTi's Corporate Net-Zero Standard creates a framework for companies to set robust and credible net zero targets in line with a 1.5°C future. The standard sets out precise requirements and drives consistency among net zero ambitions.

Globally, 2,300+ companies have now set and received approval from the SBTi on their science-based GHG reduction targets (SBTs), with many more companies committed to setting targets. Setting a target rooted in science, and disclosing a roadmap for achieving this can allow companies to demonstrate leadership and resiliency in a world with a narrowing carbon budget. At the end of 2021, out of a sample of 82 high impact companies in the healthcare and pharmaceutical industry, 46% had commitments and approved targets.

### Addressing the value chain

Beyond scope 1 and 2 reductions, there is a greater expectation that scope 3 targets should be included in any net zero goals. Indeed, the SBTi Corporate Net-Zero Standard requires that “near-term science-based targets must cover at least 95% of company-wide scope 1 and 2 emissions. For companies with scope 3 emissions that are at least 40% of total emissions (scope 1, 2, and 3 emissions), at least 67% of scope 3 emissions must also be covered.”

Understanding the level of emissions in scope 3 means taking an in-depth look at the value chain. A full scope 3 review of the categories for upstream and downstream activities will help to identify emissions hotspots, risks, and opportunities for reducing emissions. While it's undoubtedly daunting to undertake a full emissions inventory and create a clear reduction plan, it must be a focus for companies with a meaningful commitment to net zero.

As the SBTi recognises the challenge of quantifying scope 3 emissions, as data is often unavailable, it also allows companies to set targets based on a high-level screening of scope 3 emissions as a start. This approach is much less data-intensive. Moreover, the lack of emissions data granularity in the first few years shouldn't hinder companies from committing to targets and taking climate action. This shouldn't be delayed because of the imperfection of measurement. However, companies should screen all relevant emissions sources.

Figure 2 shows where these emissions might be found in healthcare and pharma. However, organisations need to critically assess their own operations and define appropriate targets.

With the complex nature of scope 3 accounting, leading industry practice ensures materiality is properly considered and potential issues such as double counting are avoided.



## Accountability is key

Clear roadmaps are essential to gain executive buy-in, focus on priorities and tracking of progress. Plans will need to be ambitious and include a ramp-up in low-carbon CAPEX to facilitate the urgent transition away from fossil fuels and step-change reductions in carbon intensity. It is also crucial that production targets and company growth ambitions are factored into the roadmap.

Indeed, companies must no longer develop their emissions reduction roadmaps without ensuring that [financial incentives for executives](#) are aligned to support successful outcomes. Additionally, ensuring that each employee knows how they can contribute to the net zero ambition helps drive engagement and develop an innovative mindset through the business.

## Set and define your science-based target and reduction roadmap

With the Climate Targets and Roadmap service, South Pole supports your organisation to set relevant SBTs and create a clear reduction roadmap in under 10 weeks. South Pole's straightforward and quick solution means you can spend less time and resources on planning and more on achieving your climate goals.

## Why choose our solution:



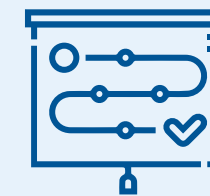
### Save time:

Set your SBTs and develop your reduction roadmap **within 10 weeks**, which gives you more time to focus on reaching your goals.



### Straightforward:

South Pole consolidates SBT guidance and provides you with easy to digest information that can be shared with relevant stakeholders for decision making.



### Maximise your existing activities:

Unlike other providers, South Pole develops an emission reduction roadmap that combines best practice reduction interventions and your key existing and planned interventions.



### 360° support:

Choose to receive guidance throughout the SBTi's submission and validation process.

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Learn more about what South Pole has to offer by downloading the [online brochure](#).

[Download brochure »](#)

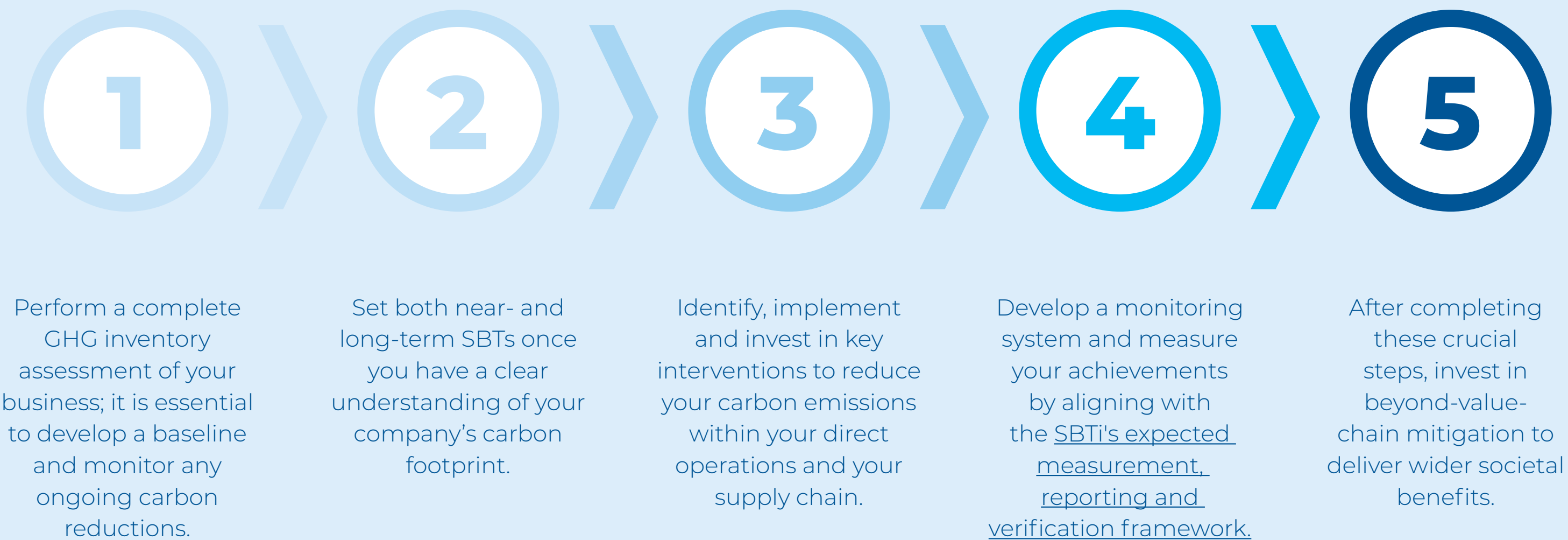


Planning for net zero

Net zero refers to a state in which the GHG emissions entering the atmosphere are balanced by the GHG emissions removed from the atmosphere. While the term ‘net zero’ is industry-agnostic, the expectation is that all companies need to reach this state on or before the year 2050. The SBTi defines two key criteria for a company to reach net zero.

- 1. Companies must achieve emission reductions in their value chain (across scopes 1, 2 and 3) in line with the 1.5°C pathway. The 1.5°C target refers to the goal set out by the Paris Agreement, which calls for all sectors of society to take concerted climate action to reduce GHG emissions in order to limit global warming to 1.5°C above pre-industrial levels.
- 2. These reductions must be supplemented by investments in the removal of GHG emissions from the atmosphere to neutralise any remaining emissions (namely, residual emissions) that a company generates.

The steps on your journey to net zero  
South Pole advises companies to follow a clear mitigation hierarchy to achieve net zero.







## Step 3: Take action to decarbonise

With energy consumption a [significant contributor](#) to the emissions footprint for healthcare and pharma, companies seeking to effect immediate change are increasingly focussing their efforts in this area. South Pole's global benchmarking shows that less than 2% of companies in the global healthcare sector have publicly committed to a 100% renewable energy (RE) target and only 15% of those have achieved it - so this presents a major opportunity to show climate leadership in the sector. Momentum to source RE continues to grow – not least because consumers, investors and employees are asking for it, but also because RE and energy efficiency are key pillars for achieving net zero emissions, while also creating savings.

Designing and implementing a renewable energy strategy achieves quick wins for reducing emissions. To implement RE successfully, partnership with the right experts is vital as different markets have different power sectors, resulting in varying availability of RE solutions. These may include some or all of the following:

- **Green tariffs** – Purchased electricity from a supplier that gets matched with RE under an energy tariff where power is bundled with energy attribute certificates (EACs)
- **Unbundled EACs** – A tracking tool that certifies energy was generated in a specific renewable facility and purchased separately from the electricity
- **EAC plus** – A long-term EAC off-take agreement
- **On-site renewables** – RE produced on a rooftop or adjacent land for direct consumption, storage or export
- **Power purchase agreements (PPAs)** – A contract to purchase power generated from a specific renewable facility

Upstream and downstream energy emissions in the supply chain also contribute to the overall carbon footprint of the sector. In order to reduce your scope 3 emissions, your suppliers will need to reduce their scope 1 and 2 emissions. One of the most effective strategies you can use to achieve this is by directly engaging your suppliers on the use of renewable energy. To address this, Novo Nordisk has set an ambitious target for all [direct suppliers](#) to use renewable energy by 2030. In addition, its top 300 suppliers – representing two-thirds of its scope 3 emissions – will have greenhouse gas reduction targets in place by 2030 as an approved SBT.

South Pole's [Supplier RE Gateway](#) is a portal which provides easy access to its full offering of corporate Renewable Energy Solutions, tailored to the unique needs of suppliers. The Supplier RE Gateway can streamline your activities wherever you are on the journey.





## Spotlight on plastics

### Managing the impact of plastics

Plastics are a point of pressure too. Virtually every company uses plastic, as it tends to be the world's packaging material of choice, particularly for healthcare and pharma applications. It's flexible, hygienic and inexpensive – meaning it's difficult for other materials, like cardboard or aluminium to compete.

The need for single-use protective clothing, medicines and medical equipment and treatment systems, has undoubtedly helped address the stem of the global pandemic over the last two years and contributed to improved health outcomes, but it's not sustainable for planetary health.

Long before the global pandemic, concerns arose over the quantities and varieties of plastics polluting water and land ecosystems, impacting human health and biodiversity. Those in the healthcare and pharma sector can make a crucial difference to the global plastics problem by taking a stand and scrutinising their packaging and the end-of-life of their plastic products.

### Taking action on plastic

For companies that are committed to taking action on plastic, a vital first step is to understand the scale of the issue. A 'plastic footprint' provides insights into the type and volume of plastic packaging being used. Furthermore, it highlights 'Plastic to Nature' leakage hotspots and suggests interventions that can be undertaken to reduce the footprint across these hotspots. Addressing plastics waste in healthcare and pharma needs to regain traction, both in terms of mitigation and reduction. Companies should look for alternative solutions, to reduce plastic packaging, such as safe options for packaging and drug delivery systems, and undertake suitable collection and sorting, where reduction is not possible.

South Pole helps organisations to understand their impacts and risks and provides recommendations to mitigate plastics in the value chain.

[Download the brochure](#) to learn more about how South Pole can support you in measuring and managing your plastic footprint.

[Download brochure »](#)



## Case Study



### Medical company helping people and the planet

Multigate is one of Australia's leading manufacturers and suppliers of procedure packs and medical consumables, both in the public and private hospital markets. Established in 1986, Multigate now employs over 400 Australians, designing, making and supplying over 2,000 products in the healthcare industry.

Multigate undertook a comprehensive review of the climate impacts of its operations. An emissions reduction plan was set, aligning the company's targets with the latest climate science. Multigate is already working on initiatives to reduce its footprint and will continue to work with the South Pole team to execute its emission reduction plan.

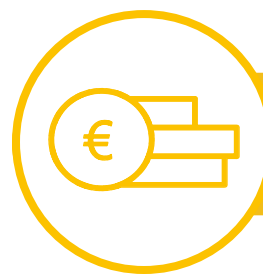
To compensate for the unavoidable emissions as part of its climate journey, Multigate has chosen to support the Antai Waste Gas Recovery Project in China, a project which uses wastewater for renewable energy production, and the Jandra/Nulty Native Forest Regeneration Project in Australia, which focuses on the restoration of native forests.

“ We chose South Pole to partner with us on our climate impact reduction journey because they are an established, recognised international company. We were excited by the comprehensive range of projects they had on offer which meet the highest international standards and make a real difference to the lives of the people and communities in the regions where these projects are located. ”

– **Sherrie Pham,**  
**Product Manager, Multigate Medical Products**







## Step 4: Finance climate action

### The role of the Voluntary Carbon Market (VCM)

In today's divided age, one of the few things that most of us can agree on is that we must dramatically increase the speed and scale of climate action today to avoid the irreversible effects of climate change tomorrow.

We must find effective and credible ways, which align with the SBTi, to finance clean technology, fair transitions, and global emission reductions. In all of this, the role of the private sector in ramping up climate action projects is critical, particularly in light of the highly insufficient action by governments.

The carbon credits sold via the Voluntary Carbon Market (VCM) are validated and verified via rigorous standards backed up by third party auditors, and have already channelled billions of dollars in finance to drive verifiable climate change mitigation – well ahead of government regulation on climate change and as standards continue to improve in line with new science, technologies, and lessons learned to ensure high quality.

### Why the VCM is a valuable tool in the climate action toolbox

Hardly any other form of financing can demonstrate the same level of transparency in measuring impacts as carbon credits can. And while voluntary markets aren't perfect, standards and methodologies are constantly improving, and the mechanism works.

Carbon credits remain one of the most viable near-term options for companies to measurably reduce global emissions beyond their value chain. With emissions-free

operations still a far-off prospect, science says that companies must invest in emission reduction activities beyond their direct operations – for example, through verified carbon credits – all while working on the long-term task of decarbonising their value chain. Done right, the VCM can deliver much-needed finance, technical capacity and significant sustainable development benefits that can help countries reach their goals and transition the world to the low-carbon future that it needs.

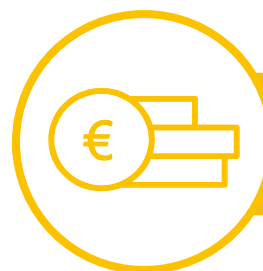
### Putting a price on emissions

Adopting carbon credits as part of a net zero strategy in line with the SBTi immediately funnels crucial financing to projects that are lowering emissions today (and cannot find funding in local capital markets). It is also – and this is key – “putting a price on carbon” which essentially means that you see what your emissions are costing your business. This becomes an immediate incentive to lower emissions over time and thus avoid this compensation cost.

[Boehringer Ingelheim](#) has applied an actual internal carbon price of EUR 100 per tonne of CO<sub>2</sub>e emitted across its business. This has driven the take-up of low-carbon technologies and runs alongside its broader environmental sustainability fund and carbon offset initiatives.

Consider, too, the increasing cost of carbon to businesses in the form of taxes and emissions trading schemes – of 68 initiatives in the latest [World Bank Carbon Pricing](#), six are already set at over USD100 per tonne of CO<sub>2</sub>e. It makes sound economic sense to reduce the carbon risk in the bottom line.





## Step 4: Finance climate action

### Supporting projects that create health benefits

The [World Health Organization estimates](#) that between 2030 and 2050, there will be an extra 250,000 health-related deaths related to climate change a year. Companies looking to invest in carbon offsets should prioritise projects that directly support health and well-being.

For example, projects that install [efficient cookstoves](#) can help to reduce air pollution and indoor smoke – meaning reduced emissions and fewer respiratory problems for the people who use them. Projects distributing [clay pottery filters](#) to remote communities also provide a multitude of valuable benefits beyond reducing emissions, by ensuring access to clean water, preventing the spread of water-borne diseases and reducing the need for plastic bottles. Projects of this kind directly support the UN SDG goals for good health and well-being and clean water and sanitation.

High-quality carbon credits, from projects such as those discussed below, adhere to a strict set of standards. Projects should be registered with a third-party internationally-recognised verification standard, such as the [Gold Standard](#), [Verra's Verified Carbon Standard \(VCS\)](#), [Social Carbon](#) and [Climate, Community and Biodiversity Standards \(CCBS\)](#), or standards verified by the [UNFCCC](#).





## Gyapa Clean Cookstoves, Ghana

More than 80% of Ghanaian households use wood or charcoal as their main cooking fuel, combined with a metal grate or 'coal-pot' that burns very inefficiently. The Gyapa Clean Cookstoves project helps to reduce emissions and indoor pollution in Ghanaian kitchens, by distributing locally-made fuel-efficient cookstoves to families throughout the country. With the reduced amount of firewood and charcoal needed for cooking, the project relieves pressure on Ghana's forests, which previously suffered mass exploitation. Positive social implications of the project include giving back time to those who are in charge of cooking, typically women and girls, which they can invest in other activities, such as going to school and socialising. The health of the cookstove users is improved due to significant reduction of indoor pollutants, whilst from a socio-economic perspective, the project provides over 900 people with valuable income and job security.



## Climate-friendly Cookstoves, Nigeria

In Nigeria, 175 million people – 9 out of every 10 – rely on wood, charcoal and other polluting biomass fuels for cooking their daily meals. This project focuses on distributing climate-friendly cookstoves, that require 50% less biomass than traditional cooking methods, thus reducing pressure on Nigeria's forests and the associated greenhouse gas emissions that come with chopping them down. The cookstoves are provided to thousands of families and small businesses across the country, reducing the exposure of those cooking to harmful pollutants. Thanks to the design of the cookstoves, users additionally save money on fuel and can spend less time cooking in the kitchen.





## Demonstrate credible climate action

Everyone, including your stakeholders, investors and customers, is aware of the climate crisis and is looking for ways to act in their daily lives. In particular, they are engaging with companies who share their climate action values and are buying products with these values in mind. You can showcase your climate action for your company or product with South Pole's Funding Climate Action label.

### The Funding Climate Action Label

The Funding Climate Action label has a QR code and landing page providing instant and full transparency about the actions you are taking along your climate journey. It demonstrates that you are taking responsibility for your company's or product's emissions and have a clear plan to reduce these over time.

Use this opportunity to display your climate action directly to your stakeholders and empower them to make decisions with their values in mind. By doing so, you meet expectations for credible climate action and transparency, raise environmental awareness for your company or product and win over a wave of climate conscious consumers.

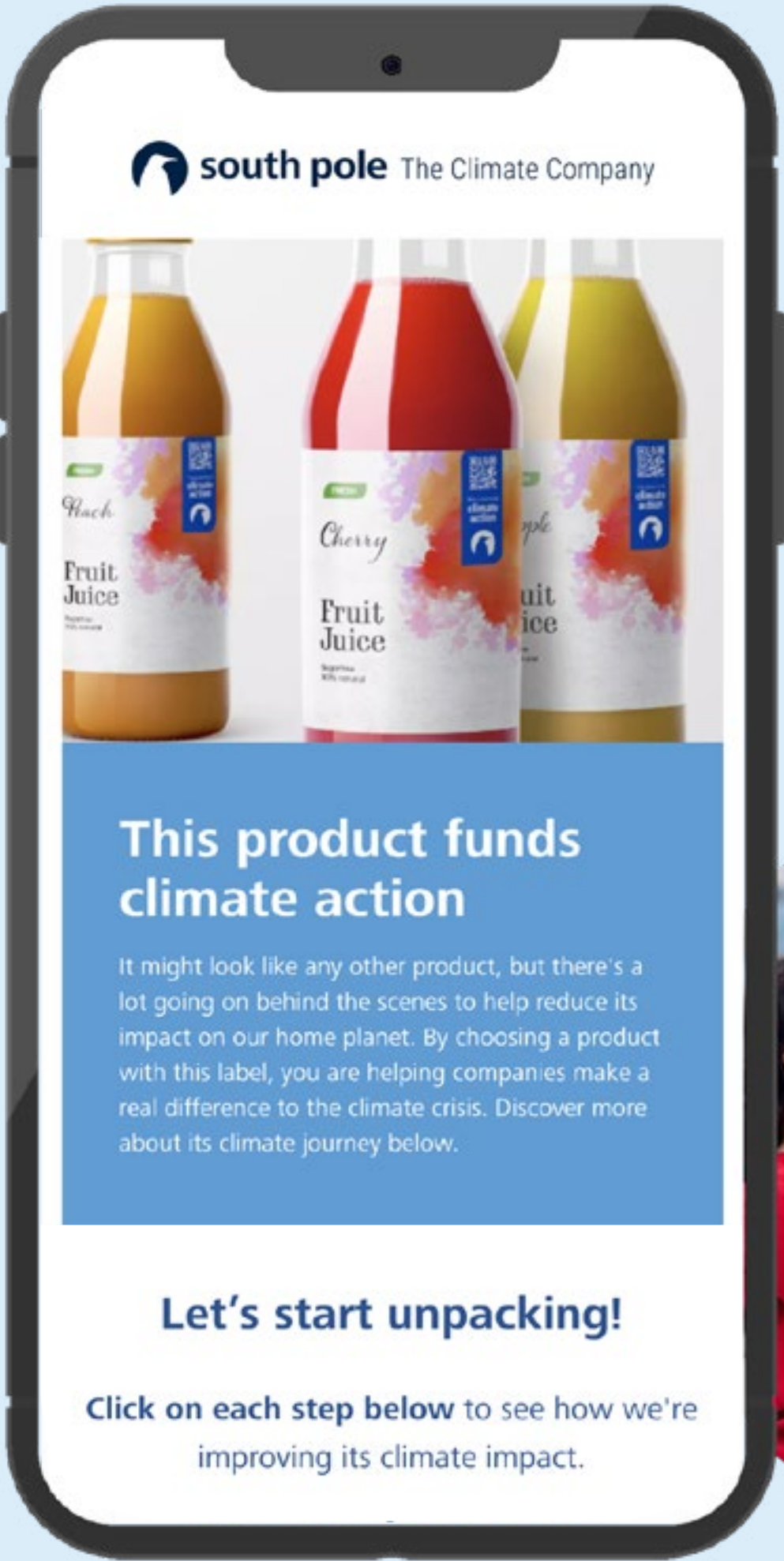
Telling your stakeholders about your climate action is important, and credibility is key when taking action on climate change. The Funding Climate Action label allows customers and stakeholders to see exactly what action and steps you have taken, and provides assurance of the credibility of the claims. In fact, 83% of consumers agree that the bespoke label landing page makes them feel well informed, 82% say they know immediately what the label stands for and 78% say they trust that credible climate action has been taken.\*

[Find out more about our labels here »](#)

\*Sapio Research. Conducted December 2022. 1,500 participants spanning the US, Germany, Switzerland, France, Belgium and the UK.







**In Action: The Consumer Journey**

Build confidence in your communications by empowering your stakeholders to scan or click on the label to get in depth information on the steps you are taking on your climate journey.

**Integrating the label**

Receive your label in four simple steps:

>

01

Measure

Define boundaries and quantify the greenhouse gas emissions associated with your company or product according to a defined scope.

>

02

Reduce

Commit to progress on a climate journey and transparently show how your company is striving to reduce emissions over time.

>

03

Compensate

Compensate for your emissions by purchasing climate action credits with immediate impact, while working on your long-term decarbonisation journey.

>

04

Communicate

Communicate your sustainability vision and achievements and perform an annual review to renew your label each year.

South Pole encourages ambitious climate action. Let us help you show your impact and be confident in your communications with the Funding Climate Action label.

[Download brochure »](#)





## Step 5: Lead and communicate

While healthcare plays a fundamental role in the health and well-being of populations, its overall impact on the environment is often ignored. Factors like emissions and pollution, as well as the impact of waste – in particular single-use plastics – have a direct negative influence on health yet are being generated by the sector itself.

In order to build awareness about the environmental challenges the sector faces and the steps healthcare companies take to address climate change, companies must credibly and transparently communicate their climate journey. Established frameworks such as the TCFD, CDP and SBTi offer a credible way for businesses to share their climate ambitions and report on their progress on the journey to net zero. For example, companies can do this by publishing and tracking

near-term emission reduction targets, sharing regular progress reports and highlighting impactful projects and initiatives.

For companies not yet at the stage to develop and implement their own materiality assessment or communicate via established frameworks, the [Biopharma Investor ESG Communications Initiative](#) might serve as a hands-on guide. It has identified high-priority topics to address and report on, including climate change, ESG governance and environmental impacts. It also outlines stakeholder expectations related to these challenges in a [guidance document](#).

### **Demonstrate leadership and build brand reputation**

Robust [communication about climate action](#) is essential for building a strong brand reputation and creating trust with stakeholders. This includes employees — when climate action is communicated in an authentic way, a sense of purpose and belonging is created throughout

the company. Making every colleague feel like they're part of the sustainability journey is critical – staff equipped with the tools for change and understanding the need for it can make an individual contribution to a business's net zero goals.

Companies can further build trust and translate it into business value by engaging a wide range of stakeholders, including suppliers, clients and trade associations, oftentimes facing similar challenges and pressure to decarbonise. Incorporating climate-specific clauses into a company's procurement strategy, encouraging and helping clients to adopt low-carbon solutions, and partnering with associations that support climate action are effective ways to bring all parties on board to deliver on a shared climate journey.





South Pole is a climate solutions consultancy and carbon project developer helping companies take ambitious climate action.

Would you like to work with us on your net zero strategy, carbon offsetting or other climate action?

Contact us here to arrange a call with one of South Pole's experts in your region.

**Contact us today »**

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