SAINT-GOBAIN

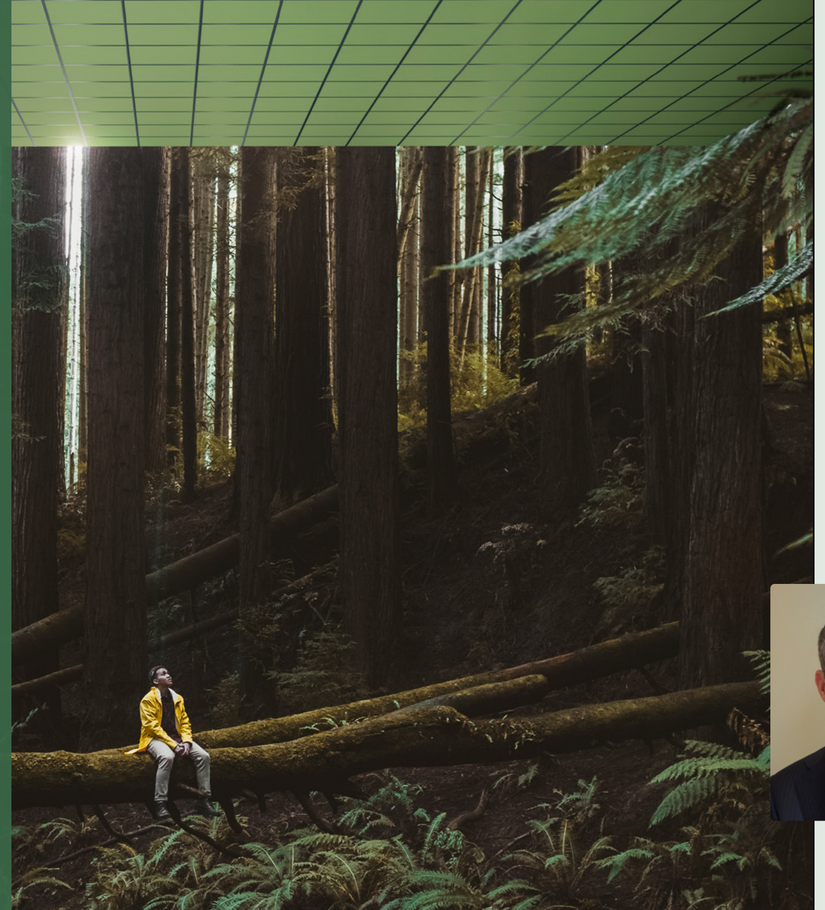
# ECOPHON SUSTAINABILITY REPORT

Ecophon

SAINT-GOBAIN

# A SOUND EFFECT ON PEOPLE

Ecophon is synonymous with sustainable acoustics. Above and beyond creating socially sustainable environments for people to work, heal and learn in, our increasingly circular business model has focused on the three essential Rs of circular production. To reduce the footprint of our products at every step of the way. To create long-lifecycle, reusable products. And to be both recycled and recyclable. Our lifelong customers remember that we were early movers in recycling, sourcing our raw materials from waste since 1990. This legacy of sustainable action continues to the present day and is being accelerated. Extending our promise to have "a sound effect on people" to the planet that sustains us all. In the pages that follow, you will be able to read more about what we are doing today to achieve zero net carbon emissions by 2050, a commitment made by Saint-Gobain.



## A VISION THAT OPENS UP OPPORTUNITIES FOR INNOVATION

Saint-Gobain's commitment to achieve climate neutrality 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. Our strategy is focused around three main pillars:

> 1) circularity & innovation
> 2) transparency
> 3) stakeholders

These pillars hold up our sustainable business model and provide a structure within which to work towards the decarbonization of construction.

***"Our commitment to net-zero carbon follows naturally from our promise to make the world a better home. Achieving this future goal means acting today, setting realistic targets for 2030 for reducing our impacts and sharing that progress transparently. This is the only way to bring about long-term change in the building industry."***

*Pierre-Emmanuel Thiard*
*CEO Ecophon.*

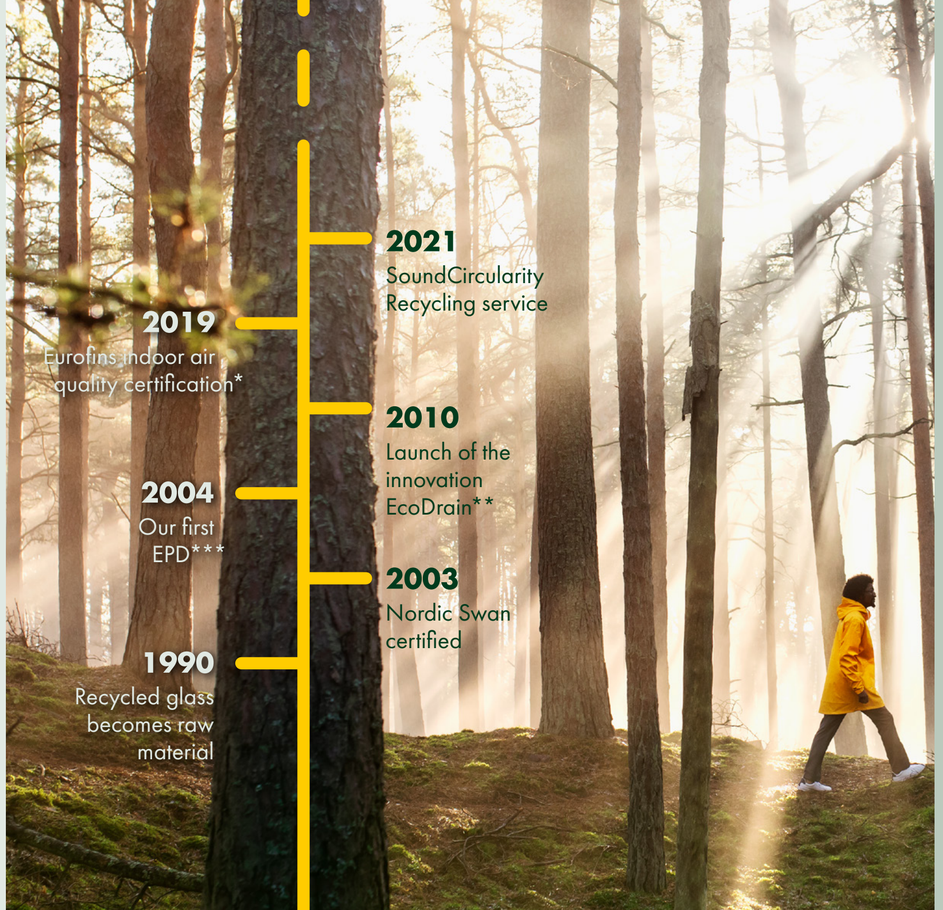
## OVER 30 YEARS OF SUSTAINABILITY

In 1990 we began the process of sustainable product innovation, by using glass wool made from recycled glass jars and bottles. But we did not stop there. In 2004, we were one of the first manufacturers to measure our own carbon emissions of our products and report them in Environmental Product Declarations (EPDs), giving our customers all the information they need to construct more environmentally friendly buildings.

And in 2021 we were proud to roll out our recycling service – SoundCircularity – marking a big step towards the circular business model that is key to our company's future.

***"We have managed to create low emission, sustainable acoustic products through strong collaborations across our supply chain. Through our policy of sustainable procurement, we walk hand in hand with our suppliers towards a more circular industry."***

*Fredrik Jensen, Business Unit Director, Ecophon Nordics.*



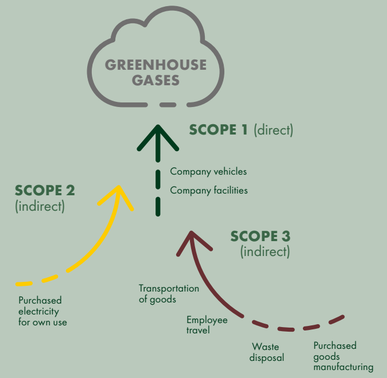

** Volatile Organic Compound.*
*** Lightweight aggregates for soil drainage made out of recycled ceilings.*
**** Environmental Product Declaration.*

# ECOPHON'S GOALS AND PROGRESS TOWARDS 2030

Here we report on our developments towards the 2030 sustainability goals. Strong progress has been made towards our goals to reduce Scope 1, 2 and 3 emissions. We have also significantly reduced the amount of waste we produce.

| | **Goals for 2030** (compared with 2017) | **Results for 2022** (compared with 2017) |
|---|---|---|
| **Non-recycled waste** | -80% | -63% |
| **Scope 3 emissions** | -16% | +17% |
| **Scope 1+2 emissions** | -33% | -60% |
| **Energy mix - share of fossil-free production energy globally** | No fossil fuels used in Ecophon's production facilities (100%) | 78% |

### SCOPE OF EMISSIONS



**PILLAR 1**

# CIRCULARITY & INNOVATION

**Our first pillar involves reducing the environmental footprint of our products and our operations.**

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. 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, ReFAB and ReUse.

**-73%**

Since 2017, the amount of waste from our production sites sent to landfill has been reduced by 73 percent.

**-230 TONNES $CO_2$ EQ.**

Eco-design and the optimisation of existing products is paying off. Reduced excessive consumption of mineral wool in Hyllinge led to savings corresponding to 230 tonnes of scope 3 emissions versus past year.

**-59 TONNES $CO_2$ EQ.**

Phasing out several propane forklift trucks in Hyllinge has reduced scope 1+2 emissions by 59 tonnes versus past year.

***The journey towards net-zero carbon emissions is founded on three key pillars. Specific KPIs have been set up for these pillars. These KPIs are evaluated annually to assess our progress.***

## RECYCLING WITH

SoundCircularity

SoundCircularity is Ecophon's unique, prize-winning global recycling service. This service is key to the circularity of our business model and at the core of our sustainability journey.

We offer a comprehensive package including collection of all waste materials from installation and demolition sites, or anywhere that old tiles need to be taken away and responsibly handled. In those contexts, SoundCircularity steps in and makes sure that landfills stay empty and that waste becomes the resource that it is, closing the circular loop.

1 *Calculation of climate savings*

2 *Return*

3 *Collection*

4 *Recycling*

5 *Climate-saving certificates*

Through harnessing innovative local recycling solutions in the countries in which the service is available, factors like transport emissions which reduce the environmental benefits of the service are brought to an absolute minimum.


***"The SoundCircularity service means that waste from mineral-wool-based products such as wall absorbers and suspended ceilings from construction, installation and demolition projects can be recycled into new products instead of ending up in landfill."***

## WHAT IS DONE WITH THE WASTE?

We work with our partners at Leca and Isover, who take the waste materials and recycle them through special processes. At Leca, the recycled material is used in the composition of their expanded clay solutions.

At Isover, the Ecophon tiles are reintroduced as a secondary raw-material and transformed into a new insulation material. Whether the waste goes to Leca or Isover depends on the country in which the service is operating.

## WHERE IS THIS SERVICE AVAILABLE?

SoundCircularity has already been launched in Sweden, Finland, Denmark, Germany and France, and should be available in all key markets by 2025.

Leca SAINT-GOBAIN

## ONGOING RESEARCH PROJECTS

### REFAB

ReFAB is an exciting new collaboration with the aim of producing the next generation of products from recycled glass wool sound-absorbing wall panels and ceiling tiles.

“This collaboration is a fantastic opportunity to challenge how recycled materials can be upgraded into high value products and how new technologies along the value chain can enable the transformation into a more resource efficient society”, says Anna Altner, Founder of The Loop Factory.

Now that the Swedish Innovation Agency Vinnova has sponsored the project with a competitive award, the best minds from partners at Ecophon, The Loop Factory, LINK Arkitektur, Decibel by Johanson, LogTrade Technology and Lund University are coming together to design resource-efficient manufacturing technologies and processes.

“Changing an industry is nothing you do as a lone actor – it must be done together”, says Ola Karlsson, R&D and Innovation Director at Ecophon. “Collaborating across industry lines and learning from each other will be the foundation of a sustainable circular system, and a key factor of success in moving away from the current linear system”.

### ReUse

When redesigning or refurbishing a room, keep the ceilings demounted, they can be reused! Our ceilings are very good candidates for reuse due to their durability, modularity, and long lifecycle.

We need to start seeing our built environment as the resource it is. Through proper classification, cleaning and storage of Ecophon acoustic materials, demands on our limited resources can be vastly reduced through urban mining. We have developed protocols for identification, demounting and maintenance – in order to assist the customer when using the Ecophon ReUse service and ensure that our tiles are reused in the best possible ways.

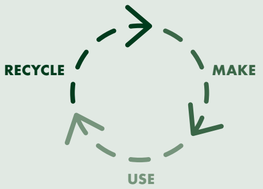
One third of the waste stream in Europe comes from building materials, waste that primarily ends up in landfill[1]. This is a cheap yet environmentally costly solution to the waste problem. Often the condition of the materials is still extremely high, retaining all acoustic and other functional properties. In such cases, reuse is warranted and is an ideal way of writing off the $CO_2$ for those products.

We are currently piloting a Reuse program which will make Ecophon best-sellers available to buy with a far lower cost for the environment.

1. Hollins, O. (2018). Towards a circular economy: waste management in the EU.

*Linear economy*


*Circular economy*

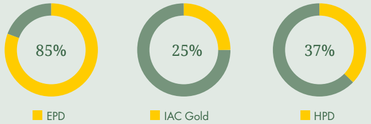



**PILLAR 2**

# TRANSPARENCY ALL THE WAY

**The second pillar of our sustainability journey is increasing transparency about how we contribute to sustainability.**

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.




*Proportions of 2022 sales covered by EPD, IAC Gold or HPD.*

We have set ourselves the goal that the products we sell should be accompanied by important external certifications: Environmental Product Declarations (EPDs), Eurofins Indoor Air Comfort Gold and Health Product Declarations (HPDs) to ensure we meet full transparency. Only the highest standards on the market are good enough.

## INFORMATION WE PROVIDE

We provide easily accessible EPDs covering 85% of the products Ecophon sells.

HPD is third-party verified and transparently lists our chemical ingredients down to 0.01%, and compare them towards a risk list.

3rd-party verified certificates of indoor air quality that ensure our products do not off-gas harmful chemicals into the indoor environment.

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

**142**
**EMPLOYEES**
trained during 2022

**PILLAR 3**

# OUR STAKEHOLDERS

**Our third pillar is intended to establish Ecophon as a leader in sustainability that our stakeholders are proud to partner with.**

Including all stakeholders in our sustainability roadmap starts with our own teams. Since 2021, over 200 Ecophon employees globally received a two-day sustainability training given by in-house experts and external consultants.

A sustainable supply chain is also essential for coordinated efforts in eco-innovation to develop tomorrow's solutions. Which is why we have implemented a strict and sustainable procurement policy to increase our carbon handprint.

Collaborating on research with the scientific community and playing an active role in the formulation of standards for sustainable products and buildings is also part of our roadmap, developing new solutions and formalizing their implementation.

And finally: close links with our customers will complete our journey to net-zero carbon emissions. They too are driving their own sustainable transformation. We are actively collecting feedback and assisting them in their efforts to build green in every possible way.

# 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, for customers across Sweden and around the world.

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 well-being.

Students have the right to hear and understand their teachers. Healthcare patients should not be exposed to a stressful noise environment. Office workers should be able to concentrate on their work and communicate with their colleagues. Pre-school teachers should not have to risk their hearing and factory workers should not have to risk their safety because of a noisy working environment.

Good health is a fundamental requirement if people are to achieve their full potential and contribute to the development of society. Studies show that a healthy sound environment can dramatically increase the overall quality of care in a healthcare setting. Some examples of benefits include:

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

# 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 well-being 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 Group's employees.*

We promote sustainable, inclusive and economic growth though 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, contributing to points and providing full transparency on our emissions.

## GOAL 12

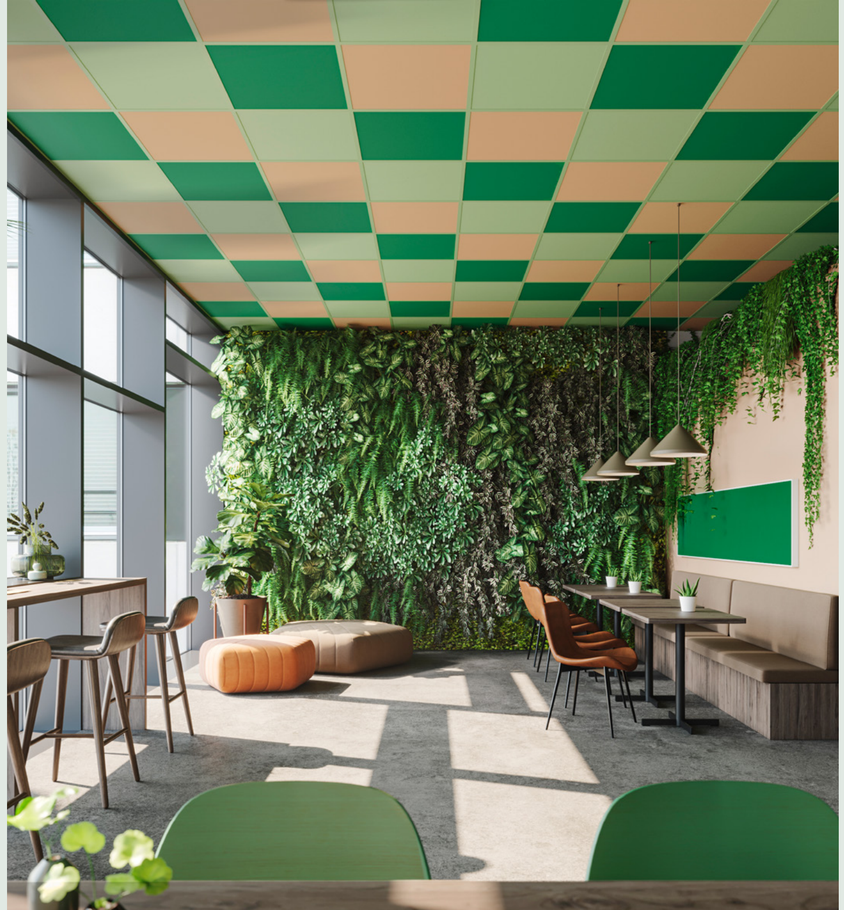
*Change the way we design, manufacture and distribute our products and solutions in order to move towards a circular economy.*

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.

# THE FUTURE OF ACOUSTICS IS LOW CARBON

The climate emergency means thinking beyond the acoustics of our products. Eco-designing. Integrating renewables. This is the only way we have been able to continuously lower the greenhouse gas emissions of our products, reducing their global warming potential.

We have developed some of the lowest emitting mineral wool sound absorbers on the market as a result. Up-to-date, third-party verified environmental product declarations (EPDs) reporting the exact emissions at the different life cycle stages for each product are now freely available to download on our website. This is proof not only of our commitment to transparency, but to reaching Net Zero carbon emissions without delay through the active reduction of our impacts.



| **Sound Absorbers** (absorption class A, edge A where applicable) | **Environmental Footprint** A1-A3 (kg $CO_2$ eq./$m^2$) | **Environmental Footprint** A1-C4 (kg $CO_2$ eq./$m^2$) | **Recycled Content** | **Social Sustainability** |
|---|---|---|---|---|
| **Focus A** | 2.1 | 2.6 | 51% | Eurofins<br>French VOC<br>Finnish M1 |
| **Master A** | 3.1 | 3.7 | 59% | |
| **Gedina A** | 1.7 | 2.1 | 46% | |
| **Advantage A** (15mm) | 1.6 | 2.0 | 48% | |
| **Hygiene Performance A** (20/40mm) | 2.0/4.1 | 2.4/4.2 | 47% | |
| **Akusto Wall A** | 4.0 | 4.7 | 53% | |
| **Super G A (25/35mm)** | 2.6/4.1 | 3.3/4.9 | 42/51% | |
| **Solo Rectangle** | 9.3 | 10.4 | 57% | |
| **Industry Modus 50mm** | 2.0 | 2.4 | 60% | |

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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