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# SUSTAINABILITY REPORT 2023

# Introduction

The 2023 Camfil Sustainability Report shares highlights of our sustainability dedication around the important areas of Environmental, Social, and Economical responsibility which is embedded in our business processes across Camfil.

**Our Sustainability Framework is built on the following 4 principles;**

- **Clean Air Everywhere**
- **Caring for People**
- **Clean Operations**
- **Preserving Resources**

These principles are intricately woven into our business operations throughout Camfil. As a global entity, we acknowledge the escalating negative impacts on our planet. Hence, we have dedicated ourselves to leading our industry by minimising the climate and environmental footprint of our operations – a promise we uphold.





**Recognising that we spend up to 90% of our time indoors underscores the critical importance of the air we breathe for our well-being. However, most often, we lack the ability to choose the quality of the air we inhale.**

Our vision is succinctly encapsulated in a fundamental question: "Clean Air – a Human Right?" Camfil's unyielding focus remains steadfast in delivering solutions that foster healthy and safe indoor environments while concurrently reducing ventilation-related energy expenses – a direct correlation to our customers' impact.

As a producer of physical products, we face the ongoing challenge of minimising our climate and environmental footprint. In 2023, Camfil implemented a new sustainability framework within our operational processes, demonstrating our commitment as responsible corporate citizens on the journey toward achieving net-zero emissions.

Throughout 2023, Camfil inaugurated cutting-edge factories in the US and China to better serve our customers, thereby curbing transportation-related emissions. We embraced new industry standards for measuring filter efficiency, affirming our pioneering role in the filtration sector.

This report consolidates the key highlights of our sustainability initiatives deeply embedded within our business in 2023, while also outlining our forward-looking vision – where sustainability isn't merely a task we perform but an intrinsic part of our organisational DNA.



90%

of our time is typically spent indoors which underscores the critical importance of the air we breathe.



# Contents

Introduction .....	2
CEO Letter.....	5
Vision, Mission, Goals .....	6
Core Values .....	6
This is Camfil .....	7
Why We Care .....	8
UN Sustainable Development Goals .....	9
Sustainability commitments.....	10
Our Strategy .....	11
Clean Air Everywhere.....	12
Value to society.....	13
Chief Aironomics Officer initiative.....	16
Product launches.....	17
Energy Efficient Solutions.....	20
Industry Leadership .....	24
Caring for People .....	28
Safe & Healthy Workplaces .....	29
Worker & Community Well-being .....	30
Business Ethics.....	31
Preserving Resources .....	34
Material Footprint .....	35
Product Circularity.....	38
Packaging .....	39
Clean Operations.....	40
Environmental Inventory .....	42
Clean Energy.....	43
Energy Efficient Production .....	44
Minimise Production Waste.....	46
Sustainability Targets and KPIs .....	48
Letter from VP of Sustainability.....	51



Let's take a deep breath – the air that surrounds us has been our passion for six decades.

MARK SIMMONS,  
PRESIDENT AND  
CEO OF CAMFIL

**In 2023, Camfil celebrated 60 years in the filtration industry, steadfast in our commitment to delivering clean air that safeguards lives, processes, and our planet.**

As we reflect on this remarkable journey, it's clear: at Camfil, we don't just talk the talk – we walk the talk. Our growing global Sustainability team stands as a testament to our unwavering dedication. Through programs like EcoVadis and Science Based Targets, we're not just checking boxes; we're diving deep into our daily grind, chasing sustainability as fiercely as we pursue innovation.

For six decades, we've been at the forefront of providing clean air solutions. But it doesn't stop there. We're steering the ship towards a greener, more sustainable future by confronting the environmental impact of our products head-on. Through Life Cycle Assessment methods and robust sustainability frameworks, we're reshaping our legacy, ensuring that every breath of fresh air we provide doesn't cost the Earth.

Our journey isn't just about reaching milestones; it's about sculpting a narrative where every decision embodies our dedication to a better world. Together, we're not just writing history; we're scripting a legacy – a legacy where clean air meets responsible practices, shaping a future that's healthier, brighter, and more sustainable.

Thank you for being part of this incredible voyage towards a world where clean air should be a human right.

# Vision Statement

→ Our way to raise awareness and create debate is to phrase our vision statement as a question: Clean air – a human right?

# Mission Statement

→ Our mission is to deliver solutions that combine clean air with energy efficiency in a sustainable and profitable way.

# Goals

→ To achieve organic growth well above market growth with maintained profitability.

## Our Core Values



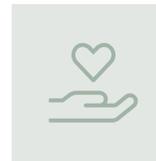
### Reliability

→ We are honest, truthful and know our market.



### Commitment

→ We strive for the best possible solutions at the forefront of technological and environmental developments.



### Customer Satisfaction

→ We put our customers first by identifying needs and creating long-lasting value.



### Local Presence

→ Local understanding and presence builds customer relations and satisfaction.



### Teamwork

→ Working together makes us stronger and increases employee satisfaction.

# Our company

## This is Camfil

Founded in Sweden in 1963, Camfil is today a world leader in air filtration solutions protecting people, processes and our planet for more than half a century.

We are a family-owned company and manufacturer of premium clean air solutions, and customers in all applications areas across the world who have come to rely on our innovative products and services.

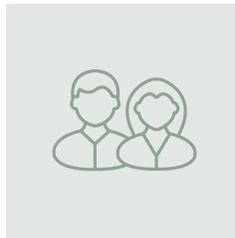
We are proud to have achieved the recognition from a wide variety of industries and communities across the world.

With our steadfast focus on fulfilling and exceeding customer expectations and industry regulations with the least energy usage, we believe that the best solutions for our customers are also the best solutions for our planet.

From innovation and design, to delivery and operations across the product life cycle, we consider the impact of what we do: on people and on the world around us. Innovation, customer understanding and problem solving has always been part of our DNA where we aim to conserve more, use less and find better ways – so we can all breathe easier and minimise the impact on our shared environment.



**Headquarters in Stockholm, Sweden**



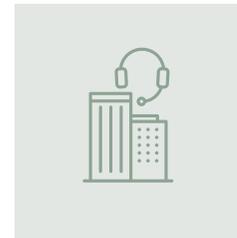
**5 700 employees worldwide**



**13.6 billions SEK net sales**



**60 years of Clean Air Solutions**



**35+ countries with sales offices**



**30 manufacturing sites**



**6 R&D centres**

*Based on 2023 reported figures*

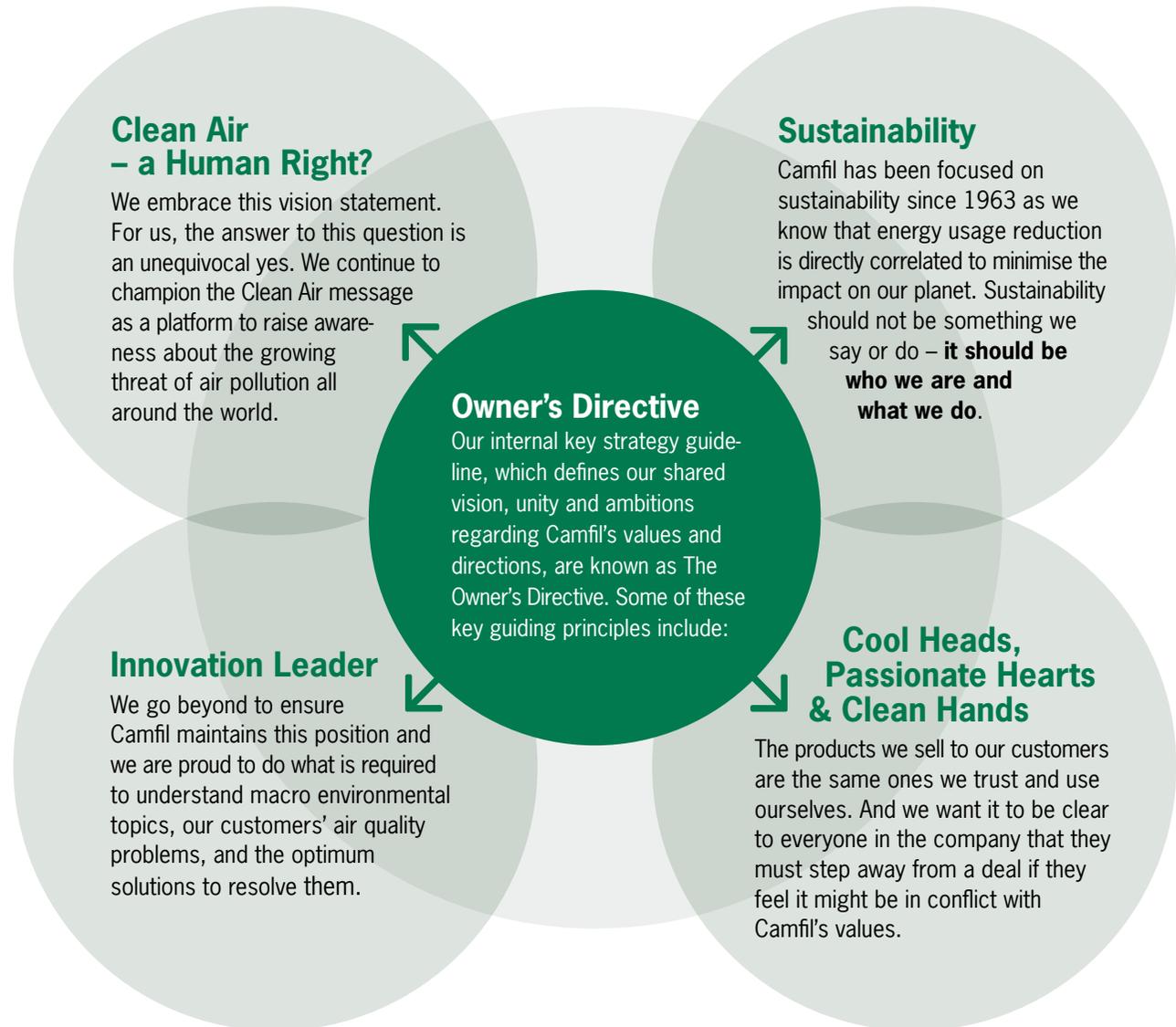
## Our commitment

# Why We Care

Science shows that Indoor Air Quality can substantially influence our health, performance and well-being. At Camfil we embrace this scientific approach as a commitment to make indoor air safer to breathe. Advocating for clean air is part of our way of sharing our knowledge.

To support our ambitions and governance across the Camfil world our Owner's Directive is an integral strategy and guide to ensure that we focus on the things that matter and make a difference for customers, end-users and all of us at Camfil.

As part of our sustainability journey we have in 2023 established a thorough framework where the Owners Directive act a strategic umbrella.



Our commitment

## United Nations Sustainable Development Goals (SDG)

**Camfil has committed to mainly four of the SDGs but is now adding a fifth – goal 17 "Partnership for the goals".**

Improving sustainability in our value chain requires cooperation. We have knowledge to share regarding energy efficient clean air solutions, our suppliers are specialised in the materials we purchase, our customers are experts in the circumstances of their operations. Relevant cooperation and partnerships with our stakeholders including universities and other research institutes and standardisation organisations is key for optimised solutions.



Our entire business revolves around helping our customers to ensure health and well-being in terms of clean air. We strive to keep having the best clean air solutions with competitive pricing.



We work continually to maintain good working conditions for our 5 700 employees in factories and offices in the 35 countries where we operate. We see this as a prerequisite for economic growth.



More than half of the world's population live in cities. Many cities have air pollution challenges. Our clean air solutions help providing healthy air quality in buildings where people live, study and work.



We strive to reduce the environmental footprint of our operations in terms of energy and raw material use, emissions, and waste. Through deepened involvement with our stakeholders, we also hope to contribute to a more sustainable value chain.



We recognise multi-stakeholder partnerships as important vehicles for achievement of the sustainable development goals. For us this means a broader stakeholder engagement.

## Our Response

# Camfil's sustainability commitments

**Since the sixties Camfil has been dedicated to conducting business in a sustainable and responsible manner, and our ambition is to improve in line with stakeholder's expectations and "planet needs".**

This means we are striving to increase our *handprint* – i.e. our positive impact, delivering clean air while reducing our *footprint* – i.e. our negative impacts on people and environment in the value chain.

We are gearing up to meet the obligations outlined in the EU Corporate Sustainability Reporting Directive (CSRD). For Camfil, this means an increased focus on comprehensive reporting starting from 2025. This will involve detailing our positive and negative impacts and sustainability-related financial risks and opportunities in a more comprehensive manner.



Camfil is a member of the UN Global Compact and supports its ten principles and four overarching areas – human rights, labour, the environment and anti-corruption. During the year we participated in their Climate Ambition Accelerator program to learn more about how we can reduce our climate impact.

We have pledged our commitment to the Science-based Targets initiative (SBTi) and are currently establishing greenhouse gas reduction targets aligned with climate science and the goals outlined in the Paris Agreement.

Additionally, at corporate level, Camfil AB has forged a partnership with EcoVadis, recognised as one of the world's largest and most reputable providers of business sustainability ratings. Through the process of addressing their questionnaire, we have gained substantial insights concerning areas for improvement. Our factories in Sweden and France have EcoVadis ratings, silver and gold respectively.

Both our factories in Sweden and France received their first ratings in 2022 and 2023, respectively. "We take immense pride in achieving a gold medal and are striving towards achieving the platinum level," says David Gueant, QHSE Director of Camfil Group in France."

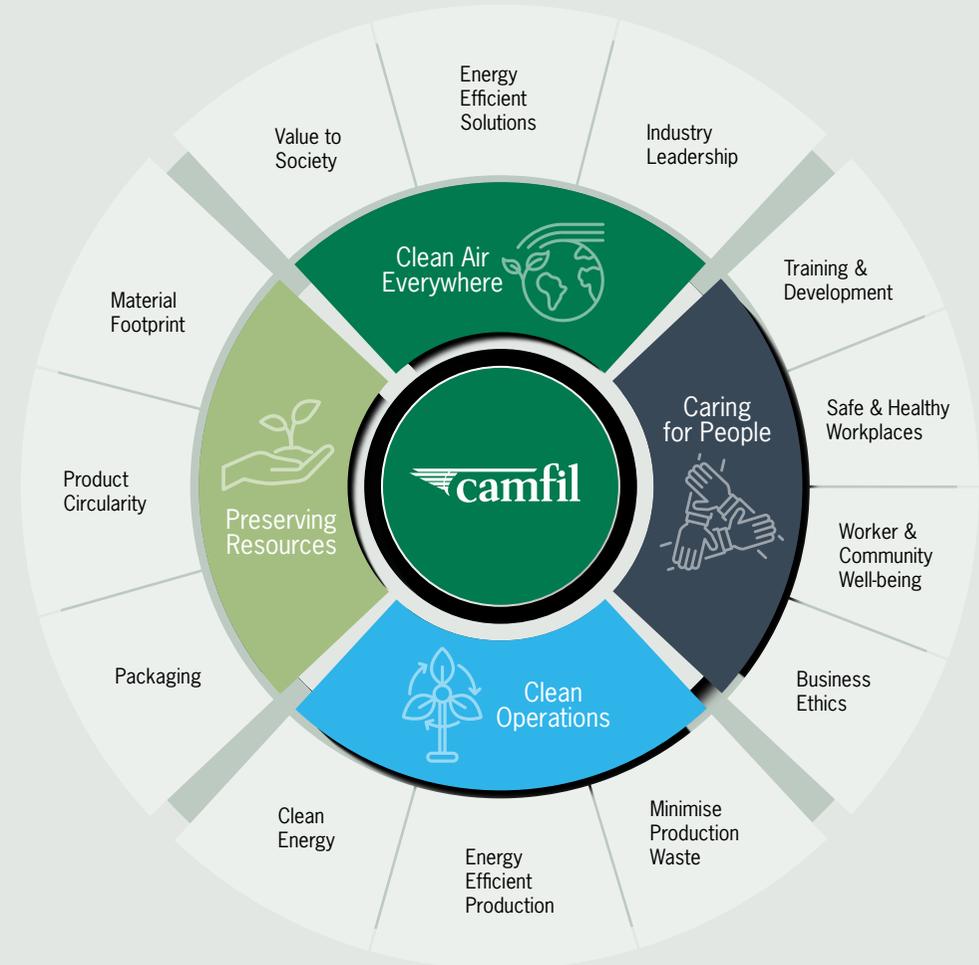
# Our Strategy – an Introduction

The strategy for our sustainability journey aligns closely with our vision of advocating for clean air as a fundamental human right. Understanding the significant impact of Indoor Air Quality on our well-being, we recognise that our primary avenue for effecting change lies in our product offerings: innovative solutions for commercial and industrial air filtration, air pollution control, and turbomachinery applications.

However, our broader aspiration centers on conservation, reduced consumption, and discovering superior methods. Our overarching goal is to ensure healthier indoor air for everyone by focusing on conserving resources, consuming less, and finding innovative approaches. Operating across 35 countries, our teams diligently work to safeguard individuals, processes, and the environment. Through continuous research efforts, our ultimate objective is to merge clean air with energy efficiency in a sustainable and profitable manner.

## Our Sustainability Framework rests upon four core principles:

- Clean Air Everywhere
- Caring for People
- Clean Operations
- Preserving Resources



# Clean Air Everywhere

A key component of our sustainability framework is to be an active part in bringing "Clean Air Everywhere" to maximise the handprint and our reason of being and deliver sustainable solutions to help our customers to fulfil or exceed environmental demands and legislation.

## Value to Society

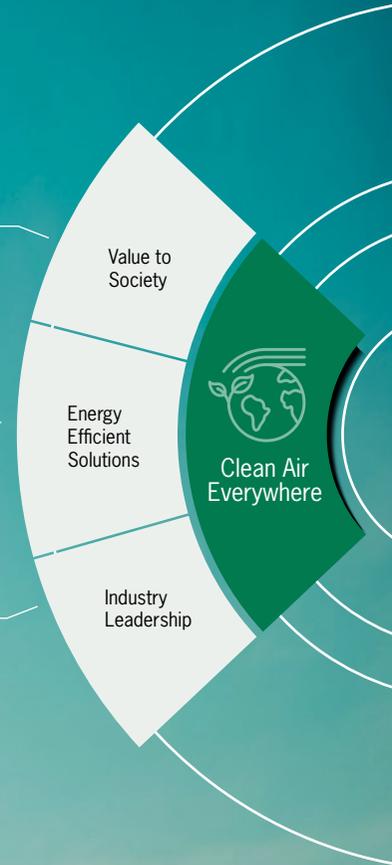
We make a meaningful positive impact on human health, industrial innovation and society by delivering clean air.

## Energy Efficient Solutions

We solve our customers' air quality problems in the most energy-efficient, reliable and resource effective way.

## Industry Leadership

We walk the talk and take the lead by setting standards, operating transparently and partnering to transform our industry.



## Value to society

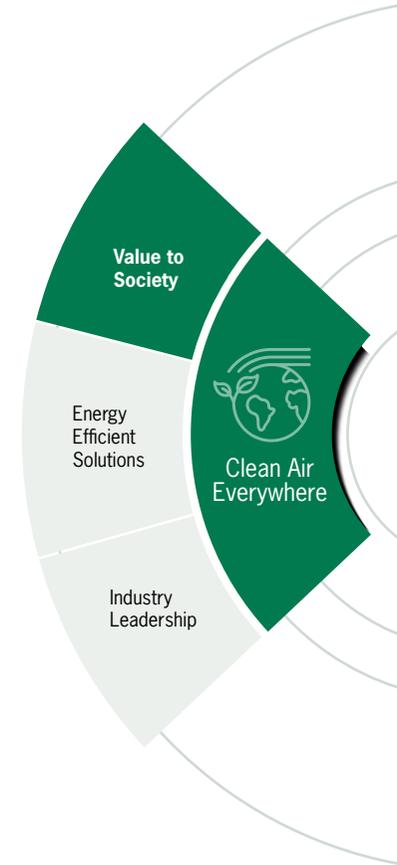
# Supporting the environmental goals of our customers

Our ambition is to be at the forefront within ethical, sustainable and responsible business activities. This means we need to do the right things, encompassing how we operate, how we treat our employees, and what expectations our business partners put upon us. We want to be a positive force that develops the industry and has a beneficial impact on the society.

Camfil and our customers are part of the same ecosystem. Through our products and solutions, we help our customers reach their environmental goals. Buildings contribute to 35% of CO<sub>2</sub> emissions (Prof. Joseph Allen, Associate Professor, Harvard) and thus, by supporting our customers in creating healthier buildings, our work has a big environmental impact.

Changing to more energy efficient filters from Camfil correlates directly to the energy usage impact and is often a simple, cost efficient and direct solution versus rebuilding complete ventilation systems. This reduces the general need for electricity generation.

But our value to society is not only supplying energy efficient products, it's also about being an active voice in the development of industry standards, to join forces with industry colleagues to further the importance of good ventilation, and to make people healthier inside of buildings – something that can be controlled and optimised.



# 35%

Buildings contribute to 35% of global CO<sub>2</sub> emissions

## Value to society

# Advocating for clean air



### Increasing people's health

We spend up to 90% of our time indoors and the air that we breathe is crucial for our health and wellbeing. According to the WHO guideline in 2021, up to 99% of the world's population is breathing air that is worse than WHO recommendations. Good air filter solutions from Camfil provides the opportunity to improve and control the indoor air quality.



### Enhancing people's productivity

Productivity is closely related to indoor air quality and the ability for people to perform at their best. Studies show that reducing common indoor air pollutants can increase productivity with 6–10%. Small numbers but when multiplied by the amount of people affected the impact is substantial.



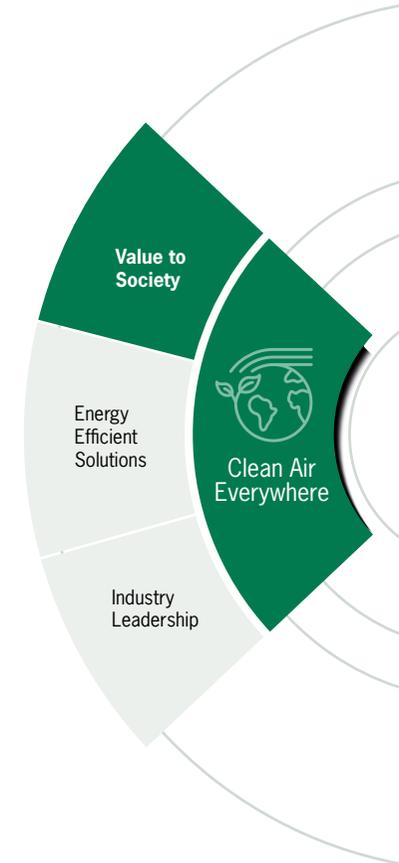
### Improving energy efficiency

At Camfil we take pride in helping our customers and society to use less energy due to innovative air filter technology solutions to deliver upon sustainability ambitions and targets.

### Empowering Clean Air Responsibility

Camfil has more than 60 years of air filtration solutions experience. We act as stewards to make decision makers and business managers aware of the responsibility for clean air in working environments to protect the health of employees and foster the best environment to perform and excel.

- *Chief Aironomics Officer (CAO)* established by Camfil to inform, educate, and inspire to assign individuals in a company to put Clean Air on the everyday agenda. *Further elaborated in the following section.*
- *HEALTHY INDOOR ALLIANCE* initiated together with Swegon, Condair and Fagerhult to reach stakeholders in Northern Europe to promote good indoor environments.



# Enabling clean air innovation for the future

Science is the foundation for Camfil's promise – to protect people, processes and our planet. Participating in research and innovation is key to prepare for the future already today.

**Initiative:** In 2023 a scientific report was presented by Nanyang Technological University (NTU) Singapore on a co-research project how poor indoor air quality affects creativity.



**Result:**

# Creativity increased 12%

when VOC's (Volatile Organic Compounds) in the indoor air was reduced by 70%, according to the study.

Value to society

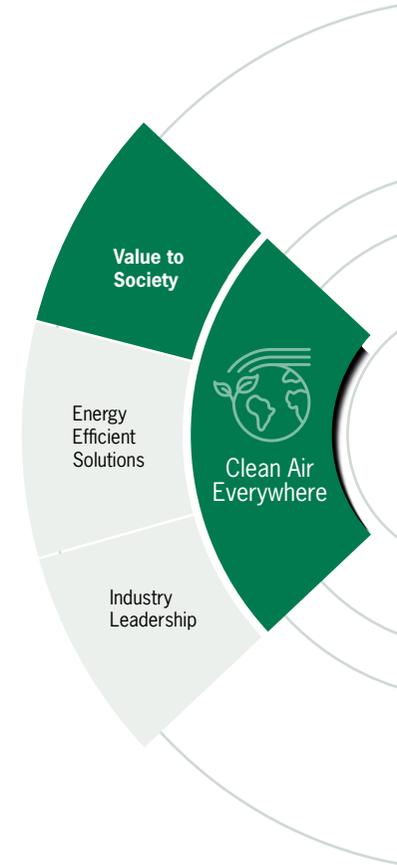
## Chief Aironomics Officer – the voice of clean air

**Initiative:** Advocate to business managers and decision makers to assign individuals responsible for the Indoor Air Quality in their respective workplaces. The Chief Aironomics Officer initiative has been started by Camfil.

The Chief Aironomics initiative is being driven at a time of urgency on three particular fronts. Sensitivities over indoor air have heightened due to the COVID-19 pandemic. Air pollutants are well known to damage the environment. WHO Air Quality Guidelines show us that air pollution is more damaging to human health than previously understood.

The initiative is a direct response to these sobering realities while also bringing to life Camfil's mission of protecting people, processes and the environment. It also puts into practice Camfil's knowledge and expertise built over more than half a century. Camfil is passionate to share this knowledge and know-how with its peers and wider audiences to improve people's lives.

Camfil believes that real change can only happen through collaborative effort and would like to motivate your organisation to join the clean air movement and community.



**Result:**

# 50 000

unique visitors to the [chiefaironomicsofficer.com](https://chiefaironomicsofficer.com) website, 25 external CAO's appointed

# TurboPulse™ “Pulse Performance Squared”

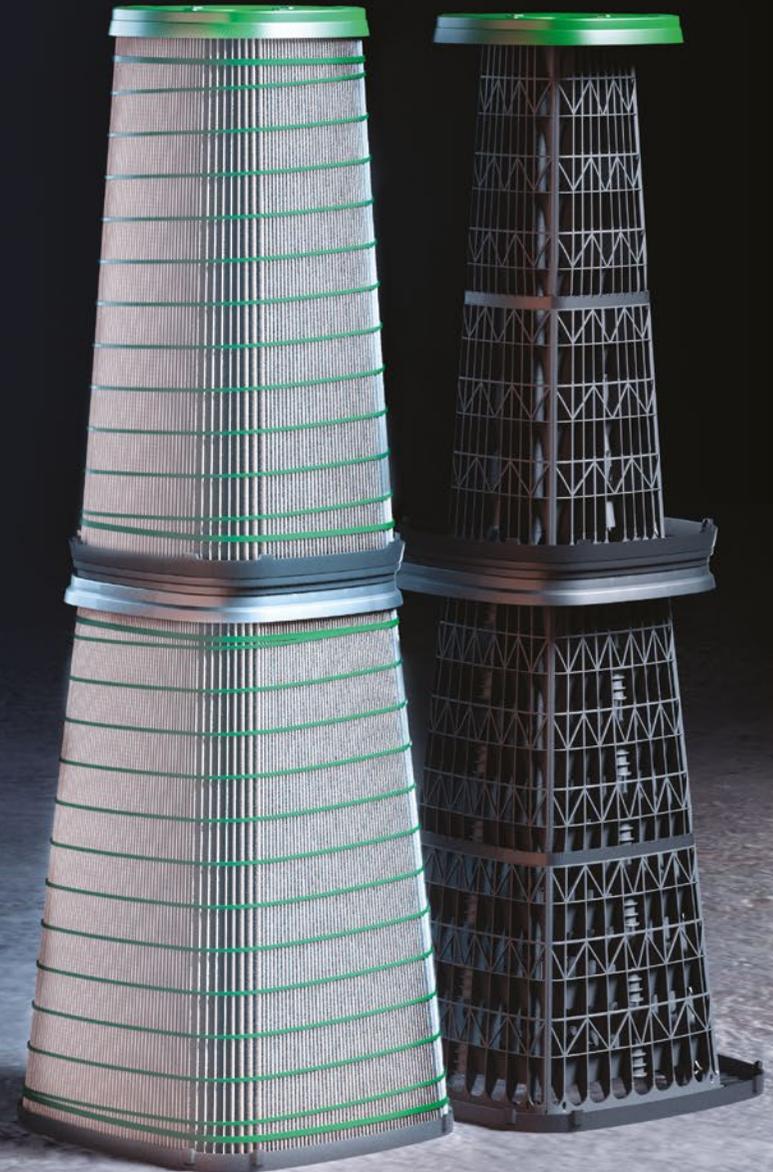
Camfil Power Systems introduces TurboPulse, a cutting-edge innovation in pulse filter technology, set to redefine the industry landscape with its unique square design and groundbreaking features. With a focus on extended filter life, reliability and ease of installation, TurboPulse is positioned to become the recommended choice for gas turbine applications. This innovation fits seamlessly into existing filter houses designed for conical cylindrical filters, providing an effortless transition to the next generation of pulse technology.

### A greener filter

At the heart of TurboPulse’s innovation lies its patented square inner cage featuring aerodynamic TurboVanets that redirect pulse energy to achieve unparalleled cleanability, optimise airflow distribution, and ensure even dust distribution within the filter. This results in:

- **25% greater dust holding capacity compared to conical cylindrical filters**
- **20% lower initial pressure drop**
- **30% pressure drop recovery after each pulse**

Low pressure drop over the life time of the filter means less work for the gas turbine, reducing heat rate. Lower heat rate, or burning less fuel for the same output, means less CO<sub>2</sub> is produced, stopping CO<sub>2</sub> before it’s even released. TurboPulse is also available in T10, EPA efficiency, for cleaner-running engines with less fouling, increased efficiency and further reduced CO<sub>2</sub> emissions. Plus, the seamless installation into existing filter houses means that no retrofit is required, avoiding any extra material usage for filter house modification.



# CamCarb XG

## Innovative conical design delivers superior performance

Camfil launched the latest innovation in molecular filtration products – CamCarb XG. Companies targeting gas-phase contaminants in various applications such as odour, pollution or corrosion control will gain superior-in-class results with performance and protection. The Camfil investment into research and development has led to the optimisation of the shape of the traditional cylinders ultimately resulting in minimised pressure drop and maximised media utilisation. Research and development on this have been at Camfil's multiple laboratories and ISO 10121 test facilities around the world and have been focused on fluid dynamics and media adsorption.

The new CamCarb XG is the best-in-class solution. Its conical shape enables high removal efficiency while maintaining low pressure drop. The patented design maximises adsorbent media utilisation resulting in an overall lighter weight filter and a longer lifetime compared to the previous generation cylinder. This results in:

- **Up to 50% reduction in labour and disposal costs**
- **Up to 35% reduction in energy consumption when compared to conventional products**
- **This unique combination provides a lower Total Cost of Ownership (TCO)**

The adsorptive media used in CamCarb XG can be anything from activated carbon or activated alumina materials and has been developed and tested in Camfil laboratories. Our molecular contamination control business division commits to sustainability. This is evident in every step of the life cycle of the product. Camfil's approach to problem-solving, innovative design, precise process control, and customer focus all contribute to product development that aims to conserve more, use less, and find better ways to protect people, processes, and the environment.



Up to  
**35%**  
reduction in energy  
consumption

## AirImage-COR

Online corrosion monitoring can reduce customers' environmental footprint



At Camfil, our commitment to sustainability drives our innovation and product development. The AirImage-COR corrosion monitoring system not only safeguards sensitive electronic equipment and valuable artifacts but also significantly contributes to reducing environmental footprints across various industries.



Sensitive electronic equipment and artifacts can be corroded due to acidic gases causing significant failure and unscheduled downtime. By continuously monitoring the corrosivity level in the air, our AirImage-COR can help industries and data centers to prevent extensive damage of equipment that would require resource-intensive repairs or replacements. In museum and archival establishments, our AirImage-COR helps to preserve valuable assets and reduce resource and cost for restoration. In summary, our AirImage-COR reduces the overall environmental impact associated with product failure, maintenance and restoration.

As an intelligent corrosion control system, our AirImage-COR indicates when air filters need changing and provides the alerts to end-users. Customers can then optimise the filter materials, the changing cost and reduce their wastes.

As part of Camfil's commitment to sustainability, our AirImage-COR is built in a compact 6" design and uses sustainable materials in the construction. The casing is made with durable and recycled material. Electronic items are carefully selected with low-power consumption components.

## Energy Efficient Solutions

# Life Cycle Cost analysis help customers save energy

### Life Cycle Cost software

To facilitate the right choice of filters for a system, Camfil's R&D Department pioneered the first Life Cycle Costing (LCC) software in the early 1990s to help air filter users to select the best filtration solution in terms of indoor air quality (IAQ) and energy performance. This software debut has been gradually followed by the launch of additional innovative computer programs for different applications and filters. The LCC computer software has evolved over the years to include data from hundreds of filters.

The new version, Camfil LCC Green, considers filter efficiency, filter life, filter change labor, filter cost, disposal costs and allows for varied inputs for all of these factors plus the largest filter expense – energy usage. The program data is based upon real life data collected at facilities around the world for real world results, as opposed to theoretical calculations. There are even predefined input criteria with guidance for entering specific air quality parameters for a geographic area, based upon data from cognizant authorities.



### LCC 3.0 software – Life Cycle Green

#### Next level strategic analysis and planning:

- Total Cost of Ownership software for HVAC filtration products
- Customisable for various application and environmental conditions
- Improved reports focusing on energy consumption, operating costs, optimised filter change points and IAQ

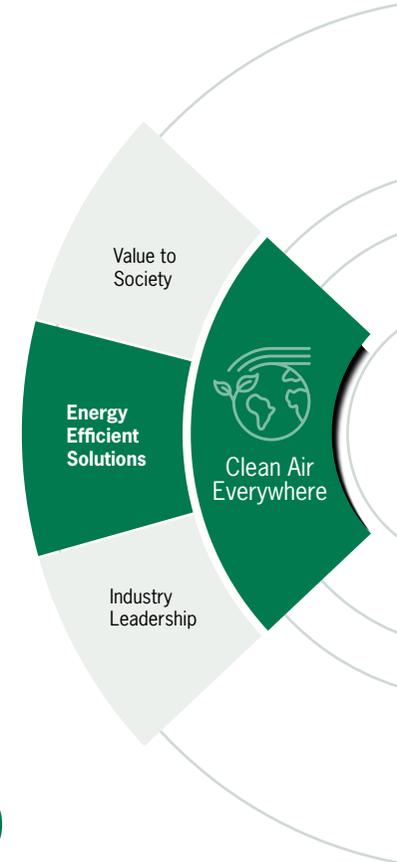
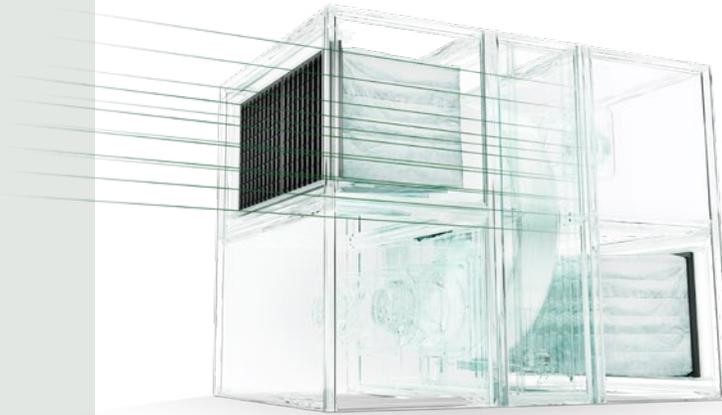




### Powerful modeling tool

Camfil's LCC software is a power modeling tool identifying the most effective filter strategy for every operating condition based on the LCC of filters. To minimise energy use and maximise filter life, the program indicates the ideal pressure drop at which filters should be changed, based on real-life application data. Different combinations of filter types can be simulated to ensure the most sustainable filtration solution for customers.

The energy consumption and environmental impact of filters can be estimated for different air handling units and outdoor air qualities at various running conditions. This enables the user to make the optimum selection by comparing systems using single or multistage filtration. The LCC can also indicate the current CO<sub>2</sub> footprint of the filter installation, based on the customer's local situation.



## Reducing pressure drop

across the air filter in an air handling unit is a key factor in lowering energy use and climate impact.

The amount of energy the fan uses to draw the air through an air filter accounts for about 75–80% of the filter's total climate impact. The most important measure to reduce the environmental impact from the use of air filters is thus to reduce the average pressure drop across the filter as it affects energy use.

**Helping our customers to achieve their sustainability targets is a key foundation for us at Camfil.**

### Total Cost of Ownership (TCO)

– typical cost split over the lifetime of an air filter



2%

Labour and disposal cost



8%

Replacement filter cost



10%

Filter cost



80%

Energy cost

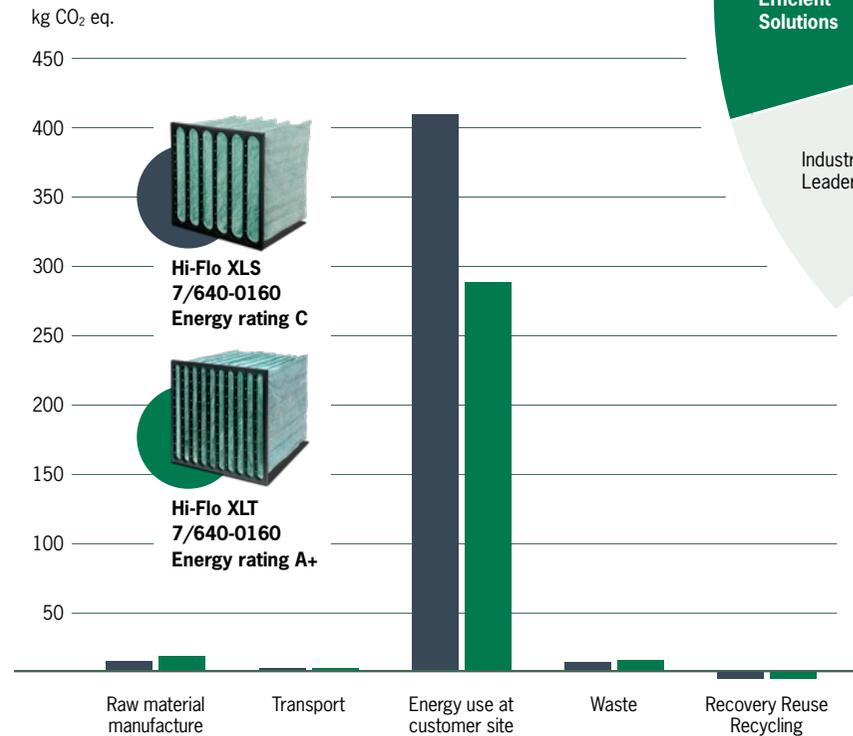
## Energy efficient solutions

# Better energy rating means less energy use

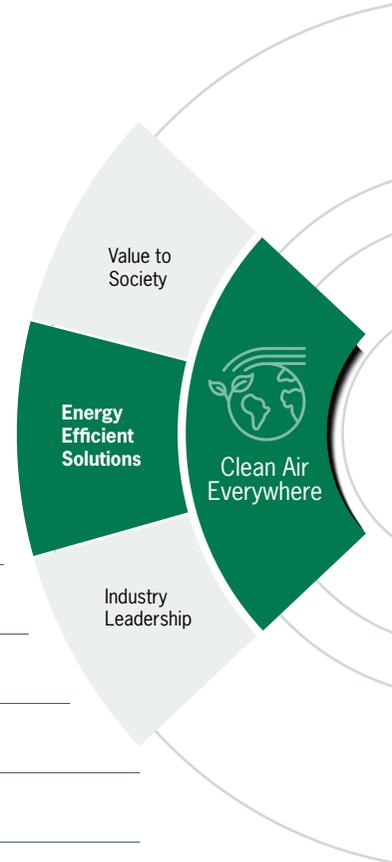
As demands to reduce CO<sub>2</sub> emissions get tougher, energy prices increase, and people are more aware of the effects of bad air on their health, the energy consumption of air filters in ventilation systems has drawn much attention. According to the products Life Cycle Assessment (LCA), the use phase has by far the biggest environmental impact.

# 30-40%

of the building energy use can be attributed to the ventilation system, thus even a small change will have a big impact. This is why everyone should use filters with better energy ratings. It is also the reason why our goal to increase the sales of highly energy efficient solutions is so important to us.



**Filter environmental impact comparison – results from LCA for Hi-Flo XLS and XLT with average European electricity mix applied in the use phase.** The XLS has the Eurovent energy rating C and the XLT has the best energy rating A+. This shows that the greatest environmental impact by far is in the user phase and in this case that the A+ energy rated filter has 30 % lower environmental impact than the C rated filter.





Depending on geographic locations, two main standard systems are used to determine the filter efficiency; ISO16890 in Europe and ASHRAE MERV (52.2) in North America. Asia Pacific use both depending on country.

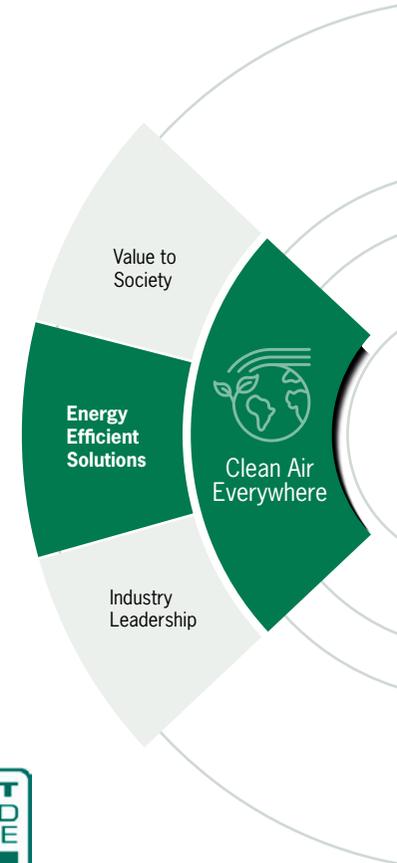
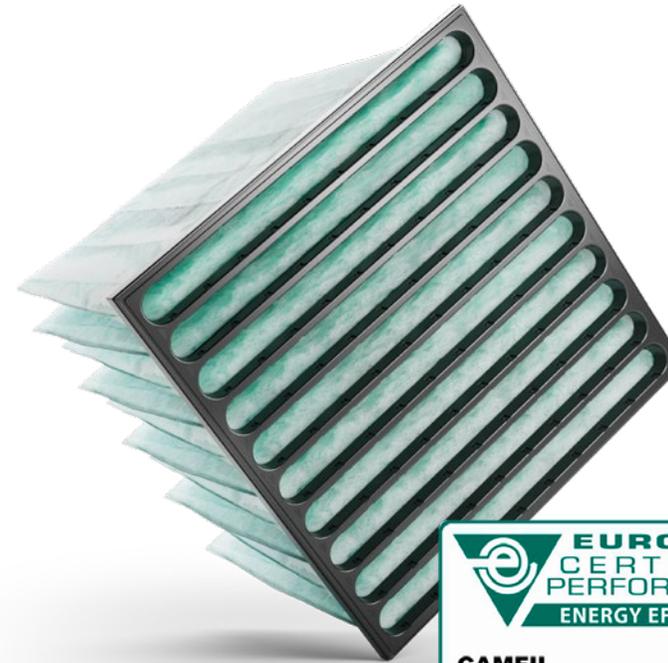
The ISO 16890 and Eurovent energy efficiency rating system helps consumers find the right air filter with the lowest energy usage combined with the highest indoor air quality. Using the right air filter not only helps our customers maintain healthy indoor air quality, but also helps to save the environment by saving energy. In the U.S., Camfil's premium filters carry a 5-star rating.

### ISO16890:

- ISO 16890 calculates filter efficiency based on ePM1 (0,3–1 micrometer)  
ePM2.5 (0,3–2,5 micrometer)  
ePM10 (0,3–10 micrometer)  
Energy efficiency (A+ to E)

### ASHRAE 52.2:

- MERV means Minimum Efficiency Reporting Value and rates a filter's ability to capture particles on a scale of 1 to 16. A higher MERV rating signifies better filtration performance
- The ASHRAE 52.2 standard includes procedures for testing a filter's efficiency in removing airborne particles ranging from 0,3 to 10 micrometers.
- ASHRAE does not measure energy efficiency



Today, all ePM1, ePM2,5 and ePM10 air filters in full size and family sizes can be graded from A+ to E. Grade A+ indicates the lowest energy consumption and E the highest. The Eurovent energy efficient classification is based on ISO 16890.

**Eurovent CERTIFIED PERFORMANCE ENERGY EFFICIENCY**

**CAMFIL**  
Hi-Flo XLT7/640 – ISO ePM1 60% A+  
[www.eurovent-certification.com](http://www.eurovent-certification.com)

**ISO ePM1 60%**  
EN-ISO16890-1:2016

Nominal airflow:	0.944 m <sup>3</sup> /s
Efficiency:	ePM <sub>1</sub> 61 %
Minimum efficiency:	ePM <sub>1,min</sub> 61 %
Annual Energy Consumption:	811 kWh/annum

A+ 2019

A+  
A  
B  
C  
D  
E

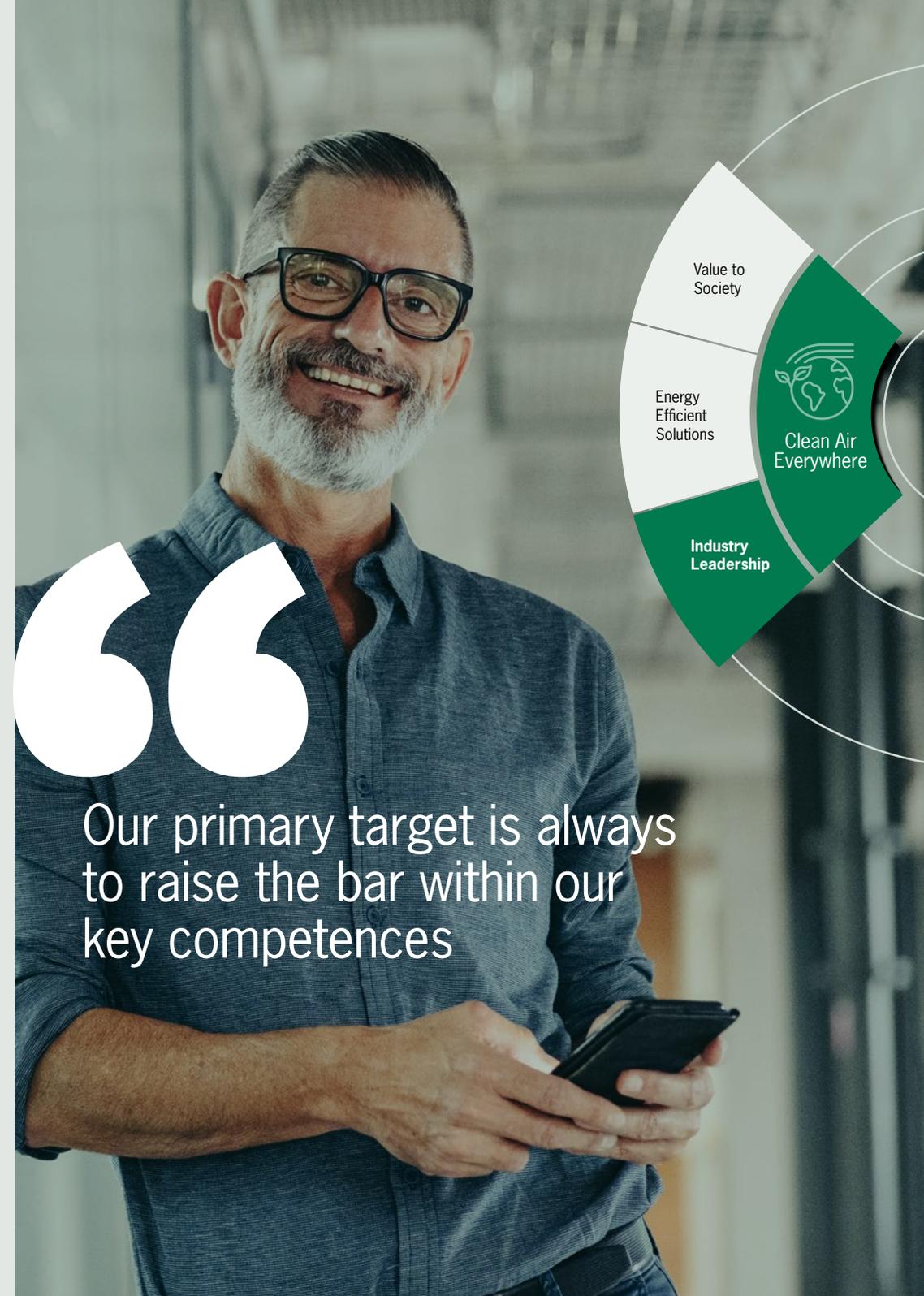
## Industry Leadership

# Industrial standards and sustainability

Camfil boasts a rich history of actively participating in the development of industrial standards within our core field of business. Our primary focus revolves around the standardisation of air quality and performance aspects related to air filters. Additionally, we express interest in exploring adjacent application areas closely associated with air filters.

We view industrial standards as crucial tools to not only influence and challenge the industry to innovate superior products but also to empower customers in making informed and conscious decisions when selecting product solutions. These standards possess the potential to become norms at regional or national levels, thereby significantly impacting consumer preferences.

As a market leader and provider of premium, high-quality product solutions, demonstrating the delivered value of our products to customers remains pivotal. When we develop industrial standards our primary target is always to raise the bar within our key competences: delivery and measurement of performance regarding air quality and energy performance and to make it easier for the customer to understand all performance aspects and fairly compare different offerings to one another.



Our primary target is always to raise the bar within our key competences



**Some significant standards and guidelines in which Camfil has played a leading role include, but are not limited to:**

### **ISO 16890 – Air filters for general ventilation**

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The HVAC filtration standard outlining how to measure and compare filtration efficiency, lifetime performance and energy performance of general air filters. *Besides its implementation in all EU countries as national standards, the ISO 16890 has been implemented as national standard in India in 2021 and the implementation in Australia started in 2023. The publication as national standard in Australia is expected for 2024.*

### **ISO 10121 – Test method for assessing the performance of gas-phase air cleaning media and devices for general ventilation**

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The first standard in the business that provides a standardised test method for filters for gas-phase contaminants and that also provides a classification system for said filters to greatly simplify the selection of right air filter for the right application. *The new classification system of ISO 10121-3 was published end of 2022 and was implemented as national standards in all EU countries in 2023.*

### **Eurovent 4/21 – Energy Efficiency Evaluation of Air Filters for General Ventilation Purposes**

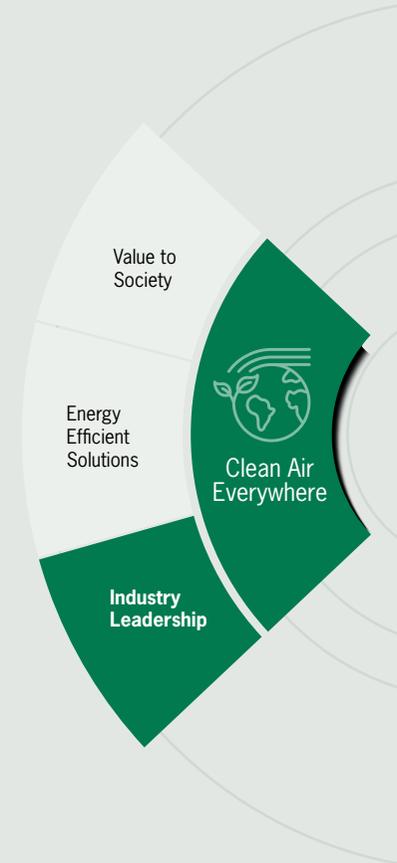
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A simple energy classification systems that is being used by all filter suppliers that are members of the Eurovent organisation. The energy classification is much similar to what the consumer is used to when choosing home appliances going from energy class A+ to E

### **EN 16798-3 Energy Performance of Building**

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Standard guiding consumer to the right filtration solution for the right application. Ensuring that depending on outdoor air pollution conditions sufficient filtration protection is being used to ensure a healthy indoor air environment. *The EN 16798-3 was undergoing a mayor revision in 2023, to align its recommended air filtration limits with the recommendations from the WHO Air Quality Guidelines from 2021. The publication of the updated EN 16798-3 is expected for 2024. To get maximum effect we work on both regional level in CEN, ASHRAE and Eurovent and on global level via ISO.*



## Industry Leadership

# Developing clean air awareness

We are engaged in organisations to actively drive the development and implementation of new standards and make the wider audience aware of the need for good ventilation and clean air environments with minimised environmental impact. In 2023 Camfil has been engaged in the WHO as well as the organisations and working groups below.



### INDUSTRY & STANDARDISATION ORGANISATIONS

- ISO (TC 142)
- CEN (TC 195 & TC 156)
- ASHRAE
- ANSI
- ISHRAE
- Singapore Standards Development Organisation

- Eurovent Association
- Eurovent Certification
- Eurovent Middle East
- Eurovent India
- Eurovent International

- Waterloo Filtration Institute
- REHVA
- ISPE
- EHEDG
- VDMA
- VDI

## Initiative:

# Work systematically across all manufacturing locations by adopting ISO 14001 standards

### Camfil Tuttingen ISO 14001:2015

For improving our environmental performance more efficiently and gaining a competitive advantage and trust, APC Tuttingen decided to perform the ISO 14001:2015 audit for implementing an Environmental Management System, what we have passed successfully.

ISO 14001:2015 is an internationally agreed standard and provides a framework for implementing an environmental management system that can help us to deliver operations in a more efficient and sustainable way. The system in place is modern, committed to continual improvement, and designed to transparently report on environmental impact.

Scope of the audit: Research, development, planning, production, installation and service of high-quality air pollution filters, air pollution separation and air capture systems as well as fire and explosion protection systems.

**Result:**  
 **33%** of Camfil manufacturing units have passed the ISO 14001 audits



### Camfil Ipoh laboratory in Malaysia has been accredited to ISO/IEC 17025:2017

Camfil's laboratory in Ipoh, Malaysia has been accredited to ISO/IEC 17025:2017 standard by Department of Standard Malaysia (DSM) which is the National Standards Body and the National Accreditation Body, providing standardisation and accreditation services for global competitiveness.

ISO/IEC 17025:2017 is the main international standard for testing and calibration laboratories. The purpose of ISO/IEC 17025 accreditation is to prove a laboratory has an acceptable quality management system in place, and it has the ability and competence to provide consistently valid testing results. To achieve ISO 17025 accreditation, the laboratory's quality management system and technical competence is evaluated thoroughly by a third-party. Audits are conducted on a regular basis to maintain accreditation. ISO/IEC 17025 accreditation can only be granted by an authorised accreditation body. Test reports can be accepted from one country to another without the need for additional testing which enhance international trade.

The accreditation primarily covers the testing of particle filters (ISO 16890) and testing of molecular filtration media; butane activity (ASTM D5742), moisture content (ASTM D2867) and apparent density (ASTM D2854).

# Caring for People

The second key component of our sustainability framework "Caring for People" underscores Camfil's dedication to fostering safe and healthy workplaces, promoting the well-being of both workers and communities, and upholding the highest standards of business ethics. Through this, we strive to make meaningful contributions to the holistic welfare of individuals within and beyond our organisational boundaries.

## Training & Development

We believe that the future of our company is based on the investment we make in our people. Our employees are offered to learn new skills, realise their full potential and apply their talents to strengthen our business.

## Safe & healthy workplaces

We maintain safe and healthy workplaces by ensuring clean air and good work conditions for all employees.

## Worker & community well-being

We promote work-life balance for our employees and are active members of the communities in which we operate, making a positive impact beyond our workplace.

## Business ethics

We uphold the highest level of ethics and business conduct to support our long term vision as a profitable and sustainable company.



# Safe & Healthy Workplaces

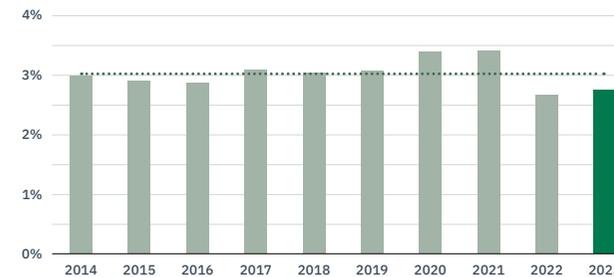
## Maintaining safe and healthy workplaces

At Camfil, we prioritise employee well-being, health, and safety as integral components of our commitment to being a sustainable employer. We assess the number of recordable injuries in alignment with the US OSHA Administration, considering these injuries as key performance indicators. Recordable injuries, measured monthly, are defined as incidents that typically necessitate professional medical attention. The OSHA incident rate is the number of recordable injuries per 200 000 working hours. Mitigation programs related to health and safety are managed locally within our factories.

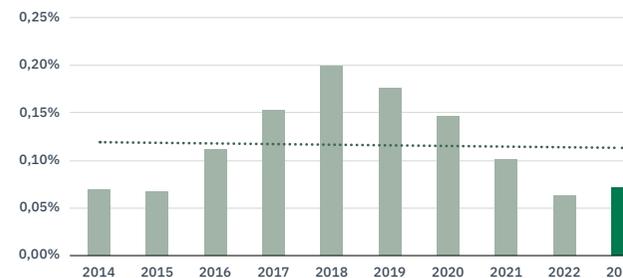
**Camfil Group OSHA incident rate**



**Number of sick leave days per 100 workdays**



**Lost workdays due to work related injury per 100 workdays**



# Caring for People

## Worker and community well-being initiatives



### THAILAND

In Thailand Camfil and Asian Stanley have cooperated in a community project where old filter frames has been given a continued life as crab cages. The cages were presented to local fishermen to be used in their aquatic breeding work.

### CHINA

During CamfilCairing week Camfil China promoted Green Commuting in the Shanghai office. While traffic can be an issue riding a bike to work saves money but also benefits health and improves quality of life.



### INDIA

In India CamfilCairing week started with a yoga and meditation session. The team tried breathing exercises, meditation and yoga poses as well as mindfulness and other relaxation techniques to reduce stress and boost productivity.



### UNITED KINGDOM

Employees and site visitors at both Camfil UK sites could enjoy the typically Swedish custom of "fika". A small break in activities where pastries, cookies, juice and water were enjoyed by the colleagues.

### UNITED STATES

Camfil's Washington/Greenville plant focused on the Chief Airgonomics Officer initiative on plant level. Among the actions taken to improve employee health were air quality data monitoring and dust collector upgrades.



### SWEDEN

Camfil Svenska AB organised a blood drive in collaboration with the county council. Employees who were blood donors gave blood and other employees could newly register and have their blood tested to become blood donors in the future.



## Business ethics

# Combating corruption

### General and training programs

Our Owner's Directive and Code of Conduct as well as our group-wide policies regarding Anti-corruption and Trade Compliance are all important governance tools to combat corruption.

During 2023 we have launched new training programs for Anti-corruption and Trade Compliance and during early 2024 we will launch a new training program for Code of Conduct. In July 2023, we launched two Anti-corruption training programs; one advanced program intended for our Trade Compliance Officers and members of Group Sourcing and one fundamental, intended for other managers and employees involved in purchasing. In August 2023, we launched a new and internally developed Trade Compliance training program intended for all Trade Compliance Officers, managers within Sales and Finance, Managing Directors and members of the Group Finance Forum.

Since it is important to set the tone from the top, we will initially only enroll senior management to the Code of Conduct training, and later we will translate it to local languages and enroll all employees of the Group.

In previous years we have reported our Code of Conduct training separately from our Anti-corruption training and our Anti-corruption training has focused on Trade Compliance. During 2023 we report on our three training programs separately.



## Trade Compliance

We are committed to fully complying with all applicable Trade Compliance laws and regulations in the many markets in which we operate, hence, understanding and awareness of Trade Compliance is a great priority to us. If a business opportunity does not align with our values, as set out in the Trade Compliance Policy, we are obliged not to go through with the deal. This is integrated in our values based approach across the organisation around the globe.

With above background, we decided 2023 to internally develop a new Trade Compliance training program, since it allowed us to integrate Camfil's Trade Compliance Policy into the training and to have this policy as a starting point and reference, instead of describing Trade Compliance in general and abstract terms. As regards internal training, we also intend during 2024 to set up regional forums, to be held four times a year, for all Trade Compliance Officers.



## The following are noteworthy examples of Trade Compliance initiatives during 2023:



### Increased internal screenings.

We have continued to evaluate the tool for internal screenings we started using a few years back. So far this tool has proved successful; with improved speed, accuracy and reliability. So long as it remains successful, we intend to roll it out throughout the organisation step-by-step. However, the roll out has been slowed down due to possible issues related to personal data legislation.



### Review distributor agreement template.

In light of the Russian invasion, several countries have issued notices (and similar) related to increased use of distributors to circumvent sanctions on Russia. In light of aforementioned, we have initiated a review of our distributors relationships and to what extent we have entered into agreements that includes sufficient contractual coverage.



### New laws and regulations; steel and iron.

The EU and UK have imposed new (or provided clarifications to existing) laws/regulations concerning import of steel and iron that emanate from (or has similar connection to) Russia. In light of aforementioned we have had to review our supply chain related to these imports and also initiated a process of gathering certificates of origin.



## Whistleblowing

We at Camfil strive for a transparent and healthy business and working climate. Anyone with a complaint or concern about any wrongdoing, should primarily contact the relevant manager or person in charge. If one feel that it's hard to be open there is a possibility to report the suspicions in a secure manner by using our whistleblowing service, anonymously.

The service is provided by the external party, 2Secure. The service is available 24 hours a day and the report can be made in local language. Reports are handled confidentially by representatives at Camfil's corporate HR department who decide if and how a whistleblowing report should be escalated. The possibility to speak up is an important part of the Camfil culture, helping to build trust, improve the work environment and to reduce risk for the Group.



## Outcomes and future risks

It is our view that the adoption of above-mentioned governance tools, together with the related training programs, have increased the awareness and knowledge of these issues throughout the Group. This is primarily based on the fact that the policy solutions to specific issues oftentimes is to escalate that matter (to Group Management or others) and via such escalations, we are able to assess the level of awareness and knowledge.

There will likely always be risks of corruption (including Trade Compliance violations) in the transactions that the Group is involved in. However, through our work as described above, we have reduced this risk and by using the mentioned governance tools we are, in our perspective, keeping these risks at a reasonable and acceptable level.



# Preserving Resources

In our pursuit of "Preserving Resources" within our sustainability framework, we aim to reduce material impact in our products and operations.

## Material footprint

We take a life cycle perspective to measure, select and reduce the impact of the materials we use in our products and operations.

## Product circularity

We strive to repurpose and maximise resource recovery from the products we create.

## Packaging

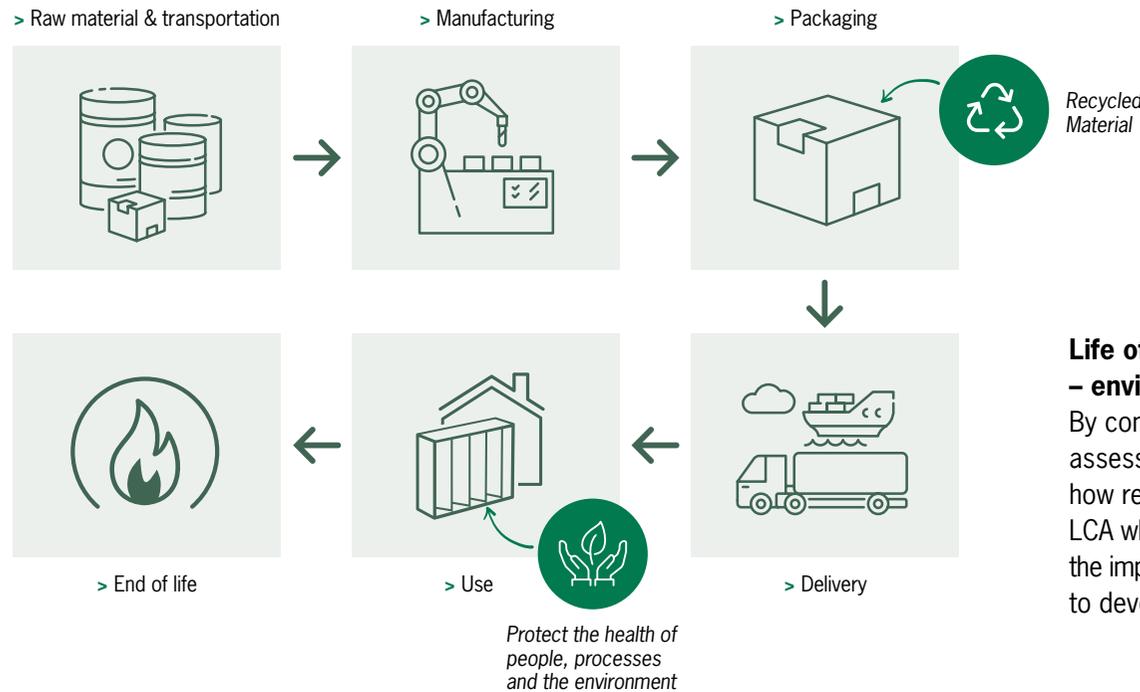
Our packaging is recycled, sustainably sourced and resource-efficient.



## Preserving Resources

# The importance of Life Cycle Assessments

To be able to take the right decisions in our shared decarbonisation journey, it is crucial to have the knowledge about the products' environmental impact over their entire life, from raw material extraction to end of use. Therefore our focus for decades has been to conduct life cycle assessments.



### Life of a filter – environmental impact

By conducting a Life Cycle Assessment (LCA), we can assess a product's environmental impact and understand how resource-intensive the different phases are. Thanks to LCA which reviews the entire process and its flows, including the impact of materials and waste, Camfil gets valuable inputs to develop more circular and sustainable operations.



## Preserving Resources

# Product sustainability with LCA and EPD

We know our air filtration solutions make a real difference for the Indoor Air Quality but all environmental claims must be backed up by transparent and independent analysis. To better serve our customers to make the right product choice to support their sustainability targets, we continuously develop Environmental Product Declarations (EPDs) that are validated by external parties.

- In 2023 we developed EPDs for Opakfil ES and Absolve VGXL produced in SML, France. They are published on EPD International website: [www.environdec.com/home](http://www.environdec.com/home)
- All this work is directly linked to the UN's global goal number 12, Responsible Consumption and Production

### The first international EPD program

The International EPD System is the world's first operational EPD program and was originally founded in 1998 by the Swedish Environmental Protection Agency (SEPA) and industry. The international EPD system is owned and operated by EPD International AB in accordance with: ISO 14025, ISO/TS 14027, ISO 14040, ISO 14044, ISO 14067, EN 15804, ISO 21930





# Q&A

with Anders Sundvik  
Camfil Vice President R&D

## What is an EPD?

The term EPD comes from the English term Environmental Product Declaration and is a standardised report on the environmental impact of a product or service during the life cycle.

## Why are EPDs important?

An EPD shows where in the value chain a product has its greatest environmental impact and where it is most beneficial to take measures to reduce environmental impact.

## How are EPDs created?

Through extensive life cycle assessments analysis that map a product's environmental impact throughout the value chain, from raw materials to waste management and recycling. The EPDs are reviewed and approved by an independent certified party, ensuring that the information is reliable.

## What can be read from an EPD?

An EPD provides specific information regarding a product's environmental impacts including details on climate impact, acidification eutrophication, ozone layer impact, as well as resource depletion. It also covers aspects such as energy, fuel, and water consumption, along with waste generation."

## Name some of the challenges in creating EPDs?

The biggest challenge is to collect the required data as not all companies have internal ready-made structures for this. For example, it can be a challenge for Camfil to get data from some of our subcontractors. Creating these "EPD structures" is an investment that costs time, effort and money. But as more companies implement these structures, data collection will become less of a challenge.

## Who benefits from Camfil providing EPDs?

EPDs are of great benefit to all parties. We benefit from knowing where our products have the greatest environmental impact, which helps us minimise that impact. Our subcontractors and our customers benefit in the same way. Like the planet and people in general when more environmentally sustainable products are available on the market.

## Who requests Camfil to have EPDs?

The demand for our EPDs comes, for example, from manufacturers of air handling units and real estate companies who want to be able to see and analyse the entire environmental impact of their products and/or operations.

## How are EPDs accredited?

The data is compiled into an EPD report, which is then reviewed by an approved verifier before the EPD can be registered and published via the international EPD system.

## Does Camfil produce EPDs in-house?

Yes, we have the tools to produce EPDs in-house thanks to the independent Swedish Environmental Research Institute who have trained us in producing EPDs. In Europe we have produced EPD's for our largest products groups. You find our EPD's on the EPD international website: [www.environdec.com/home](http://www.environdec.com/home). Our vision is that it should be as easy to choose a durable Camfil product as it is to choose the right filter size or filter class.



# Preserving Resources

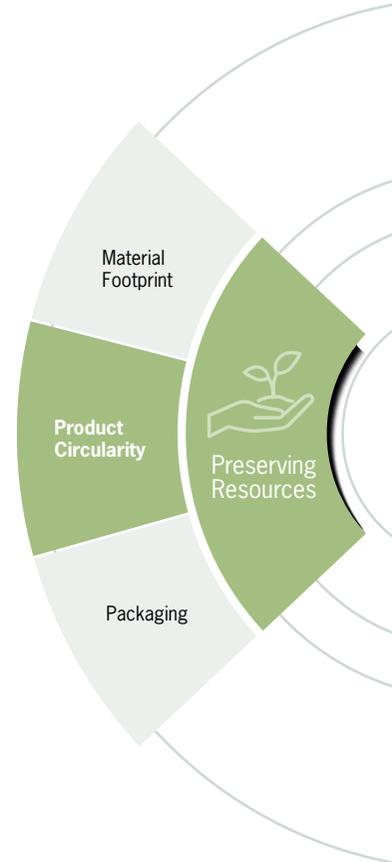
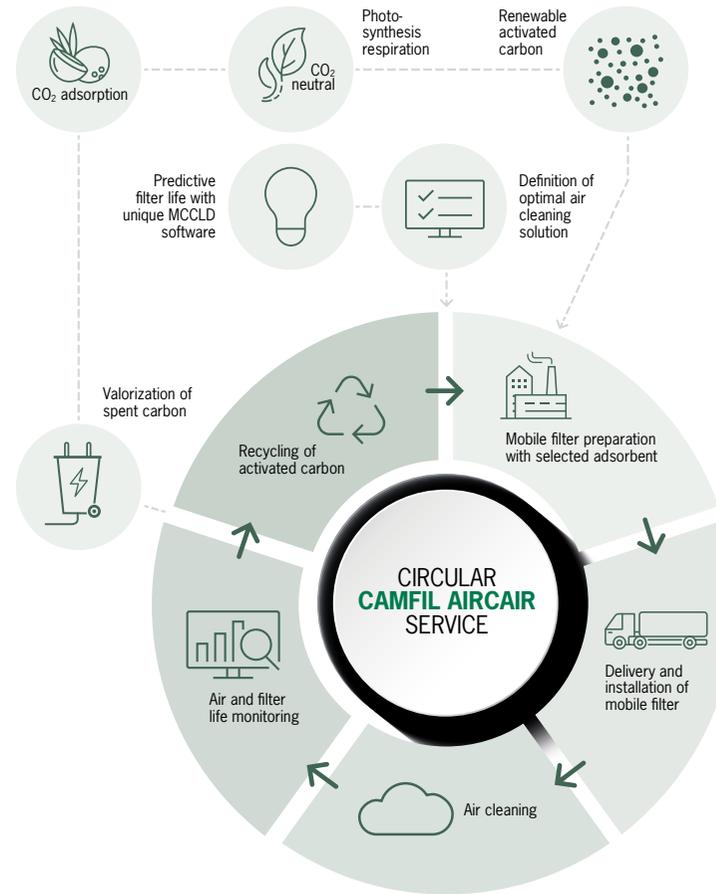
## Product circularity

The Camfil AirCair molecular service is a circular and sustainable service to enable end-users to comply with environmental and safety regulations.

The optimal air cleaning solution is defined based on the unique Molecular Contamination Control Lifetime Determination (MCCLD) and advanced application knowhow of design and service centers.

As Camfil's commitments to continuously reduce the carbon footprint of our products, we provide high quality air purification solutions with a low total cost of ownership (TCO) and sustainable activated carbon media. Mobile filters are prefilled with renewable activated carbon media made from coconut shell base. These filters are then delivered and installed at end-users for air cleaning by the same truck. Once the media are exhausted, the entire filter unit is replaced by another one.

In line with the objective of preserving natural resources and minimising carbon footprint, the spent carbon is either recycled if feasible or valorized to generate energy. The CO<sub>2</sub> emissions are neutralised through the CO<sub>2</sub> adsorption process facilitated by coconut trees.



**Initiative:**  
Mobile filtration solutions  
– activated carbon.

## Preserving Resources Packaging

**Sustainability project initiation:** Camfil's commitment to reduce climate impacts and save energy across their entire business and supply chain.

**The shift:** Addressed packaging materials, specifically the corrugated boxes used for transport. From using white boxes, previously a marketing tool, to brown boxes due to environmental considerations. Examined various factors impacting CO<sub>2</sub> emissions reduction by means of a Life Cycle Assessment (LCA):

- Materials' carbon footprint
- Production locations
- Fiber sources and their environmental impacts
- Recycled content of materials
- Performance of different board grades

**Validation:** LCA confirmed a reduction – 50 tonnes of CO<sub>2</sub> per year by transitioning to unbleached brown bag filter boxes.

**Action:** Camfil swiftly executed the switch for bag filter boxes in Europe.

**The impact:** Achieved a 13% reduction in CO<sub>2</sub> emissions per box, fostering a positive brand perception while substantially reducing environmental impact.

**Next steps:** After the successful implementation of the brown bag filter boxes, the roll-out to all other filter ranges was done.

**Result:**  
**13%**

reduction in CO<sub>2</sub> emissions per box equalling 50 tonnes CO<sub>2</sub> reduction yearly.



# Clean Operations

The fourth principle of our sustainability framework is dedicated to clean operations and encapsulates our commitment to clean energy, efficient production, and minimal waste with a focus on sustainability and recycling.

## Clean Energy

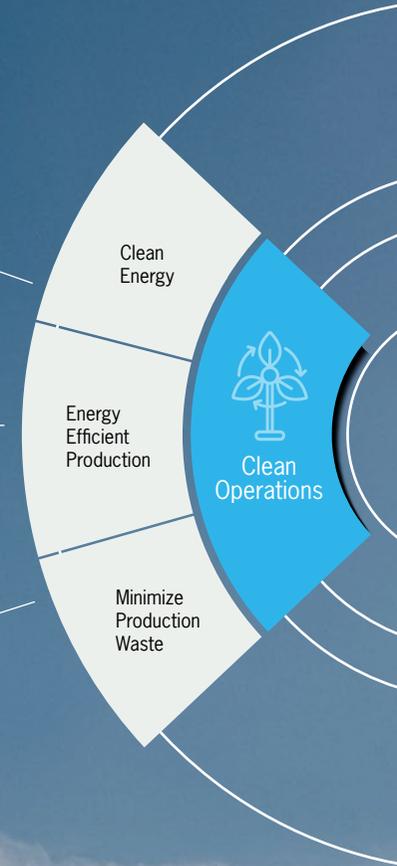
Committed to minimising energy use and embracing sustainable alternatives.

## Energy Efficient Production

Committed to minimising our energy consumption, with a consistent focus on regular monitoring.

## Minimise Production Waste

Committed to reduce raw material use, minimise waste and optimise recycling practices.



# Clean Operations Introduction

Camfil has been monitoring environmental performance data since 2007. In response to stakeholder preferences and new legal obligations, we have intensified our data gathering efforts.

## Broadened Environmental Inventory

Our environmental inventory has undergone significant expansion in 2023, with a broader scope that now includes not only our factories but also individual offices, warehouses, and company vehicles used for deliveries and by employees. This comprehensive approach provides us with a more holistic and detailed understanding of our environmental impact. We have gained deeper insights into our water consumption, factory emissions, electricity-related emissions, and our waste generation.

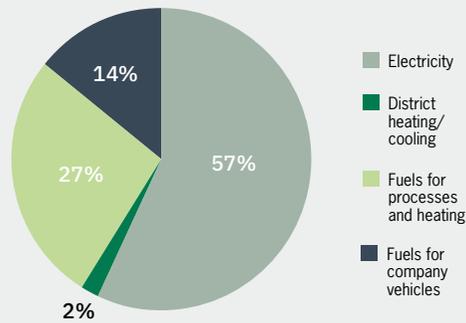
Next step is to gather data in our value chain on suppliers' environmental performance, transportation, waste treatment, customers' use of our products etc.



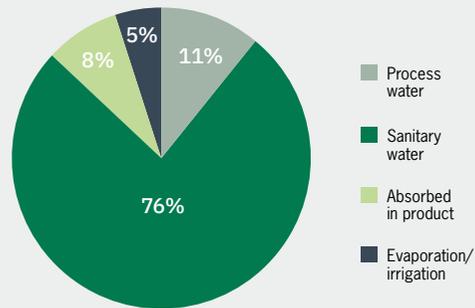
# Environmental Inventory

The inventory includes factory sites as well as sales offices and warehouses located elsewhere.

## Energy use, 96 GWh

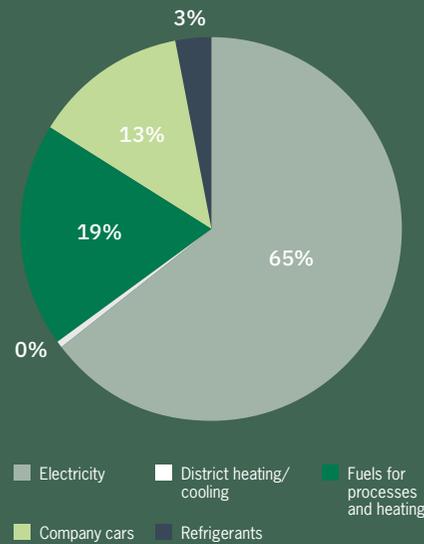


## Freshwater use, 118 ktonnes



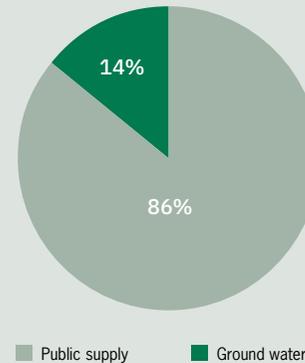
11% of the water is used for processes and is disposed of in the public sewage system, apart from 1,4% that becomes hazardous and is sent in containers to special treatment. 8% is used for activating carbon and stays in the product. Most of the sanitary water is sent to the public sewage system but at one site (4% of total sanitary water) it is sent in containers for treatment.

## CO<sub>2</sub>e emission, 29 ktonnes



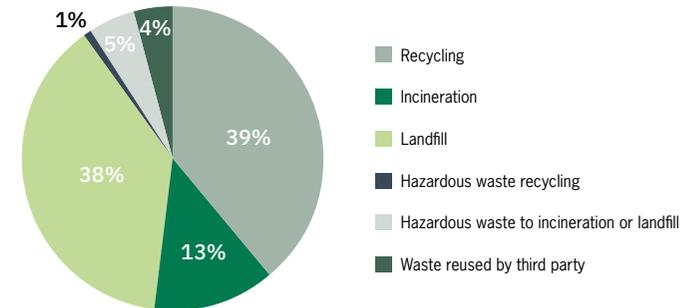
Tonnes	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e	CO <sub>2</sub> bio
Location-based electricity	18 868	1	0	18 929	607
Market-based electricity	18 930	1	0	18 991	524
District heating/cooling	103	0	0	110	565
Fuels for heating buildings & processes	5 391	0	0	5 398	37
Company cars	3 621	0	0	3 628	
Refrigerants				865	
Carbon activation process					2 214
<b>Sum, location-based approach</b>	<b>27 983</b>	<b>1</b>	<b>0</b>	<b>28 929</b>	<b>3 423</b>
<b>Sum, market-based approach</b>	<b>28 046</b>	<b>1</b>	<b>0</b>	<b>28 992</b>	<b>3 340</b>

## Water origin



86% of water used stems from public supply. One site uses ground water from an own well.

## Waste, 14 ktonnes



Apart from the amounts shown in the diagram Camfil also handles 2 kton of customers' waste filters. These are either landfilled or incinerated, depending on different countries' waste handling infrastructure. Approx. 0,02 ktonnes of waste is reused in own operations.

# Clean Operations

## Clean energy

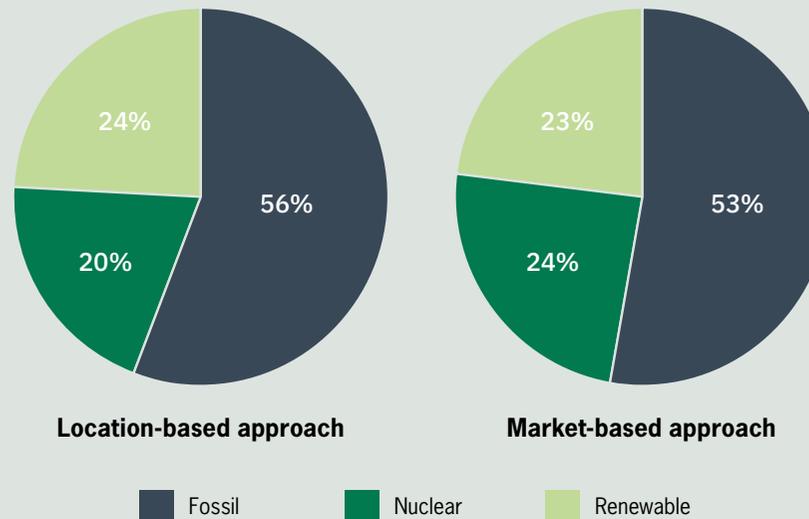
### Electricity and fuel consumption:

All power technologies involve the utilisation of natural resources, leading to emissions and waste to varying extents. Electricity and fuel consumption stands out as one of our most significant environmental impacts, particularly within our factories. We are committed to minimising our energy requirements and enhancing energy efficiency.

Our ongoing efforts include the substitution of fossil fuels, primarily natural gas used for heating in our factories, with more sustainable alternatives. Additionally, we strive to procure fossil-free electricity whenever feasible. A noteworthy example is our factory in Levice, Slovakia, which has entered into an agreement with the electricity supplier to source renewable electricity starting from August 2023.

For a comprehensive overview of our energy usage, encompassing factories, separate offices warehouses and company vehicles, please refer to the previous page.

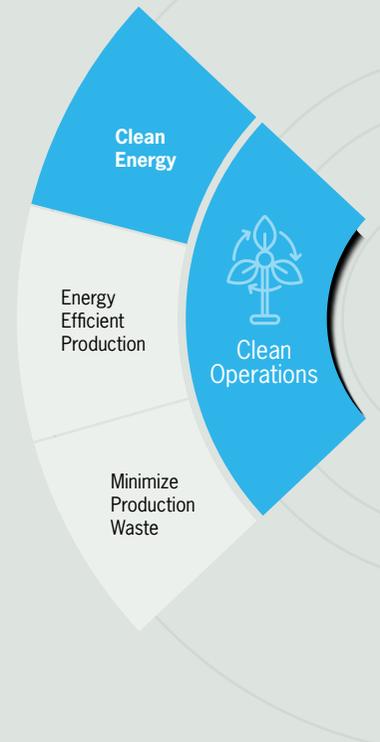
2023 factories electricity mix, 50 GWh in total



According to the Greenhouse Gas Protocol standard we are to disclose our electricity mix with two different approaches, the location-based and the market-based. The location-based approach takes into account all power technologies feeding the grid whereas the market-based approach takes into account any electricity purchased with a contractual instrument, for example renewable certificates. In the latter case, the sites that do not purchase electricity with a contractual instrument are supposed to receive the so called residual mix which is worse than the grid mix since all electricity with contractual instruments sold to customers (usually "greener" electricity) is subtracted from the mix.



Apart from the electricity purchased shown in the diagrams, one factory has solar panels generating approximately 40% of the electricity needed on the site.



# Clean Operations

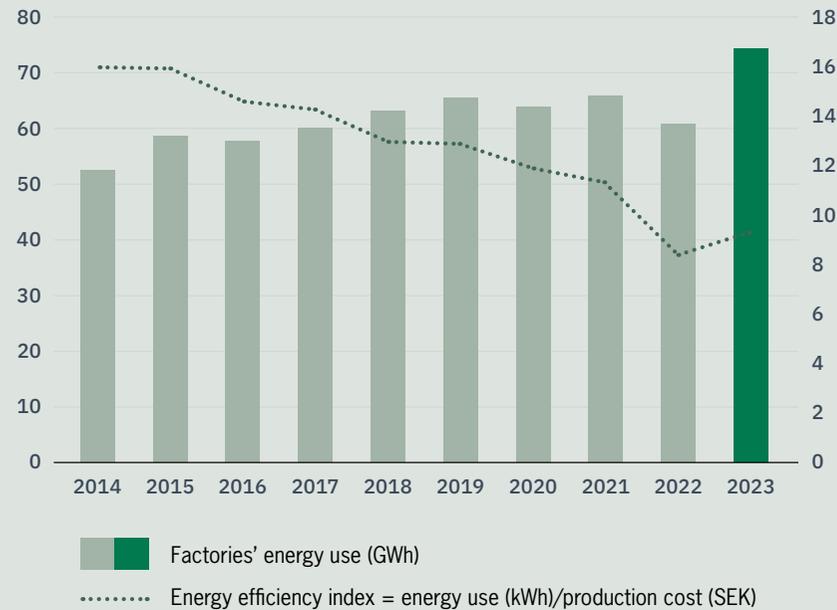
## Energy efficient production

### Reducing energy use

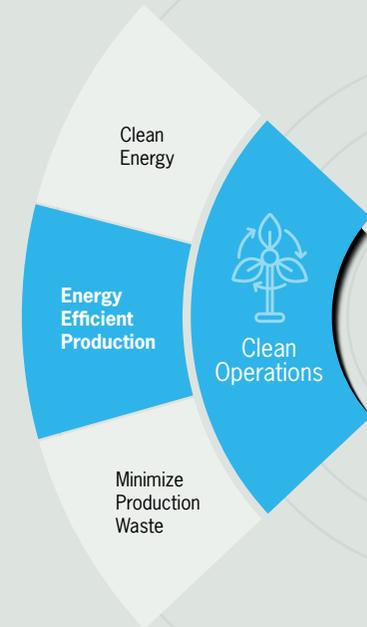
Aligned with our three-year strategic plan, we are committed to minimising our energy consumption, with a consistent focus on regular monitoring. Energy efficiency is a key consideration in the development of our production processes.

While our growth may lead to an overall increase in energy usage in the coming years, our primary goal is to enhance efficiency in its utilisation. We systematically analyse our energy and other sustainability data in relation to the production cost of goods sold (CoGS). While we acknowledge that fluctuating raw material prices and variations in our product mix may introduce some distortions, we believe that our approach provides a sufficiently reliable indication of Camfil's sustained sustainability efforts over time.

**Energy use and energy efficiency index**



*In 2022, inflation and rising raw material prices significantly affected our energy efficiency index, leading to a substantial decrease. However, in 2023, prices have stabilised, resulting in an increase in our index once again. Despite this fluctuation, the diagram shows a decline over time.*



## Clean Operations

# Energy saving initiatives

Here are some examples of energy-saving measures implemented during the year:

### LED lighting in Slovakia and Australia

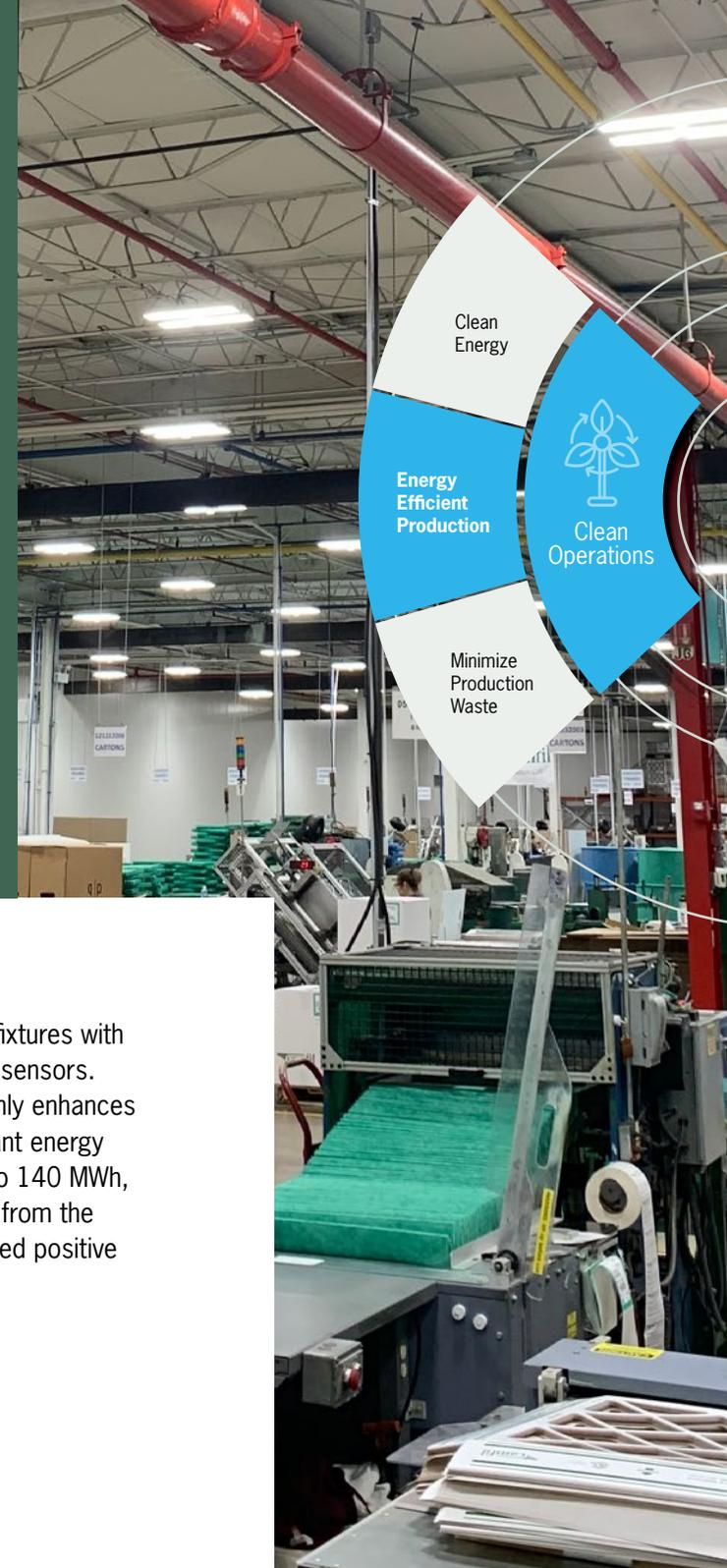
An ongoing project in our factory in Levice, Slovakia involves replacing existing fluorescent tube lighting with smart LED technology. This initiative is estimated to result in an annual energy saving of approximately 200 MWh. Similar projects are underway in Australia. Apart from energy savings and improved lighting conditions, these initiatives contribute to environmental benefits by eliminating the generation of hazardous waste in the form of end-of-life fluorescent tubes. Additionally, the new LED technology generates less heat, reducing cooling needs and minimising the risk of fire.

### Geo-Exchange Cooling System in Ipoh, Malaysia:

In Ipoh, Malaysia, we have new production lines for media lamination that needs cooling. Instead of using a traditional electricity-powered water cooler, a geo-exchange cooling system has been installed, designed with several joined pipelines in the underground. This innovative system, utilising underground water sources, circulates naturally flowing water to cool the hot water from the production lines. The result is a substantial annual electricity saving of around 840 MWh compared to a traditional electricity-powered water cooler.

### LED Lighting at Crystal Lake, US:

At our Crystal Lake factory in the US, we replaced 440 fixtures with the latest LED lighting technology, incorporating motion sensors. This smart system, adjustable via mobile devices, not only enhances workplace brightness and safety but also yields significant energy savings. The calculated annual energy savings amount to 140 MWh, with a quick payback time of 5 years, thanks to rebates from the local utility. In addition, the enhanced lighting has garnered positive feedback from our employees.



## Clean Operations

# Minimise production waste

### Production Waste Management:

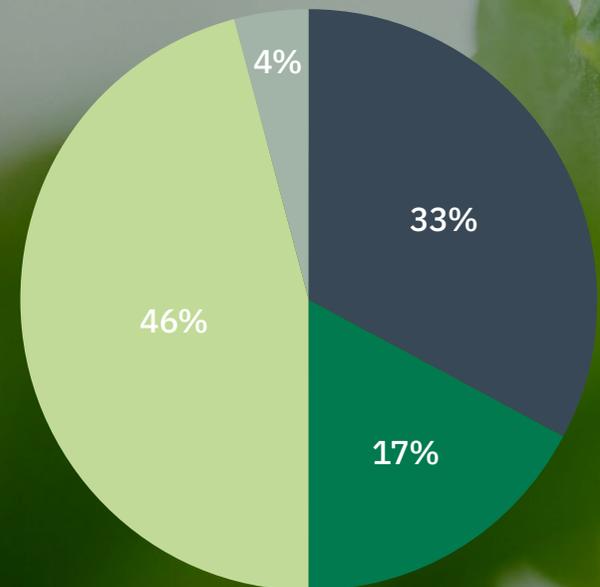
Sustainability entails the reduction of raw material and energy consumption per manufactured product, along with minimising emissions and waste generation. In Camfil, one of the significant waste fractions arises from filter media waste during filter manufacturing. This represents not only the loss of valuable raw materials but also unnecessary utilisation of natural resources and energy, as well as unnecessary emissions.

Waste management systems differ across continents and countries, prompting us to align our waste sorting efforts with local conditions. Our sorting practices aim to maximise recycling rates, providing not only environmental benefits but often proving to be the most economically viable approach.

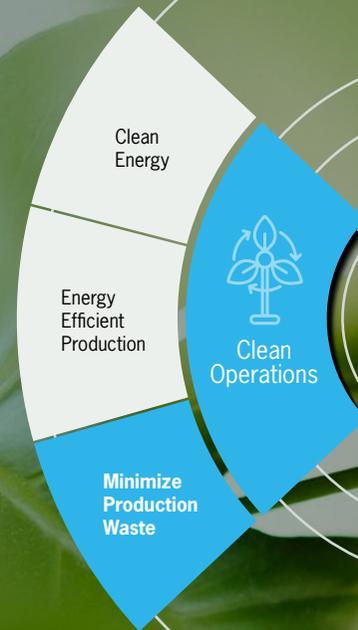
Camfil has developed a production yield system to collect data, enabling us to pinpoint and analyse instances of filter media waste in the production process. This system aids in optimising operations for increased yield. Our goal is to integrate this system into all major production units, and in the past year, another factory in Switzerland has successfully adopted it.



2023 factory waste destination



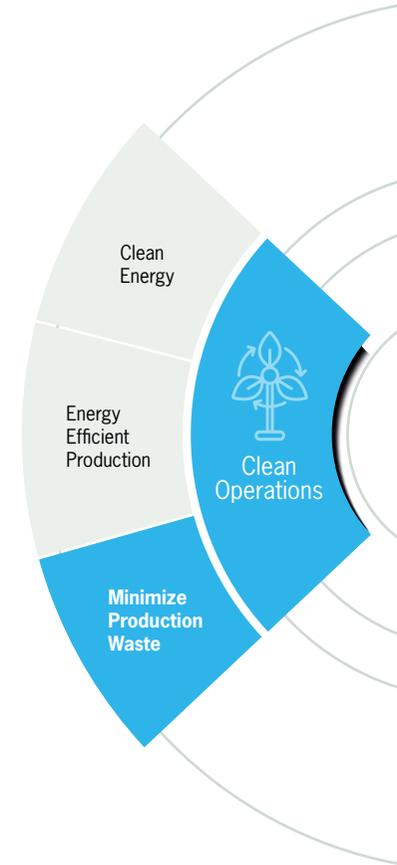
The amounts of waste reused by third party consist of coconut shell charcoal dust which is used by third party to produce e.g. briquettes.



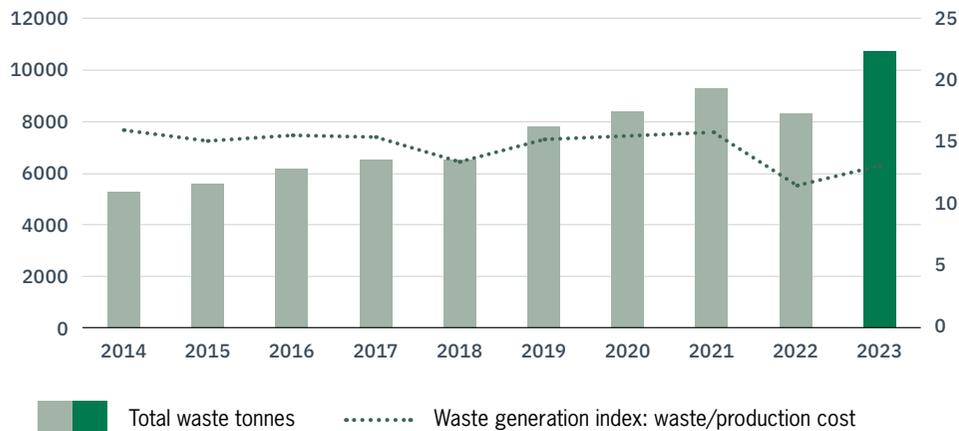


In designing and producing essential machinery for Camfil production sites worldwide, we prioritise high-quality machines equipped with the latest technology. Our approach emphasises extended service lives and minimal maintenance requirements. When these machines reach the end of their service life we reuse components where possible and recycle remaining parts.

The machines are configured to minimise raw material waste during production. Thanks to high quality and precision, almost all products successfully pass the quality tests. Direct feedback from machine operators plays a crucial role in continuous optimisation and serves as valuable input to our in-house machine development process. Consequently, the foundation for further improvements in yield is well-established.



**Non-hazardous waste amounts in factories and amounts per production cost**



*Since Camfil is growing, the amount of waste increased. Last year's waste generation index decreased a lot due to inflation, i.e. increased production cost. 2023 the raw material prices stabilised and the index increased again. We still see a declining trend over the last couple of years.*

# Our Sustainability Targets and KPIs

Sustainability Area	Goal	Target 2024	Result 2022	Result 2023	Status	UN SDG	Risk	Governance
<b>Sustainable Products and Innovation</b>	Reduced energy consumption for Camfil's customers.	5% increase in filters with Eurovent classification A or A+ per year.	8% increase	<b>26% increase</b>	Energy consumption remains a key competitive factor.		Increased energy consumption by the end user, resulting in increased CO <sub>2</sub> emissions.	The products are certified by Eurovent. Educate and inform the sales community and end users about lifecycle cost tools.
<b>Sustainable Production</b>	Reduced energy use in factories, increased utilisation rate of raw materials and reduced production waste.	2% reduction in energy use relative to production cost of goods sold.	25% decrease	<b>11% increase</b>	The 2023 result is an increase compared to 2022 which was an extreme year due to inflation but a decrease compared with 2021.	  	Increased CO <sub>2</sub> emissions, unnecessary consumption of natural resources and an increased cost for the Group.	Camfil's global production scorecard is used to report and analyse key performance indicators in these areas on a monthly basis.
		2 factories per year where the yield system for measuring the scrap rate from filter media is put into operation.	5 factories	<b>1 factory</b>	Implementation is connected to the roll-out of new ERP systems in the countries.			
		1% reduction in production waste relative to production cost of goods sold.	27% decrease	<b>12% increase</b>	The 2023 result is an increase compared to 2022 which was an extreme year due to inflation but a decrease compared with 2021.			

Sustainability Area	Goal	Target 2024	Result 2022	Result 2023	Status	UN SDG	Risk	Governance
<b>Worker &amp; Community Wellbeing</b>	Be an employer that supports equal opportunities.	All 12 GEEIS certified production units keep the certificate.	92%	<b>92%</b>	Target revised during 2023 from 13 to 12 units. Target achieved.	 	More difficult to find and retain staff.	Owner's directive and a global policy on diversity and equal opportunities. Locally implemented and available in 15 languages.
<b>Safe &amp; Healthy Workplaces</b>	A safe and healthy workplace.	2,5% Sick leave 2,5 OSHA ratio 50 accidents/incidents	2,7% Sick leave 3,2 OSHA ratio 95 accidents/incidents	<b>2,8% Sick leave</b> <b>2,8 OSHA ratio</b> <b>81 accidents/incidents</b>	Targets not achieved. Awareness and training initiatives underway.	 	Increased risk of workplace-related illnesses or workplace accidents. In the long run, the Group's reputation as an employer.	The Global Health and Safety Handbook is implemented locally and is available in several languages. Camfil's global production scorecard measures the monthly number of OSHA incidents.
<b>Business Ethics</b>	Zero tolerance for bribery and corruption.	100% of designated target groups will participate in annual training on anti-corruption, sanctions and trade barriers. For details, see page 31.	84% participated	<b>57%</b> participated in Anti-Bribery and Corruption (Basic) <b>57%</b> participated in Global Anti-Corruption (Advanced) <b>62%</b> participated in Basic Trade Compliance Training	The trainings were launched quarter 2–3 which is why the target is not achieved during 2023		Risk of damage to brand image, criminal liability and significant financial consequences (including contractual liability and financing issues).	Owner's Directive, Trade Compliance policy and code of conduct. Third-party whistle-blowing function to ensure anonymity, available in 15 languages.
<b>Business Ethics</b>	High level of ethics and business conduct.	100% of new hires should participate in online code of conduct training.	63% participated	<b>85% participated</b>	Not achieved, ongoing training efforts.	 	Risk to image and reputation. Impact on the brand, more difficult to recruit and retain staff.	The code of conduct describes our shared corporate culture and clarifies how goals and values affect everyday actions.

Sustainability Area	Goal	Target 2024	Result 2022	Result 2023	Status	UN SDG	Risk	Governance
<b>Sustainable Transport</b>	Reduce the climate impact of transport. Environmental requirements specified in all tenders and part of carrier selection process.	Use more energy efficient transport (road to rail) resulting in 150 tonnes CO <sub>2</sub> reduction.	Not applicable	<b>110 ton CO<sub>2</sub> saving</b> shifting from road to inter-modal from Camfil Riverdale factory to customer in TX USA. Target for 2023 was 100 ton CO <sub>2</sub> savings.	Continued work on reducing climate impact from transport through review of freight volumes and shipping methods.	  	Increased CO <sub>2</sub> emissions, unnecessary consumption of natural resources and an increased cost for the Group.	Procurement requirements for freight forwarders and code of conduct for partner companies.
		Conduct 3 group-wide procurement procedures including environmental requirements.	One tender completed with environmental requirements part of selection criterias.	One tender completed with environmental requirements part of selection criterias.				
		Collect emissions reports from all group-wide freight forwarders in Europe.	Accomplished	Accomplished				
<b>IT Security and Data Protection</b>	Increase awareness of cybersecurity.	90% participation of active users in the IT security training programme.	84% participated	<b>89 % participated</b>	Not achieved, ongoing training efforts		Untrained staff can result in data breaches, business interruptions and increased costs for the Group.	Information security policies and guidelines.

# Insights, ambitions and actions

**My name is Anne-Marie von Salis, and I have dedicated my entire career to the air quality industry.** During my thirteen years at Camfil, I have been privileged to hold senior roles closely related to Camfil's products and offering. These experiences have collectively prepared me for my current and most significant endeavour yet: Head of Sustainability.

Since I began leading the sustainability efforts at Camfil, I've rediscovered fundamental insights often overlooked. Our company's commitment to excellence has always embraced sustainability. Over 50 years ago, Camfil pioneered air filtration technology in Europe by establishing our own testing facility in Trosa, Sweden. Quality and energy efficiency have remained top priorities in our product development, evidenced by our creation of an energy rating system in the early 2000s, adopted industry-wide.

Fifteen years ago, we pledged to the "UN Global Compact" and initiated "CamfilCairing Week", an annual event involving the entire company in sustainability activities to build a shared foundation where we are all equally important in our sustainability efforts.

2023 has been a year of important milestones; we joined the "EcoVadis" sustainability rating platform and committed to the "Science-Based Target" initiative to align our greenhouse gas reduction targets with science and the Paris Agreement. Understanding our products' environmental impact throughout their lifecycle has long been essential, leading us to establish an in-house Life Cycle Assessment team.



2023 has been a year of important milestones

ANNE-MARIE VON SALIS,  
VICE PRESIDENT OF  
SUSTAINABILITY



Camfil conducted a thorough inventory of our factories and operations to assess our environmental footprint and readiness for compliance with EU legislation, such as the Corporate Sustainability Reporting Directive (CSRD). Moving on we are focusing on a better understanding of the risks, impacts and opportunities in the value chain.

We foresee this regulation driving collective action towards minimising negative impacts on people and the planet. Thus, we've committed to UN Goal 17, "Partnerships for the Goals," to collaborate more systematically with stakeholders within and beyond our industry.

These are all strong foundations for our sustainability efforts to minimise our impact on our shared environment. But these are also foundations for our customer's ability to achieve their sustainability targets and reduce their climate impact. It's not we or them – it's us together – today and tomorrow!



## Camfil – a Global Leader in Air Filters and Clean Air Solutions.

For more than half a century, Camfil has been helping people breathe cleaner air. As a leading manufacturer of premium clean air solutions, we provide commercial and industrial systems for air filtration and air pollution control that improve worker and equipment productivity, minimise energy use, and benefit human health and the environment.

We firmly believe that the best solutions for our customers are the best solutions for our planet, too. That's why every step of the way – from design to delivery and across the product life cycle – we consider the impact of what we do on people and on the world around us. Through a fresh approach to problem-solving, innovative design, precise process control and a strong customer focus we aim to conserve more, use less and find better ways – so we can all breathe easier.

The Camfil Group is headquartered in Stockholm, Sweden, and has 30 manufacturing sites, six R&D centres, local sales offices in 35+ countries, and about 5 700 employees and growing. We proudly serve and support customers in a wide variety of industries and in communities across the world. To discover how Camfil can help you to protect people, processes and the environment, visit us at [www.camfil.com](http://www.camfil.com).

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