ClimatePartner

ClimatePartner Protocol

Quality guidelines for carbon neutral companies, products, and services

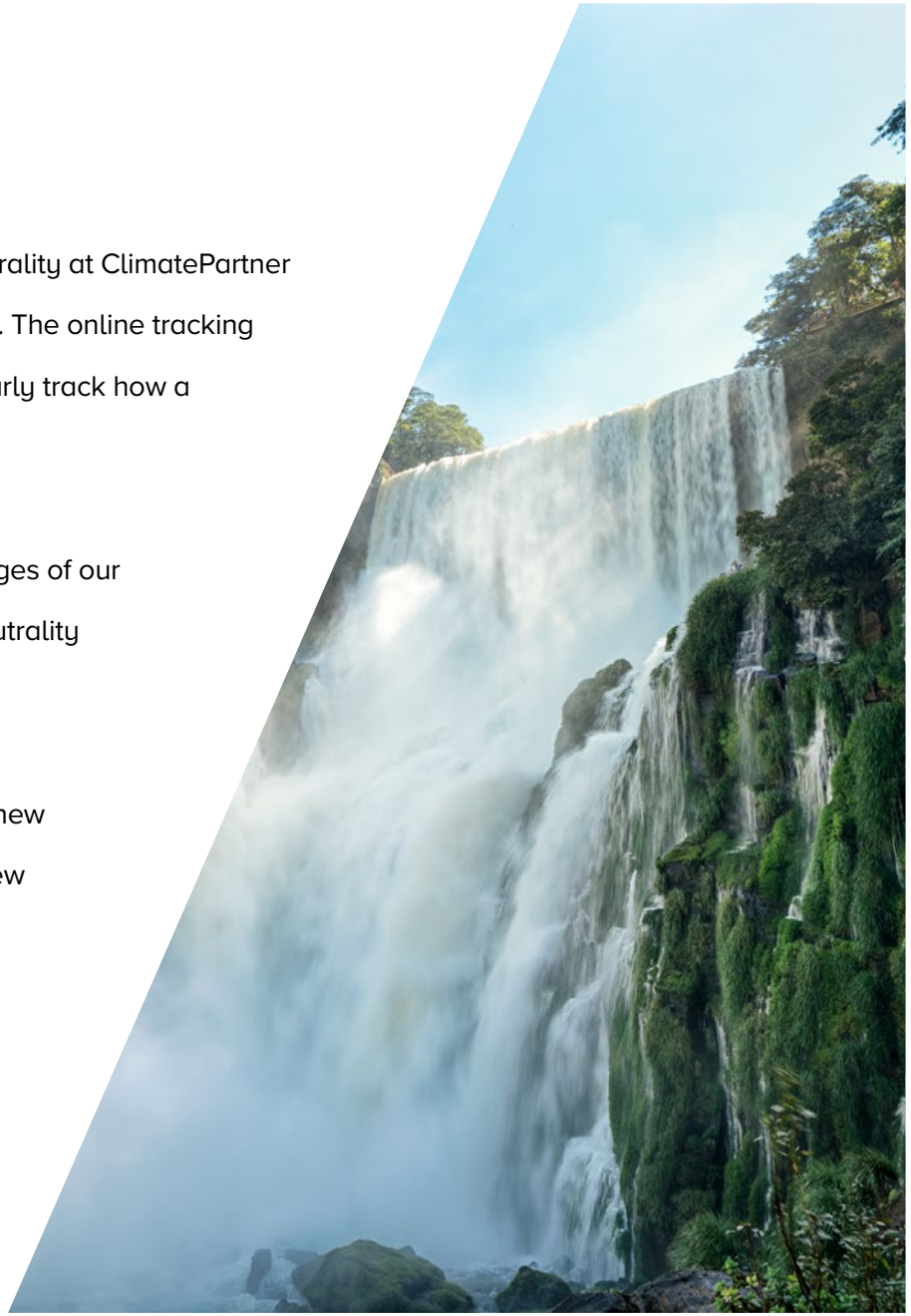
We would like to thank our partners for their support and cooperation

About the ClimatePartner Protocol

Transparency has always been of paramount importance to us. This is why carbon neutrality at ClimatePartner has always tied in with a label which assigns a ClimatePartner ID to every carbon offset. The online tracking system is one of the most transparent systems in the world, and enables anyone to clearly track how a company, product, service or other activity has come to be carbon neutral.

Additionally, our ClimatePartner Protocol highlights all of the important aspects and stages of our work, and explains what really matters in each instance. Our goal is to make carbon neutrality understandable and comprehensible for all.

We update the ClimatePartner Protocol on a regular basis in order to take into account new scientific findings relating to climate change, developments in life cycle analysis, and new trends in the voluntary carbon market. As such, the requirements and recommendations below can change over time.



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Foreword

What a moment for climate action! The Paris Agreement of 2015 and political commitments are only one part of it – such as the 1.5 °C pledge or binding reduction targets for 196 countries. Society's changing perception of climate action is perhaps the greater accomplishment. In recent times, much more attention has been paid to the climate than climate activists could ever have dreamed just a few years ago.

This movement has resulted in many major leaps and small steps forward in global climate action: sustainable alternatives for consumers such as packaging-free goods, vegan alternatives to animal products, eco-friendly fashion, microplastic-free cosmetics, train travel in lieu of aviation, the bicycle boom and so much more have turned climate action into a mainstream issue over the past few years. The same can also be said of carbon neutral products.

The greater the level of environmental awareness, the more governments, companies and organisations strive to become carbon neutral. The more carbon neutral products become available, the broader the range of opinions will be about what is the "right" type of carbon neutrality is. Does a carbon neutral product have to be intrinsically carbon neutral, as some would say, meaning that it has not caused any greenhouse gas emissions? Can you be carbon neutral if "only" the calculated total greenhouse gas emissions have been offset and the impact on the climate remains neutral? Can this be done through additional projects which save greenhouse gas emissions? And does it then have to be referred to as "climate neutral" or "carbon neutral", "climate neutralised" or "climate neutral through offsetting"?

Naturally, no product can be manufactured without releasing CO_2 or other greenhouse gases, and no company can do business with zero emissions. On the other hand, to become carbon neutral by calculating, reducing, and offsetting emissions via carbon offset projects which save greenhouse gases elsewhere or remove them from the atmosphere is an established process which has had the recognition and support of experts for almost two decades. This process of achieving carbon neutrality goes hand-in-hand with costs and effort for companies – we at ClimatePartner monitor and inspect every single step our customers take with care, expertise and a tremendous amount of passion.

What we now have to do is raise awareness of this concept, bring about more certainty with transparency and information, and counter the accusations that the term "carbon neutral" can be misleading if the underlying company or products are not emission-free (which, as we have said, would be impossible). This document explains the action ClimatePartner takes in detail.

After all, one thing is clear: we do not have much time to decelerate climate change. And, from a technological and economic standpoint, it is simply not possible to do this only by reducing and avoiding greenhouse gas emissions. That is why we need additional projects besides reduction and avoidance at a company level which save and absorb many more greenhouse gases on a large scale – carbon offset projects financed by carbon neutral products and companies.

However, there is still no standardised legal definition of carbon neutrality or how it can be accomplished. The established standards at present leave a relatively large amount of leeway, such as when it comes to calculating carbon footprints. ClimatePartner has undertaken to always impose the strictest possible requirements in this context. Nevertheless, this means that some individual issues are handled inconsistently and in slightly different ways, which will also be reflected in this document. ClimatePartner is involved in the development of a binding standard concerning the individual issues relating to carbon neutrality and continuously adjusts its methods based on the most up to date versions of the standards.

If we want to have even a semi-realistic chance at accomplishing the 1.5 °C pledge, all companies must act now; we must use every opportunity available to us to lower the concentration of greenhouse gases in the atmosphere. The Earth's climate has increased by more than 1.2 °C in temperature compared to pre-industrial levels and we do not have much time left to prevent it from heating up even further. That is why as many companies as possible must address the issue of climate action and make a contribution by reducing their emissions and immediately offsetting all currently unavoidable emissions. We cannot allow ourselves to lose time on this by debating right and wrong approaches and terminology.

Climate action in politics and business

The importance of the Paris Agreement

The Paris Agreement on climate change in 2015 was a breakthrough, as 196 nations – and not only industrialised countries – pledged to limit global warming for the first time.

We find three aims of the Paris Agreement particularly important:

Limit the temperature increase from global warming to 1.5 °C

A 2 °C increase was previously seen as tolerable for global warming. In light of new findings and political initiatives in many developing countries and emerging economies (including island nations whose very existence is under threat), the new global target is a maximum tolerable increase of 1.5 °C. To put things into perspective, a 1.5 °C increase in the temperature of the Earth's climate would cause between 70 and 90 per cent of all coral reefs to be irreversibly lost. A 2 °C increase in temperature would kill all coral reefs permanently. Sea levels would rise by another 10 centimetres, and 10 million people would be affected by loss of land, flooding and other effects, to name but a few examples (Source: WWF).

A carbon neutral global economy from 2050

The net volume of greenhouse gas emissions – i.e. the difference between emissions and absorption – is to be reduced to zero by the second half of this century. This is an endeavour for a carbon neutral planet where the carbon cycle is once again in balance.

Binding reduction targets every five years

National plans to implement climate targets are part of the Agreement. The nations must submit their plans every five years, making them increasingly ambitious and adapting them in light of technological advancements. 186 countries had already submitted reduction plans by the end of the conference. However, most of these plans unfortunately do not go far enough to achieve the agreed targets. This makes voluntary initiatives in the private sector all the more important.

Voluntary climate action and carbon neutrality

For these international targets to be achievable, it is enormously important that as many companies as possible turn their attention to climate action and contribute to limiting climate change by reducing emissions and offsetting unavoidable emissions.

The private sector has considerable influence over the concentration of greenhouse gases in the atmosphere. Companies from exceptionally energy-intensive sectors are obliged to limit their greenhouse gas emissions. Additionally, companies in every sector have serious leverage in terms of voluntary climate action by calculating, avoiding, reducing, and offsetting their emissions. This is the way to achieve carbon neutrality.

Companies, products, services and other activities whose greenhouse gas emissions have been calculated, reduced and offset through support for internationally recognised carbon offset projects can therefore be considered carbon neutral. As an extension of avoidance and reduction, this offsetting of CO_2 emissions is an essential part of voluntary climate action.

As greenhouse gases such as CO_2 are distributed evenly in the atmosphere, the concentration of greenhouse gases is roughly identical all over the world. This makes the location where emissions are released or avoided irrelevant to the global concentration of greenhouse gases or the greenhouse effect. Emissions that cannot be avoided locally can be offset with carbon offset projects elsewhere.

Carbon neutral products

Carbon neutral products are an opportunity for consumers to choose an eco-friendly alternative: carbon neutral versions of foods such as strawberries or frozen pizza, wet wipes, cosmetics, hygiene products, office paper, hotel stays, clothing, and even holidays in a camper van are all available already.

For companies, providing carbon neutral products is an excellent way to make their commitment to climate action tangible. In doing so, they are enabling their customers to pick eco-friendly alternatives and taking responsibility for the emissions caused by the product.

Read our description of methods and carbon neutrality requirements in the following sections so you know how to recognise carbon neutral companies and products.

The four steps to carbon neutrality

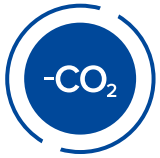
Over the course of more than 15 years, ClimatePartner has developed an ambitious yet practical process for achieving carbon neutrality. Companies that want to make themselves or their products or services carbon neutral with ClimatePartner must go through the four-stage process described here with us.

First of all, we will provide an overview of these four steps and how we, ClimatePartner, understand them. The next section entitled “Description of methods” deals with the processes, requirements and basic principles in more detail and describes precisely what has to be done and put into practice in each step.

Overview

Any type of company, product, service, activity or even individual person can be carbon neutral.

Calculate your carbon footprint



Reduce emissions

Offset emissions

Transparent communication

1. Carbon footprint calculation

ClimatePartner adheres to international standards to calculate carbon footprints. The leading standards – Greenhouse Gas Protocol and the international ISO standards – are the most important. There are also national standards and industry-specific standards. The following overview contains a selection of standards, according to which ClimatePartner works. This list is not exhaustive.

Companies

- Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard
- ISO 14064-1: Greenhouse gases – Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals

Products

- Greenhouse Gas Protocol – Product Life Cycle Accounting and Reporting Standard
- ISO 14067: Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification
- PAS 2050: Specification for the assessment of the life cycle greenhouse gas emissions of goods and services

Industry standards

- ISO 16759: Graphic technology – Quantification and communication for calculating the carbon footprint of print media products
- DIN EN 16258: Methodology for calculation and declaration of energy consumption and GHG emissions of transport services (freight and passengers)

What the various standards have in common is that they set out fundamental principles and requirements for every carbon footprint analysis. The most important principles:

- Relevance
- Completeness
- Consistency
- Transparency
- Accuracy

The following steps are necessary in order to calculate a carbon footprint:

- Define the goals of the carbon footprint calculation
- Define the system boundaries
- Collect consumption data and emission factors
- Calculate the carbon footprint
- Document the results

At the start of a project, ClimatePartner discusses with the client the objectives of the project, sets the system boundaries and identifies all relevant processes and data that are necessary to calculate the carbon footprint. These discussions also sheds more light on emission reduction initiatives which a company has already launched or is planning to launch.

The ClimatePartner Footprint Calculator is an online tool which compiles all of a client's relevant consumption and activity data and converts it into CO_2 equivalents. The tool features a wide range of emission factors for calculating CO_2 equivalents which are all based on the latest scientific findings. All emission factors originate from internationally recognised databases (e.g. ecoinvent), government authorities (e.g. DEFRA or UBA) and carbon footprint reports from independent research institutes.

ClimatePartner verifies that all data up on which the calculations are based is complete, plausible, and suitable for the calculation models being used. All assumptions, exclusions, and estimates must be explained and disclosed in a transparent manner. ClimatePartner takes all greenhouse gases identified in the Fifth Assessment Report of the IPCC into consideration. All greenhouse gas emissions are converted to CO_2 equivalents (CO_2e).

This means that, in addition to CO_2, the other greenhouse gases identified by the IPCC are factored into the calculation: methane (CH_4), nitrous oxide (N_2O), sulphur hexafluoride (SF_6), hydrofluorocarbons (HFC), perfluorocarbons (PFC) and nitrogen trifluoride (NF_3). For the sake of legibility, all emissions are referred to as CO_2 emissions and measured in tonnes of CO_2.

The results are documented in a report and, depending on the service package, discussed in a final presentation. We also use the final presentation to discuss emission hotspots and compile other ideas relating to climate action measures.

A regularly updated carbon footprint is an important tool for companies to identify significant potential to lower emissions and track their progress towards their reduction goals. It is also useful for gauging the effectiveness of the various climate action measures a company has already put in place.

2. Reduce emissions

If a company wants to achieve carbon neutrality, ClimatePartner recommends pursuing a clear climate action strategy. This strategy consists of three pillars which will result in a credible, sustainable commitment to protect the climate: avoidance, reductions, and offsetting. The global community will only have a chance of achieving the international climate goals if a company builds its strategy on each of these three pillars. As such, it should be a priority for companies to formulate ambitious climate goals that both avoid and reduce CO_2 emissions.

That is why ClimatePartner has been helping companies develop suitable climate action strategies for businesses, their products, services, and supply chains for over 15 years. ClimatePartner advises companies on how to plan, implement, and monitor emission reduction initiatives on the basis of carbon footprint analyses and internal workshops. We urge companies to update their carbon footprints on a regular basis so they can see the difference they have made, and measure their progress towards targets.

ClimatePartner's industry teams use their industry-specific expertise to develop effective climate action strategies. They are also well-versed in advanced subject areas such as science-based targets, CDP and GRI reporting, and supply chain management.

In addition to strategy development, ClimatePartner helps companies build up their own knowledge by, for instance, taking part in events at the ClimatePartner Academy. Moreover, ClimatePartner advises its clients on the concrete implementation of their climate action strategies. For example, our team of green power experts advises on the procurement of renewable energy for sites all over the world. The consulting team works with numerous companies to integrate climate action into supply chains and assists with participation in various reporting initiatives, such as CDP or GRI.

With ClimatePartner, every company can regularly take part in a number of different training courses on its way to achieving carbon neutrality. We share what we know in these courses, and hope to make companies more aware of how to do business in an environmentally friendly manner.

3. Offset emissions

Companies, products, services, and other activities are considered carbon neutral when all CO_2 emissions have been calculated and offset through support for carbon offset projects which have been certified under internationally recognised standards.

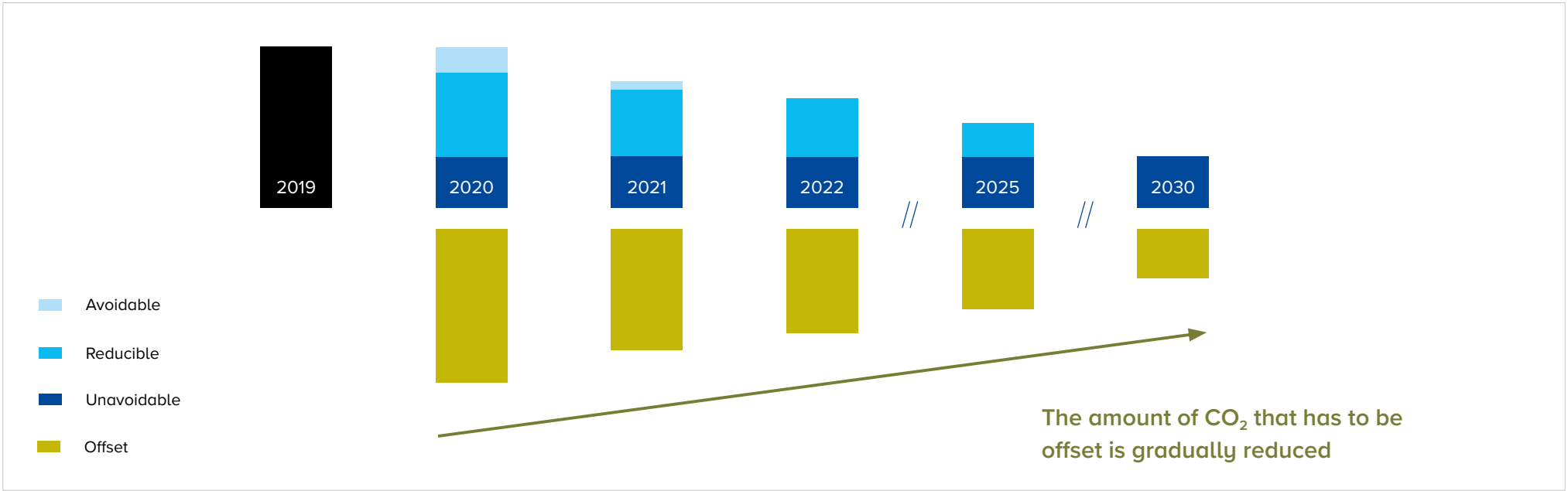
With current technology, it is impossible for a company or product to completely avoid emissions. Therefore, in order to achieve carbon neutrality, action has to be taken outside of the system boundaries to offset the remaining CO_2 emissions. As such, carbon neutrality does not mean CO_2-free.

As mentioned earlier, the concentration of greenhouse gases is almost identical all over the world due to the even distribution in the atmosphere. Where CO_2 is released and where emissions are avoided has no bearing on the greenhouse effect or climate action. This means that CO_2 emissions can be offset regardless of where they are released or saved.

Carbon offset projects make it possible to offset emissions in this way. These can be projects that remove CO_2 from the atmosphere (e.g. reforestation) or prevent more CO_2 from being released (e.g. renewable energy, or energy efficiency projects such as clean stoves or clean drinking water). All projects must be certified under internationally accepted standards.

In addition to their positive impact on the climate, robust carbon offset projects make an important contribution to sustainable development. The United Nations' Sustainable Development Goals (SDGs) are a recognised means of measuring these positive effects.

With a complete climate action strategy based on the three pillars – avoid, reduce, and offset – the CO_2 emissions that have to be offset will decrease over time.



4. Transparent communication

Transparent communication is a key part of a credible climate action strategy. That is why ClimatePartner greatly values comprehensive information, and provides its clients with online and offline communication, images and videos of carbon offset projects, and guidelines and workshops for transparent, credible communication. ClimatePartner delivers as much transparency as possible via the ClimatePartner label and online tracking.
Anyone can enter a unique URL to find out how much CO_2 has been offset, what project was supported and what carbon neutrality relates to in detail.

Transparent communication also entails setting specific CO_2 emission avoidance and reduction targets, and communicating them clearly – not to mention outlining measures that have already been put in place and the reductions that have consequently occurred.

Description of the methodology

The sections below describe the methods ClimatePartner uses to calculate the carbon footprints.

These are the basis for comprehensive climate action and carbon neutrality.

1. Carbon footprint calculation

The carbon footprint of a company, product, service, or other activity is calculated in five sequential steps:

1. Define the goal of the carbon footprint calculation

2. Define the system boundaries

3. Collect consumption data and emission factors

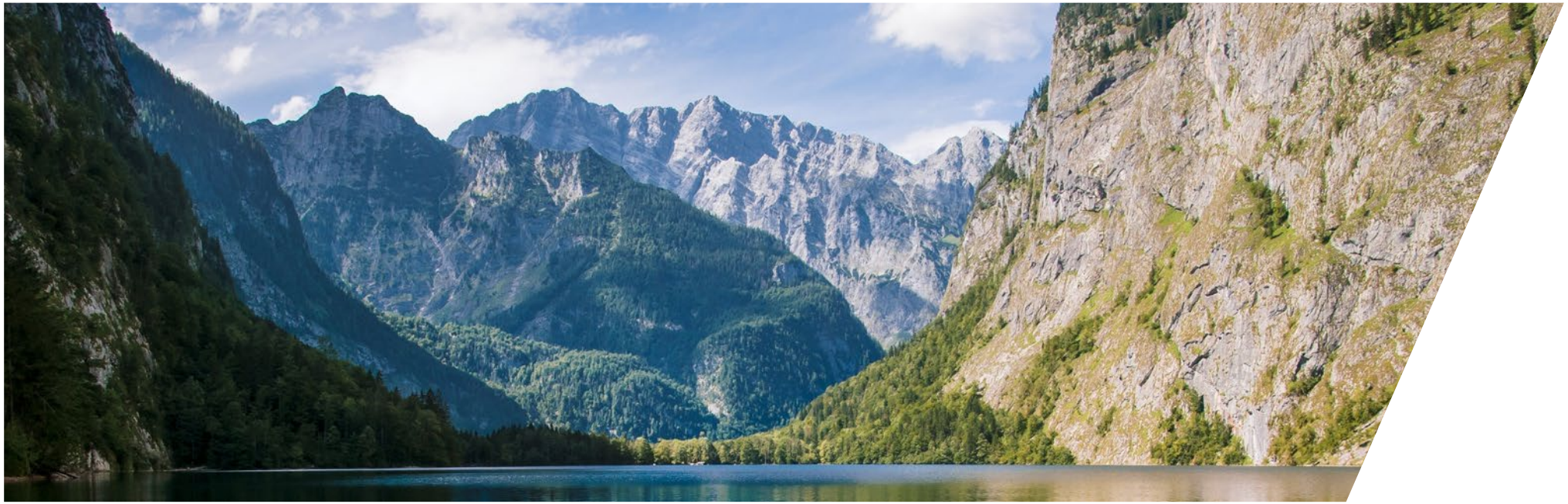
4. Calculate the carbon footprint

5. Document the results

1. Define the goal of the carbon footprint calculation

The first step involves defining what the company aims to achieve by calculating the carbon footprint in order to factor in all relevant aspects.

- Analyse the status quo
- Set reduction targets
- Identify room for improvement
- Monitoring and reporting
- Basis for carbon neutrality



2. Define the system boundaries

The system boundaries determine which activities and processes are taken into account in a carbon footprint calculation. The approaches differ for companies, products, services, and other activities, depending on what is being considered. The following sections present the basic principles from commonly used standards, and explain what criteria system boundaries have to meet in order to qualify for the ClimatePartner Carbon Neutral label. The requirements shown here are the result of over 15 years of professional experience with more than 3,000 clients and countless carbon footprint calculation projects. We revisit them regularly and adapt them to accommodate the latest scientific findings, changes to standards, and market requirements.

Although ClimatePartner is committed to making sure that companies calculate as comprehensive a carbon footprint as possible, it is aware of their limited resources and the challenges they face in terms of obtaining the necessary data. That is why ClimatePartner differentiates between mandatory sources of emissions which must always be factored into a carbon footprint in order to qualify for the label, and sources of emissions that can be taken into account on a complementary basis.

System boundaries for a company

The system boundaries for the carbon footprint of a company comprise the organisational and operational boundaries. They show which organisational unit(s) and activities are included in the carbon footprint. The methods of defining system boundaries are explained in more detail below.

Organisational boundaries

Companies differ in their legal and organisational structures. There are two different approaches to setting organisational boundaries: equity share and the control approach. Companies can choose which approach to take to calculate and report their emissions.

- **Equity share:** The company reports emissions based on the proportion of capital it has in the business activity. If, for example, a company holds 80 per cent of the shares of a company, 80 per cent of that company's emissions are included in the overall carbon footprint.

- **Control approach:** The company reports 100 per cent of the emissions from business activities over which it has control. In this context, control can be defined either as financial control or operational control.

The Carbon Neutral Company label is awarded on the basis of the **control approach**. In this approach, 100 per cent of the processes controlled by the reporting company are factored into the carbon footprint. This ensures that a company is only distinguished as carbon neutral if the emissions relating to its business activities have been calculated and offset in their entirety.

Operational boundaries and emission categories

The operational boundaries define which company activities are taken into account in detail. The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard including the Corporate Value Chain (Scope 3) Accounting and Reporting Standard provides orientation and guidance on this.

Categorising activities into three scopes based on the extent to which they can be influenced is the most important aspect.

Scope 1: This encompasses emissions from sources which are under the direct control of the company. This includes the stationary and mobile combustion of fossil fuels in order to generate electricity, heat, or run combustion engines in vehicles. It also covers emissions from chemical processes and fugitive emissions, such as those resulting from refrigerant leaks.

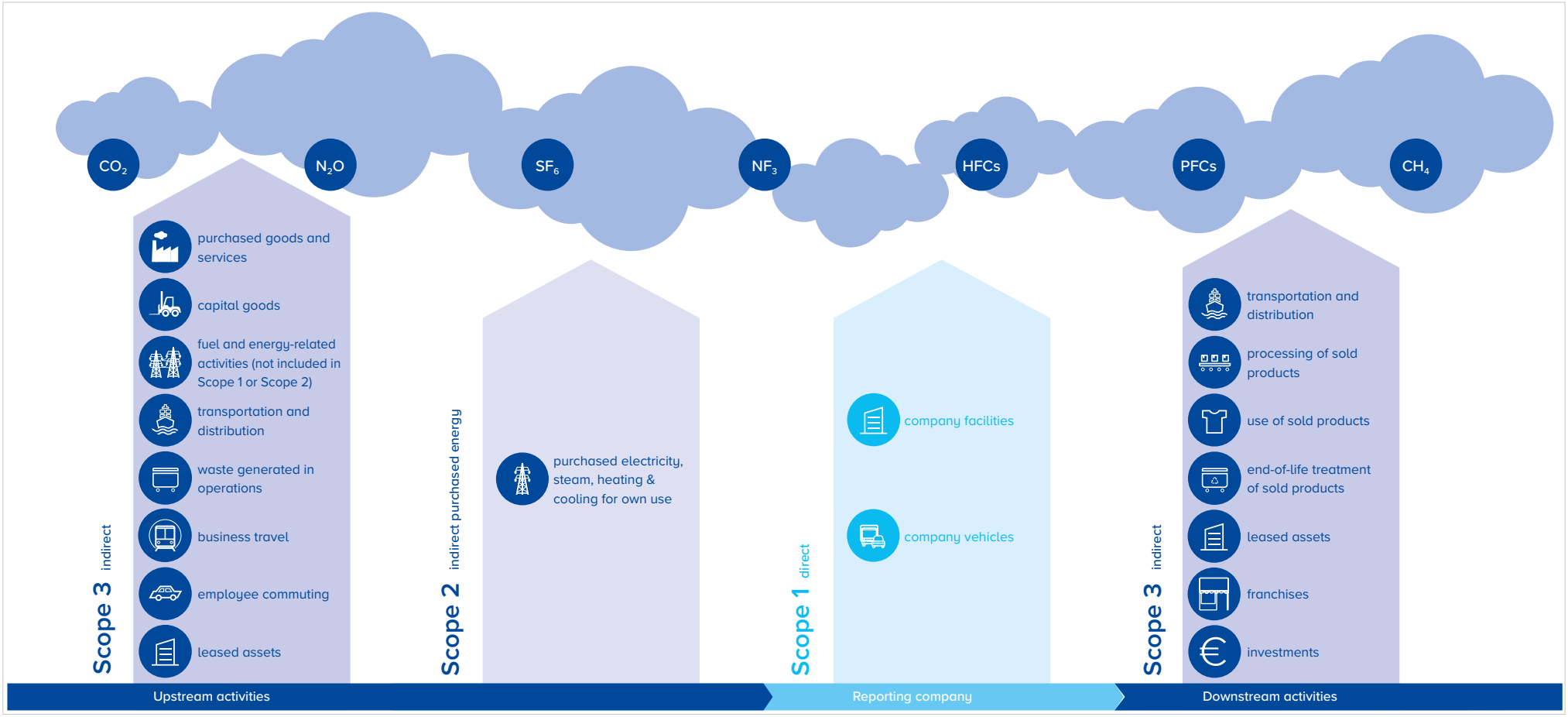
Scope 2: This encompasses emissions caused by the generation of purchased electricity, as well as the district heating and cooling purchased by the company. These emissions are released when the utility company burns fossil fuels to generate energy.

Scope 3: This covers all other emissions of which a company is an indirect cause. They are split into upstream (the company's suppliers and their own suppliers) and downstream (after the company has sold its product or service) emissions. There are a total of 15 categories including the production of purchased raw materials, transport, business travel, and waste disposal.

The commonly used standards under which carbon footprints are calculated require Scopes 1 and 2 to be documented and evaluated completely. However, Scope 3 emissions make up a very significant portion of the carbon footprints of many companies. That is why, for over 15 years, ClimatePartner has been taking elements of Scope 3 into consideration when it awards its label to carbon neutral companies. At the same time, it is still a major challenge for many companies to obtain the necessary data to analyse their various activities. ClimatePartner advises companies to document all relevant sources of emissions

as completely as possible. The reports make it clear which sources of emissions have been factored into the carbon footprint calculation. ClimatePartner operates an online tracking tool so this information remains readily available in the future.

The commonly used standards of the GHG Protocol and ISO 14064, and the product-specific standards ISO 14067 and PAS 2050, explain in detail how CO_2 emissions are supposed to be calculated. Carbon neutrality is not a part of these standards. ClimatePartner will therefore set out the requirements of the ClimatePartner Carbon Neutral label in this document.



The following table shows which sources of emissions absolutely must be documented in order for a company to obtain the ClimatePartner label, and which additional sources ClimatePartner advises taking into account. Due to the varying general conditions, companies in the service sector are treated differently to manufacturers.

Companies that decide to only make one or more site(s) carbon neutral and not the entire company will receive the “Site” label.

Hotels seeking to qualify for a distinction as a carbon neutral hotel must meet special requirements.

Scope	Category	Source of emissions	Label		
			Company	Site	Hotel
1	Direct emissions from sources owned or controlled by the company	Self-generated heat	mandatory	mandatory	mandatory
1	Direct emissions from sources owned or controlled by the company	Self-generated electricity	mandatory	mandatory	mandatory
1	Direct emissions from sources owned or controlled by the company	Refrigerant leaks	mandatory	mandatory	mandatory
1	Direct emissions from sources owned or controlled by the company	VOC leaks	mandatory	mandatory	mandatory
1	Direct emissions from company vehicles	Fleet fuel	mandatory	mandatory	mandatory
2	Purchased electricity for own use	Purchased electricity	mandatory	mandatory	mandatory
2	Purchased heat, steam and cooling for own use	Purchased heat	mandatory	mandatory	mandatory
2	Purchased heat, steam and cooling for own use	Purchased cooling	mandatory	mandatory	mandatory
2	Purchased heat, steam and cooling for own use	Purchased steam	mandatory	mandatory	mandatory
2	Purchased heat, steam and cooling for own use	Heat in leased buildings	mandatory	mandatory	mandatory
3	Purchased goods and services	Raw materials	recommended	recommended	recommended
3	Purchased goods and services	Packaging	recommended	recommended	recommended
3	Purchased goods and services	Office paper	recommended	recommended	recommended
3	Purchased goods and services	Printed products	recommended	recommended	recommended
3	Purchased goods and services	Water	recommended	recommended	mandatory
3	Purchased goods and services	External data centres	recommended	recommended	recommended
3	Purchased goods and services	Gastronomy	recommended	recommended	mandatory
3	Fuel and energy-related emissions	Upstream fleet	mandatory	mandatory	mandatory
3	Fuel and energy-related emissions	Upstream heating	mandatory	mandatory	mandatory
3	Fuel and energy-related emissions	Upstream cooling	mandatory	mandatory	mandatory
3	Fuel and energy-related emissions	Upstream electricity	mandatory	mandatory	mandatory
3	Upstream transport and distribution	Inbound logistics	recommended	recommended	recommended
3	Downstream transport and distribution	Outbound logistics	recommended	recommended	-
3	Waste generated in operations	Waste	recommended	recommended	mandatory
3	Waste generated in operations	Transportation of waste	recommended	recommended	mandatory
3	Business travel	Flights	mandatory	mandatory	mandatory
3	Business travel	Train journeys	mandatory	mandatory	mandatory
3	Business travel	Hire cars and personal cars used for business travel	mandatory	mandatory	mandatory
3	Business travel	Overnight hotel stays	recommended	recommended	recommended
3	Employee commuting	Transportation of employees between their homes and places of work	mandatory	mandatory	mandatory
3	Employee commuting	Teleworking	recommended	recommended	recommended
3	End-of-life treatment of sold products	Waste transport	recommended	recommended	-
3	End-of-life treatment of sold products	Disposal of products	recommended	recommended	-

System boundaries for products

In the case of a product, a functional or declared unit is defined which sets out the reference quantity and potentially the underlying use. Examples of this include 200 ml of cosmetic products (cradle-to-customer plus end-of-life) or 52 uses of a t-shirt (cradle to grave).

Defining the functional unit significantly affects the system boundaries because it dictates how the life cycle is to be assessed. Transparent communication is critical here so that the relevant parties can make informed decisions, and to make sure it is clear which of the product's life cycle phases have been made carbon neutral. ClimatePartner therefore communicates each system boundary in all outcome reports and in its online tracking tool for carbon neutral products. Additionally, companies should make all communication materials on carbon neutrality, and how it is to be accomplished, transparent.

Product life cycle phases

System boundaries for products are defined along the product life cycle phases which are grouped as follows:

a. Raw material acquisition and pre-processing

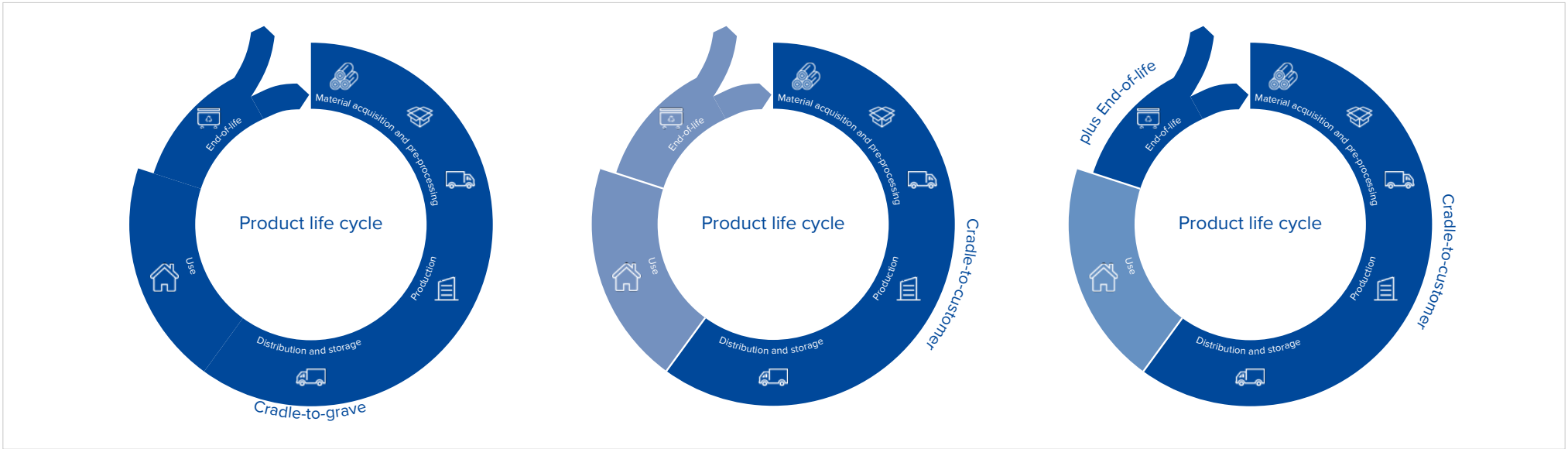
b. Production

c. Transport and storage

d. Use

e. End-of-life

The functional unit described at the start reflects which phases are taken into account when emissions are calculated. Depending on its variant, it might be cradle-to-grave (the entire life cycle), cradle-to-gate (all processes up to the factory gate) or cradle-to-customer plus end-of-life (the entire life cycle excluding the use phase). The diagrams below outline these approaches.



Choosing the most suitable approach depends on factors including what goal the company is aiming to accomplish by calculating a carbon footprint. If carbon neutrality is the goal, the focus is placed on the phases which the company is able to influence and control directly. These phases must always be taken into account when CO_2 emissions are offset. With regards to phases over which the company does not have direct control, such as the use phase, the results are highly uncertain due to the often difficult availability of data, the number of assumptions that have to be made, and the number of scenarios that have to be defined. As such, it is reasonable to perform a partial assessment in order to offset CO_2 emissions. However, if the goal is to compare different products, it is advisable to carry out a full life cycle assessment. ClimatePartner also recommends carrying out a full life cycle assessment on products which cause significant emissions during their usage phase.

Depending on the company's position in the value chain, certain challenges arise when it comes to evaluating processes and activities in individual life cycle phases. It is often difficult for manufacturing companies to obtain robust data for downstream phases such as use and end-of-life treatment. That is why there are numerous carbon neutral products on the market for which product use and end-of-life treatment have not been taken into account.

ClimatePartner strives to calculate the emissions of a product as comprehensively as possible and factor them into its carbon neutrality. To this end, it continuously improves and refines the methods that are available to it. The end-of-life phase of a product is also documented and evaluated as standard.

Cradle-to-customer plus end-of-life is the default choice of assessment method for all new Product Carbon Footprint (PCF) measurements. "Customer" here refers to the first direct customer of the organisation that is measuring the PCF. This means that the system boundary ends when the goods are delivered to the direct customers. The customers are not necessarily the consumers; the term can also refer to a re-seller.

For example, delivery to the warehouse owned by the pharmacy chain which sells the product is taken into account for a carbon neutral cosmetic product. In this case, distribution from there to various branches of the pharmacy chain, as well as potentially shipping to consumers or the end customer's transportation to the branch, are not part of the system boundaries.

If the same pharmacy chain also provides the same carbon neutral cosmetic product to the end customer by means of direct distribution, and the product is shipped to the consumer straight from the manufacturer, the transportation to the consumer is taken into account because the consumer is the first customer.

ClimatePartner has various product-specific carbon neutrality labels. It issues the following labels:

- Product
- Packaging
- Printed product

The following table shows the requirements and recommendations for sources of emissions that can or must be taken into account when a product carbon footprint is calculated.

Life cycle phase	Source of emissions	Label		
		Product	Packaging	Printed product
Raw material acquisition and pre-processing	Raw materials	mandatory	mandatory	mandatory
Raw material acquisition and pre-processing	Primary packaging	mandatory	recommended	recommended
Raw material acquisition and pre-processing	Secondary packaging	mandatory	recommended	recommended
Raw material acquisition and pre-processing	Tertiary packaging	mandatory	recommended	recommended
Raw material acquisition and pre-processing	Inbound logistics	mandatory	mandatory	mandatory
Production	Electricity consumption in production	mandatory	mandatory	mandatory
Production	Heat consumption in production	mandatory	mandatory	mandatory
Production	Transportation of manufacturing waste	recommended	recommended	recommended
Production	Disposal of manufacturing waste	recommended	recommended	recommended
Distribution and storage	Transport to first customer	mandatory	mandatory	mandatory
Distribution and storage	Storage by the customer	recommended	recommended	recommended
Distribution and storage	Transport to the end customer	recommended	recommended	recommended
Use	Direct emissions during the use phase	recommended	recommended	recommended
Use	Indirect emissions during the use phase	recommended	recommended	recommended
Disposal	Transport to the disposal facility	mandatory	mandatory	mandatory
Disposal	Disposal of the product	mandatory	mandatory	mandatory
Indirect emissions	Not directly attributable emissions	mandatory	mandatory	mandatory

Use phase

As a rule, it is advisable to take the use phase into account if significant emissions can be expected to result from it. This can be the case with electronic devices, for example, which cause a lot of emissions over their lifespan due to their electricity consumption, or devices which run on fossil fuels. As there is normally uncertainty with regard to the use profile, usage scenarios have to be constructed. ClimatePartner recommends a conservative approach in order to make sure that the resulting CO_2 emissions are not systematically underestimated.

Indirect emissions

In a product carbon footprint calculation, sources of emissions that are only indirectly attributable are taken into account alongside emissions that can be directly attributed to a product, service, or other activity. These indirect emissions result from business activities of the company, without which it would not be possible to manufacture the product or provide the service. This includes activities such as employee commuting. In doing so, ClimatePartner goes beyond the requirements of commonly used standards such as the GHG Protocol Product Lifecycle Standard.

As the indirect emissions cannot be attributed directly to individual products, services, or activities, in most cases they are allocated using physical (e.g. quantity, weight, volume) or economic values (e.g. costs and sales).

Handling of credits and avoided emissions in the disposal phase

To take emissions from waste disposal into account, especially for recycling processes, there are various allocation methods. In some cases, emissions are shifted between different life cycles of a material or credits are issued. In terms of accomplishing carbon neutrality, it is critical that all relevant emissions are documented in full. ClimatePartner therefore takes a recycled content approach, also known as "cut-off by classification". This approach is recommended by the Greenhouse Gas Protocol Product Life Cycle Accounting and Reporting Standard, and can also be found in recognised carbon footprint databases such as ecoinvent.

With regard to disposal, in the case of recycling, all emissions relating to the recycling (collection, sorting and processing) are allocated to the resulting recycled material and thus to the second life cycle. Therefore, no emissions from recycling are attributed to the original product from the first life cycle, and double counting of emissions in recycling processes is avoided.

If, for example, an egg carton is made from old magazines, then the emissions shall be allocated as follows: emissions from raw materials, energy use, transportation, and other processes for manufacturing the virgin fiber paper are attributed to the first product life cycle, i.e., the magazines. No emissions are attributed to the magazines for recycling, as they are completely recycled in our example. In the second life cycle - egg carton - no emissions are attributed for the raw material virgin fiber paper, as these were already allocated to the first life cycle. However, all recycling emissions from waste paper collection, sorting, preparation and transport are attributed to the new egg carton product.

In turn, emissions that are released when waste is burned, for example, are all allocated to the waste-causing product, which means that no CO_2 emissions are allocated to the generated electricity or heat.

"Avoided emissions" refers to emission reductions that are accomplished indirectly by the assessed product or a process in the assessed product's life cycle. In the burning process, for example, these occur during disposal, as the electricity generated from the burning of the waste theoretically avoids other power stations having to generate electricity. Such "avoided emissions" are different to reductions that are directly attributable to the product, such as a reduction of electricity consumption in production, or a switch to green electricity.

The GHG Protocol clearly states that avoided emissions may not be part of a product carbon footprint. ClimatePartner adheres to this and does not take avoided emissions into consideration.

Cut-off criteria

The goal of ClimatePartner is to accomplish carbon neutrality in as comprehensive a manner as possible. For this reason, no cut-off criteria are used in the sense that only some of the emissions (e.g. 95 per cent) are taken into account. Instead, where feasible, ClimatePartner is committed to achieving the highest possible data quality with its clients. If there are data gaps, appropriate methods such as assumptions, estimates and extrapolations are used to close them. We work with our clients to attempt to avoid data gaps wherever possible.

Services and other activities

Besides companies and products, services and other activities such as events can be made carbon neutral. ClimatePartner has the following label categories:

- Service
- Website
- Mobility
- Overnight accommodation
- Travel
- Event
- Event participation
- Trade fair attendance
- Construction
- Shipping
- Shipping and packaging

The following table shows the requirements and recommendations with regard to the system boundaries in order to achieve carbon neutrality in the aforementioned label categories.

Source of emissions	Label										
	Service	Website	Mobility	Overnight stay	Travel	Event	Event participation	Trade fair attendance	Construction	Shipping	Packaging and shipping
Direct and indirect emissions from stationary sources	mandatory	mandatory	-	mandatory	mandatory	mandatory	-	mandatory	mandatory	-	-
Direct and indirect emissions from mobile sources	mandatory	-	mandatory	-	mandatory	mandatory	-	mandatory	mandatory	mandatory	mandatory
Generation of purchased electricity	mandatory	mandatory	mandatory	mandatory	mandatory	mandatory	-	mandatory	mandatory	mandatory	mandatory
Transportation of employees / contractual partners between their homes and places of work (including overnight accommodation)	recommended	-	-	-	-	mandatory	-	mandatory	mandatory	-	-
Transportation of participants	-	-	-	-	mandatory	recommended	mandatory	-	-	-	-
Waste disposal	recommended	-	-	mandatory	mandatory	mandatory	-	mandatory	recommended	-	mandatory
Manufacture of consumables and their delivery	-	-	-	mandatory	mandatory	recommended	-	recommended	mandatory	-	mandatory
Electricity consumption during execution or use	recommended	mandatory	-	-	-	-	-	-	-	-	-
Provision of infrastructure	-	-	mandatory	-	mandatory	recommended	-	mandatory	-	mandatory	mandatory

3. Collect consumption data and emission factors

Carbon footprint calculations require data relating to energy and material consumption, and emission factors for converting the consumption data into CO_2 equivalents.

ClimatePartner strives for the highest possible data quality when it collects data. ClimatePartner prefers primary data over secondary data. Only with high-quality data can extensive analyses be carried out on the basis of a carbon footprint and decisions be made about reduction measures. That is why the proportion of primary data must increase steadily over time, such as by involving suppliers, customers, and other relevant actors. As a rule, exclusively primary data must be obtained for processes and activities that are under the direct control of the company striving to become carbon neutral. If this is not completely possible in a specific case, it must be documented and justified.

All consumption data are transferred to the ClimatePartner Footprint Calculator to be processed.

Various options are available to companies when it comes to obtaining data. By providing these options, ClimatePartner enables companies to achieve the highest possible standard of data quality. All data input options are aligned with the requirements and recommendations of the GHG Protocol.

ClimatePartner only uses and accepts emission factors from recognised scientific sources in order to calculate a carbon footprint. For example, these sources include Ecoinvent, agribalyse, DEFRA, and GEMIS.

Data management

ClimatePartner advises companies on the collection, documentation, and comparability of data. It normally prepares data sheets which define what data are collected for every source of emissions, where the data can be found within the company, who is in charge of collecting the data, and what particularities have to be taken into account when the data are processed. Additionally, the quality of the data should be estimated in terms of the completeness and reliability of the data.

Evaluating data quality

The underlying data quality has to be evaluated in order to judge how informative a carbon footprint is. ClimatePartner uses defined criteria to evaluate the quality of data.

Dealing with data gaps

It is not always easy to obtain consumption data for all processes, or suitable emission factors for converting consumption data into CO_2 equivalents might turn out to be unavailable. Although there are various ways to obtain data and ClimatePartner has access to numerous, extensive carbon footprint data and its own calculations, data gaps are not always completely avoidable. These gaps have to be closed as follows.

The goal of any calculation is to have as few data gaps as possible so the calculation can be as informative as possible. Consequently, ClimatePartner helps its customers gradually close data gaps with primary data or, if this is not possible, refine the quality of their assumptions and estimates. This is admissible under the applicable standards.

ClimatePartner helps customers close data gaps by making use of its own data, independent sources such as product category rules, publicly available statistics, or other scientific publications. It is important that all assumptions, estimates, and projections are documented in a transparent, traceable manner, and can be replicated. When it comes to closing data gaps, conservative estimates are generally preferable in order to make sure that the CO_2 emissions are not underestimated.

4. Carbon footprint calculation

CO_2 emissions are calculated on the basis of the collected consumption and activity data, and the relevant emission factors. In most cases, the calculation is based on the following formula.

$$\text{Consumption value [unit]} * \text{Emission factor} \left[\frac{\text{kg } CO_2}{\text{Unit}}\right] = \text{X kg } CO_2$$

For example, the direct emissions from a car's fuel consumption (tank-to-wheel) are calculated as follows:

- Petrol consumption per year = 1,000 litres
- Fuel emission factor = 2.241 kg CO_2 / litre

Emissions per year:

$$1000 \text{ litres} * 2.241 \frac{\text{kg } CO_2}{\text{Litre}} = 2{,}241 \text{ kg } CO_2$$

Carbon footprints are calculated using the Footprint Calculator, an established cloud-based software solution from ClimatePartner. This convenient, user-friendly software solution produces detailed calculations of carbon footprints. Using the software guarantees that companies use recognised calculation models and emission factors in the calculation. The Footprint Calculator is also a solid basis for third parties to audit carbon footprints as the underlying data, calculation models, and sources are documented in a transparent, traceable manner.

Global warming potential

"Global warming potential" (GWP) describes the impact a gas has on global warming relative to CO_2. Every greenhouse gas affects global warming differently and some gases remain in the atmosphere for longer than others. ClimatePartner applies GWP with a 100-year time horizon as defined by the IPCC in its Fifth Assessment Report in 2013.

Inclusion and emissions of biogenic CO_2

ClimatePartner does not factor biogenic CO_2 into its carbon footprint calculations – neither storage nor emissions into the atmosphere – for the following reasons:

- The IPCC (Intergovernmental Panel on Climate Change) defines the release of fossil CO_2 emissions as the cause of climate change, for example, coal, natural gas, and oil. Biogenic emissions are not taken into consideration and are therefore not included in the commonly used IPCC Life Cycle Assessment methods.
- For most products, stored biogenic emissions are released over the product's life cycle, normally as part of their end-of-life treatment. Looking at the entire life cycle, the calculated carbon footprint would not change if biogenic storage were factored in or not. Accounting for biogenic storage poses the risk of underestimating the total emissions by opting for a cradle-to-gate assessment, which would leave a company open to accusations of greenwashing.

RFI factor for flights

The influence of emissions from aviation on global warming is not solely dependent on the volume of CO_2 emissions. As they are emitted on a large scale alongside soot particles and water vapour, for example, the effect is intensified. An RFI (Radiative Forcing Index) factor is used to represent this.

ClimatePartner uses an RFI factor of 3 in its calculations to account for the environmental impact of aviation.

5. Documentation

Transparently documenting underlying data, assumptions, methods, and results is an important part of transparent communication with the public.

6. Recognition of third-party calculations

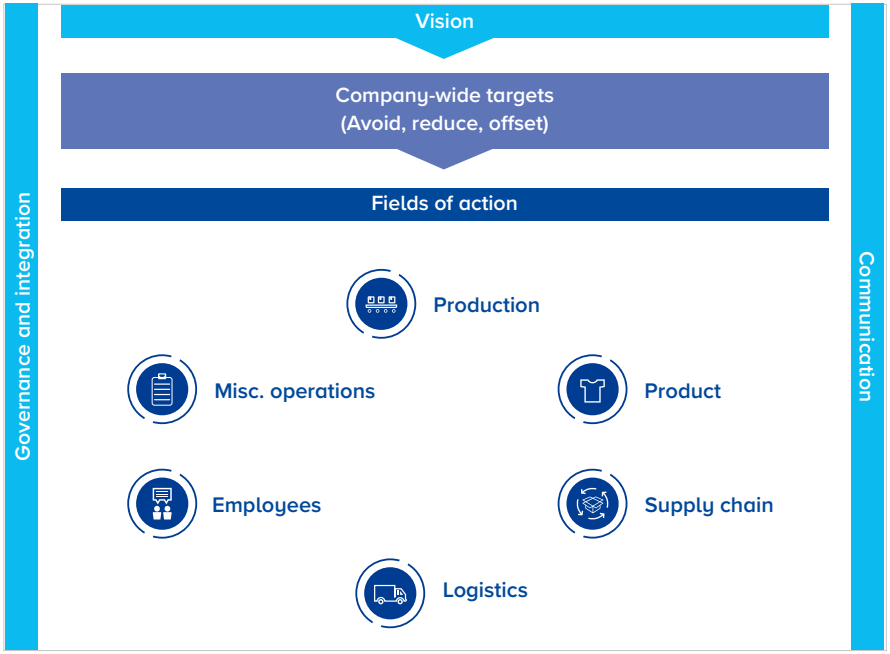
Third-party calculations may only be used if the requirements described in this document can be proven to have been met in full. In particular, this includes the minimum system boundary requirements for the ClimatePartner label as well as sufficient quality and transparency with regards to the data and calculation methods used.

2. Reduce emissions

The avoidance and reduction of CO_2 emissions are a key part of any climate strategy. ClimatePartner sees the continuous reduction of emissions as an indispensable part of any commitment to protect the climate. The process is continuous. ClimatePartner urges all clients to implement a management system to ensure that the commitment is put into practice within the company and intensifies continuously.

A company's climate strategy sets its climate action targets, describes how they will be anchored within the company, outlines the most important fields of action, and the extent to which the company will support carbon offset projects for the sake of global climate action. A supplementary component is communicating the commitment to employees, business partners, reporting initiatives (such as CDP and GRI), and other interested actors.

The most important elements of a climate strategy:



Responsibility within the company

The management assuming responsibility for adopting and achieving climate targets is a key driver of the success of corporate climate strategies. This is why ClimatePartner advises companies to appoint at least one person from the management to be in charge when they develop a climate strategy.

Additionally, one method which has proven effective is to involve employees from various divisions in the development and implementation of a climate strategy so as to make the best possible use of a company's broadly distributed knowledge, and increase the acceptance of the targets and measures.

Set reduction targets

Reduction targets are a key part of a climate strategy as they set out important guidelines to reduce emissions and represent a – mostly public – commitment by the company to make measurable efforts to protect the climate.

More and more companies are using the methods of the Science Based Targets Initiative to set reduction targets. Science-based targets are reduction targets for companies which are aligned with the goal of the Paris Agreement to limit the global temperature increase to below 2 degrees Celsius, possibly even 1.5 degrees Celsius.

ClimatePartner helps its clients develop a science-based target, i.e. it helps them define and flesh out the various requirements a science-based target has to meet along with how to achieve the target.

ClimatePartner advises companies on how to comprehensively assess their various strategies and target parameters, and on the feasibility of a science-based target under certain conditions.

Reduction measures

Companies have a range of means of avoiding and reducing emissions. We can differentiate here between direct and indirect influence. On a company level, direct influence can be exerted on emissions in Scopes 1 and 2. Scope 3 emissions can be influenced indirectly. On a product level, the emissions linked to the company's own value chain can be influenced directly – all other emissions are influenced indirectly.

Emissions can be reduced by scaling back activities which cause emissions or lowering the intensity of such activities.

Option 1:

Scale back the **activity** by lowering consumption

Trodat, a global leader in the stamp market and a client of ClimatePartner for ten years, has optimised the design of its best-selling product Printy to significantly reduce material consumption and in turn emissions.

Option 2:

Lower the **intensity** with more eco-friendly sources of procurement

By using recycled plastic and green electricity in its factories, Trodat has cut the CO_2 emissions caused by the Original Trodat Printy 4.0 by up to 49 per cent* compared to the previous model.

(* ECO black and ECO grey. Other colours make up a smaller proportion.)

The following are usually important fields of action for companies:

- Use of renewable energy
- Increase energy efficiency
- Optimise processes
- Optimise products

Indirect emissions in particular are a key strategic field of action for many companies to reduce their emissions. It is often necessary to work with suppliers to build up solid underlying data and develop eco-friendly alternatives. For this reason, ClimatePartner is helping more and more companies develop eco-friendly supply chains.

Additionally, raising consumer awareness of aspects such as the use and disposal of products can be used as a strategy to lower emissions.

ClimatePartner helps clients identify and assess reduction measures and their feasibility. In the process, companies benefit from ClimatePartner's extensive experience in diverse sectors and product groups. ClimatePartner also uses interactive tools to model the effect of emission reduction measures compared to the status quo. By taking into account internal and external drivers, which in turn pave the way for a plausible reduction roadmap to be drawn up.

Supply chain management

For many companies, the majority of their carbon footprint is caused upstream in the value chain. In the manufacturing industry in particular, indirect emissions from raw materials, transportation, and other upstream processes are often many times higher than the emissions over which a company has direct influence.

This is why it is often a challenge for companies to expand their climate action commitment to encompass the supply chain. ClimatePartner provides software solutions and expertise to help companies develop such strategies and measures, from collecting and evaluating supplier data, to formulating science-based targets for the entire value chain.

Green energy solutions

Energy consumption for electricity, steam, heating, and cooling is often responsible for the majority of a company's CO_2 emissions. Switching to green energy, i.e. energy from renewable sources, is a core measure to lower a company's emissions and in turn reduce its carbon footprint.

ClimatePartner enables companies to switch their sites in every country to green electricity. To this end, ClimatePartner provides green certificates from all national and international certification systems (Guarantees of Origin in Europe, RECs in the USA, and Canada and I-RECs internationally) for energy from all renewable technologies. These technologies include solar, wind, hydroelectricity, biomass, and geothermal energy.

ClimatePartner provides the following green electricity services:

- Advice on the development of a green electricity procurement strategy
- Purchase and retirement of the necessary green certificates in order to switch electricity consumption at national and international sites to renewables
- Assistance (where necessary) with reporting under international standards such as RE100, CDP, and Science Based Targets

ClimatePartner Academy

ClimatePartner holds events at the ClimatePartner Academy to offer every company a source of comprehensive expertise in all aspects of corporate climate action.

3. Offset emissions

How does carbon offsetting work in principle?

The principle of carbon offsetting originated from the Clean Development Mechanism (CDM) in the Kyoto Protocol. The Clean Development Mechanism is essential to global climate action: it helps realise carbon offset projects in developing countries and emerging economies in particular. The Protocol also aims to pave the way for developing countries and emerging economies to maintain sustainable development with flexible mechanisms.

The CDM is one of the flexible mechanisms proposed by the Kyoto Protocol as a means of reducing CO_2 emissions.

The CDM supports carbon offset projects in developing countries and emerging economies. Certified Emission Reductions (CER) can be counted towards the reduction targets in industrialised nations which support such projects. These projects and emission reductions are part of what is known as mandatory emissions trading. Companies and private individuals can also voluntarily use CER to make certain activities carbon neutral.

The Clean Development Mechanism is a key driver of the sharing of clean technology and sustainable economic development in developing countries and emerging economies.

The CDM will expire and be replaced by a new, similar mechanism when the Paris Agreement takes effect. This mechanism is part of Article 6 of the Paris Agreement.

Article 6 of the Paris Agreement sets out three mechanisms for the parties to cooperate towards their national climate pledges. One of these is a new mechanism in Article 6.4 which was designed to contribute to reducing CO_2 emissions and support sustainable development. The detailed rules, methods, and procedures to implement the mechanism are currently still being negotiated. ClimatePartner expects these more detailed regulations to be one of the outcomes of the 2021 United Nations Climate Change Conference in Glasgow.

Voluntary Carbon Market (VCM)

The Voluntary Carbon Market emerged on the basis of the CDM and operates outside of mandatory emissions trading. Companies and private individuals who wish to voluntarily help protect the climate by offsetting the CO_2 emissions of their activities can support carbon offset projects from the voluntary market (Verified or Voluntary Emissions Reductions – VERs). An activity is almost any process which causes CO_2 to be released (flights, electricity or gas consumption, raw materials etc.). The Verified Carbon Standard and the Gold Standard are the leading standards in the VCM.

Requirements for carbon offset projects

ClimatePartner makes sure that only high quality projects are used to offset CO_2 emissions. It assesses all necessary aspects to verify the quality of the projects and processes. The projects must be supplementary, permanent, have other effects on local development (in line with the Sustainable Development Goals), and be audited by third parties.
ClimatePartner does this by requiring at least the two following quality assurance criteria to be met before a project can be used to offset carbon:

- The projects must be certified under an internationally accepted standard.
- The projects must also undergo a thorough due diligence process.

Every climate project offered by ClimatePartner has been certified under the internationally recognised standards for emission reduction projects. These serve as evidence of CO_2 emission reductions as well as other effects on development. Besides a positive effect on the climate, approved standards must contain at least three proven positive effects on another Sustainable Development Goal (in addition to SDG 13: “Climate Action”). Multiple standards can be combined in order to accomplish this.

As a member of ICROA, ClimatePartner follows the regulations of the Alliance. As such, ClimatePartner currently accepts the following carbon credits or combinations of credits:

- Verified Carbon Standard (VCS)
- Gold Standard / Gold Standard for the Global Goals (GS VER/GS4GG)
- Verified Carbon Standard + Climate, Community & Biodiversity Standards (VCS + CCBS)
- Verified Carbon Standard + SocialCarbon Standard (VCS + SC)
- Clean Development Mechanism + Gold Standard (GS CER)
- UK Woodland Carbon Code
- American Carbon Registry
- Climate Action Reserve

These carbon credits also make sure that the following general principles of offsetting projects are upheld:

- real
- measurable
- additonal (i.e. if they were not being financed by carbon credits, they would not be realised)
- permanent
- independently tested and verified
- exclusion of double counting

Besides emission reductions and sustainable development in line with Agenda 2030 (the Sustainable Development Goals) that are ensured by the certificates, projects must undergo an internal due diligence process by ClimatePartner.

By only using carbon credits that meet the above criteria, ClimatePartner makes sure that a high standard is maintained and minimises the risks that might arise in connection with offsetting projects.

ClimatePartner complies with the strict requirements of the Climate and Development Alliance (Allianz für Entwicklung und Klima) with regard to certification processes and transactions involving carbon credits.

- Independent auditors must confirm that projects meet the requirements of the standards.
- Records of emission reductions by registered projects must be verified after the fact by independent auditors.
- Emission reduction projects must be clearly identifiable in a register.
- Certified emission reductions must be clearly allocated to registered projects in registers. Each CO_2 reduction may only be claimed once with a carbon credit. Duplicates are not allowed and reductions may not be counted multiple times; carbon credits must be purchased and retired transparently.
- Retirements must be documented clearly; every carbon offset ends with the documented retirement of the carbon credits.

The certification by international standards, as well as the verification of projects by independent third parties, ensures that carbon offset projects reduce emissions. As there is a great number of available carbon offset projects, ClimatePartner has designed an internal due diligence process that projects must go through before they are included in our portfolio and offered to clients. This process includes a project-level review, as well as a review of our counterparties.

As part of the project review, various criteria are scrutinised in different review procedures. These procedures include, for example, the review of documents, media reports, and research on the project region, as well as queries on money laundering, fraud, or corruption. In order to evaluate the projects, ClimatePartner works closely with the project partners. If necessary, the review process can be extended to an in-depth analysis. By implementing this internal process, we can ensure that risks which may arise in connection with carbon offset projects are minimised as far as possible.

Development of carbon offset projects

ClimatePartner also develops its own projects which meet the strictest quality and certification standards, and make a valuable contribution to both global climate action and regional development. The experts at ClimatePartner have years of experience in the development of social impact projects such as clean drinking water and efficient stoves, as well as nature-based solutions such as forest protection, reforestation, and agroforestry. We also create innovative new project strategies to remove CO_2 emissions from the atmosphere. In so doing, we and our supporters can initiate carbon offset projects all over the world and keep them running on a long-term basis. Our project development services cover the entire value chain from the preparation of feasibility studies and project documentation (PIN, PDD, monitoring reports, etc.) to the management of external project auditors (validators and verification), support for our partners on site and, the transparent management of carbon credits. In addition to project development itself, we support our projects over their entire life spans and generate comprehensive communication materials.

Sustainable Development Goals

The United Nations adopted Agenda 2030 for Sustainable Development at the Sustainable Development Summit in September 2015. The 17 Sustainable Development Goals (SDGs) are a core element of the Agenda. They aim to improve living conditions for all people in current and future generations, contribute to protecting the planet, and make global developments sustainable by 2030.

The Agenda applies to all nations in the world equally (industrialised nations, emerging economies, and developing countries) and even integrates the three dimensions of sustainability:
economic, social, and environmental. This aims to underline that we all share responsibility for the world.

The 17 United Nations Sustainable Development Goals follow these guiding principles:

- End poverty, and hunger and fight inequality
- Strengthen human self-determination and gender equality, and ensure a healthy life and well-being for all
- Promote prosperity for all and build sustainable ways of living worldwide
- Respect the ecological limits of the Earth: Fight climate change, conserve, and sustainably use nature
- Protect human rights – ensure peace, good governance, and access to justice
- Build a global partnership

If the Agenda is to succeed, absolutely everyone has to contribute, not just entire nations and large organisations. Only by working together can we build a more sustainable, fairer, and better world.

Through its business model, ClimatePartner has a direct influence on Goal 13 – “Take urgent action to combat climate change and its impacts”. All of our clients who make their companies or products carbon neutral also have this influence. Additionally, every climate project by ClimatePartner contributes to achieving several other goals. Occasionally, these contributions are so significant that the projects tend to be more development projects with a positive effect on climate action and not the other way round.

That is why ClimatePartner sets out the Sustainable Development Goals that each climate project supports.

Application of a safety margin

There are uncertainties in every carbon footprint calculation to some degree. The following are some typical examples of uncertainties:

- CO_2 emissions are not measured, but rather calculated using emission factors based on industry data, scientific studies, or estimates
- There are data gaps which have been closed with estimates, assumptions, or extrapolations
- In spite of careful checks, mistakes can be made when data are collected and processed

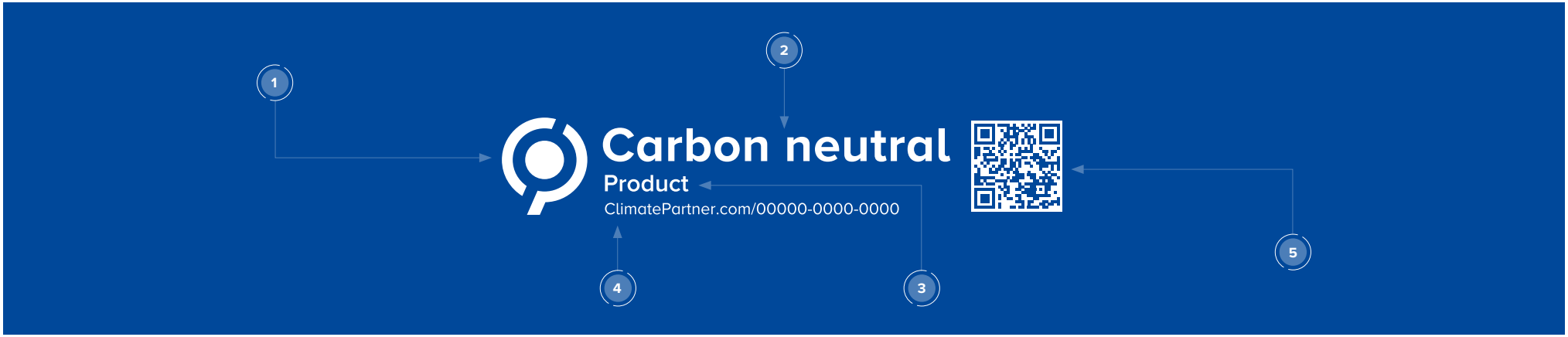
To make sure that a company or product is completely carbon neutral, a 10 per cent safety margin is normally applied to the calculated emissions. This means that the amount that has to be offset is always 110 per cent of the calculated emissions. The safety margin generally relates to the overall result and not the individual items.

The safety margin is only of relevance to offsetting and does not change the carbon footprint itself.

Items that are already carbon neutral (e.g., carbon neutral shipping) must be reported in the carbon footprint, but not offset again. However, this requires that the climate action projects behind them meet the standards of the ClimatePartner Protocol.

TÜV-certified process

The process developed and used by ClimatePartner to offset via an online platform has been certified by TÜV Austria and is audited annually (certificate number: TA290102005531).



4. Transparent communication

Transparency is critical when companies communicate their commitment to protect the climate. Customers can only understand and appraise it when the company's endeavours and actions are provable and traceable.

As proof of carbon neutrality, ClimatePartner awards its "Carbon neutral" label to companies, products, services, and other activities which have been made carbon neutral by means of the processes defined here: by calculating, reducing, and offsetting CO_2 emissions. It has become an established hallmark of carbon neutrality and is recommended by independent institutions such as the German Federal Ministry for Economic Cooperation and Development (BMZ) in the portal Siegelklarheit.de or at Labelinfo.ch.

Clients of ClimatePartner may only use the label in the category in which they meet the requirements. The "Carbon neutral Company" label does not necessarily apply to every product too – the carbon neutral product criteria as set out in the section entitled "System boundaries" must also be met for this to be the case. Therefore, the "Carbon neutral Company" label may not be applied to products as this can confuse consumers and leaves the company open to criticism.

The label may only ever be used for the specific carbon neutral item in the calculated quantity and for the offset time period.

The ClimatePartner label

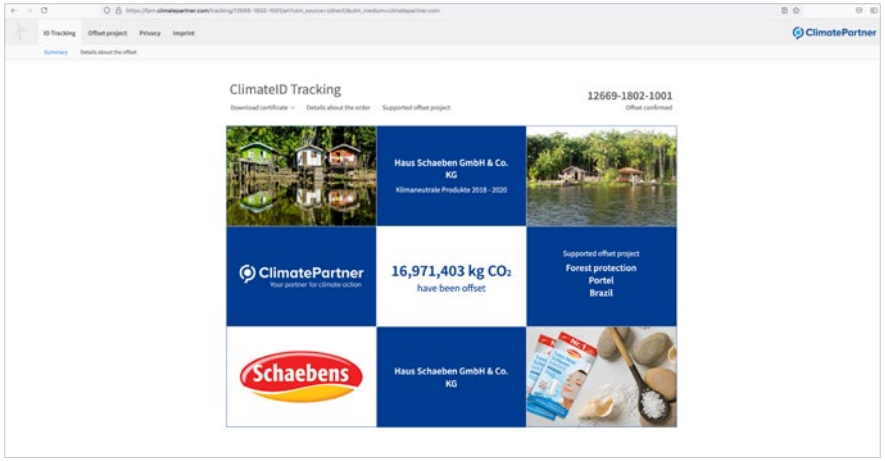
1 **The ClimatePartner signet**
It shows a symbol of the globe and the initials CP around the atmosphere.

2 **The "carbon neutral" designation**
The label confirms that unavoidable emissions from the labelled product have been calculated in line with the requirements of this document and offset via recognised carbon offset projects. This requires the label to have been used correctly and the related project to have been posted correctly.

3 **The category**
It illustrates what the carbon neutrality relates to: the company, a product, a service, or an activity (see "System boundaries").

4 **ID number and tracking URL**
Every offset has a unique ID number. A corresponding website gives an overview about the amount of CO_2 offset and which project has been used to offset.

5 **Optional: QR code**
It links to the tracking URL which contains information about the amount of CO_2 offset and the carbon offset project.



Traceability with climate ID tracking

The ID number on the ClimatePartner label and the tracking URL can be used for ID tracking. All the relevant carbon neutrality data for the product or company are available there to view:

- the company and/or product
- the amount of offset emissions
- with products, the system boundaries of the calculation, and the carbon footprint per product unit can be added
- the validity period of the carbon neutrality
- the supported carbon offset project with a project description including the technology, project standards, certifying organisations, how much is saved each year, its contribution to the SDGs and the location of the project on a map
- the company's carbon reduction strategies, goals, and results
- a definition of carbon neutrality in the context of the ClimatePartner process

Certain information is available depending on the label category:

Carbon neutral
Company
ClimatePartner.com/00000-0000-0000

Carbon neutral company

- Name of the company and other relevant information (e.g. sites)
- Validity period of its carbon neutrality

Carbon neutral
Product
ClimatePartner.com/00000-0000-0000

Carbon neutral product

- Product name, additional information characterising the item such as packaging size and sales territories
- Functional unit
- Validity period

Carbon neutral
Overnight Stay
ClimatePartner.com/00000-0000-0000

Carbon neutral service and other activity

- Name of the service or activity, maybe additional information if the entire service or activity is not covered
- Carbon neutrality validity period

The label delivers maximum transparency and traceability for climate action.

Use of the label

The ClimatePartner label may not be altered. All its individual components have a significance and its current form and composition have been optimised to perform the necessary functions. Only the QR code is optional.

Carbon neutral
Product
ClimatePartner.com/00000-0000-0000

Klimaneutral
Druckprodukt
ClimatePartner.com/00000-0000-0000

Climatiquement neutre
Emballage
ClimatePartner.com/00000-0000-0000

Carbon neutral
Company
ClimatePartner.com/00000-0000-0000

If there is not enough space on the packaging for the standard label, a smaller special version of the label is available. It only applies to carbon neutral products.

Linking to the label

If the label is used online – such as in an e-mail signature, on a website, or on a social media channel – the tracking URL can be used to link to it. Only the version without the QR code is used online as the link is used in place of the QR code. Links may not lead to other landing pages than the ID tracking page.

Certificate – Partner in climate action

For every carbon neutral order, the company receives a certificate to confirm its carbon neutrality and the fact it is working with ClimatePartner. The certificate shows the amount of offset CO_2 emissions as well as the company name, the supported climate project, the ID number and tracking URL and the date.

Clear communication

This document contains ClimatePartner's definition of carbon neutrality and is easy for any end consumer to find through ID tracking. As such, we recommend using the ClimatePartner label and wording and not creating any of your own company labels. The client is free to outline the principle of carbon neutrality next to the label on the product, such as by adding "Carbon neutral means that CO_2 emissions have been calculated and reduced, and unavoidable emissions have been offset through carbon offset projects".

ClimatePartner provides clients with boilerplate text. It can be used for reliable, transparent presentation.

Climate neutral or carbon neutral?

The phrase “carbon neutral” is largely used synonymously with “climate neutral”. Strictly speaking, climate neutrality encompasses CO_2 and all other greenhouse gases.

All greenhouse gases that contribute to global warming are factored into the calculation as CO_2 equivalents and, after reduction, all gases are offset in the form of CO_2.

The term “carbon neutral” is commonly used by our clients and in public discussions, especially in English-speaking countries. We have therefore updated our communication and provide a “carbon neutral” label in those countries. Where explicitly necessary, we will continue to use the term “climate neutral”.

The ClimatePartner marketing guidelines

ClimatePartner helps its clients communicate in a transparent and credible manner. The marketing guidelines are a comprehensive package with lots of tips, practical examples, checklists, and a resource database of logos and boilerplate text.

We also assist our clients with their communication: we check phrasing, provide templates, and even design marketing material depending on the project.

Clients can even take part in the ClimatePartner Academy and online deep dives free of charge and learn more about climate action.

About ClimatePartner

ClimatePartner – from a start-up with a sustainable idea to an established partner for climate action

It all began with an idea and the first client in Switzerland. Moritz Lehmkuhl founded ClimatePartner in Munich in 2006. His business proposal was simple and made waves on the sustainability scene: calculate, reduce, and offset CO_2 emissions through carbon offset projects. Although there was already a carbon offsetting market, to offset smaller specific amounts of emissions on the basis of what was causing them was something new.

The idea was welcomed by the printing industry as the market had been hit by digitisation and climate action was a promising way to stand out. It was a success: the first few printing shops in Switzerland and Germany were soon followed by more and more looking to offer their customers optional carbon neutral printing services. ISO 16759, a carbon neutral print product standard, was soon developed with the assistance of ClimatePartner to give customers the peace of mind of a certified process. The quantification of emissions from print products became more and more standardised and was soon followed by packaging manufacturers with similar measurement methods.

At the same time, ClimatePartner began calculating corporate carbon footprints and offering advice on the reduction and avoidance of emissions.

Carbon neutral products were ultimately added in line with the same principle. Today, ClimatePartner has clients from a wide range of sectors. Its services range from quantifying emissions, and advising on reduction and climate action strategies, to offsetting unavoidable emissions, and assisting with communication. Our clients can work with us to offer individual carbon neutral products or orders, become carbon neutral as companies or, like most of our clients nowadays, become carbon neutral companies with carbon neutral products.

ClimatePartner has grown quickly, especially over the past year, with new members of staff every month and new sites in other European countries and soon the USA. In future, our goal is to continue assisting companies with climate action and contribute to the international climate change mitigation targets. We would like to thank all our clients who have worked with us so far for their confidence in us!

Successful climate action: our clients

Many printing shops and packaging manufacturers are currently part of ClimatePartner's client base. ClimatePartner also works with various companies from a wide range of sectors: food, beverages and cosmetics, textile and sports, retail and industry, logistics, mobility, media, services, finance, and more, from start-ups to major groups. After all, climate action is everyone's responsibility. Over 3,000 companies now have success stories about tackling climate change.

The goal of ClimatePartner remains the same: there should be a carbon neutral product in every basket. Every consumer should seek eco-friendly alternatives.

From calculation to offsetting: our services

- Measuring the carbon footprints of companies, products, services, and other activities
- Climate action strategies and advice on the avoidance and reduction of CO_2 emissions
- Carbon offsetting through carbon offset projects
- Assistance with communication for transparency and credibility
- Clean energy
- Integration of CO_2 calculators into corporate IT systems
- Supply chain solution to purchase carbon neutral products from multiple different suppliers
- Science-based targets: science-based CO_2 reduction targets

Glossary

CCF – Corporate Carbon Footprint

A CCF is the carbon footprint of your company. We conduct our measurement in accordance with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. We report emissions in Scopes 1 to 3 depending on whether they occur directly within the company (Scope 1), from purchased energy (Scope 2) or are indirect emissions from upstream and downstream processes such as raw materials, logistics, and disposal (Scope 3). See → PCF

Clean Development Mechanism (CDM)

The Clean Development Mechanism is one of the flexible mechanisms proposed by the Kyoto Protocol as a means of reducing greenhouse gas emissions. Carbon offset projects are realised in developing countries and emerging economies through the CDM. Certified Emission Reductions (CER) can be counted towards reduction targets in industrialised countries. The CDM is therefore a key driver of the sharing of clean technology and sustainable economic development in these countries.

Carbon neutral

Companies, processes, and products whose greenhouse gas emissions have been calculated and offset through support for internationally recognised carbon offset projects can be considered carbon neutral. Besides avoidance and reduction, offsetting greenhouse gas emissions is an important part of a holistic climate action strategy.

CO_2 equivalents

We factor all greenhouse gases identified as relevant by the Kyoto Protocol into our calculation of a CCF or PCF: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (“laughing gas”, N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). As each of these gases affects the greenhouse effect differently and remains in the atmosphere for a different length of time, we convert them into what are known as CO_2 equivalents. We therefore use the term “carbon footprint” for the sake of brevity.

Data collection

Primary data

The term “primary data” refers to collected or directly measured data which have not been processed or otherwise manipulated. Examples of primary data sources include the direct measurement of how much natural gas is burned in a heating system (Scope 1) or the electricity measured (Scope 2) before the application of conversion factors that are used to determine emissions. Provided they are available, up to date, and geographically suitable, primary data should be used to obtain as accurate a carbon footprint as possible.

Secondary data

Collected or measured data which have been processed or used in additional calculations in order to obtain a usable result are referred to as secondary data. Examples include the application of emission factors to flight distances or fuel consumption in order to calculate emissions.

Greenhouse Gas Protocol

The GHG Protocol is an internationally recognised standard for companies to measure their greenhouse gas emissions. It was developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). Five basic principles must be taken into account when measuring and reporting on a corporate carbon footprint: Relevance, completeness, consistency, accuracy, and transparency.

Climate neutral

In English we use the term climate neutral as a synonym to the term carbon neutral.
See → carbon neutral

“Climate positive”

There is no universal definition for the term “climate positive”. How the term is understood and interpreted is equally unclear. “Climate positive” is also a misleading term. A company or product can be carbon neutral at best, i.e. it offsets the effect of the CO_2 emissions it causes by avoiding them elsewhere. However, overcompensation does not equate to “climate positive”.
see → carbon neutral

Climate project

Carbon offset projects are proven to save greenhouse gases, be it through forest protection, reforestation, or expanding renewable energy. Carbon offset projects also promote sustainable development in their local countries, such as by improving the supply of clean drinking water or building local infrastructure, creating jobs, or conserving biodiversity. Carbon offset projects must meet four criteria in order to be recognised and certified as carbon offset projects: they must be supplementary, they must exclude double counting, they must be permanent, and they must be audited by independent third parties on a regular basis.

Kyoto Protocol

On 11 December 1997, the United Nations adopted an extension to the United Nations Framework Convention on Climate Change (UNFCCC) in Kyoto, Japan. The treaty was signed by 193 states and imposed binding targets for industrialised countries to limit greenhouse gas emissions for the first time. The industrialised countries which signed the treaty committed to reduce their annual greenhouse gas emissions by set amounts, such as by an average of 5.2 per cent compared to 1990 levels in the first commitment period from 2008 to 2012. The Protocol also aimed to pave the way for developing countries and emerging economies to maintain sustainable development.

Paris Agreement

In 2015, 196 nations pledged to limit global warming from 2020 onwards. Since then, all the nations in the world – industrialised nations, emerging economies, and developing countries alike – have been pulling together to limit global warming for the first time. We find three aims of the Paris Agreement particularly important: Limit the temperature increase from global warming to 1.5°C, a carbon neutral global economy from 2050, and binding reduction targets every five years.

PCF – Product Carbon Footprint

A PCF is the carbon footprint of a product. The measurement is based on the Greenhouse Gas Protocol Product Life Cycle Accounting and Reporting Standard which contains a clear set of criteria for this. We normally assess the life cycle of a product from manufacturing and logistics to the use phase and disposal (cradle-to-grave). See → CCF

ClimatePartner

ClimatePartner – Your partner for climate action

ClimatePartner develops and realises climate solutions for companies. We help our clients measure and steadily reduce their CO_2 emissions and offset their unavoidable emissions through carbon offset projects. Our Carbon Neutrality Label for carbon neutral companies, products, services, and other activities is well established across different sectors and is recommended by institutions such as the German Federal Ministry for Economic Cooperation and Development (Siegelklarheit.de) and Labelinfo.ch.

We rely on our sophisticated software range and our 15 years of experience with over 3,000 clients.

We select our carbon offset projects with care: We carry out projects in different regions around the world with various technologies and standards. The additional social effects of the projects matter a great deal to us. As such, we follow the 17 United Nations Sustainable Development Goals and list the ones to which each project aims to contribute.

ClimatePartner was founded in Munich in 2006. Now, in mid-2021, we have over 200 members of staff in Munich, Berlin, The Hague, Essen, London, Milan, Vienna, and Zurich. We work with over 3,000 companies in 35 countries.

Publishing details

ClimatePartner GmbH
St.-Martin-Str. 59
81669 Munich, Germany

Phone +49 89 1222 8750
info@climatepartner.com
www.climatepartner.com

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