ecophon
SAINT-GOBAIN

ECOPHON

SUSTAINABILITY REPORT 2023

SAINT-GOBAIN

CONTENT

In a year marked by global uncertainties, Ecophon's sustainability commitment has not wavered. The vision is clear: to lead as the first net-zero carbon manufacturer of acoustic solutions, driven by innovation and transparency. Through our people's hard work to decarbonise our operations, we are thrilled to find ourselves ahead of schedule and set to achieve zero-carbon production in Scope 1 and 2 emissions by 2026.

In our second annual sustainability report, we detail our strategy and strides taken toward our sustainability targets in 2023. Advancements in manufacturing gave rise to our Carbon Low[1] product range, cutting carbon footprints by a third compared to standard version of same products. We launched a sound absorber reuse pilot in Sweden, a major leap towards a circular value chain where resource use is redefined.

Ecophon transforms ceilings and walls from mere structural elements into contributors to healthier living spaces. We ensure our products and services support our mission to make the world a better home. Ultimately, to have a sound effect on people – and the planet.

Pierre-Emmanuel Thiard, CEO Ecophon

[1]Carbon Low product definition described on page 16.

TOWARDS NET-ZERO ACOUSTICS

Ecophon's sustainability activities are driven by our ambition to bring net-zero acoustic design to the world. We work together with our suppliers and customers to reduce our emissions, and to introduce recycling services in the value chain. This sustainability report marks our commitment to transparently communicate our performance today and the key actions of tomorrow.

[2] Volatile Organic Compound.
[3] Environmental Product Declaration.
[4] The Nordic Swan.

OVER 30 YEARS OF SUSTAINABILITY

In 1990, we began the process of sustainable product innovation, by using glass wool made from recycled glass jars and bottles. We did not stop there. In 2004, we were one of the first manufacturers to measure the carbon emissions of our products and report them in Environmental Product Declarations (EPDs), giving our customers all the information they need to construct in a more sustainable way. In 2021 we rolled out our recycling service – SoundCircularity – marking a big step towards the circular business model that is key to our company's future. During 2023, we proudly presented a new range of low-carbon products.

"Ecophon's identity is built on two foundations: acoustic performance and the sustainability of our products and operations. Leveraging our strong R&D, we are reducing our customers' environmental footprint through Carbon Low product innovation and introducing recycling services in the value chain. We welcome you to join us in transforming the way we build and create a sound, sustainable effect on people."

Laura Seitovirta, Marketing Director, Ecophon.

A VISION THAT OPENS UP OPPORTUNITIES

FOR INNOVATION

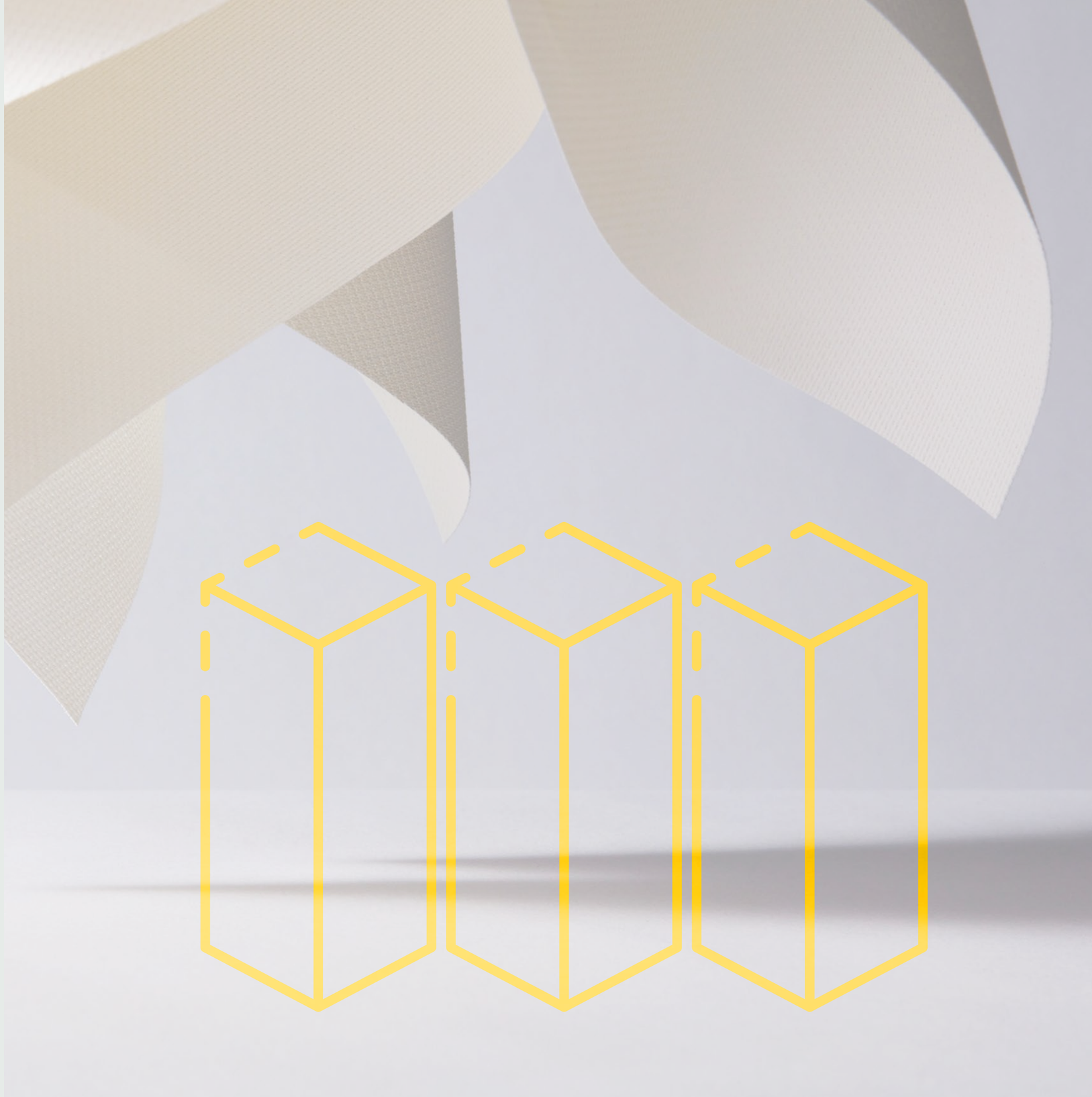
Saint-Gobain's commitment to reach net-zero carbon by 2050 is rooted in the strategy of Ecophon:

We aim to become the first net-zero carbon acoustic solutions manufacturer through transparency and innovation.

This commitment will lead to a significant transformation of our business. We see this as a fantastic opportunity for innovation, rather than an obstacle that we need to negotiate.

The journey towards our sustainability goals is founded on three key pillars:

1. **Our environmental footprint**
2. **Our solutions**
3. **Our people**



PILLAR 1

OUR FOOTPRINT

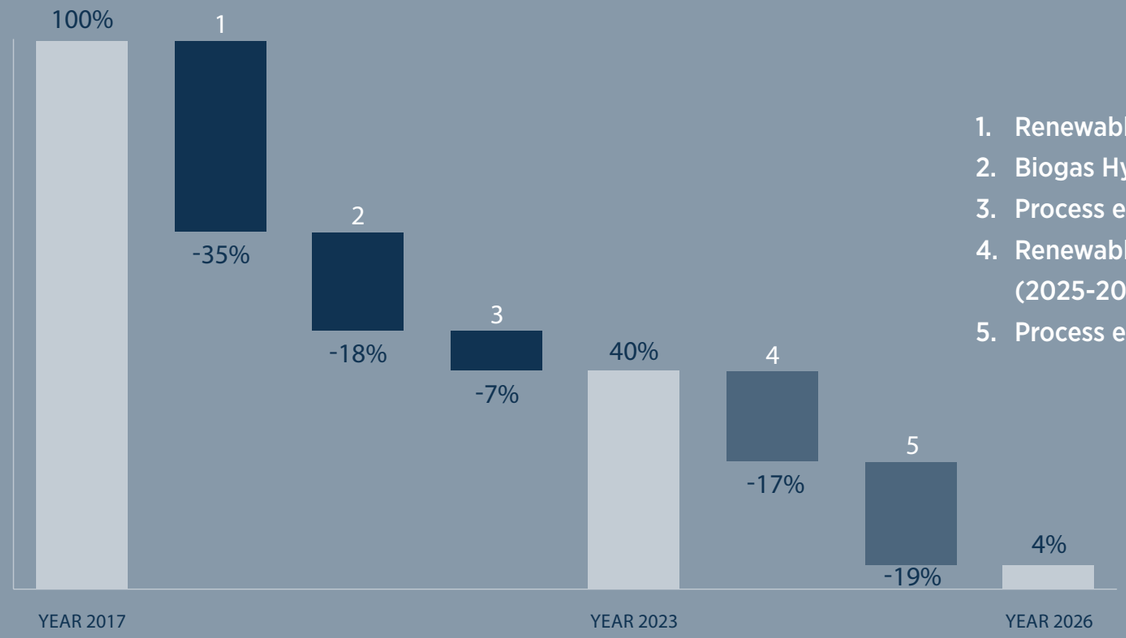
Here we report on our developments towards the 2030 sustainability goals. Since particularly great progress has been made on Scope 1 and 2 emissions, we have decided to raise the bar, aiming for net-zero[5] emissions until 2026, and absolute zero by 2030 at the latest.

The 2026 roadmap is detailed in the figure – we expect an expansion in procurement of renewable electricity, and also a phase-out of fossil-intensive process equipment. Scope 3 will naturally fluctuate depending on sales volumes and stock management. We expect new innovations and circular business models to reduce emissions from purchased materials in the coming years.

Almoz Consulting AB was engaged to conduct an independent verification of the greenhouse gas (GHG) emissions.

Read more about this related information included within the scope of work here.

Goals towards 2026



1. Renewable electricity Nordics
2. Biogas Hyllinge production
3. Process equipment (2021-2023)
4. Renewable electricity rest (2025-2026)
5. Process equipment (2024-2026)

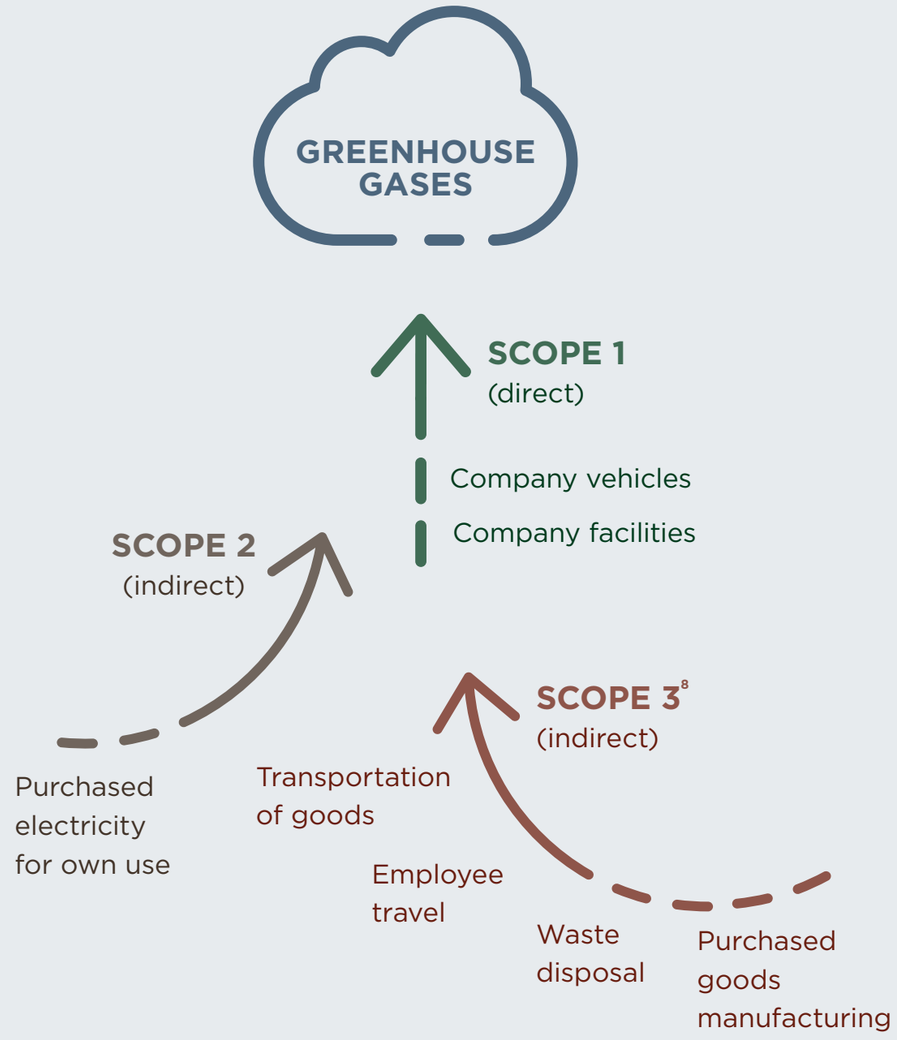
	GOALS FOR 2030 (COMPARED WITH 2017)	RESULTS FOR 2023[6] (COMPARED WITH 2017)
Scope 1+2 emissions (absolute[7])	**-100%**	**-60%**
Scope 3 emissions (absolute[7])	**-16%**	**-2%**
Non-recycled waste (absolute[7])	**-80%**	**-61%**
Energy mix - share of fossil-free production energy globally	No fossil fuels used in Ecophon's production facilities (100%)	**79%**

[5] Net-zero defined according to Science Based Targets Initiative Net Zero Standard as higher than 90% reduction compared to the baseline year.

[6] The indicators cover the larger 6 of Ecophon's production sites (Sweden, Denmark, Poland, Finland, Netherlands, France), and associated warehouses. Remaining 3 sites will be included in next year's report. The indicators for 'non-recycled waste' cover glass wool ceilings and grids.

[7] Targets given as absolute values, not relative to production volumes.

SCOPE OF EMISSIONS



[8]Scope 3 categories described above is a selected range.

200
TONNES CO_2 EQ.

was saved by procuring partly renewable electricity in Ecophon Gliwice.

-780
TONNES

less water was consumed in Hyllinge in 2023, compared with the previous year – without any significant reduction in production volume.

1500
TONNES CO_2 EQ.

was saved in Scope 3 when Isover Billesholm (Sweden) partly switched to biogas.

CLIMATE IMPACT ACROSS OUR VALUE CHAIN

SCOPE 3

SCOPE 3

Raw materials

with glass wool made of 70% post-consumer recycled glass and timber sourced as close as approximately 50 km radius.

Product design

with lightweight glass wool construction and optimised product recipes to phase out carbon-intensive components, and to incentivise our suppliers to work with renewables.

Manufacturing

with 100% renewable electricity in the Nordics and 79% of total Ecophon energy consumption is fossil free.

Transport

targeting to decarbonise our supply chain with electricity trucks between Hyllinge and Isover Sweden during 2025.

Installation

with no maintenance required. Easy to demount and reuse in other buildings.

Usage

with a design engineered to last longer than their typical use. Thanks to SoundCircularity Reuse, panels can spend more time in the usage phase.

End of life

with recycling possibilities in several countries through SoundCircularity. In our ReFAB project, we explore possibilities for closed-loop recycling by 2026.

SCOPES 1 & 2

BEYOND GLASS WOOL

MATERIAL FOR ANY SCENARIO

Every project comes with the challenge of balancing acoustic performance, aesthetics and sustainability. That's why we've expanded the Ecophon material solution choices to include more options for designing sustainable acoustic comfort for any environment. All these material solutions come with their own EPD for full transparency.

PROVEN PERFORMANCE WITH GLASS WOOL

Glass wool is the original Ecophon choice for combined acoustic performance, aesthetics and sustainability. It is light, made with a sizeable contribution of recycled glass and easily recyclable at the end of its lifespan. Ecophon SoundCircularity, including both recycling and reuse, were developed and for the time being extend exclusively to glass wool, further reinforcing their environmental credentials.

SOUND SIMPLICITY WITH PLASTER

Spray plaster provides a flexible and discreet acoustic management option. Certified Cradle to Cradle Gold, Ecophon Fade™ plaster solutions contribute to an optimised lifecycle impact by being simple to repair with a new or maintenance coat, ensuring easy upkeep and minimising the need for replacement.

FREE FORM WITH FABRIC

A technical stretched fabric offers a seamless design flexibility with important sustainability advantages, reaching as low as 2,2 kg CO_2/ m^2 footprint[9]. Ecophon Clipso™ is simple to install and the fabric can quickly be fitted into the profiles over the existing ceiling – a sustainable alternative compared to a full renovation project. Ecophon carcinogenic-free fabrics are certified IAC Gold and GREENGUARD Gold and A+ for minimal VOC emissions.

NATURAL ATTRACTION WITH WOOD WOOL

Wood and cement sourced within Sweden – timber as close as approximately 50 km radius. Ecophon Saga™ is today made from only three ingredients: spruce, water, and cement. Ecophon is leveraging its R&D competence and is looking to further develop wood wool offer on both acoustical and environmental performance.

[9]GWP-TOT in life-cycle stages A1-C4, from Clipso So Acoustic 495D EPD, in accordance with EN 15804+A2

PILLAR 2

OUR SOLUTIONS

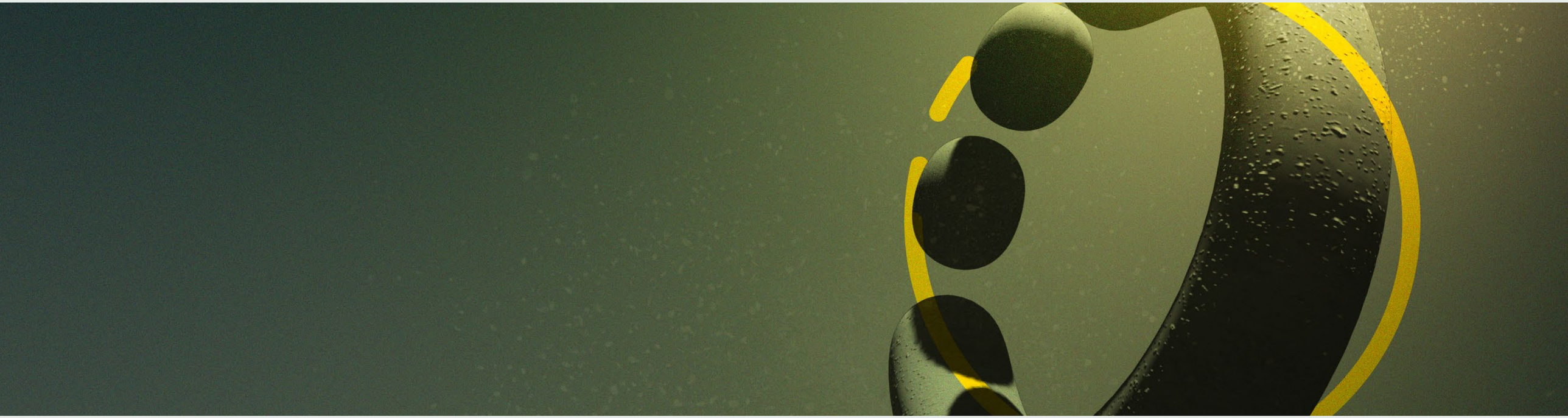
Our efforts to reduce our environmental footprint takes two parallel tracks: optimising manufacturing processes and designing our products to achieve lower emissions.

To reduce the carbon footprint of our operations, we need to reduce the energy consumption. The energy needed for production is already being reduced, for example by recirculating hot air and upgrading to more energy-efficient equipment. We give particular attention to our energy mix and aim to gradually phase out all remaining carbon-intensive energy sources and replace them with fossil-free alternatives.

We are optimising our product range by reducing excess use of materials in end products and replacing carbon-intensive raw materials in our product formulations including all aspects of our packaging. When planning future products, our R&D teams consider environmental aspects right from the design phase to ensure we use materials with low environmental impact. It is important to create products that minimise the volume of waste during manufacturing. Tomorrow's portfolio of acoustic solutions will be eco-designed.

CIRCULARITY SHOWS THE WAY AHEAD

Net-zero carbon emissions cannot be achieved without circularity. This means that more recycling is needed in the construction industry. Ecophon is at the forefront of this circular approach. Here we tell you more about SoundCircularity and ReFAB.



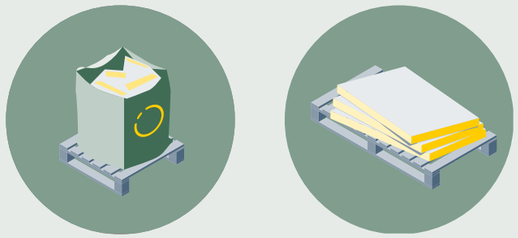
WELCOME TO THE CIRCLE

Discover Ecophon SoundCircularity, based on circular initiatives such as our award-winning Recycling program, and Reuse service and products. Each offers a distinctive step forward in responsible lifecycle management of acoustic material, products and design.

We are continually building on our Recycling and Reuse programs, with more services to come. And strengthening our circle of like-minded partners and stakeholders for the journey to a circular economy.

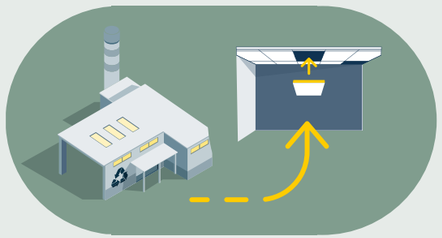
SERVICES

Our initiatives to take-back previously sold material and reprocess it for further use.

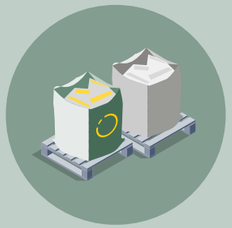


PRODUCTS

Our initiatives for reintroducing reused products or recycled products to the market.



CALCULATION OF CLIMATE SAVINGS



RETURN

COLLECTION

RECYCLING

CERTIFICATE OF CLIMATE SAVINGS

RECYCLING MADE EASY

Effective material recycling that's easy to understand and manage is a must for everyone working towards circularity. Ecophon's award-winning recycling service makes it easy for customers to do the right thing with recyclable acoustic panels and off-cuts.

Our recycling partners pick up your materials, separate the materials and components and process them accordingly, including the recyclable content back into production of new Ecophon acoustic panels.

The service is currently available in Sweden, Finland, Denmark, Germany and France – and is expanding to more markets soon.

CO_2 SAVINGS

The climate savings are reflected in the reduced amount of CO_2 in kilograms that the project contributed with. For some countries, a certificate is issued as proof of the amount of material that has been recycled. The certificate can be issued as project-specifically or over a period for your business or organisation.

	GOALS FOR 2024	RESULTS FOR 2023
Increase in take-back volume for recycling (annual growth rate)	**+15%**	**+38%**
Share of sales in countries with take-back scheme	**68%**	**62%**

THINK REUSE FIRST

Ecophon acoustic panels are designed to last longer than their typical use and are easy to demount, store, transport, and reinstall in another project.

We are proud to share that in 2023, Ecophon expanded its circular offer even further as its Swedish business unit launched a pilot and test market for the reuse of sound absorbers. Ecophon offers to buy back material from existing buildings, for instance in connection with reconstructions, renovations, or tenant customisations. The absorbers are then offered as an alternative to newly produced materials for use in new construction projects. The aim is to reduce resource and energy use and to avoid unnecessary scrapping.

The Ecophon Reuse offer is welcomed by our most advanced customers who are looking to reduce environmental impact by maximizing the reuse of materials in renovation projects.

"Reuse is a real game-changer as it promotes lower waste, reduces energy usage, and provides products with reduced environmental impact and carbon footprint compared to buying new. Large-scale reuse requires early planning and the right materials, as well as a systemic approach that includes the entire value chain. It also involves debunking myths about reused materials being inferior in terms of appearance and performance."

Erika Edlund, Sustainability Specialist, Ecophon Sweden.

INVENTORY

SORTING

COLLECTION

QUALITY VERIFICATION

PAYMENT & CO2 ESTIMATE

REFAB

The ReFAB project is a collaboration with The Loop Factory, LINK Arkitektur, Decibel by Johanson, LogTrade Technology and Lund University. Driven by the growing demand for customisation, digitalisation, and sustainability, our project explores how high acoustic performance can be harmoniously combined with stunning three-dimensional designs enriched with subtle surface structures and textures. The parametric design approach makes the offer scalable and adaptable. Thanks to a mould, the embossed geometry is transferred to recycled glass wool. Then, as a finishing touch, a fabric or acoustic plaster is applied, and it is then ready for installation according to its specific acoustic and design demands.

During the year, the ReFAB project has reached a significant milestone by successfully testing 3D-shaped panels made from recycled glass wool. Thanks to a unique recipe that allows us to shape and “freeze” panels into a customised topography, we are opening the doors to a world of highly personalised acoustic designs. By considering room-specific factors like dimensions, absorptive elements, and the presence of furniture, we can optimise both the quantity and design of these 3D panels to create the optimal acoustic experience. The magic lies in mixing absorptive and diffusive properties, making our installations acoustically performant and resource-friendly. By doing this, we are taking a notable step towards reducing the carbon footprint of acoustic products.

“The project gives Ecophon totally new opportunities to shape products and face them with new types of expressions and surface textures. We’re excited to be at the forefront of innovation in acoustics and sustainability.”

Ola Karlsson, R&D and Innovation Director, Ecophon

CARBON LOW[10]

Ecophon's products already have some of the lowest emissions values on the market. Now, we have reached a new low point.

Thanks to innovation and the introduction of biogas in our manufacturing, we are now able to reduce our carbon footprint even more on a selected range of standard products.
The range is currently available in Denmark, Finland, Norway, and Sweden.

- **Reduced carbon footprint with an average of -35%[11]**
- **Same sound absorption and technical properties as the standard versions.**
- **Available in white 600x600 & 1200x600 mm.**
- **The range will be rolled out globally during 2024.**

LOW-CARBON PRODUCTS	CARBON FOOTPRINT[12] [KGCO2EQ./M²]	REDUCTION[11]
Focus A	1.5	-30%
Focus E	2.3	-30%
Master A	2.4	-27%
Master B	3.9	-40%
Master E	3.5	-35%
Master SQ	3.3	-50%

[10] Products with a minimum of 20% lower carbon footprint compared to their standard counterparts.

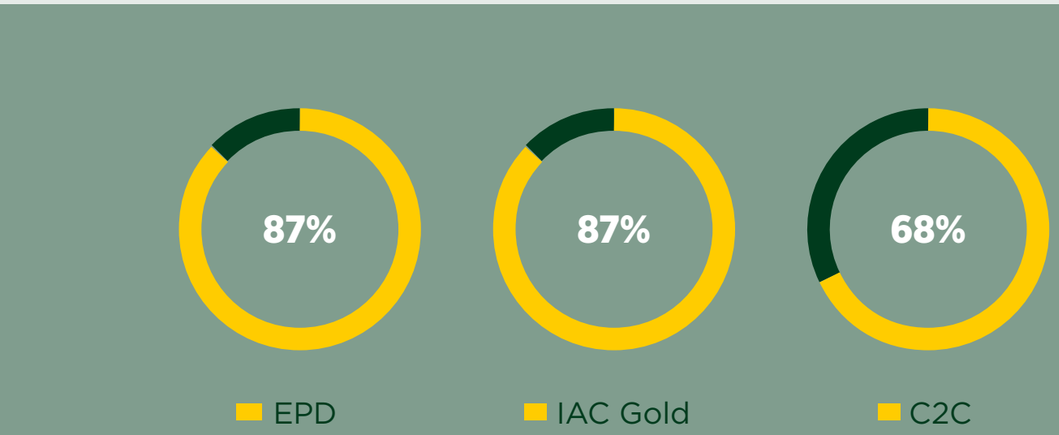
[11] Compared to standard products. Average reduction for 6 low-carbon products, comparing EPD indicators in accordance with EN 15804+A1 (life cycle stages A1 to C4)

[12] GWP-TOT in life-cycle stages A1 to C4, EPD in accordance with EN 15804+A2.

TRANSPARENCY ALL THE WAY

It is possible to offer a high-quality acoustic solution and focus on sustainability at the same time. Sustainability is a powerful driver of innovation, but we believe that a reduced carbon footprint should not come at the expense of reduced technical performance or safety. Our customers should not have to compromise on product features in order to use sustainable solutions. They should expect the same promise from Ecophon as always: quality, superior acoustics, and safety.

We aim to ensure that the products we sell are accompanied by important external certifications: Environmental Product Declarations (EPDs), Eurofins Indoor Air Comfort Gold and Cradle to Cradle (C2C) to ensure we meet full transparency. Only the highest standards on the market are good enough.



Proportions of 2023 sales covered by EPD, IAC Gold or C2C.

INFORMATION WE PROVIDE

We provide **easily accessible** EPDs covering 87% of the products Ecophon sells.

Reduced emissions of volatile organic compounds (VOC, Volatile Organic Compounds), which is certified through third-party verified VOC certificates. We aim for all our products to be covered by the third-party approved certification.

Green Building **scorecards** for LEED, BREEAM, WELL and DGNB that describe how our products contribute to these building certifications.

CRADLE TO CRADLE CERTIFIED® BRONZE IN VERSION 4.0

In 2023, Ecophon achieved Cradle to Cradle Certified® Bronze for our glass wool products made in the Nordics, which account for 68% of Ecophon's sales volume. Ecophon is one of the first companies to achieve the certification according to the new stricter version 4.0. In addition, silver was achieved in the 'Material Health' category, underlining Ecophon's commitment to chemical safety and low emissions.

CERTIFIED®
cradle to cradle
BRONZE

We have launched a **download center** on our website, where we offer easy download of zip files per building certification, to easily meet the needs of our customers on a project basis and show compliance towards the most common building certifications (LEED, BREEAM, WELL, DGNB).

PILLAR 3

OUR PEOPLE

Including all stakeholders in our sustainability roadmap starts with our own teams. Since 2021, 230 of 1100 employees in all functions and locations have received two days of training on sustainability. During the spring of 2024, 150 of 350 employees in Hyllinge have participated in the Climate Fresk training, to increase awareness of the causes of climate changes and the consequences.

We also actively collaborate with suppliers and partners to combine our forces in environmental innovation work and develop tomorrow's solutions together. In a broader perspective, we work actively within our industry, both locally and globally, to shape tomorrow's sustainability standards, both at product and building level. Ecophon has a long history of interaction and collaboration with the scientific community and has participated in many research initiatives on acoustic comfort. This commitment continues, with a greater focus on sustainable acoustics.

We carry out active work in the standardisation of sustainable construction. During 2023, we were proud to announce that our employee Markus Beckman, Environmental Engineer at Ecophon, assumed the role as chairman of ***SIS*** (Swedish Institute for Standards) TK 209, Sustainability of construction works.

230
employees trained since 2021.

HEALTH AND WELLBEING

FOR PEOPLE

Caring for people is the best way to secure a better future. At Ecophon we take pride in contributing to sustainable acoustic solutions, from the inside out.

Sustainability is not just about reducing climate emissions. There are other essential requirements for building a sustainable future: socially sustainable workplaces, educational environments, healthcare facilities – places that promote health, development, inclusion, and wellbeing.

Ecophon has a long history of active work within standardisation[1] and impacting regulation at regional and country levels. We have representatives in technical standardisation committees and working groups dealing with building acoustics, fire safety, sustainability, and suspended ceilings.

1. SIS, ISO, CEN, AIENOR.

Students learn better when they hear and understand their teachers speak. Healthcare patients heal better when their noise environment is less stressful. Office workers concentrate better, preschool teachers do not have to risk their hearing - the list can be long concerning the benefits of a sound environment.

There is a scientifically proven correlation between an optimal activity-based acoustic design and well-being.[13] A healthy sound environment contributes to :

- **Lower blood pressure**
- **Improved communication**
- **Lower stress levels**
- **Increased patient safety**
- **Improved staff wellbeing, performance and satisfaction**

[13] Acoustic ergonomics of school. Tiesler & Oberdöster 2006, “Modern School Acoustics”

A SAFE AND HEALTHY WORKING ENVIRONMENT

We work hard to drive the development towards a more sustainable acoustic industry, in terms of environment and climate, as well as ethics and social responsibility. That ambition applies in both large and small ways – from offering vegetarian alternatives in the canteen to choosing digital meetings over long commutes, or donating money to people suffering from mental health.

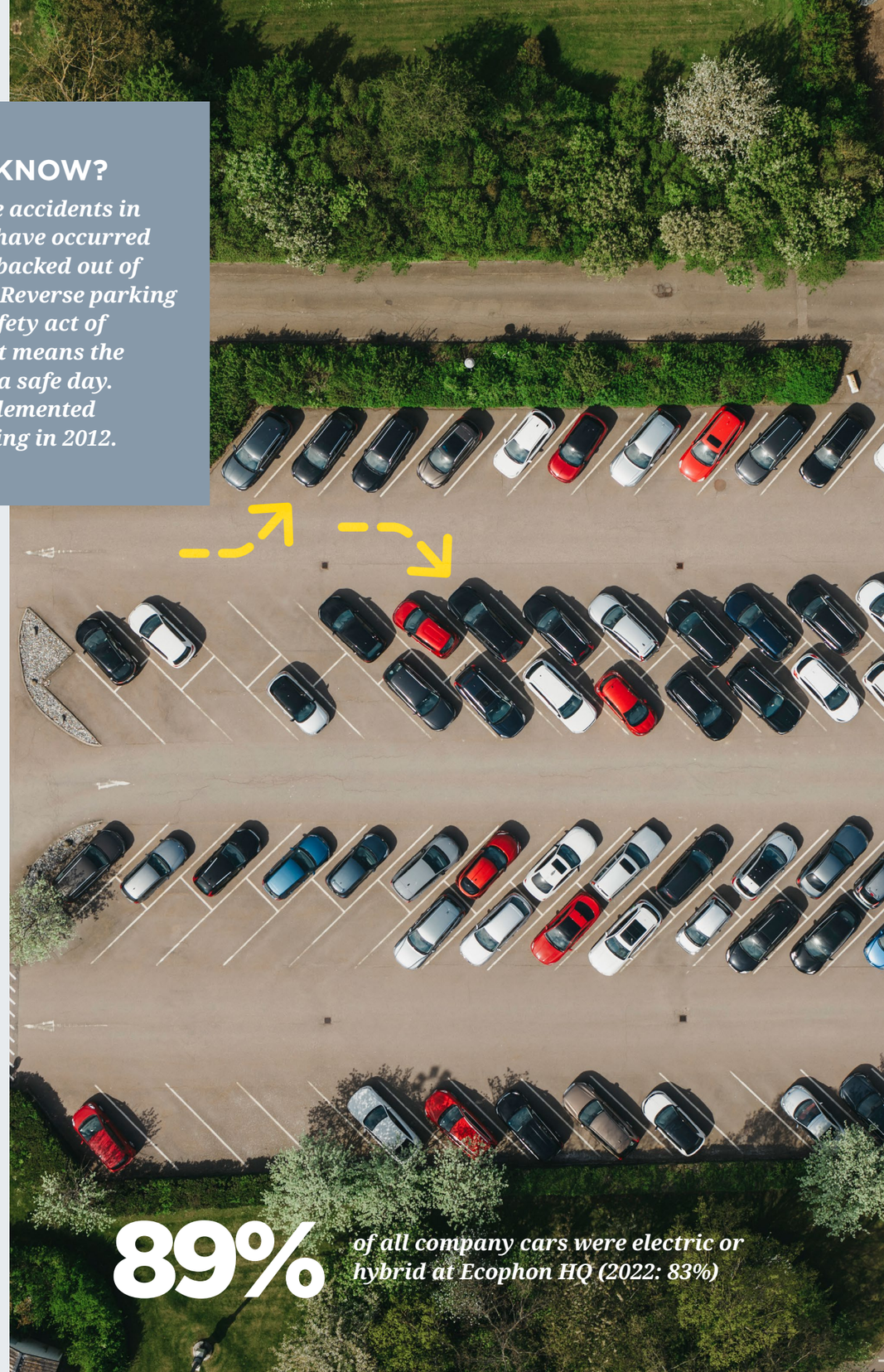
One of our main commitments is to guarantee a safe and healthy working environment for all employees. SMAT (Safety MAnagement Tool) is one of our most important tools for building our safety culture across all employees. SMAT is a method and a tool that Ecophon uses to create a safety culture to reach our long-term target: no work-related accidents.

435

SMAT evaluations were made on 350 colleauges during 2023. Our goal is that everyone in the office should have at least 1 SMAT and everyone in production 2.5 SMAT per year.

DID YOU KNOW?

that 3/4 of the accidents in parking lots have occurred when people backed out of their places? Reverse parking is the first safety act of the day and it means the beginning of a safe day. Ecophon implemented reverse parking in 2012.



89%

of all company cars were electric or hybrid at Ecophon HQ (2022: 83%)

ECOPHON

CONTRIBUTES TO GLOBAL SUSTAINABLE DEVELOPMENT

Sustainable acoustic solutions contribute to the United Nations Global Sustainable Development goals in a number of ways.

GOAL 3

Promote healthy lives and support the wellbeing of everyone at all ages.

Rest, sleep, healing, and recovery are crucial when we have gone through physical trauma. We promote healthy lives through ensuring healing sound environments in healthcare institutions that keep average noise levels and peaks below the limits required for patients to recover undisturbed.

GOAL 8

Create conditions that guarantee decent work for the employees.

We promote sustainable, inclusive and economic growth through our supplier charter which ensures fair working conditions and minimum wages.
We also focus sales and operations on emerging economies to improve the productivity of developing societies.

GOAL 11

Offer sustainable and affordable solutions that support lifestyle changes associated with growing urbanisation.

We help to create sustainable cities and communities in three ways:

1. We manage our own waste through our recycling service, SoundCircularity.
2. Our products are certified to have the minimum of chemical contents and emissions.
3. We facilitate Green Building certification, offering CarbonLow products, facilitating our customers' evaluation of environmental performance through scoring systems and providing full transparency on our emissions.

GOAL 12

Change the way we design, manufacture and distribute our products and solutions in order to move towards a circular economy.

Each year we calculate our environmental impact Scope 1, 2 and 3 emissions as a precursor to reducing them in every possible way. Measuring the emissions of our products – through the EPDs that are essential to certificated sustainable buildings – enables customers to start making sustainable decisions about products, based on accurate facts and figures.

Ecophon is the leading supplier of indoor acoustic solutions that improve working performance and quality of life. We believe in the difference sound can make to our everyday lives, and are passionate advocates for the importance of room acoustics to people's wellbeing – whatever the space, activity or need.

Having a sound effect on people is the principle that guides all we do. We're proud of the Swedish heritage and human approach that promise is founded on. Our uncompromising commitment to transparent sustainable practice. And, as members of the Saint-Gobain Group, to be doing our part in making the world a better home.

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