



# Climate Roadmap

 **CLIMECON**  
*Human centric ventilation*



# Foreword

The effects of climate change, such as extreme weather events and the rise of global average temperature, are already visible. Greenhouse gas emissions must be reduced in every sector to ensure the continuity of humankind. The manufacturing sector accounts for about a fifth, and the built environment accounts for about a quarter of Finland's greenhouse gas emissions. It can, therefore, be said without a doubt that these sectors have a significant impact on reducing climate change and achieving Finland's goal of carbon neutrality.

Climecon achieved carbon neutrality in 2020 as one of the first companies in the construction and ventilation industry. The work against climate change continues because we want to remain Finland's most responsible solution provider in the ventilation sector in the future. That is why we have created a climate roadmap to support our purposeful climate work. Carbon neutrality work and responsibility are important to Climecon's operating principle because we want to take care of people and the environment.

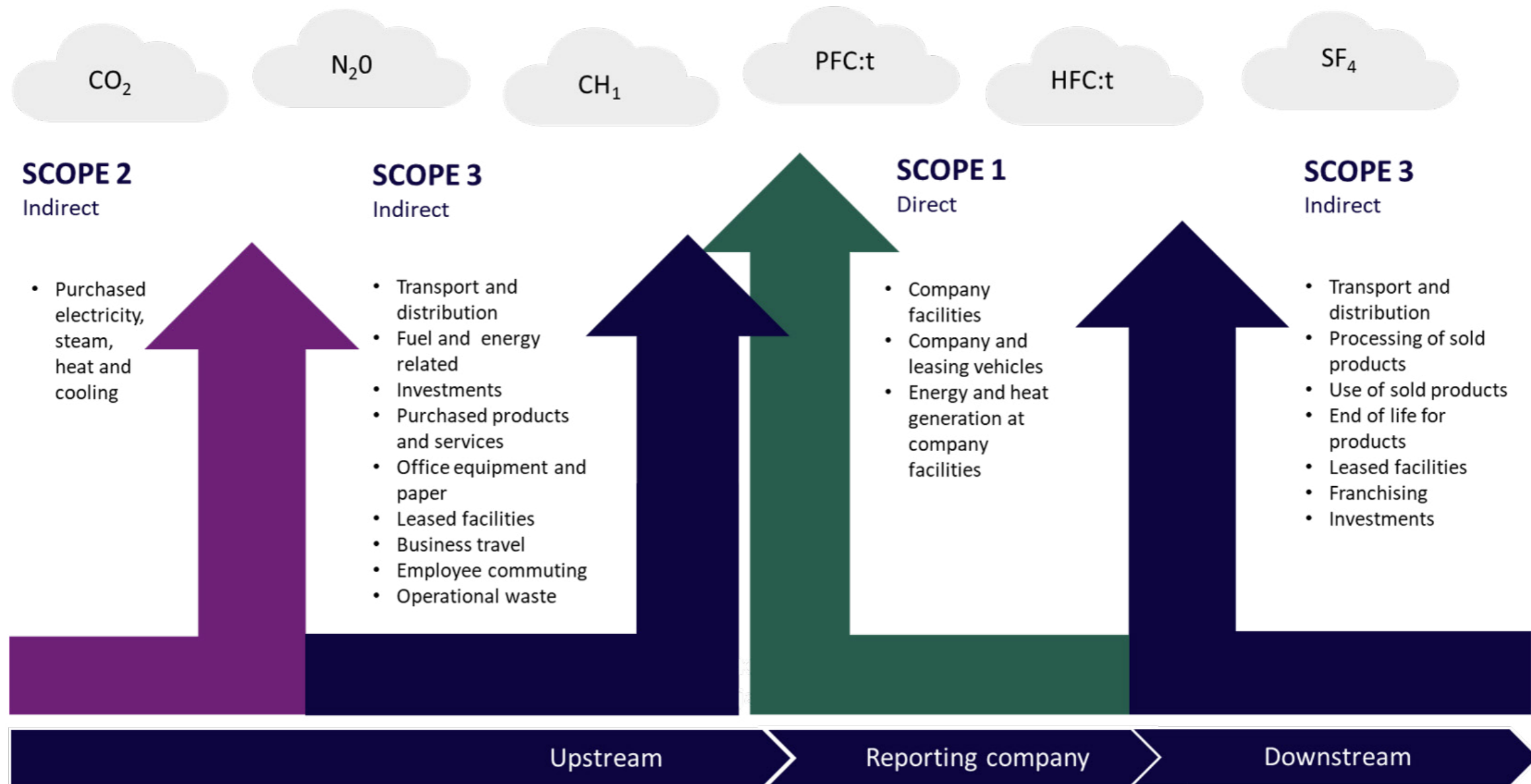
## Background for the Climate Roadmap

- Finland and Europe have signed the Paris Climate Agreement, which aims to keep the global average temperature rise well below 1,5°C.
- Finland's national goal is to be carbon-neutral by 2035.
- The reduction of greenhouse gas emissions in the construction industry is guided by the Ministry of the Environment's Low-carbon Built Environment program and the Land Use and Building Act reform, which takes into account sustainable development.

# Climecon's climate roadmap is based on long-term climate work

We are committed to calculating our greenhouse gas emissions, implementing emission reduction measures, and compensating for the unavoidable emissions of our operations.

Climecon's first carbon footprint calculation was carried out in 2019, and since 2020, the company has been carbon neutral. Climecon's carbon neutrality calculations are based on the globally used GHG protocol, which provides the framework for calculating and compensating the company's carbon dioxide emissions. We are carbon neutral regarding direct emissions from our operations (Scope 1) and indirect emissions from purchased energy (Scope 2). In addition, we are a carbon-neutral company in terms of travelling to work, business travel, fuel and energy related activities, and waste handling. We have compensated our emissions to the extent that we cannot remove them ourselves for the time being.



Original picture: Greenhouse Gas Protocol

<sup>1</sup> Finland towards climate measures in line with the 1.5 degree goal ([sitra.fi](http://sitra.fi))

<sup>2</sup> Climecon's carbon neutrality means that the emissions resulting from the company's own operations have been neutralized. The most important way is to reduce the generation of carbon dioxide emissions. In addition to this, similar emissions that have not been able to be reduced are compensated for verified climate projects.

## Development of emissions calculation

Our emissions calculation has become more precise every year as we constantly better understand the environmental impacts of our operations. In previous years, emissions have been calculated in several parts based on euros, which is a secondary way for companies to report the amount of materials and products purchased from the value chain. This year, the calculations have been based on more accurate, mass-based data that we have collected from our value chain. Due to a more detailed investigation, the emission figures look significantly better. However, there is a problem here: if we want comparable data, we would have to redo the calculations from previous years as well.

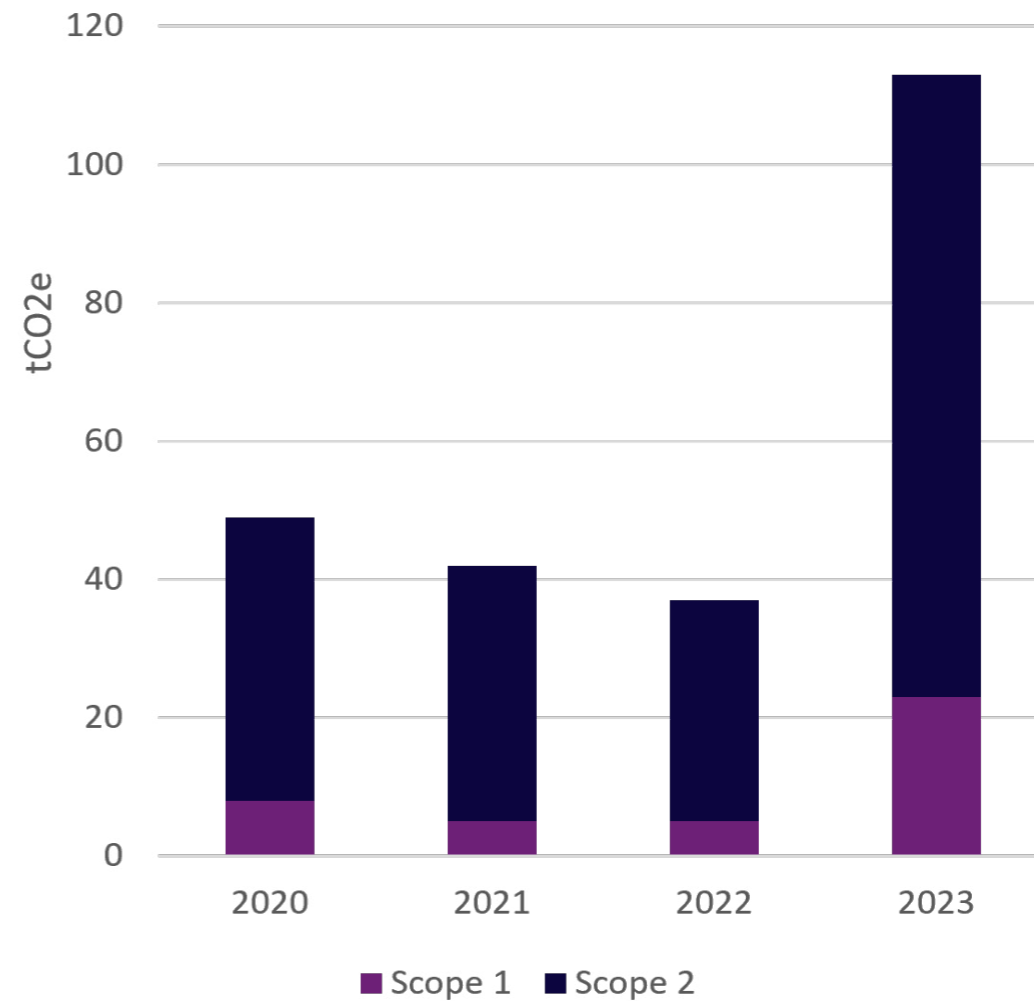
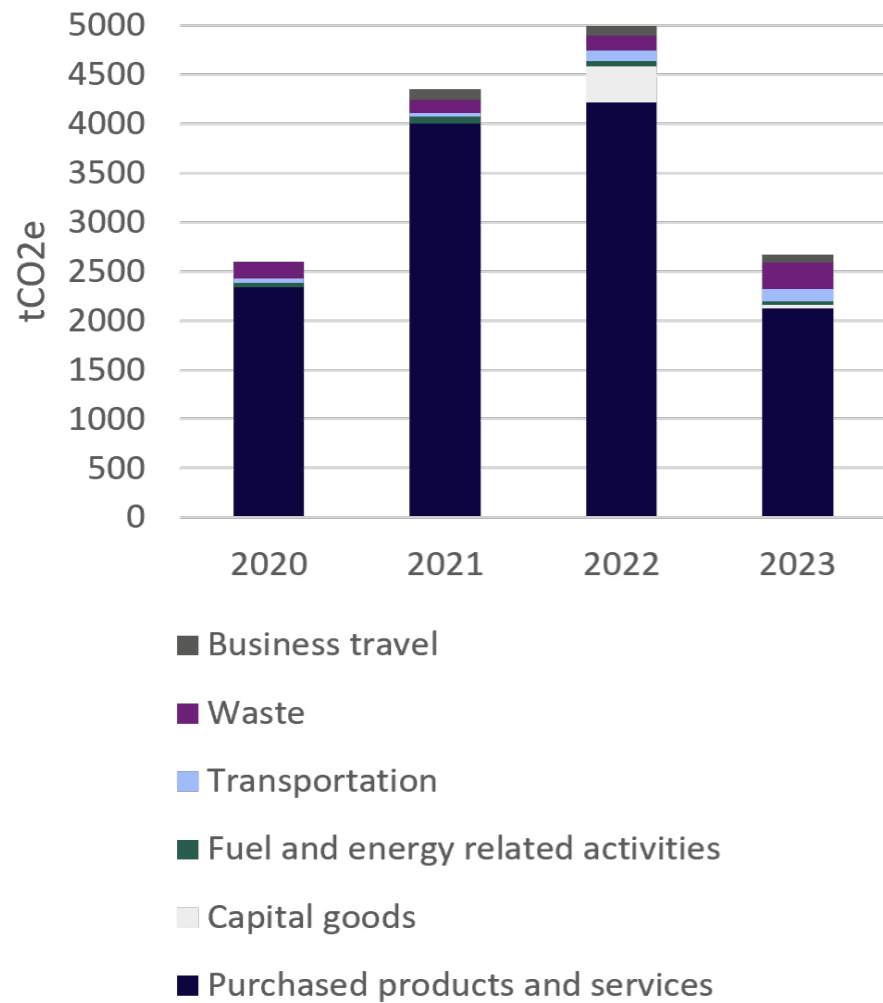
A materiality analysis has improved the Scope 3 emissions category coverage because we want to consider all emissions resulting from the company's operations as accurately as possible. The materiality analysis was also carried out to ensure the fulfilment of the emission reporting requirements of the EU's CSRD directive.

## Carbon intensity

A better business year almost automatically means more emissions, and vice versa. This is why it is essential to compare the absolute carbon footprint with the so-called carbon intensity, i.e., by dividing the emissions per million in turnover or production volume. When the carbon intensity remains downward, we are on the right track. In 2023, Climecon's carbon intensity was 204 kgCO<sub>2</sub>/M€. This means that, relative to turnover, our emissions have decreased by 37 % compared to previous years.



# Emissions in 2023



The Scope 1 covers the company’s direct emissions, i.e. emissions from company-owned properties, own energy production and company vehicles. In 2023, Climecon generated 23 tCO<sub>2</sub>e of Scope 1 emissions. Scope 2 are emissions that a company causes indirectly and come from where the energy it purchases and uses is produced. For example, the emissions caused when generating the electricity that we use in our buildings would fall into this category. Climecon’s Scope 2 emissions in 2023 were 90 tCO<sub>2</sub>e. The direct emissions of Climecon’s own operations in 2023 were therefore 113 tCO<sub>2</sub>e.

Scope 3 emissions refer to all indirect emissions that occur in the company’s value chain. Climecon’s Scope 3 emissions have decreased considerably from the previous year. The difference between 2022 and 2023 is 2162 tCO<sub>2</sub>e. The reduction of Scope 3 class emissions has been influenced, for example, by material choices, as well as the above-mentioned improvement of the emission calculation.

Our effort is to identify parts of our value chain that generate unnecessary emissions and set goals to reduce these emissions. For example, with technology investments, we aim to reduce the generation of waste materials and increase energy efficiency.

# Concrete actions

Climecon has been working actively for years to reduce energy consumption and carbon footprint. For example, green transition measures have been taken to reduce the carbon footprint of energy and fuel use, increase the sustainability of products and purchases, and guarantee excellent quality.

Use of energy and fuels	Sustainability of products and procurements	Quality assurance and monitoring
<ul style="list-style-type: none"> <li>• Our premises purchased electricity has been changed to 100% renewable certified wind energy, and the district heating is also largely renewable. As a result, the company's electricity and heat production emissions have decreased by approximately 156 tCO<sub>2</sub>e compared to 2019.</li> <li>• A solar power plant was established at the Kausala factory in 2021. In 2022, the solar panels produced 63 MWh of electricity, which is 11.9% of the factory's operating electricity.</li> <li>• At the Helsinki and Kausala offices, a 100% renewable energy charging infrastructure has been built for electric cars. This aims to encourage our employees to invest in low-emission vehicles instead of gasoline or diesel cars.</li> <li>• The forklifts in our factories have been replaced with electric ones since 2019.</li> <li>• The light bulbs in our premises have been replaced with LED bulbs. LED lamps have a lifetime of at least 25 times longer, and their energy consumption is up to 75% lower than incandescent lamps.</li> <li>• 20% less electricity is used for painting products than before. Investing in more covering paint and systematic personnel training have contributed to this. By making the painting process more efficient, the Kausala factory's energy consumption has decreased by 120 MWh from 2022.</li> </ul>	<ul style="list-style-type: none"> <li>• The plastic components of the products have been replaced with biocomposite. The material's carbon footprint is up to 90% smaller than before.</li> <li>• Waste metal generated in the manufacture of products is recycled for reuse.</li> <li>• Durability and practicality are considered in procurements, such as business gifts.</li> <li>• In addition, for example, staff clothing is purchased from a company that uses recycled textiles in its production.</li> </ul>	<ul style="list-style-type: none"> <li>• We have calculated the carbon footprint of many products and prepared an EPD environmental statement for them. Thanks to EPD environmental reports, construction contractors, builders, and designers better understand environmental issues related to products and materials</li> <li>• We are a completely a Finnish company and always strive to use local suppliers whenever possible. Therefore, the delivery distances of materials are short, and the social sustainability of the supply chain is verifiable.</li> <li>• A sustainability specialist has been hired for Climecon, whose most important task is to develop a sustainable and responsible business.</li> <li>• We have ISO 9001:2015 and ISO 14001:2015 certifications for quality and environmental standards.</li> </ul>

# The objectives of the climate roadmap

## We act as a forerunner

We have already started working against climate change in 2019, we want to take steps towards even more responsible operations. Climecon's goal is not only to continue as a carbon-neutral company in terms of its operations; we want to find out how we can improve the sustainability of our supply chain and reduce unnecessary emissions beyond our operations.

## Commitment

We want to provide our customers with reliable and transparent information about the environmental impact of our operations. Therefore, Climecon joins the Science Based Targets initiative and commits to emission reduction targets to mitigate climate change. The validation confirms that Climecon's climate strategy supports the transition to a sustainable economy and limiting global warming to 1.5 degrees in accordance with the Paris Climate Agreement and the latest climate science.

- We will reduce 42% of Scope 1 and Scope 2 emissions by 2030 compared to 2023
- We will reduce Scope 3 emissions by 30% by 2030 compared to 2023

## The roadmap gives guidelines

The roadmap gives the guidelines we at Climecon can create an even more sustainable future. The purpose of the climate roadmap is to support the fulfillment of Climecon's climate goals.

The climate roadmap aims to determine the company's current state, define priorities for reducing greenhouse gas emissions, and study possible compensation models. The roadmap describes the measures we aim to take to reduce energy consumption and greenhouse gas emissions. In addition, the map identifies the company's positive climate effects, the so-called carbon fingerprint.



## Reporting

We will publish an ESG (Environmental Social Governance) report every year, in which we will tell you about our progress. ESG responsibility reporting, contains information about the effects of the company's operations on the environment, climate and people, the possibilities of responsible business and the organization's responsibility goals.

## Emission reductions are achieved with concrete climate measures

Goal orientation and systematicity are essential in the work against climate change. Because of this, we have defined a list of concrete measures that we will use to reduce carbon emissions even further. We identified a total of 18 functions where we will make emission reductions. The measures are based on sustainable product development, improving energy efficiency, circular economy and waste management, procurement and supply chain, business travel, and cooperation and commitment. The parties responsible for the measures, metrics, implementation schedules, and partners are Climecon's internal information.

## Monitoring the success of climate measures

Climecon's carbon footprint has been calculated since 2019, and we are committed to monitoring its development every year in the future. We will calculate our carbon footprint in 2025, after which we will check the adequacy of our climate measures and decide on possible additional measures. We constantly evaluate, change, and develop our climate roadmap as climate science and our own knowledge develop. A sustainability specialist monitors the measures listed in the climate road map.



# The Science Based Targets initiative approved Climecon's climate targets

Climecon joined the Science Based Targets initiative and commits to emission reduction targets to mitigate climate change. The most responsible and climate-wise companies have set a public goal that is in line with the Paris Climate Agreement. Climecon is one of the first construction product manufacturing companies to have approved a climate target through the Science Based Targets initiative, shortly SBTi.

The validation confirms that Climecon's climate strategy supports the transition to a sustainable economy and limiting global warming to 1.5 degrees in accordance with the Paris Climate Agreement and the latest climate science.

## What is Science Based Targets?

Science Based Targets (SBT) is a corporate climate action organization that enables companies to participate in mitigating the climate crisis. The project's drivers are, for example, the UN and the nature conservation organization WWF. Through SBT's initiative, companies can set an emission reduction goal, the purpose of which is to slow down climate change. As the name suggests, the goals of the SBT project are based on climate science.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION



# Sustainable product development

## Optimizing the materials used in the products

We look for and implement low-carbon material options that support circular economy, and we develop our products towards demand-controlled and energy-efficient ventilation. We will prepare and publish EPD environmental reports for all our products, which contain information about the products' carbon footprints. We will increase the availability of carbon-neutral products. We strive to reduce the generation of waste materials through smart technology investments and personnel training.

## Optimization of packaging materials

We reduce the use of packaging materials and improve their recyclability. We also reduce the use of virgin plastic and switch to using as much recycled plastic as possible. We are also exploring the opportunities with replacing other materials used in packaging with recycled materials.

## Development of energy-efficient products

We pay attention to energy efficiency as a part of the measurement system for product design and strive to develop products that support our customers' energy-saving designs and construction.

## Improving energy efficiency in operations

An energy investment is planned for the Kausala factory, which will help reduce energy consumption in the factory's operations. Electricity consumption is monitored, and changes are reacted to by adding an energy management system. The equipment is also regularly serviced to detect and correct faults. In addition, personnel are trained to operate in an energy-saving manner.

We are negotiating with the municipality of Pihtipudas about possible energy-saving measures at the Pihtipudas factory. For example, we will find out if building a solar power plant and charging infrastructure for electric cars is possible there.



# Circular economy and waste management

## **We increase the recyclability of packaging materials**

Each material used in the packaging of the sold product is marked with the recycling bin to which the material belongs.

## **We are increasing the recycling of waste at our offices**

We are increasing the waste sorting capabilities of all premises. We pay attention to user-friendly placement of the waste bins, and clear instructions to ensure the correct waste sorting. We optimize waste transportation according to the amount of waste generated instead of time intervals. We monitor the accumulation of waste and the recycling rate using an external tool. We comply with the EU's goal that by the end of 2025, at least 65% of our packaging waste will be recycled.

# Procurement and supply chain

## We are switching to carbon-neutral deliveries

We explore the low-carbon transport options and switch to using them.

## Sustainability is taken into account in all purchases

Purchases are made from operators who are committed to sustainable development. We will introduce a procurement contract that binds partners to act according to sustainability principles.

Procurement is done sustainably and with an effort to use recycled materials. When preparing procurements, we consider their lifetime climate impacts and monitor the effectiveness of completed procurements.

We set the conditions regarding emission classification and carbon dioxide emissions for the purchased vehicles and work machines.

## Development of business travel

We arrange as many separate customer meetings in the same area as possible.

Flying is viewed critically, especially domestic flights and other short journeys. Domestic business travel aims to favor the train when the situation allows. When flying is necessary, the carbon dioxide emissions of the flights are compensated. Carbon dioxide emissions from hotel stays related to business travel are also compensated. Low-emission cars are preferred in car rental related to business travel.



# Cooperation and engagement

Committing suppliers	Employee engagement and training	Customer engagement
<p>Continuous cooperation is carried out with suppliers to promote sustainability and climate goals. The suppliers have already set ambitious climate goals independently, and we will systematically request information on realizing the goals.</p> <p>Suppliers are expected to operate according to 9001 and 14001 standards. We understand that not every small business has the opportunity to acquire ISO certificates. In such cases, we can agree on a supplier audit, which allows us to verify the company's efforts to act responsibly.</p>	<p>We ensure all Climecon employees understand the importance of carbon neutrality and the company's sustainable operating principles.</p> <p>We prepare written instructions on Climecon's sustainable development operating principles and add responsibility as part of the orientation.</p>	<p>We increase the customer's awareness of products that support the green transition by providing information about the products' carbon footprint in verified EPD documents.</p> <p>We are developing a carbon footprint compensation model, which is part of Climecon's selection tools. In this way, our selection programs guide the customer to a more low-carbon construction. We also increase the transparency of business operations by publishing an annual sustainability report.</p>

## Other cooperation

We are increasing cooperation with, for example, universities, cities, and other organizations in the field to find more sustainable solutions. We are involved in the green transition discussion on our initiative, and we encourage other companies in the industry to become more sustainable by sharing our own experiences.



# Carbon handprint of Climecon products

The goal of carbon handprinting is to assess the positive greenhouse gas impacts that would be achieved when a product is used by a customer.

Climecon develops demand controlled and energy-efficient ventilation solutions. Unbalanced ventilation is not energy efficient and often leads to indoor air problems. When the devices and their air volumes are dimensioned correctly, just the right amount of air goes to the right place - not too little or too much. In this way, the ventilation also works as planned. A properly designed and adjusted ventilation system is energy efficient. Energy efficiency is also supported by Climecon's .X selection programs and the DCKV kitchen ventilation system.

## Energy savings from ventilation

With DCKV (Demand Controlled Kitchen Ventilation) technology, the ventilation of the professional kitchen can be adjusted according to the degree of use. Ventilation can be controlled and made more efficient for each workplace, so that energy is not wasted. With the help of overall control, the ventilation works at optimal power in all situations, resulting in large energy savings.

## A designer's climate smart working

The vast majority (90%) of emissions are already determined upon the planning phase, so the effects of planning and construction taking place today extend far into the future of the built environment. The client and designer of the construction work play the most significant role in these decisions. That is why we have developed our selection tools to facilitate the customer's climate-aware working. A calculation model will be added to the planning tools, with which the customer can compare the carbon footprints of different products using the CO<sub>2</sub> efficiency figure. In the programs, you can already see the emissions of carbon footprint-calculated air terminal devices.

In Finland, the goal of operators in the construction sector is to achieve carbon neutrality in the built environment by 2035. In addition, the Ministry of the environment's regulatory guidance on low-carbon construction will include obligations to evaluate the climate impacts of the life cycle of buildings in the near future. Climecon offers a selection of EPD-calculated products, in which, in addition to the carbon footprint of ventilation products, their environmental impact is presented extensively. EPD documents enable the customer to obtain a reliable emission calculation result. In addition to verifying the environmental effects, based on a comprehensive EPD calculation, it is possible to locate improvement points in Climecon's own operations.





## Emission compensation plan

Since Climecon cannot, even in the best case, operate without producing some greenhouse gas emissions, voluntary compensation plan must be introduced. Climecon is committed to compensating the unavoidable emissions resulting from its own operations by supporting carbon sinks. With the help of ecological compensation, the damage caused by human activity to biodiversity on one area is compensated by increasing biodiversity on the other. Emission categories 1 and 2 are compensated, in addition to which, we compensate emissions from commuting and business travel, emissions from waste processing, and emissions from fuel and energy related activities.

Climecon selects annually projects for compensation, that support environmental and social sustainable development in the Global South. We have decided to focus on projects whose goals are to protect biodiversity, restore damaged ecosystems, and promote the independence and well-being of local communities. We have decentralized our compensation to various climate projects verified by a third party, which allows the risks of individual projects to be managed.

Climecon is involved in projects that promote the well-being of the Baltic Sea and supports, for example, the John Nurminen Foundation and Pidä Saaristo Siistinä ry's activities every year. With its donations, Climecon participates in concrete and effective Baltic Sea conservation work and ensures that the Baltic Sea's heritage is also passed on to future generations.

Picture: Juha Nurminen





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