



# SUSTAINABILITY REPORT 2025



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# INTRODUCTION

At Renson, we want to make everyday life better and more comfortable. In harmony with nature, starting from our development and production. In doing so, we keep pushing ourselves towards a pragmatic and sustainable approach across our four pillars: people, company, products and buildings. On our own sites and in the buildings of our customers, where air, light and space come together to support healthy living.

The world and our way of life are evolving at high speed. Renson closely follows these developments and responds with solutions that add comfort and health to the indoor and outdoor environments of homes and workplaces. In the years and decades to come, we will continue refining and connecting our processes, products and systems, always mindful of their environmental impact and long-term value.

The Corporate Sustainability Reporting Directive (CSRD) pushes Renson to evolve towards a robust ecological and social business model. In this report, we provide insight into our ESG priorities and how they are embedded across the group. Driven by our ambition to create healthy, comfortable living spaces in a sustainable way. Today and tomorrow.



## A MESSAGE FROM OUR CEO, PAUL RENSON

At Renson, we believe in a future of respectful relationships. Where we live in harmony with each other and with nature. A future where we use the strengths of nature to improve our living environment. More nature, less energy.

To do so, we have set up several initiatives in favour of our employees over the last decade. These relate to communication, team spirit, formation and a better work-life balance. They strengthen our no-nonsense culture, with a direct, practical and objective approach. That is how we see the way forward.

Research, development and innovation have always been, and will always be, the driver for the Renson Group. They allow us not only to differentiate, but also to bring complementary expertise together and develop solutions that work in balance. This strong focus on R&D remains a catalyst to meet the European sustainability goals defined in the Green Deal. Ecodesign, taxonomy, decarbonization, the digital product passport, circular economy, LCA and EPDs, CBAM — these elements find their way into the Renson Group as practical levers to create real ESG value.

All these initiatives lead to more efficient production with lower energy and raw material consumption. Provided that they are applied pragmatically. We do not rush into implementation, but move forward steadily, with a clear long-term perspective.

Looking ahead to 2026, sustainability will be fully embedded across the group. It will guide how we design, produce and collaborate. We will continue evolving in comfort and innovation, moving from strong standalone products to integrated systems that bring performance, responsibility and well-being into balance.

By developing low-carbon building systems, we contribute substantially to climate change mitigation. Our solutions improve the energy performance of buildings and reduce both operational and embedded emissions. It is how our economic activity makes a tangible difference — within each business unit and across the group, where complementary systems reinforce one another and elevate sustainable living comfort.

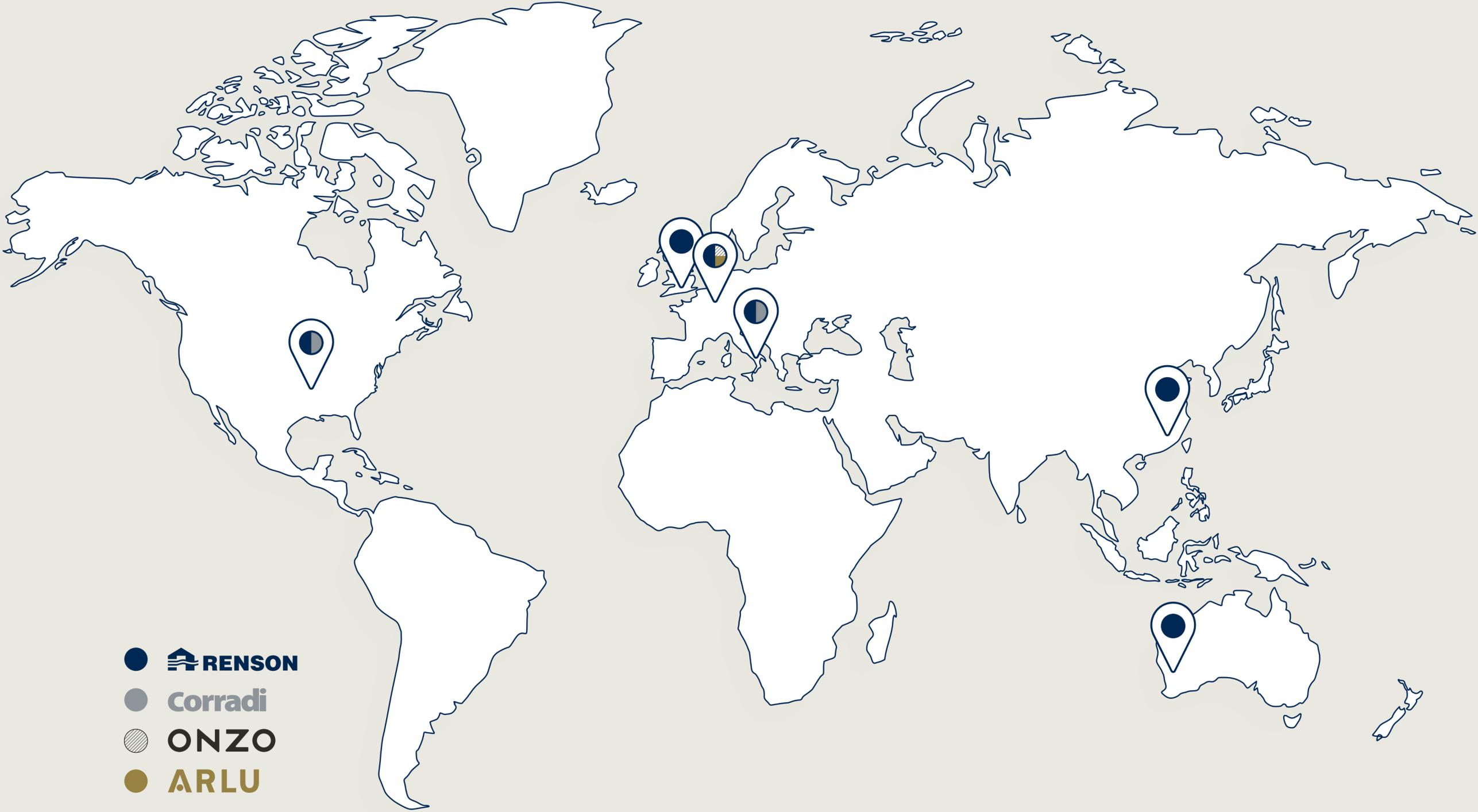
At the heart of our organization, human, natural and artificial intelligence join forces to push boundaries responsibly. For a better home and a better world.

Thanks for wanting to be part of our journey.

*Paul Renson.*



# RENSON GROUP



4 BRANDS AND  
12 SITES WITH THE  
SAME GOAL

**RENSON** **ARLU**

**ONZO** **Corradi**

ACTIVE IN



**83**

COUNTRIES

1.200 EMPLOYEES



**24**

NATIONALITIES

TURNOVER



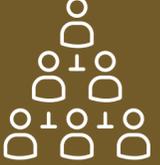
**320**

MILLION EUROS

BELGIAN FAMILY  
BUSINESS



SINCE 1909



**4**

GENERATIONS



**Headquarters Waregem**  
Ventilation - Sun protection -  
Wall cladding - Smart living



**Renson outdoor Kruisem**  
Outdoor living  
Onzo  
Parcel letterboxes - Garden  
and entrance gates



**Kalkhoeve Waregem**  
Sun protection



**Renson Deerlijk**  
Window vents



**Messiaen Waregem**  
Renson Academy



**Argent Alu Kruisem**  
Injection moulding



**Arlu Ardoeie**  
Interior door solutions - Outdoor hardware



**Renson UK Maidstone**



**Renson AUS Perth**



**Renson CH Shanghai**



**Renson & Corradi USA Dallas**



**Corradi IT Bologna**  
Terrace coverings

# RENSON IN 2025

The Renson story of today is built on over a century of innovation, entrepreneurship and a clear vision on healthy living environments. For 25 years, backed by the forces of nature, we have been developing sustainable solutions to transform buildings into future-proof homes and workspaces – and we continue doing so. During the evolution of the Renson group, we reflect on the impact of our solutions on our people, our company and buildings, and the world.

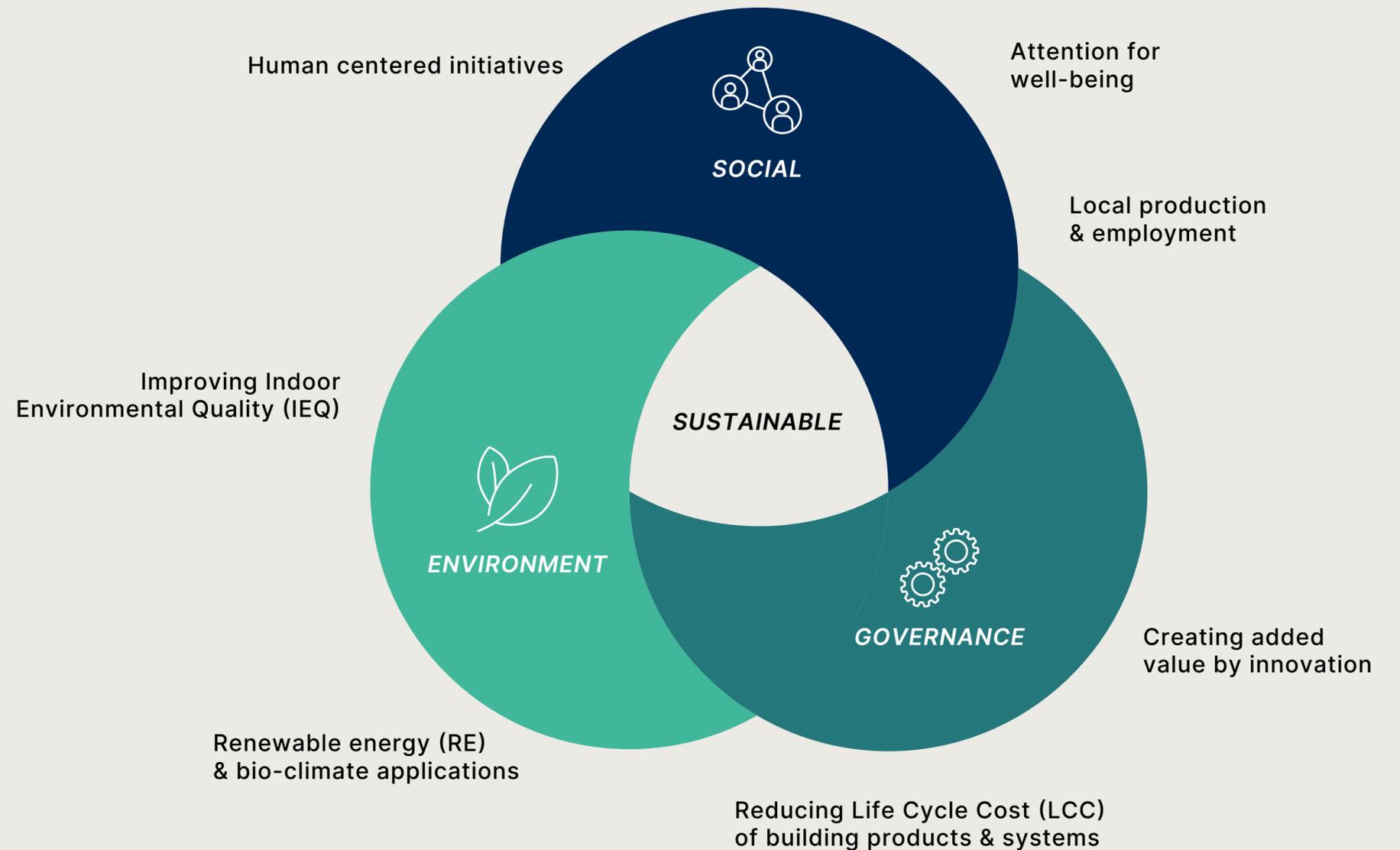
Renson’s core activity is focused on making the built environment more sustainable: designing and selling construction products that are part of carbon-free, climate-proof and healthy buildings, with a focus on the residential sector. We believe in living naturally, harnessing the power of nature to create healthy, comfortable environments - indoors and outdoors - while keeping energy use remarkably low. The Renson building blocks in a building’s life cycle include both the materials used and the techniques and control systems applied.

In addition to a focus on sustainable products, the production process has also become much more sustainable over the past 25 years through:

- Energy-efficient measures
- Renewable energy production
- Emission reducing measures
- Collaboration with social employment enterprises

While doing so, we keep our head in the economic game as well. After all, creating healthy spaces cannot happen without making a profit. The past made us a strong company, with a lot of ambition for the next decades.

In an increasingly globalised world, it is becoming more difficult to ascertain the level of sustainability upstream and downstream in the chain. After all, the aim is not to shift negative impacts (ecological, social, economic) to other areas and then claim to be sustainable. That is why Renson is working on mapping and improving the “external sustainability”, upstream and downstream of the Renson group.



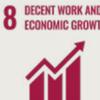
The ESG concept provides a solid foundation for our ongoing efforts to improve the way we run our business on an environmental (E), social (S) and governance (G) level.

# OUR GOALS AND STRATEGIES, INSPIRED BY THE UN

Up to 2000, the sustainability reflection was mainly based on current labour and environmental regulations, thereby setting a minimum level. Due to European sustainability goals for 2025-2050, which create the market demand, Renson was and is pushed further towards low-carbon and climate responsive solutions.

To this day, we are still inspired by the UN's Sustainable Development Goals (SDGs). These are based on 17 themes that aim to prepare the world for a sustainable future by 2030. The biosphere is the basis for a sustainable society and economy: living and working in correlation with nature. Specifically, 5 of the SDG's are close to our hearts:

- 

**3 GOOD HEALTH AND WELL-BEING** Our solutions and products add directly to **good health and well-being**. Indoors and outdoors. In schools, hospitals, homes, offices, ... and in our own workspaces.
- 

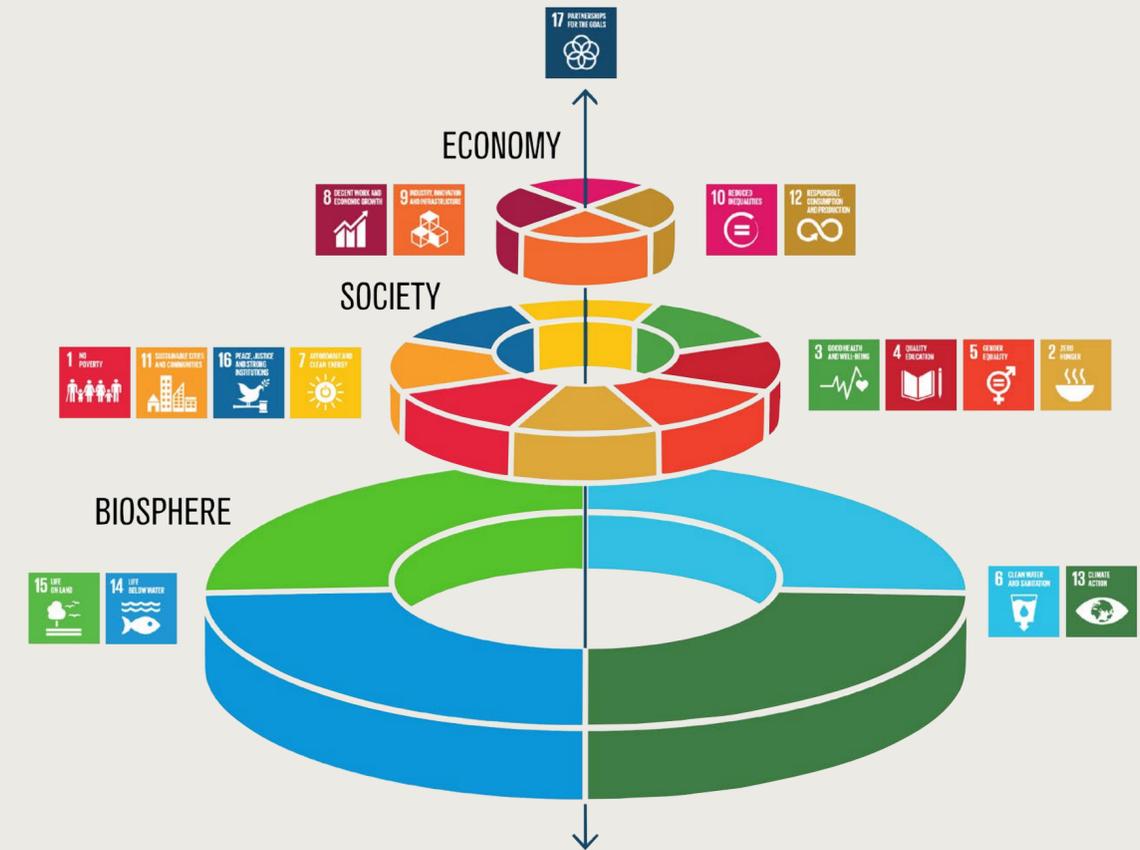
**8 DECENT WORK AND ECONOMIC GROWTH** Every day, we build on **sustainable economic growth**, with and thanks to our motivated team. We are an inclusive company that offers fair chances and compensation to all our employees.
- 

**9 INDUSTRY, INNOVATION AND INFRASTRUCTURE** **Innovation** is rooted in our DNA. It is how we have been transforming buildings, since the very beginning. Our industrial production and modern infrastructure help putting this pioneering work into practice.
- 

**11 SUSTAINABLE CITIES AND COMMUNITIES** Through making **buildings more healthy, comfortable and sustainable**, we future-proof neighbourhoods and cities. Making them safe, resilient and a good place to live, today and tomorrow.
- 

**12 RESPONSIBLE CONSUMPTION AND PRODUCTION** Only by **producing and consuming sustainably** can we make a real impact. Renson products are manufactured in a well-considered manner and built for a long life cycle while minimising stress on the environment.

# SUSTAINABLE DEVELOPMENT GOALS

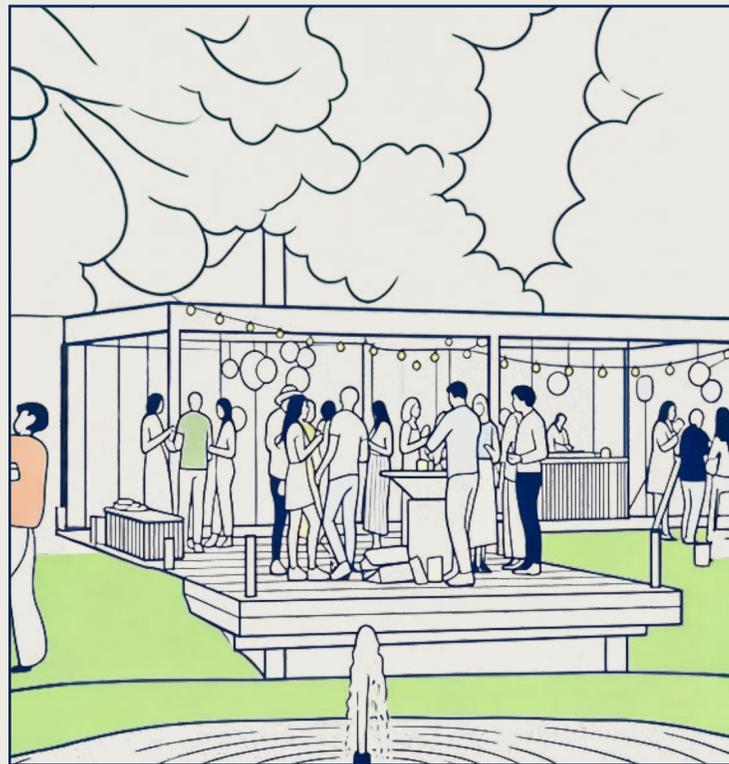


Economies and societies are embedded within the biosphere (Source: Stockholm Resilience centre)

# WHAT'S NEXT?

We will continue our quest for sustainability in the coming quarter century. To this end, we have defined 4 pillars toward a healthier, more responsible future:

## PEOPLE



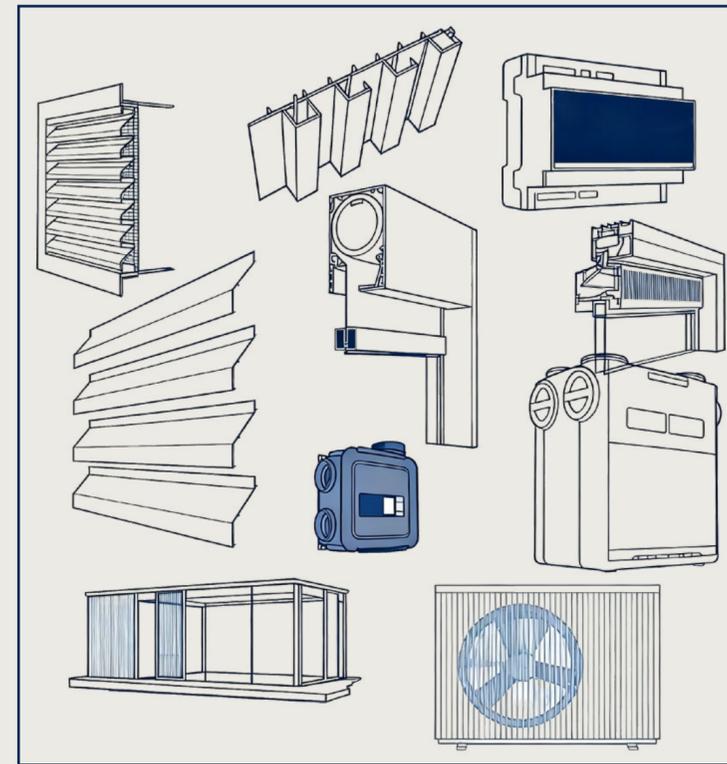
Sharing the Renson values, standards and objectives with our employees, customers and partners, through clear Codes of Conduct, formation and communication.

## COMPANY



Adapting and optimising the Renson structure, sites and business, following a sustainable vision.

## PRODUCTS



Identifying and reducing the environmental impact (emissions) of materials and energy flows (SCOPE 1/2/3) at product (EPD) level.

## BUILDINGS



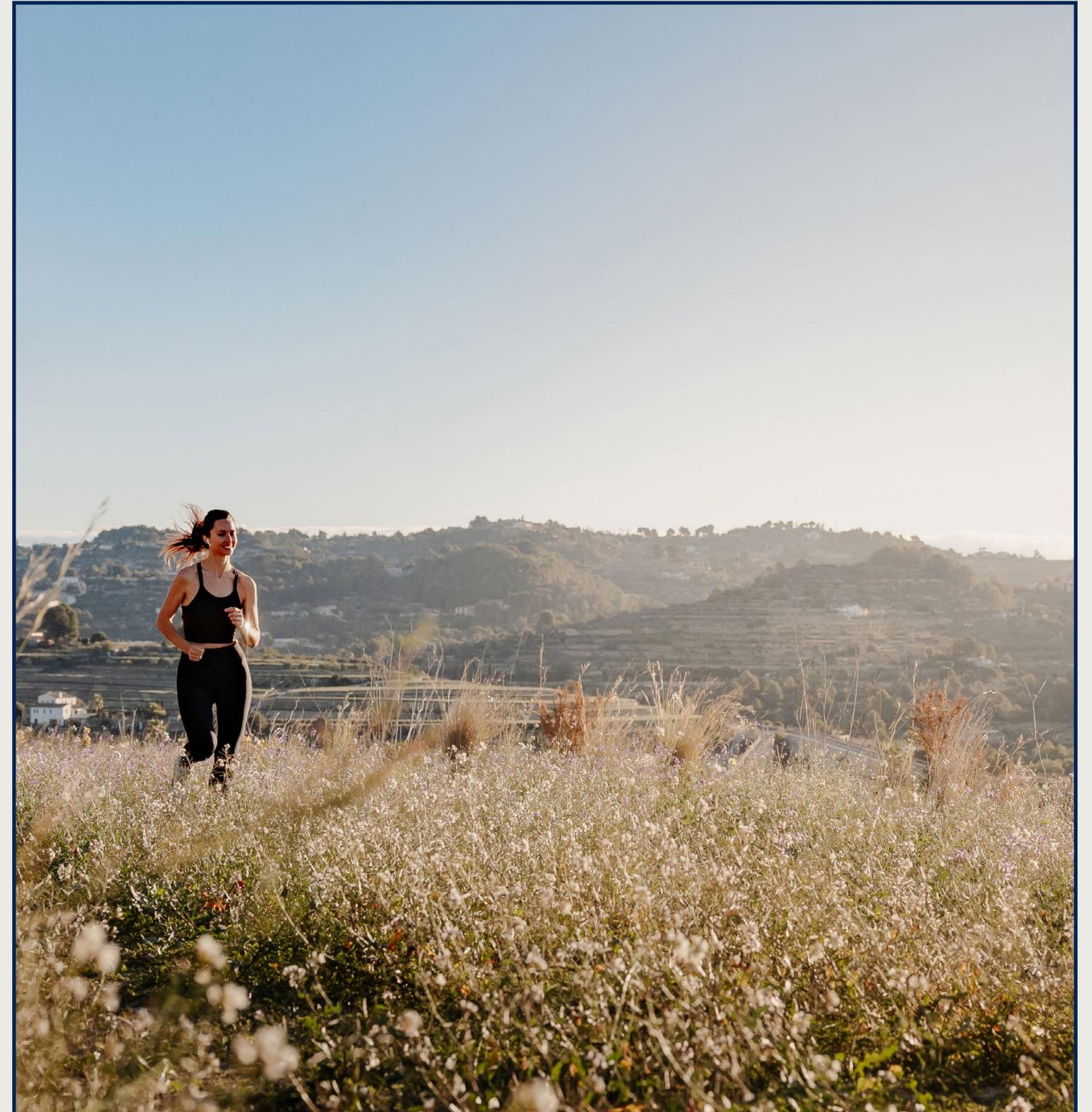
Further developing our 'Creating Healthy Spaces'-mission as a part of a global 'Healthy Building Strategy', with window, façade, HVAC, door operating and outdoor solutions.

**Driven by innovation, we map out a clear, ambitious path to reach our sustainability goals by 2030, at the end of the report.**

# THE STARTING POINT

ESRS (European Sustainability Reporting Standards) are general and topical EU standards under the Corporate Sustainability Reporting Directive (CSRD) that guide companies to disclose detailed information on Environmental, Social, and Governance (ESG) issues, thereby focusing on “double materiality”: company impacts on people/environment and sustainability impact on financial risks/opportunities.

To determine which topics as defined in the ESR standards are the most relevant and powerful to strengthen our sustainable business story, we conducted the Materiality Assessment. By evaluating the impact on our stakeholders as well as our business, we identified a shortlist of 12 action points that are material.



# OUR MATERIALITY MATRIX

This exercise gives us a clear list of focus points that form a guideline for our future plans. Most of these elements are related to European sustainability regulations which show us the way. We are pleased to note that we have already taken steps to address many of these focus areas.

## Double materiality matrix



### Our shortlist:

#### Environmental materialities (E)

- Circularity (E3)
- Energy-efficiency (E5)
- Ecological transition (E11)
- Greenhouse gas removal (E13)
- Waste management (E15)
- Process water coating lines (E16)
- Powder losses (E17)
- Eco-labels (E20)

#### Social materialities (S)

- Working conditions of own staff (S1)
- Other work-related matters (S3)
- Product safety (S8)

#### Governance materialities (G)

- Business ethics (G1)

Throughout this report, you'll find out how we take these most important elements into account, today and in the future. These material points are related to one of the 3 ESG elements, but belong also to one or more of the 4 sustainability pillars: people, company, products, and buildings. Environmental aspects mainly belong to the company, products and buildings. Social and governance aspects, on the other hand, mainly belong to the people and the company.

- Environment
- Social
- Governance

To keep track of this analysis, you will find elements of our shortlist scattered throughout our sustainability charter, as coloured circles with a number in the margin. You can always refer back to this page to see which topic a specific achievement or action is linked to.

# 1. PEOPLE

Entrepreneurship is what keeps us going at Renson. Our people and their skills are the foundation of our innovative work. Our employees are proud and motivated to contribute to the creation of healthy spaces. As a thank you, we try to offer them the best possible work environment, formations and growing opportunities.

Not only do our own people deserve the best. Most R&D project and product improvements aim to improve living and working environments. The continuous change in our processes is meant to strengthen our partnerships and to simplify professional activities.

Codes of conduct, internally as well as upstream and downstream of the company, constitute an important basis of respect between each other. Besides, the 5 key values of Renson are the guide during our mission.



# CODES OF CONDUCT <sup>G1</sup>

Together, we strive to conduct business in an ethical, lawful, and sustainable manner. We ask a commitment from our partners, suppliers, contractors and service providers to respect our [Codes of Conduct](#) (CoC), as far as ESG-wise achievable. It sets forth the key expectations and standards for the business operations of Renson partners. This way, we can be sure that our sustainable efforts will bear fruit.

The main expectations are:

- Respecting all governmental and environmental laws, rules and regulations
- Sustainable resource management, such as responsible sourcing of raw materials, energy efficiency measures and waste reduction
- Protecting ecosystems and biodiversity on their own sites
- Respecting human rights, diversity, equity and inclusion
- Providing a respectful, safe and healthy work environment for all employees



# KEY VALUES IN THE WORKPLACE

In 2024, we surveyed our employees. These are the 5 company values that we have distilled as the values that will define our organizational culture from now on. They will guide us in the way we want to further fulfil our 'Living natural' mission.

## Health

By facilitating and stimulating a healthy way of living and by fully embracing and respecting the beauty and blessing of nature in the business we do, we want to have a beneficial impact on the health of our stakeholders and our company.

## Impact

We want to make a lasting positive mark on our customers, our colleagues and the society as a whole. We do this by setting ambitious goals, we work hard to achieve them, and we innovate continuously to change the world we live in for the better.

## Winning together

We believe in the complementarity of teams and support everyone who inspires them and leads them by example. Led by passion and ambition we dare to challenge each other to go the extra mile.

## Common sense

In order to use all resources effectively and efficiently, we avoid unnecessary complexity and rigidity in our way of working. We always keep an eye on what we want to achieve. We foster and support pragmatism and encourage sound, insightful judgement.

## Authenticity

We do what we say, and we say what we do. We deliver on promises and we are honest with ourselves and others. While we are humble to know ourselves, we are also courageous to be true to ourselves. We stand for clarity and open communication.



# CONTINUOUS LEARNING

At Renson, we believe in the strengths, abilities and ambitions of our people. What's more, we nurture their hunger for new knowledge and skills. In this way, we lift each other and our company to the next level. Passionate and competent employees are the key to success. That is why we give all our employees the opportunity and the tools to continuously learn, grow and reach their full potential. The goal is to involve any blue-and white-collar worker in this process, with at least 8 hours of training per person per year.

We do this on a very personal level. During one-to-one meetings with managers, as well as during annual appraisal interviews, we define the individual training needs and wishes. In the next phase, we monitor and evaluate the training progress during similar meetings. Next to the individual training paths, we also roll out collective training initiatives within our organization. A talent manager coordinates and improves this training process.

## Leadership as a powerful catalyst

Training is important on every level, not in the least for our leadership roles. To this end, we have invested in a leadership programme. This programme consists of a "Compass", in which we explore the Renson vision and the associated leadership model in greater depth, and a "Practice", which focuses on skills. The training groups were divided based on expectations (e.g. separate groups for senior managers and operations managers). This ensures optimal transferability to the workplace. We have already immersed around 68 managers in these People Fundamentals and for some groups, the programme is still ongoing. We are also planning to redo this programme next year.



## Young graduates

Young people are our future. In 2024, we launched our first young graduate programme. This was an important step in attracting and developing young talent to continue building our future of innovation and growth. Over a period of two years, these four young graduates will work in various departments, actively participating in projects. In addition, they will work on a joint project with a slightly more strategic angle. At the end of these two years, they can progress to an open position that matches their skills and interests. Fuelled and motivated by Renson.



## Agile and feasible work <sup>S1</sup>

True complementarity and the pinnacle of teamwork require multi-skilled employees. That is why we consciously focus on the horizontal broadening of knowledge and skills. This is the most straightforward path to flexibility and resilience as an organization. Those who have the right knowledge and skills for certain tasks can be deployed immediately. Other employees receive on-the-job training.

Operational flexibility is important both within one's own department (in a different job) and in another department within the business unit, and even for other business units.

For blue-collar workers, this amounts to at least 20% monthly. This flexibility is recorded, and we can now demonstrate that 50% of our employees have already worked in a different job.



## Other training initiatives

Within P.C. 209, we have a career fund called "MTech+" that offers numerous training courses that our employees can sign up for (after consultation with their manager). We regularly organise in-house training courses tailored to our employees across all departments. For colleagues who prefer digital learning, we offer LinkedIn learning as a platform to acquire knowledge at their own pace. This allows each employee to choose, according to their preferences and without obligation, which knowledge they want to expand or which skills they want to hone.

As a family business, we also really value a warm welcome to new employees. When it comes to training, we immerse them into our organization during orientation days, 3 days or learning all ins and outs on their business unit and their job tasks.



# EVERYDAY EFFORTS WITH A POSITIVE IMPACT

Of course, big initiatives and actions are good, and necessary. However, smaller decisions and daily habits are just as meaningful when it comes to running a sustainable business. These are only some examples of how we, as a team, build a better world, day by day.

## Healthy food made locally

Juicy vitamins or well-seasoned soup: they are important building blocks for healthy employees, full of energy. Every day, Renson employees can enjoy free freshly made soup. At our site in Kruisem we add, next to a pinch of salt and pepper, a hint of social commitment to these tasty vitamins. People from a social enterprise transform vegetables from a local grower into a varied soup menu. In addition to delicious soup, we also provide fresh fruit every week, as a healthy snack.

## Sport@lunchbreak

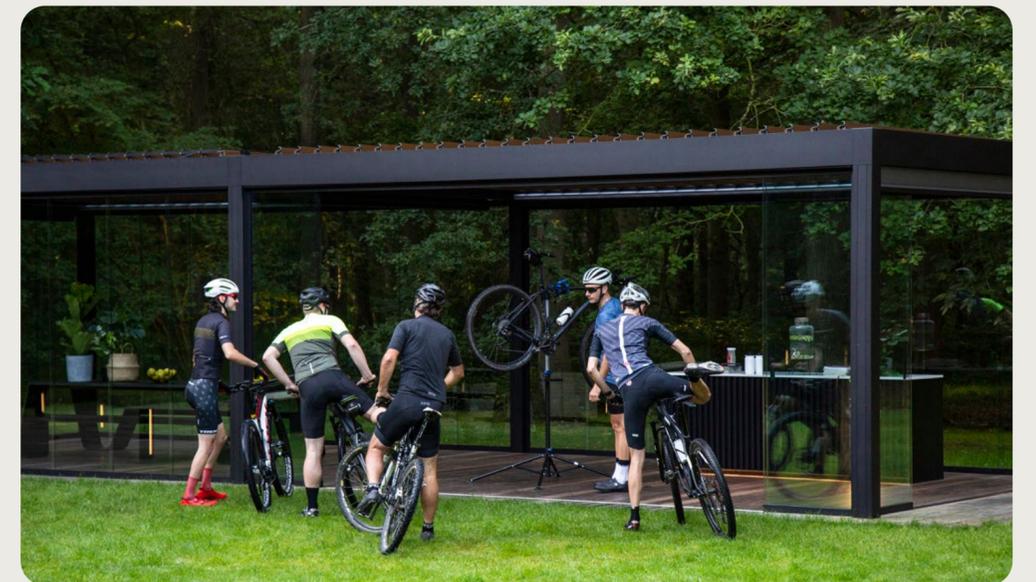
Loosening up your muscles and getting your blood flowing is the ideal way to regain your concentration. That's why a few employees took matters into their own hands and organize half an hour of exercise every Tuesday at noon. Tabata, Pilates or an intense CrossFit session? Our sports enthusiasts are up for anything.

## Sustainable commuting

Renson is well underway with the **electrification of the company car fleet**. At least 200 company cars have been replaced by electric cars. Together with the electrification of the car fleet, the charging station network is being further expanded.

Commuting by bike is also encouraged by Renson through an interesting bike leasing, signed in by about 20% of the employees. In addition, every employee who regularly comes to work by bike receives an interesting bike allowance.

Of course, the least polluting kilometres are those that are avoided. That is why working from home one day a week is permitted. In addition to being less harmful to the environment, it is also a way to relieve our employees. They have the opportunity to schedule focus time in their familiar surroundings and break up the office or factory week.



# 2. COMPANY

## INTERNAL COLLABORATION – EXTERNAL VISION

To deliver on our vision of 'Living naturally', we rely on a robust internal collaboration model. This model brings together four essential building blocks. Individually, each block strengthens our organization. Combined, they form the foundation for a future-proof business.



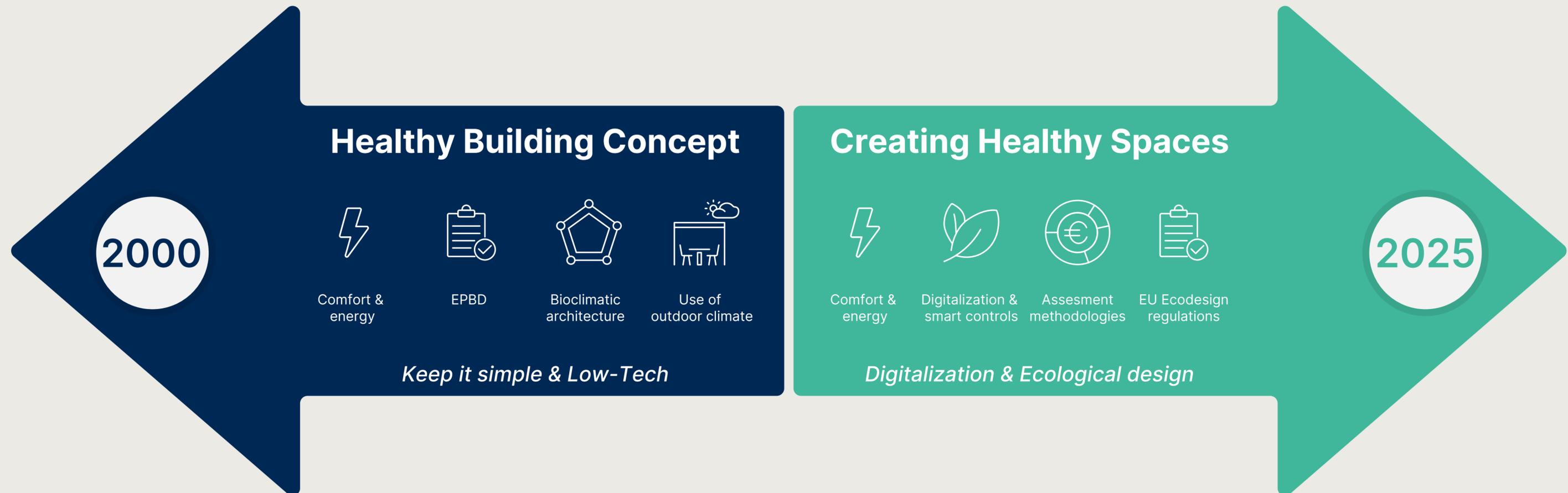
# 1. A clear strategic plan

Everything starts with a plan. At group level, our overarching strategy is anchored in the ambition to create healthy spaces. At business unit level, each activity within Renson translates this vision into a clear and actionable plan.

Once this strategic direction is defined, it gives us identity and purpose. It allows every employee to understand where we are heading and how their work contributes to this shared ambition. Reaching that ambition is only possible through close collaboration, across disciplines, departments, teams and people.

'Creating Healthy Spaces' is not just something we say. It's what we do and have been doing for a quarter century. In doing so, our scope has shifted throughout the years. Today, we approach our mission with a broad perspective and with great ambition.

'Living naturally' takes more than a good balance between comfort and energy consumption. It goes far beyond the bioclimatic architecture we pioneered 25 years ago. Recent calculation methods, New European 'Ecodesign regulations', digital evolutions, smart controls and assesment methodologies all define how we do what we promise, time and time again.



## 2. A focused organizational structure

The second building block is a well-designed organizational structure. It creates clarity and ensures that everyone can focus on their core responsibilities.

A strong structure benefits us all:

- Employees feel that their work contributes to a meaningful, bigger story.
- The business operates efficiently.
- Customers experience trust and reliability when working with Renson.

## 3. Systems and processes that enable performance

Renson's systems and solutions tap from 3 intelligence sources:

- Human intelligence: our people and their expertise are the base of what we do, know and create.
- Natural intelligence: we use natural principles and energy to boost comfort while reducing on energy use, e.g. natural ventilation, night cooling, solar shading, etc.
- Artificial intelligence: we integrate AI into our processes and products and put its strengths to good use for optimal results.

Effective collaboration also requires systems and processes that support the way we work. These tools help us align and streamline our operations and ensure consistency across the organization. They form the third essential building block of our model.

Digitalization is a driver of sustainable systems and processes. We have already taken major steps in digitalizing our company and will be shifting up a gear in the near future. Europe is imposing rules and directives to make the world more sustainable, and we are ready to keep pace. Among other things, digital product passports (DPP) will play an important role in the future. We are already fully prepared to implement the new directives and regulations, with a focus on the environment, people and the economy.

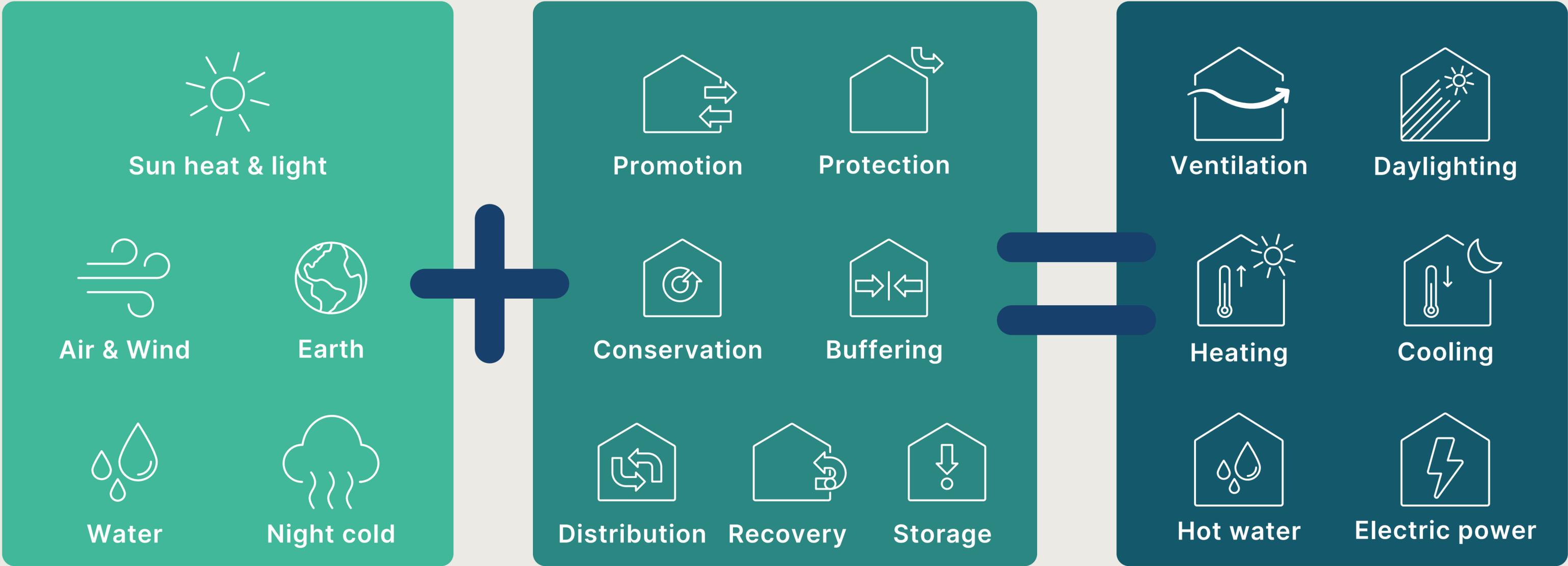
## 4. Human capital as a driving force

Finally, our people make the difference. Their talent, expertise and engagement turn strategy into action. Investing in human capital through development, empowerment and well-being is therefore a crucial fourth building block. This block is elaborated in the previous section about People.



# CLIMATE RESPONSIVE RENSON OFFICES

By utilising natural elements, such as the outdoor air, the wind, the nighttime cold and the sun, in a smart manner, we create modern and healthy living and working comfort. And we reap the fruits of this approach ourselves. In 2000 we designed our offices in Waregem (BE), following the 'Healthy Building Concept'. Using natural ventilation, ventilative cooling and external solar shading, we manage to keep the indoor climate optimal in winter and summer. In this way, we can also strongly limit the use of active cooling during warmer periods.

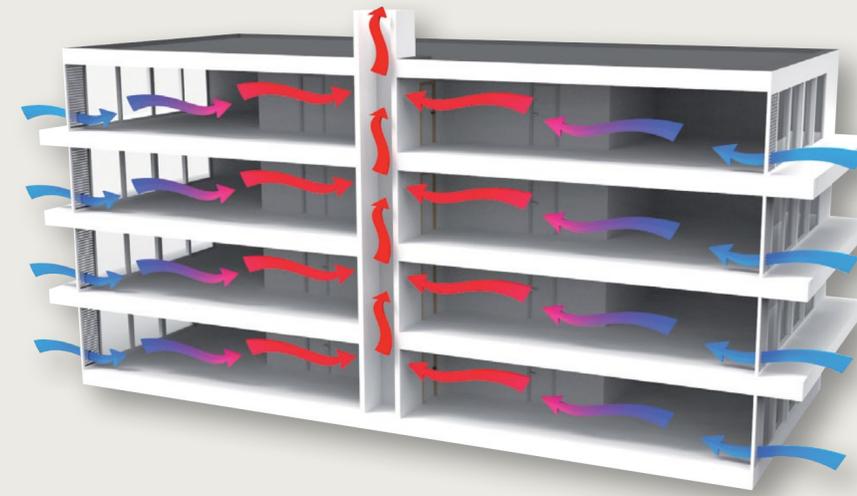


We use natural energy sources and innovative techniques to create comfortable living spaces: bioclimatic architecture.

# BLUEPRINT FOR ALL COMPANY BUILDINGS

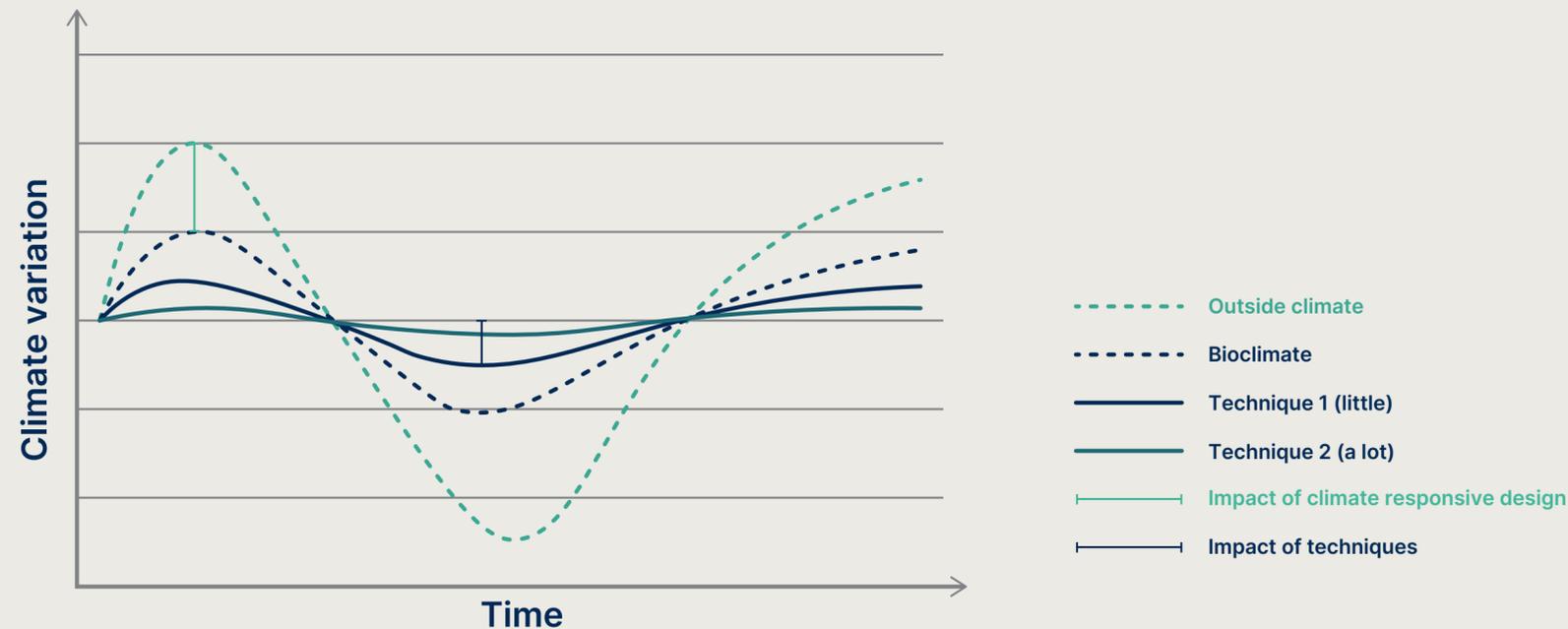
We built most of our company offices, across the world, on the firm foundations of this 'Healthy Building Concept':

- Consider 'bioclimatic architecture' as climate-responsive design
- Prevent overheating by using the 'Ladder of cooling': in 4 steps
- Keep it simple: start with the building envelope, before adding low-technique design
- Work with multifunctional products: combine protection to sun, rain, burglary, ... in 1 product

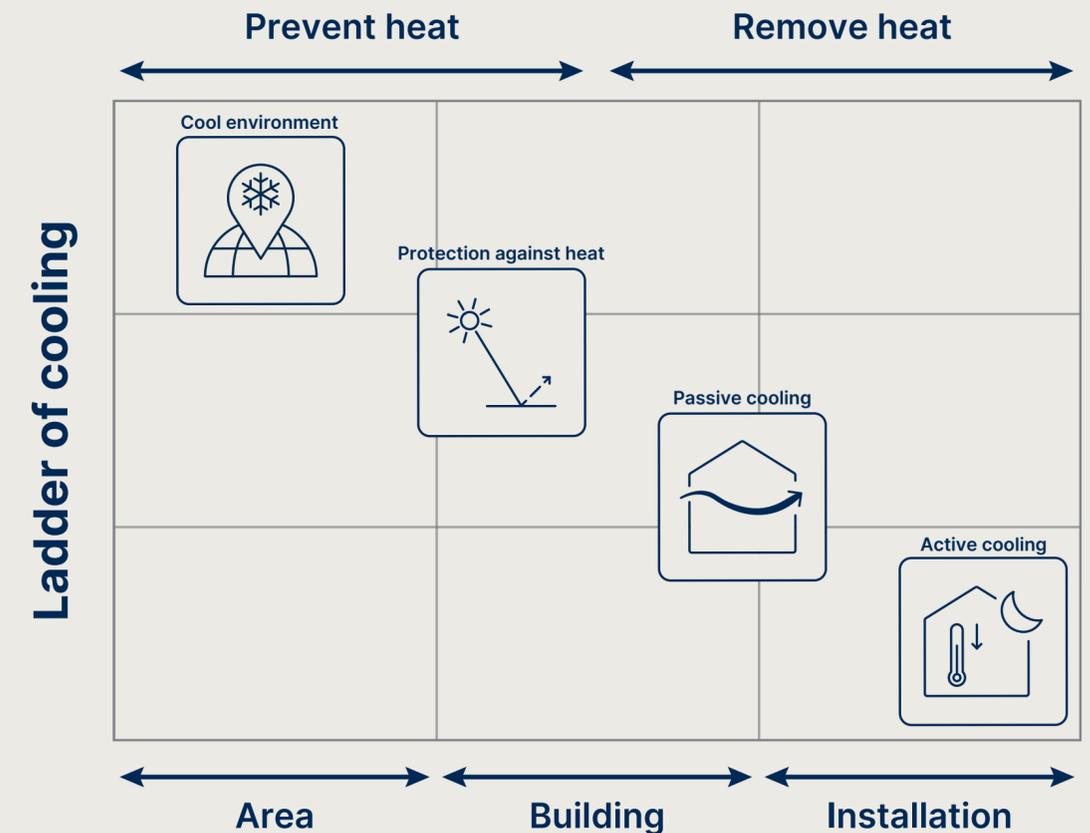


Outdoor air is used to ventilate and to cool during summer nights. Dynamic solar shading can be used to profit or to shield from the sun, while natural light adds to the comfort level. It is how we write a story of a healthy indoor climate as well as an energy-efficient building.

As illustrated in the figure below, the indoor climate (temperature, indoor air quality, light, ...) is allowed to vary within limits over time. A very constant climate which is mainly set by techniques is not desired within the building. People enjoy working and living in a more variable environment.



Variation of the indoor climate over time when applying bioclimatic measures versus techniques. Source: GRO



The Renson concept is also clearly expressed in the 4 steps of the Ladder of Cooling

*CASE STUDY*

# RENSON OUTDOOR



With Renson Outdoor we underlined our sustainable outlook. There we succeeded in creating a building with zero energy impact. Self-sufficient in water and energy consumption, with the most sustainable techniques for healthy and comfortable living and working. Discover 'Living natural' in practice.

The Renson Outdoor site is equipped with 7.000 PV panels for its own green energy. And that's not all. Renson Outdoor has its own injection moulding department, which makes it possible to also produce used plastic components locally. Meanwhile, the zero-waste paint shop reuses all wastewater and the heat from the ovens. By painting with synchronous recycling, we also limit powder loss<sup>E17</sup> to 15%, a significant improvement compared to around 70% with manual painting. Our expertise in painting also helps us sharpen the safety margin on the minimum paint thickness, thus saving on coating powder and energy.

It is clear that a lot of efforts are being made every day to run the Renson Outdoor HQ as sustainably as possible. Part of our positive production story, however, takes place elsewhere. Throughout a worldwide partner network, we organize local sale and manufacture of finished products. We have our own sites in China, Australia and the United States, supplemented by a Fabricator network that also handles the processing and distribution of our products. This allows us to avoid long transport distances and thus also the associated emissions.





## SUSTAINABLE PRODUCTION EFFORTS

On point production processes are the indispensable start of high-quality solutions. Besides, they offer valuable opportunities for sustainable improvements. We have already accomplished a lot. Yet, every day we look for possible enhancements and actively better our production environment and workflow. Let's have a look at the steps we have taken and are taking today, to push the boundaries tomorrow.

### Limiting the use of primary aluminium

Aluminium as a construction material is a conscious choice for strong, light and durable results. It has a life cycle that few other metals can match. It is corrosion-resistant and can be frequently recycled. What's more, it can be reshaped and reused time and time again, making it the perfect response to changing needs and challenges. This makes aluminium a first-class circular building material<sup>E3</sup>.

Primary aluminium is made from the raw material bauxite ore, with an energy-intensive process. Therefore, the share of secondary or recycled aluminium is continuously increased, while the production waste is decreased and reused<sup>E15</sup>.

The average percentage of recycled aluminium is about 60%, of which 40% is pre-consumer and 20% is post-consumer recycled. Using full secondary aluminium, with up to 95% less emission than aluminium from freshly mined ore, is usually not possible due to quality requirements.

Besides, we limit production waste and collect remaining punch and cutting waste in separate containers. In that way, the aluminium waste can be used in new profiles, components of other production processes. During annual evaluations of the most used sizes, we optimise the extrusion lengths of our profiles. This allows us to minimise sawing losses and material waste.

## EFFORTS OF THE PURCHASING ORGANIZATION

The Renson purchasing organization plays a key role in the sustainable successes of the company. Through strategic purchasing, the organization selects suppliers with attention to sustainable processes and materials, such as aluminium extrusion companies that are increasing their share of recycled aluminium and striving for lower CO<sub>2</sub> emissions in alu production. Or what about using recycled plastics instead of virgin materials, where technically feasible? By optimizing transport flows and promoting circular cooperation, we further reduce the ecological footprint.

For these partners, we have a supplier Code of Conduct that sets clear expectations regarding ethical business practices, human rights, environmental protection<sup>E11</sup> and transparency in the chain. Hence, we ensure that our suppliers add to our sustainable story, from a shared view on positive entrepreneurship and a long-term vision. Because a sustainable supply chain sets a whole lot of sustainable improvements into motion.



# OUR GUARANTEE ON HIGH QUALITY

Sustainability is also defined by the quality of our products and solutions. A longer lifespan means fewer raw materials and energy used for producing new products.

## Internal quality control

We use ISO 9001 as a blueprint for our Factory Production Control (FPC). The flow and process scheme underneath is already being implemented in the production of mechanical ventilation and will be expanded into other business units over time.

FPC is a documented, continuous and internal quality assurance system that Renson uses to guarantee conformity between what we promise and what we deliver. In order to better organise, control and improve business processes, we focus on the following core activities:

# Process diagram ISO 9001



## 1. Inspection and testing

- Regular checks of raw materials, intermediate products and end products. We have a system in place that indicates what needs to be checked and when.
- Verification that products comply with design and standard requirements.
- Calibration of measuring equipment and maintenance of machinery.

## 2. Process control

This includes the production processes as well as the way we handle customer complaints.

- We monitor the production processes to ensure consistency and efficiency.
- Customer complaints are resolved as quickly as possible for the customer, but they are also all:
  - *Logged in a central system,*
  - *Labelled with regards to the defects or causes of the complaints (based on an initial assessment), and*
  - *Analysed by the department that is at the roots of the complaint cause*

The findings of this analysis are fed back to the production management and the employees with simple yet clear information, in order to avoid similar complaints in the future. When a problem occurs frequently, we assemble a small project team to find a structured solution.

## 3. Documentation, traceability & improvements

- During the production process we register used materials, test results, any deviations and corrective measures.
- Working and assembling methods are improved and clarified.
- We analyse data of our processes and products, in search of optimization opportunities.

## 4. Responsibilities

A good quality management system can only succeed with a clear division of roles and responsibilities. Organisational charts and competency matrices are indispensable to do so.

### External quality control

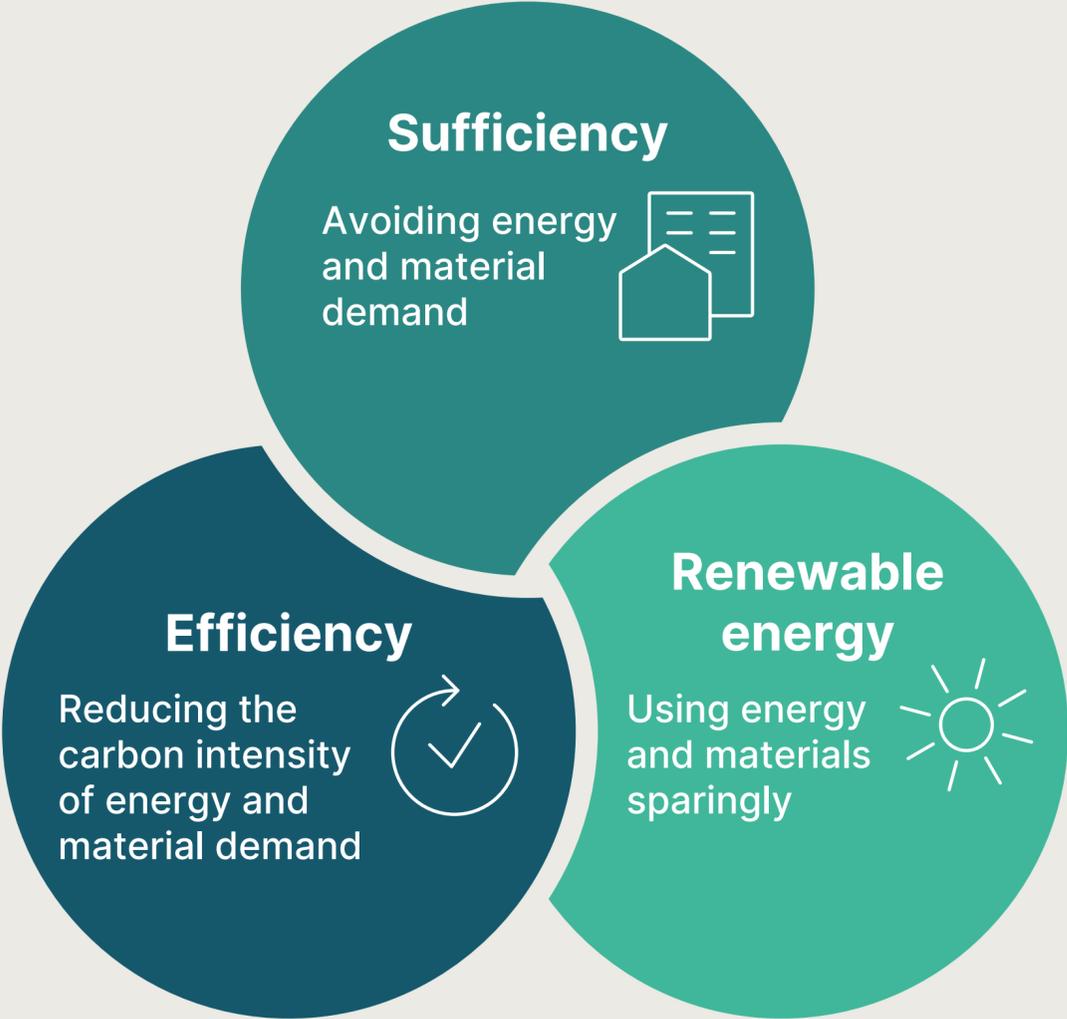
Certain production processes are also subject to external quality control, such as mechanical ventilation and patio covers. In addition to an external audit by the FPC, an accredited external testing laboratory conducts random checks to verify compliance with product specifications.



# ENERGY PRODUCTION AND CONSUMPTION<sup>E5</sup>

Energy efficiency requires a good balance between renewable energy production and low energy use. At Renson we level up our solar energy installation, optimize self-use and invest in more energy efficient machinery.

- By using excess heat of the coating process to heat the buildings and the baths of the pre-treatment tunnel, we could save 15% on gas consumption.
- The possibility of new electrically driven ovens that gradually replace or complement to the gas-fired drying and curing ovens is investigated.
- Currently, we have a 3091 kWp installation of photovoltaic solar panels on the roofs of our company buildings. By making our production process smarter and more in line with the instantaneous PV production, we optimize the utilization of our own green energy. Also, we are currently examining the possibilities and feasibility of battery storage, to become even more self-sufficient.
- All new and existing workspaces are equipped with high-efficient LED lighting which minimises energy consumption, while improving the light levels according to the standards.



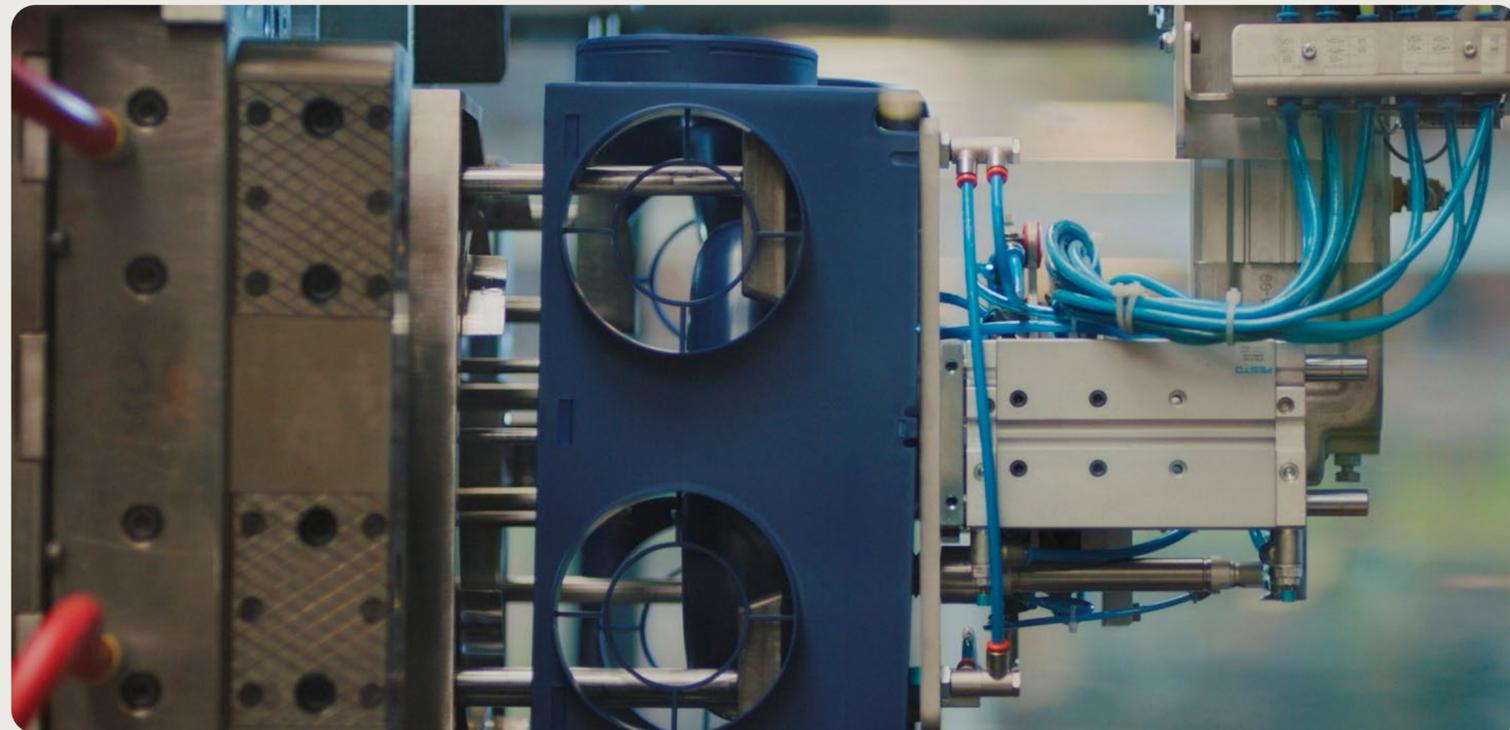
Source: GRO

# FINETUNING PRODUCTION PROCESSES

The way we manufacture our products, directly impacts their sustainable nature. It is therefore logical that there is a considerable scope for improvement here. Let's have a look at the steps we're taking.

## Injection moulding

Many of our plastic parts are sprayed inhouse. To guarantee a good operation, moulds must be cooled to 15°C and the oil of the machine needs to be cooled to 30°C. By switching to a new cooling machine with 2 cooling circuits, we can diversify the cooling temperature, instead of cooling both the moulds and the oil to 15°C. This saves significantly on cooling energy. Moreover, the excess heat, which is stored in the oil after leaving the machines, can be used to heat the production hall in winter.



## Powder coating

We save on energy by using process heat to heat the working environment and the baths of the pre-treatment tunnel. To further improve our energy management, we investigate alternative energy sources for the gas-fired drying and curing ovens. The physicochemical water purification installation of the coating line will also be replaced. By 2028 we will have an evaporation installation that should lead to a water recovery of 75% <sup>E16</sup>. Finally, we are researching the possibility of reusing powder coating loss <sup>E17</sup>.





## Internal transport

By centralising everything on 1 site per production line, we keep the internal transport as limited as possible. All diesel-powered forklifts on our sites are already replaced by electric ones.

## Rainwater harvesting

Of course, we try to save on water throughout the production flow. Yet, we still need a decent water supply for our production. We aim at sufficient rainwater harvesting to cover our water needs in production, thus saving on groundwater.



## PACKAGING AND WASTE MANAGEMENT

In accordance with the EU Packaging Regulation (PPWR), Renson is working to reduce the environmental impact of its packaging. The entire life cycle of packaging is being made as sustainably as possible on various levels, with the following main objectives for 2030:

- Making an inventory of all packaging, identifying quick wins and things to be absolutely avoided
- Prevention of the use of packaging
- Increasing the use of recycled material in packaging
- Designing packaging for recycling (D4R)
- Increasing the amount of reusable or fully recyclable packaging by phasing out disposable packaging and organising return flows
- Clear labelling of the type of waste

In general, we strive for minimal packaging materials, especially when it comes to stretch film. Where possible, we choose packaging made of cardboard.

Waste management belongs to packaging but also to the production process, which focusses on:

- Minimising waste<sup>E15</sup> through optimized cutting of aluminium and PVC profiles, and shading textiles
- Reusing waste for other applications

Specific PPWR related objectives are listed at the end of the report.



*CASE STUDY*

**ARLU**

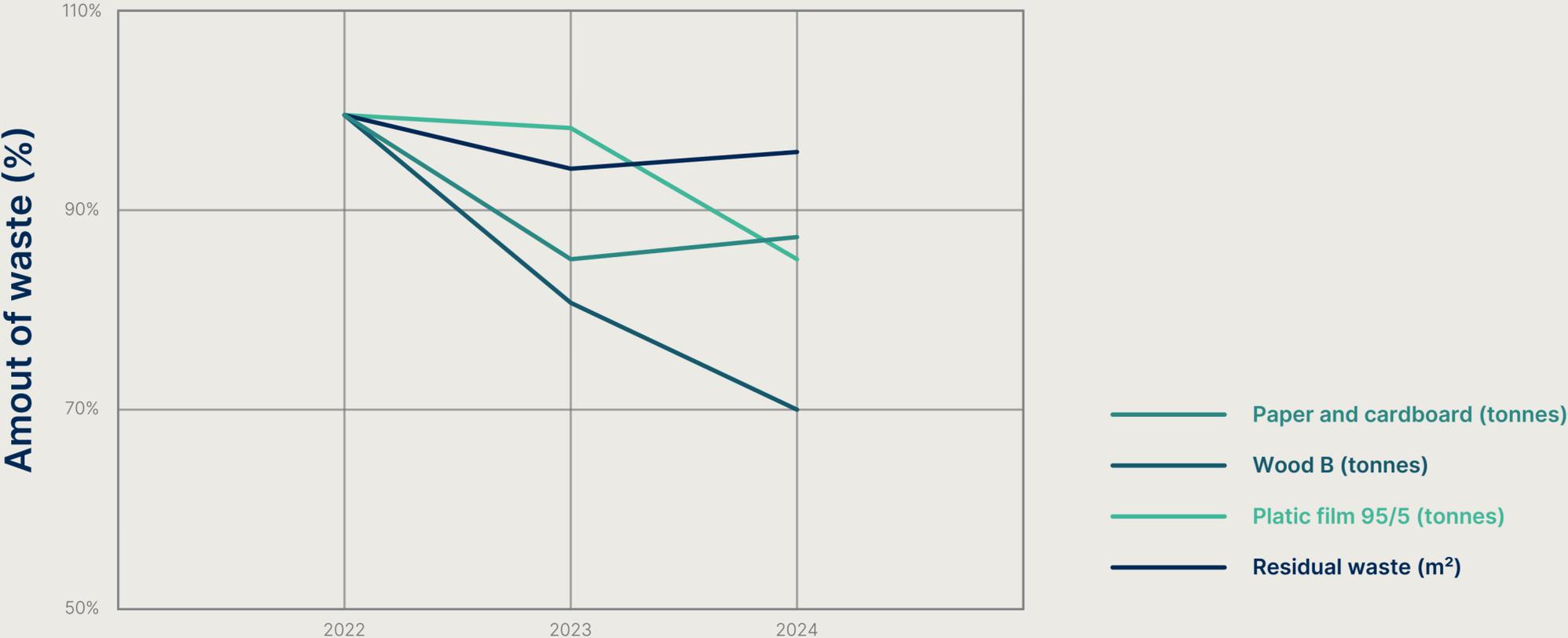


Within the Renson Group, Arlu is making great efforts towards more sustainable packaging. Here are some illustrations of this mission:

- The packaging data is registered within VAL-I-PAC and can be consulted by external parties.
- Single-use packaging is always made from recyclable materials.
- Reusable packaging accounts for about 10% of total packaging.
- The total amount of packaging has decreased by about 10% in recent years.

When it comes to waste management, Arlu succeeds to gradually reduce some important waste flows over time, as the figure below shows:

### Evolution of waste streams Arlu *(normalised to turnover)*



Source: GRO



# SCOPE 1/2/3: OUR CARBON BALANCE

Taking care of nature is inextricably linked to attention to carbon emissions. To take impactful steps in the right direction, it is crucial to have a clear view on the total carbon balance. We work towards a better and more transparent registration of our total material flow and its impact, using the Carbon+ software. This will clearly show us the opportunities to make our day-to-day business more sustainable.

The boundaries of the carbon scope study presented in this study are:

- **Period** of activities: year 2024
- **Territory** of activities: all the Belgian Renson sites divided over 4 different companies
- Intercompany trade (sales/purchases) is not considered, except for transport-related emissions.
- **Direct fossil emission** due to stationary and mobile combustion of fuels, including commuting (Scope 1)
- **Indirect fossil emission** due to consumption of purchased electricity (Scope 2)
- **Upstream Scope 3 fossil emission** related to:
  - *Purchase of raw materials (profiles) and components, including transport and packaging*
  - *Purchase of goods as fans, motors & electrical components*
  - *Business travel*
- **Downstream Scope 3 fossil emission** is not included, instead we focused on the yearly saved energy and saved emissions during the use phase of some main Renson products

As illustrated in the figures below, emissions are divided over 3 scopes: direct (scope 1), indirect (scope 2) and other emissions (scope 3). Scope 3 is broken down into 15 categories.

Without being complete, a significant share of the total fossil emissions within these boundaries, is included. Within these boundaries, we found:

- Direct (scope 1) and indirect (scope 2) emissions related to energy consumption represent about 5 and 1% respectively of the total fossil emissions. Energy consumption is significant but rather limited within the total fossil emissions of Renson.
- Since Renson is a manufacturer of building products, raw materials as aluminium, plastics and textiles, and the derived intermediate products, represent a share of about 2/3 of the total fossil emissions. These materials represent the highest share, and therefore the highest potential for emission reductions per sold product.
- Goods as fans, motors and electrical components represent nearly 10% of the total fossil emissions.
- About half of the emissions belong to the Renson NV company, while Renson Outdoor counts for one quarter, based on the assumptions.
- Argent Alu and Arlu have a similar small share of about 1.5%, due to the absence of raw materials in the calculation flow.
- Common emissions over the Renson group or emissions that could not be assigned to a specific company are almost 20% of the total amount.

The emissions during the use phase of the Renson products have a dual character:

- Direct emissions related to the operation of the products
- Indirect emissions related to the heating and cooling consumption of the building



**SCOPE 2**  
INDIRECT CARBON EMISSIONS



Purchased energy and water

**SCOPE 3**  
VALUE CHAIN EMISSIONS



Business travel & commuting



Waste management

**SCOPE 1**  
DIRECT CARBON EMISSIONS



Company facilities



Company vehicles

**SCOPE 3**  
VALUE CHAIN EMISSIONS



Transportation & distribution



Use of sold goods



Processing of sold goods



End-of-life treatment of sold goods



Leased Assets



Fuel- & energy Related activities



Capital goods



Purchased goods & services



Transportation & distribution



Company vehicles



Transportation & distribution



Use of sold goods



Processing of sold goods



End-of-life treatment of sold goods



Franchises



Investments



Leased Assets

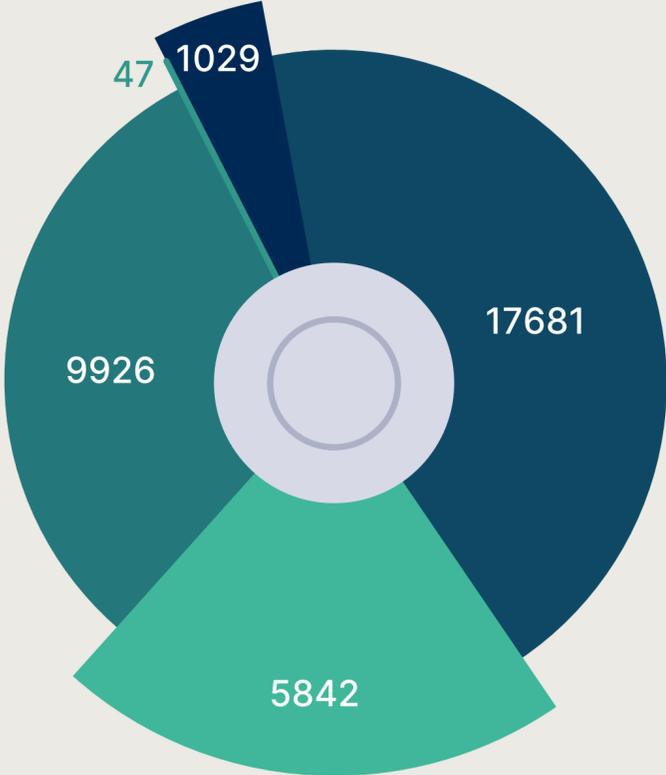


These direct and indirect emissions during the use phase are reduced by energy efficient measures, such as demand control and heat recovery, implemented on the Renson mechanical ventilation systems. Total yearly energy yearly savings for ventilation products sold in 2024 are calculated according to the Ecodesign directive (ErP, 2018), compared to basic systems.

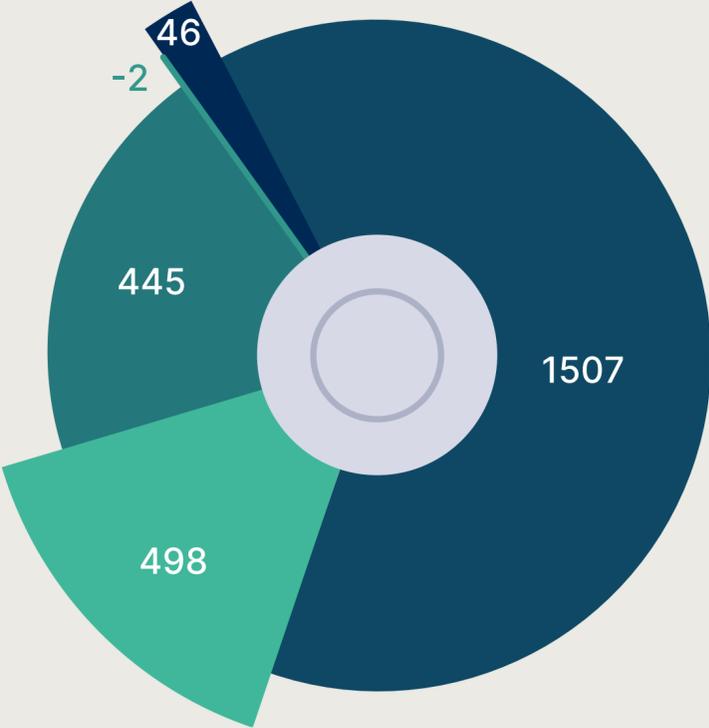
Besides, solar shading blinds reduce the amount of cooling energy (kWh) and the installed cooling capacity (kW). The yearly average saving potential is given in the figures below in case active cooling is present. Thereby, an average cooling energy saving<sup>E5</sup> of 10 kWh/m<sup>2</sup> is assumed due to the use of solar shading.

Total yearly energy and CO<sub>2</sub>-reductions realized with Renson ventilation and sun blinds products, sold in 2024:

### Total yearly saved energy consumption in 2024 (MWh/a)



### Total yearly saved CO<sub>2</sub>-emissions in 2024 (Ton CO<sub>2</sub>/a)

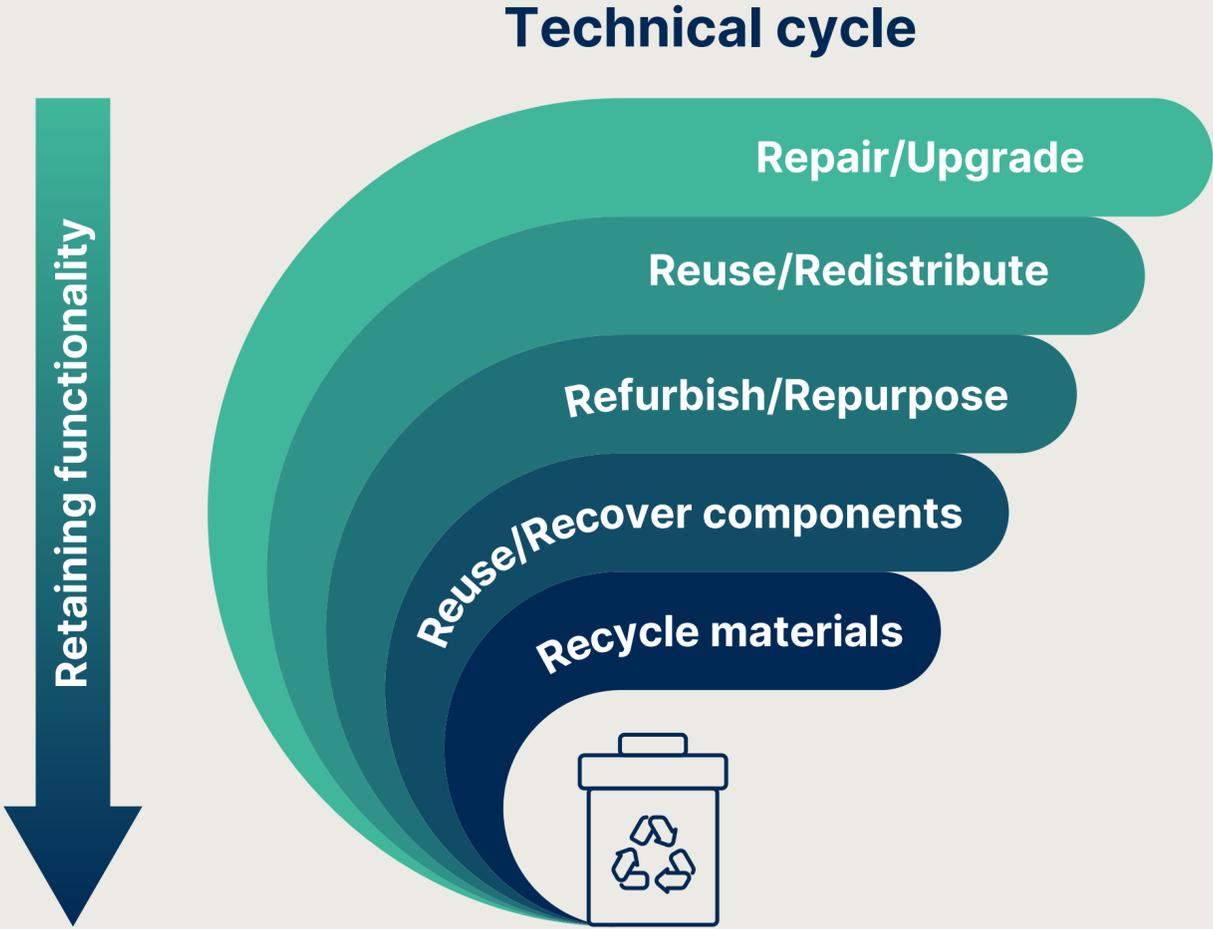
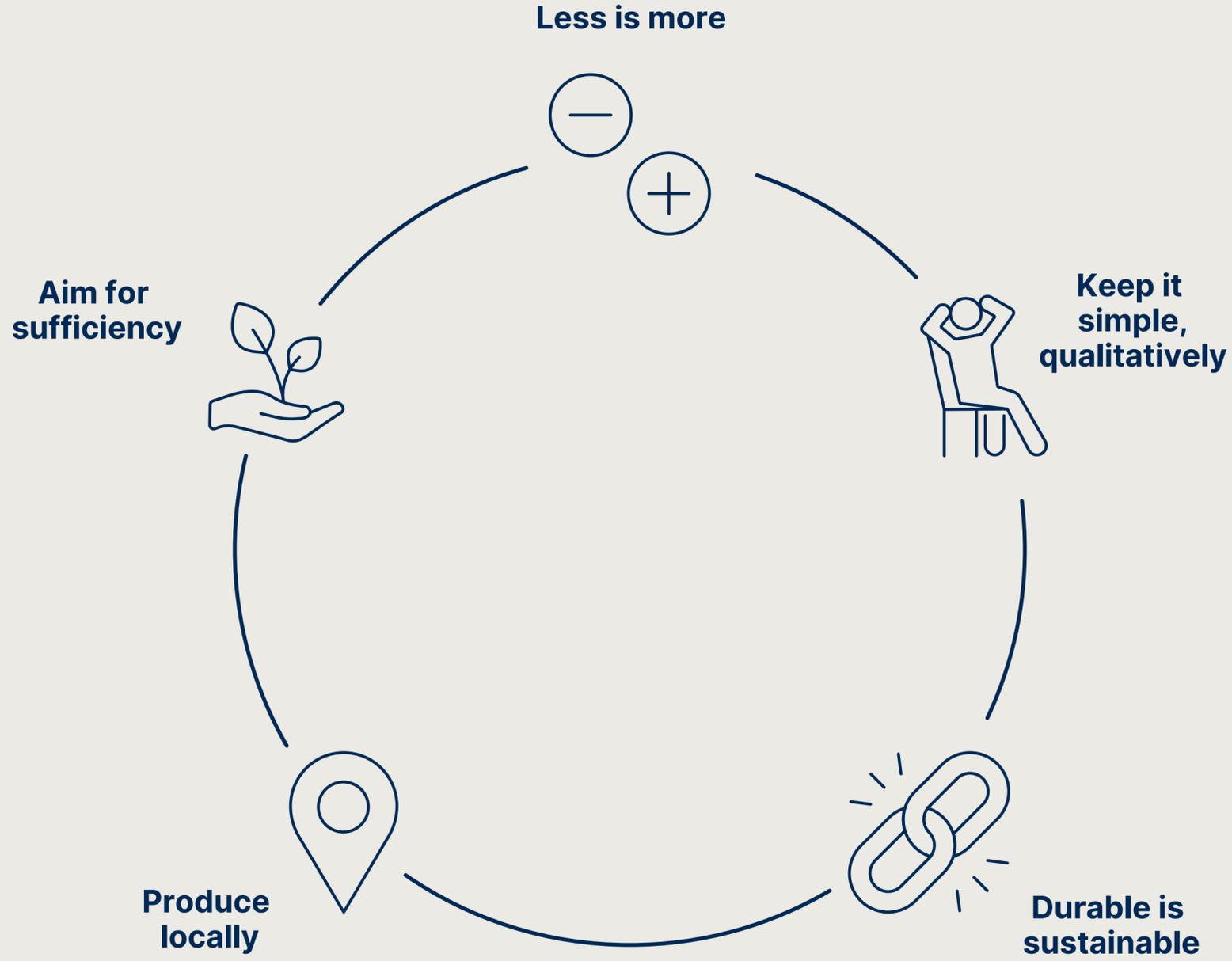


- Flux systems (Fan consumption)
- Healthbox systems (Fan consumption)
- Healthbox systems (Gas heating)
- Flux systems (Gas heating)
- Sun blinds (cooling)



# SUSTAINABLE DESIGN FOR A CIRCULAR ECONOMY

Designing for a circular economy requires a new mindset, one that is built on a few powerful rules of thumb. This new economic logic is stooled on the key principles:



When it comes to designing for the circular economy, there are valuable frameworks to build upon, such as the **R-ladder**. Circularity strategies higher up the ladder save more raw materials. So, we aim to stick to those strategies as much as possible.

## Renson rules of thumbs in line with the R-ladder

Buildings, and therefore their components, must be more resource-efficient, adaptable, flexible and dismantlable to enable reuse and recycling. Successfully meeting that challenge begins with the design process.

Thorough innovation contributes to the limited environmental impact of our products. The most important key points within this continuous innovation process are:

- Thinking in terms of product, system and concept
  - *To differentiate and integrate*
  - *Via calculating, measuring and improving*
- Designing for
  - *Ease of manufacturing, installation, maintenance and repair*
  - *Higher durability, recyclability, disassembly and adaptability*
  - *Balance between product efficiency and sufficiency, during its operation phase*
  - *Lower material use and eco-friendly materials in production and packaging*

These rules of thumbs are translated into specific sustainability goals, we work towards:

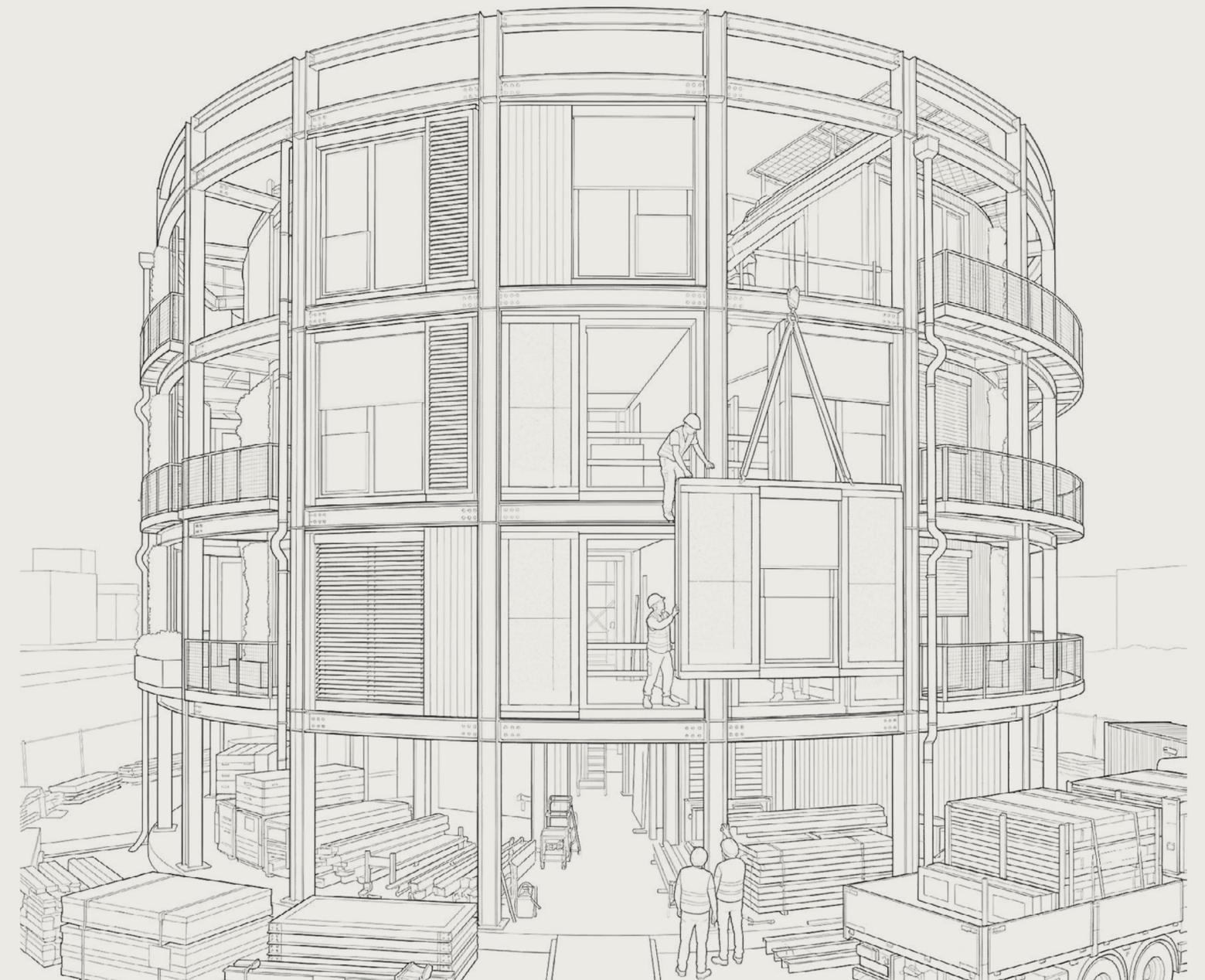
- Reducing mass & number of components (kg)
- Using less raw and more recycled materials
- Reducing transport (km)
- Cutting back on energy use during life cycle (kWh)
- Using more recyclable components
- Packaging which complies with the European regulation

### Put into practice

A simple yet good example of this thoughtful design<sup>E3</sup> is the conscious choice to use maximum click and screw connections. We strive to glue our products as little as possible. Instead, we use click connections or the components are screwed together, facilitating the disassembly and reparability of products by only replacing the component that is damaged.

This can easily extend the lifespan of our products. Also, click and screw connections ensure that the different materials used can be separated and thus recycled more easily.

Technical building systems, in turn, are mostly designed to reduce energy demand (via demand control, energy recovery) or to use renewable fossil-free energy<sup>E13</sup> (heat pumps, ventilative cooling).



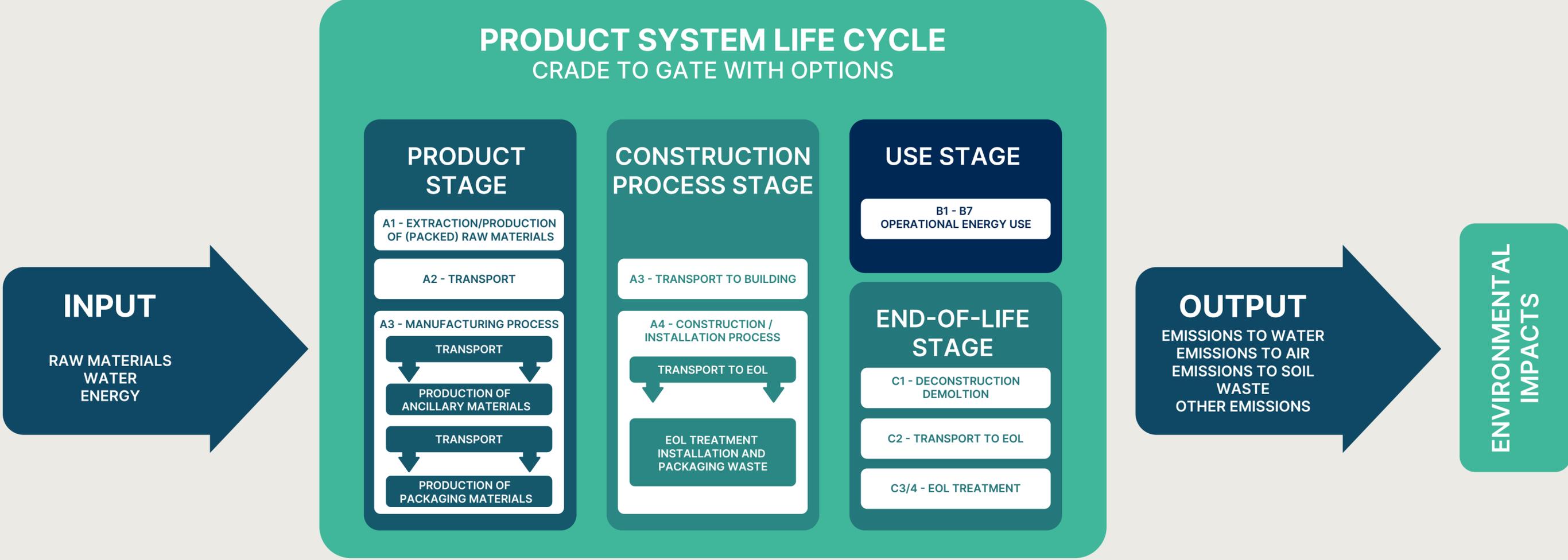
# ASSESSMENT OF THE DURABILITY BY LCA

The environmental impact of buildings is mainly determined by the building products and technical systems they are built with. Therefore, from 2020 on, Renson increased its efforts to analyse the environmental impact of products and systems over their entire life cycle (LCA). This life cycle assessment is finally summarized in an environmental product declaration (EPD). EPDs are made in accordance with standards (EN15804 + A2) and product category rules (PCR), that may differ between countries. An example of the different life cycle stages and system boundaries is given below.

EPDs are important in the sustainability strategy of Renson, since they reveal the potential for product and process optimization during the different life cycle stages of manufacturing, installation, use and end of life. EPDs represent objectivity, transparency, and credibility to enhance the market position of Renson. Consequently, these third-party verified EPD data enhance the building rating, when certified according to BREEAM, GRO, LEED, ...

Firstly, Renson actively participated in **collective** LCA research on sector level, as for solar shading products and for wall cladding systems. Also, from 2025 on, **Renson specific** EPDs are issued. In that way, the real sustainable impact of a Renson product on a building can be determined. Louvre systems, external solar shading and mechanical ventilation systems are the first in scope.

In the long term (2030), we want to provide national and/or European EPDs for the main product types of the Renson group.

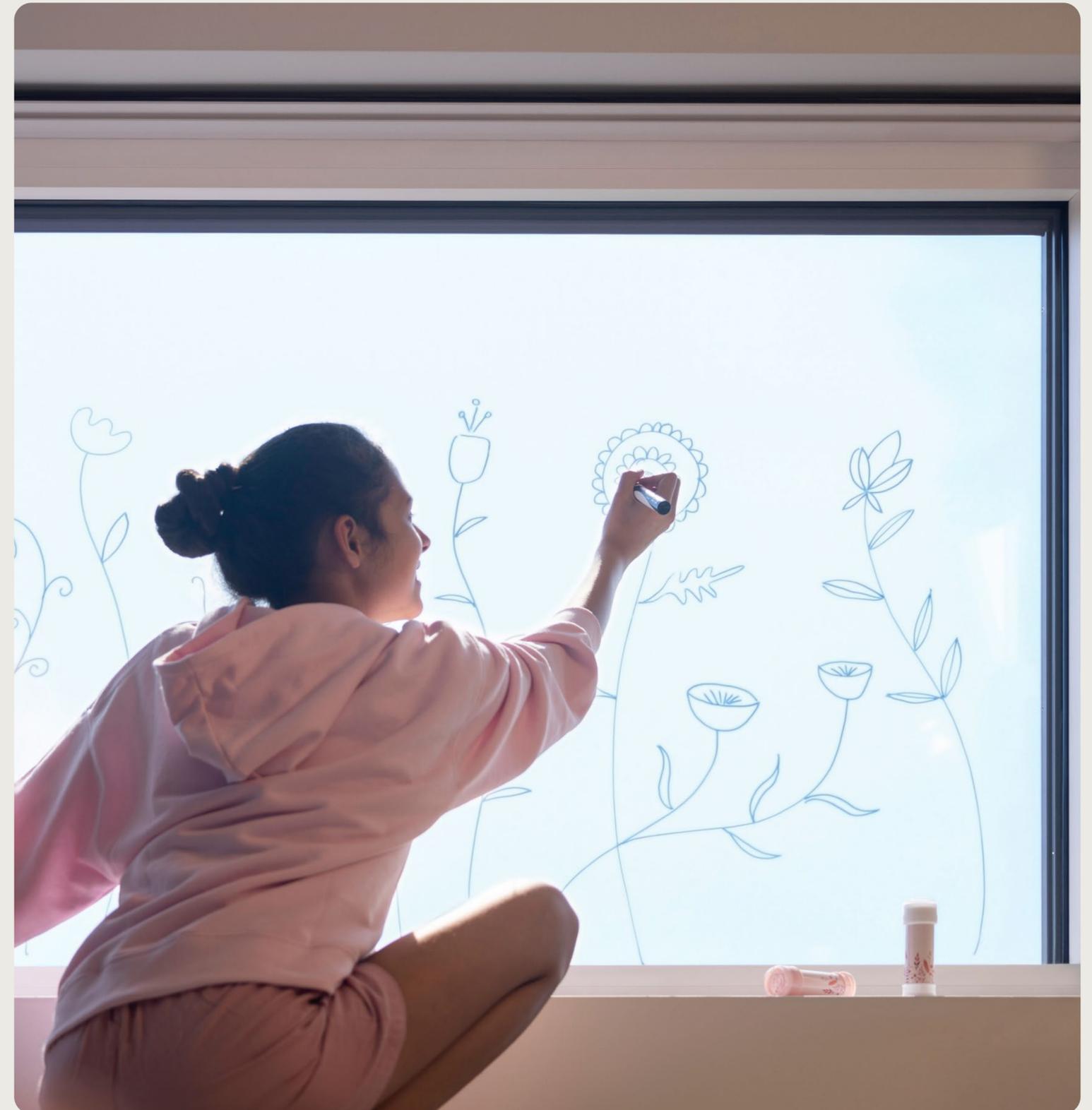


## HOW WE PRACTICE WHAT WE PREACH

Well-considered principles are admirable and essential. However, they must be applied correctly to be truly valuable. In this section, we demonstrate how we incorporate and realise our mission, vision, and goals in our R&D through some of our innovative solutions. This ensures that our products truly deliver on the promises made in this report.

### Ventilation

When it comes to ventilation, demand control has a positive impact on energy use, heating/cooling and noise. Where applicable, zonal controlled mechanical extract ventilation (MEV) systems compete with centrally or decentrally controlled mechanical ventilation with heat recovery (MVHR) systems, with respect to total energy consumption (heating, cooling, auxiliary) and comfort (IAQ, thermal and acoustic). Careful design, installation, and commissioning are key elements for their overall performance. Depending on the project, the yearly operational cost of residential ventilation varies between 100 and 200 € in Belgium. A small cost for breathing healthy indoor air at all times.





## Healthbox

Our MEV system Healthbox is a prime example of our focus on an easy (dis)assembly, sorting and recycling of components. We use many clip connections. Minimal screws and no glue allow for quick part replacement. For a longer lifespan of our products and a more valuable second life for the materials used. Everything is enclosed in a PP housing.

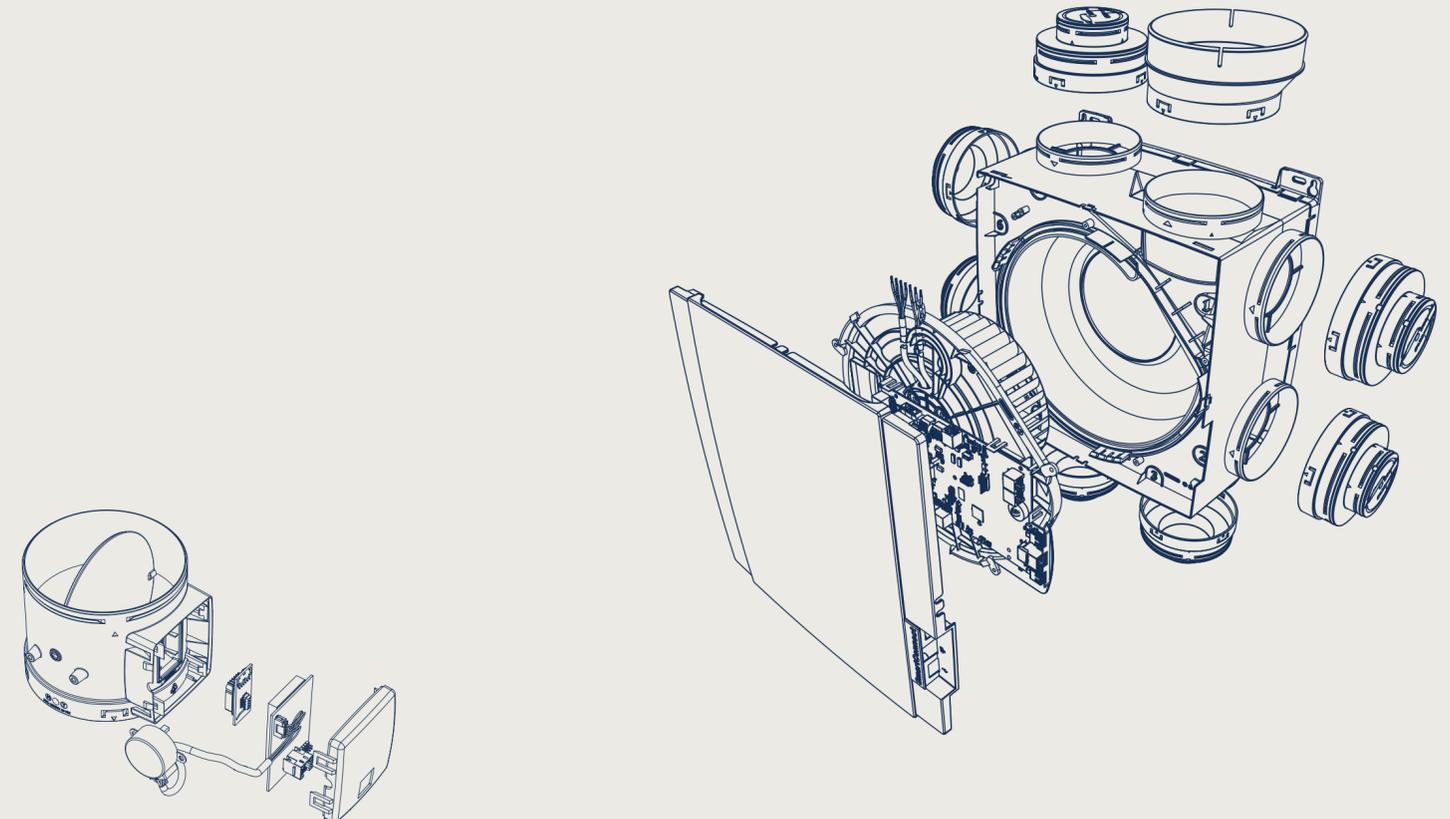
When it comes to electronics, we keep the circuit boards as small as possible, with only the most essential components.

### (Dis)assembly throughout the various stages of life

Numerous clip connections, no glue, and a minimum number of screws facilitate quick assembly and disassembly. This allows for the rapid replacement of components such as sensors.

### Proof of concept

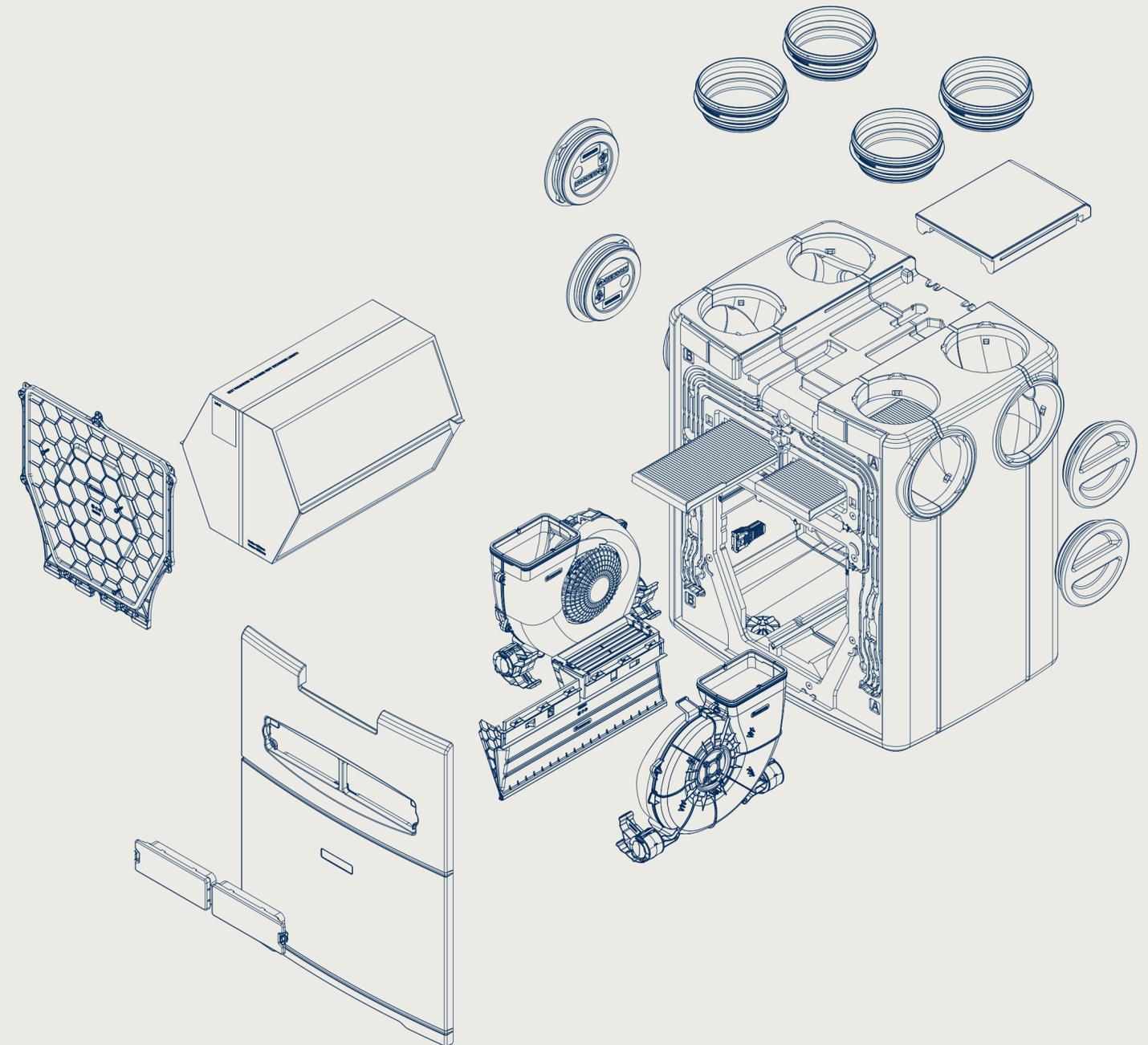
A large-scale analysis of the performance of the Renson Healthbox 3.0 Smartzone system based on field data, revealed that on average the indoor air quality in bedrooms is high (at least 90% of the nighttime  $< 1000$  ppm  $\text{CO}_2$  with a maximum of  $1200$  ppm  $\text{CO}_2$ ).





## Flux

Flux adds heat recovery – amongst other things – to energy-efficient and reliable ventilation. The avoided heat loss improves the energy use as well as the daily comfort inside the home. Elaborated CFD analysis resulted in significant lower operational energy, while increasing compactness and reducing weight.



- Packaging = fully recyclable (only cardboard)
- Modular by design: 100% and easy separation of parts at end of life, easy to repair, Easy to upgrade unit at later stage
- Plastic injection: from virgin to using fully recycle plastics (in our own injection facilities)
- Lightweight by design (32 kg): try to minimize use of materials = direct impact on EPD performance
- EPB body: shifting to using recycled EPP
- Heat exchanger: a new design which can be fully recycled

## External solar shading Screens (External solar shading)

Active cooling is causing more and more CO<sub>2</sub> emissions. Renson is taking action with its external solar shading. Screens prevent the sun rays from overheating the interior, thereby eliminating or reducing the need for active cooling. No running air conditioning means no additional CO<sub>2</sub> emissions<sup>E13</sup>. The fact that this external sun protection is also produced in a sustainable way reinforces its positive impact.

Being mounted in the jamb as well as in front of the window (montage 7), our external solar shading fits elegantly into a wide variety of projects. The patented Connect&Go technology makes mounting and disassembling the fabric roll child's play. This means that the fabric or motor can be replaced quickly, extending the lifespan of the screen.



## Linus / Linarte (Facade cladding)

An aluminium louvres façade from Renson is a sustainable choice by nature. From the use of materials to the modularity of the façade construction. As for all our products, we pay close attention to avoiding glues and silicones for assembly of the component. Rather, we use clamps, screws or clips. This significantly increases repairability and recycling options<sup>E3</sup>.

When it comes to the painting process, we have already taken important steps. We switched to gas-driven coating lines. During the painting process heat is released. We're actively exploring the possibilities of capturing that heat and using it to warm up the pre-treatment baths on the one hand and our buildings on the other. This could cut back our gas use with 15%. By using cyclone recycling we've been able to limit powder loss<sup>E17</sup> to 15%. And that with a minimal safety margin for a guaranteed sufficient coating thickness.





## Divina (Arlu)

Divina is a system for dividing spaces in a light-filled and aesthetic way using glass walls. The modular nature of this solution fits perfectly with the sustainable approach. Walls can be dismantled, rebuilt and expanded as desired. With or without doors, partitions, etc. By avoiding silicone sealant and similar installation materials, we keep the materials pure. The separate plastic parts and aluminium components can thus be optimally treated at every stage of their life cycle<sup>E15</sup>.

## Lapure (Renson Outdoor)

Like the Linius, Lapure is mainly made from aluminium and profits in this way from the green character of this material, as set out before. The low specific mass, strength and corrosion-resistance of aluminium are the ideal properties for an outdoor product as Lapure. Lapure also reaps the sustainable benefits of the modern Renson Outdoor production site. These include in-house injection moulding, efficient coating processes, reuse of water<sup>E16</sup> and heat from the production process, etc. And let's not forget the energy savings in your home. By adding this extension you automatically profit from extra sunprotection. You can read more about this on p. 45.



## Recent additions to the product family

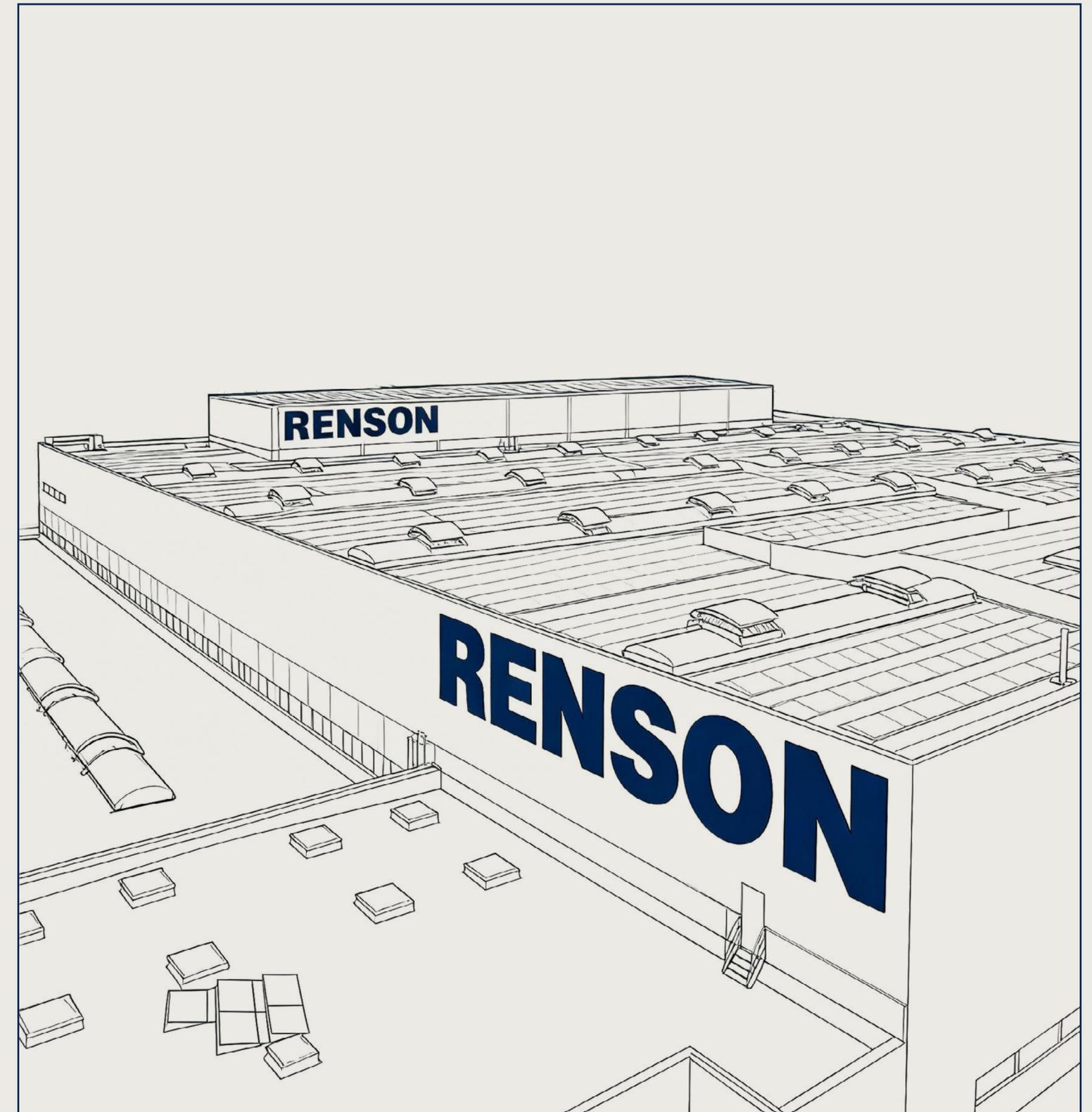
To build even more sustainable concepts, we don't back away from opportunities within related fields. We recently developed and launched a high-quality range for sustainable heating and cooling. Our **heat pumps** follow the same rules of thumb for responsible production and handling, with a keen eye for further improvement. The main ecological advantages of the Renson air heat pumps are given below.

	Ecological advantages
Monoblock	No leakage of refrigerant No need of air-co installer
Refrigerant	Natural propane R290 (GWP=3)
Low T heating/ high T cooling	Heating SCOP: 4-5 Cooling SEER : 3-4
Heat/cold emission	Floor/ceiling/wall surface Radiant comfort Perceived as hidden cooling + adaptive comfort accepted
Smart control	Weather dependant water- TPV powered, when available

# 4. BUILDINGS

The fourth sustainable pillar of Renson is dedicated to the buildings in which the Renson products are integrated. Sustainable buildings are no longer a wish but a must. By combining passive and active building elements Renson adds to this evolution. To live even more in harmony with nature's forces we keep developing our total building concepts, thereby using broad expertise, data and technical insights.

To create additional incentives for the commitment to more sustainable buildings, Europe is also taking action, including the Renovation Wave, within the European Green Deal. This initiative aims to renovate 35 million buildings by 2030, at least doubling the annual rate of energy renovations in the EU. At Renson, we are ready to provide optimal support for this ambitious mission with innovation, high-quality techniques and a broad vision of the future.



# CURRENT STATE OF AFFAIRS

We are rapidly advancing towards a comprehensive and integrated technical concept for building management. At the beginning of the 2000s, energy efficiency and the global comfort were already firmly on our agenda. After the turn of the century, winter comfort as well as summer comfort, indoor air quality, acoustic comfort and visual comfort were part of the Renson Healthy Building Concept. From then on, the market and regulation started to take up the different comfort elements which are crucial for designing a sustainable building. Nowadays, due to climate change and not adequate regulations, enhancing sustainable summer comfort and overheating prevention has become essential. The four-step hierarchical concept of the “Ladder of cooling” is a basic strategy to prevent building overheating, prioritizing energy efficiency and sustainability.

During the last decade, renewable energy and digitalization have also come onto our radar and within our scope. In the coming years, we will be investigating how we can respond even better to the challenges and opportunities presented by electrification, renovation, digitalization, controls, monitoring, standardization, etc.

With an integrated design of building technologies, we aim to strike the right balance between:

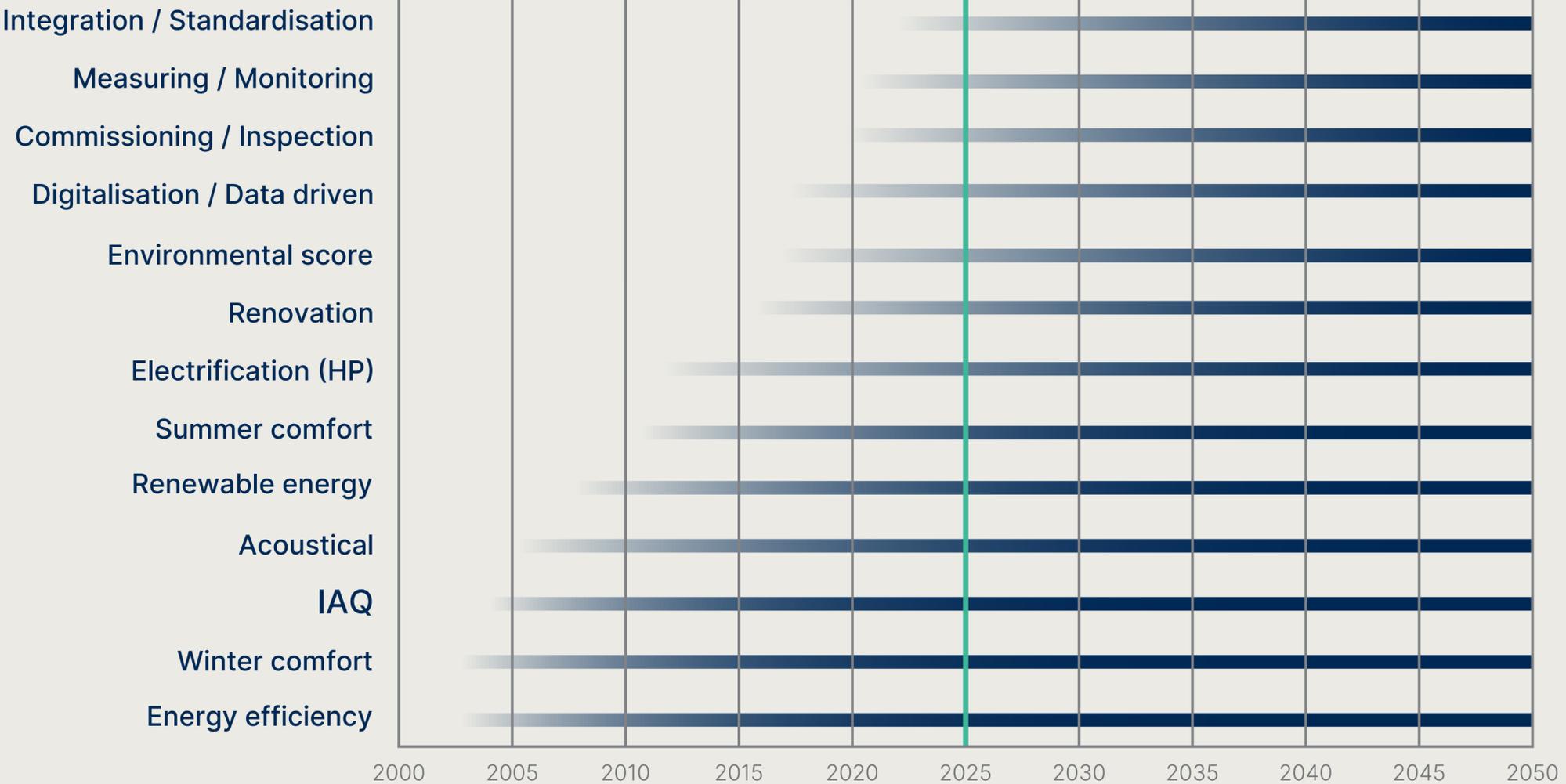
- Winter and summer comfort
- Comfort wishes and energy consumption
- The materials and the techniques in a building
- Embodied and operational carbon
- Flexibility in time and space

This broad approach allows us to offer customers a wide range of options to meet their personal comfort requirements. By further expanding our current range with this broad perspective, we keep building towards a well-founded sustainable total concept for the residential market.

The Energy Performance of Buildings Directive (EPBD 2024) also gives us valuable guidance for the coming decade. Since still a whopping 80% (average) of energy used in EU homes is for heating, cooling and hot water, there is much to be gained here.

Integrated concept  
Renson One

## Evolution of the construction market over 50 years: 2000-2050



# TOTAL CONCEPTS FOR MAXIMUM IMPACT

Only when all the technologies in a building are perfectly coordinated can you achieve the best possible result. For us at Renson, it therefore makes sense to develop and optimise total concepts for buildings. We are gradually evolving from a healthy and sustainable basis, through smart buildings and all their possibilities, to zero-emission buildings as the pinnacle of sustainability.

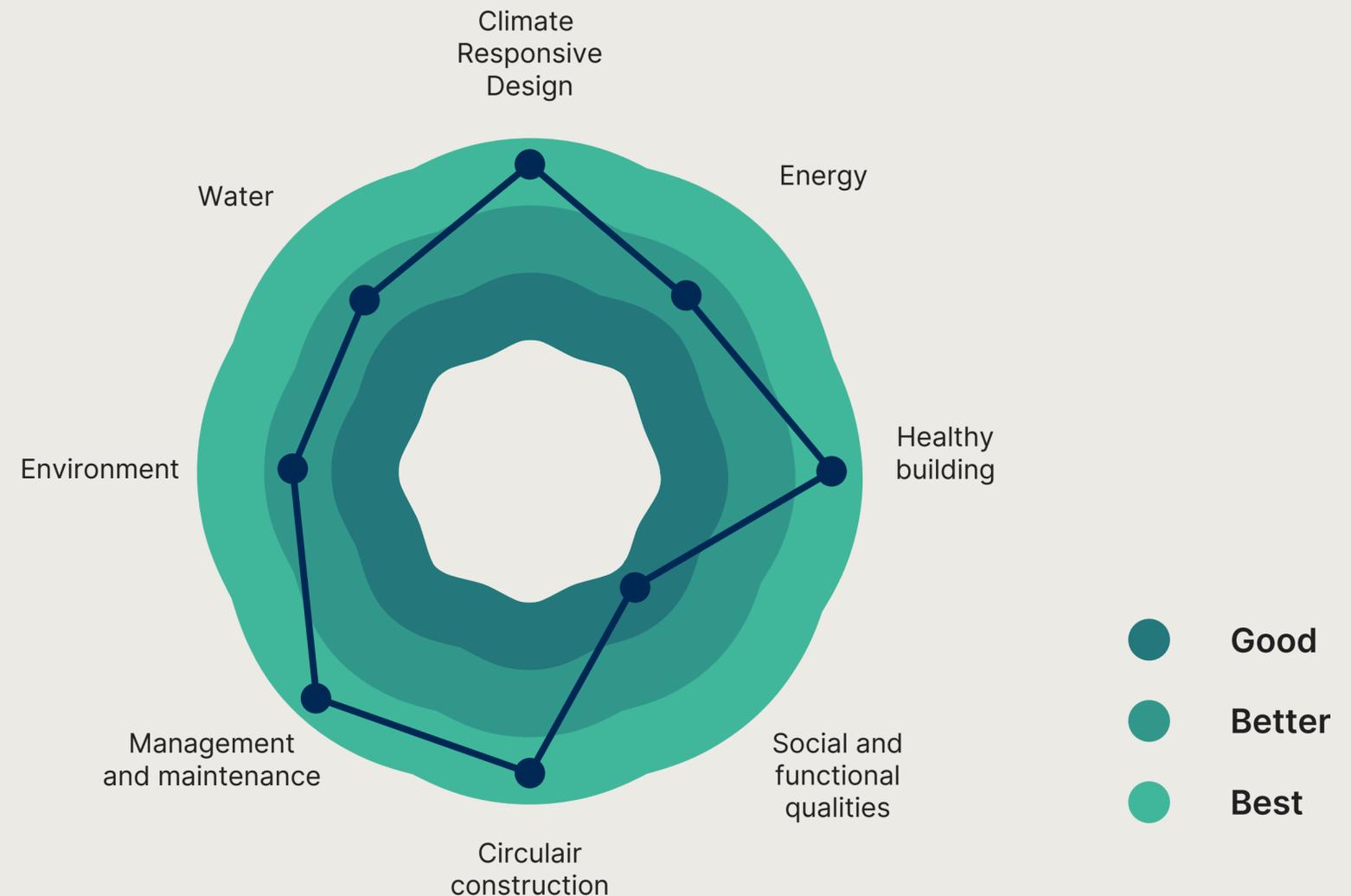
## 1. Healthy and comfortable living

Energy efficiency and environmental performance are, of course, important. However, healthy and comfortable living is way more than that. It demands a good integration of health and comfort interventions, into a dynamic whole. Sufficient daylight, no noise concerns, a pleasant living experience, enough space, ... They all add to the holistic approach to modern and healthy living comfort, where residents are the focus of the building concept.

The holistic building design is also expressed in the Renson recommendations to meet sustainable winter and summer comfort:

- Start: reasonable window to wall/floor ratio (WWR/WFR) and exposed thermal mass
- Adaptive building envelope: dynamic solar shading and ventilative cooling
- Maximal use of renewable energy: passive solar gains and daylight, passive ventilative cooling, building integrated PV (SS), heat pump
- Advanced control strategies: focus on demand-control (indoor)
- Low-T heating & High-T surface cooling: cooling capacity of 30 W/m<sup>2</sup> ~ keeping 26°C (if no heat wave)

For a richer life, and in particular for hospitality businesses, we also take apply the 'Active House' principles outdoors wherever we can. The outdoor environment is the ideal place to create unique experiences. Surrounded by nature and bathed in similar modern comforts as indoors.



## 2. Smart buildings

A smart building uses intelligence to optimize comfort and user experience, with **data analysis** as a powerful lever. Connected systems communicate and align with each other, in order to create added value for users, the building, and the environment. A smart building is a short track to:

- Smarter energy consumption
- Better building maintenance and management
- Optimal indoor climate
- Less impact on the environment
- Better user experience

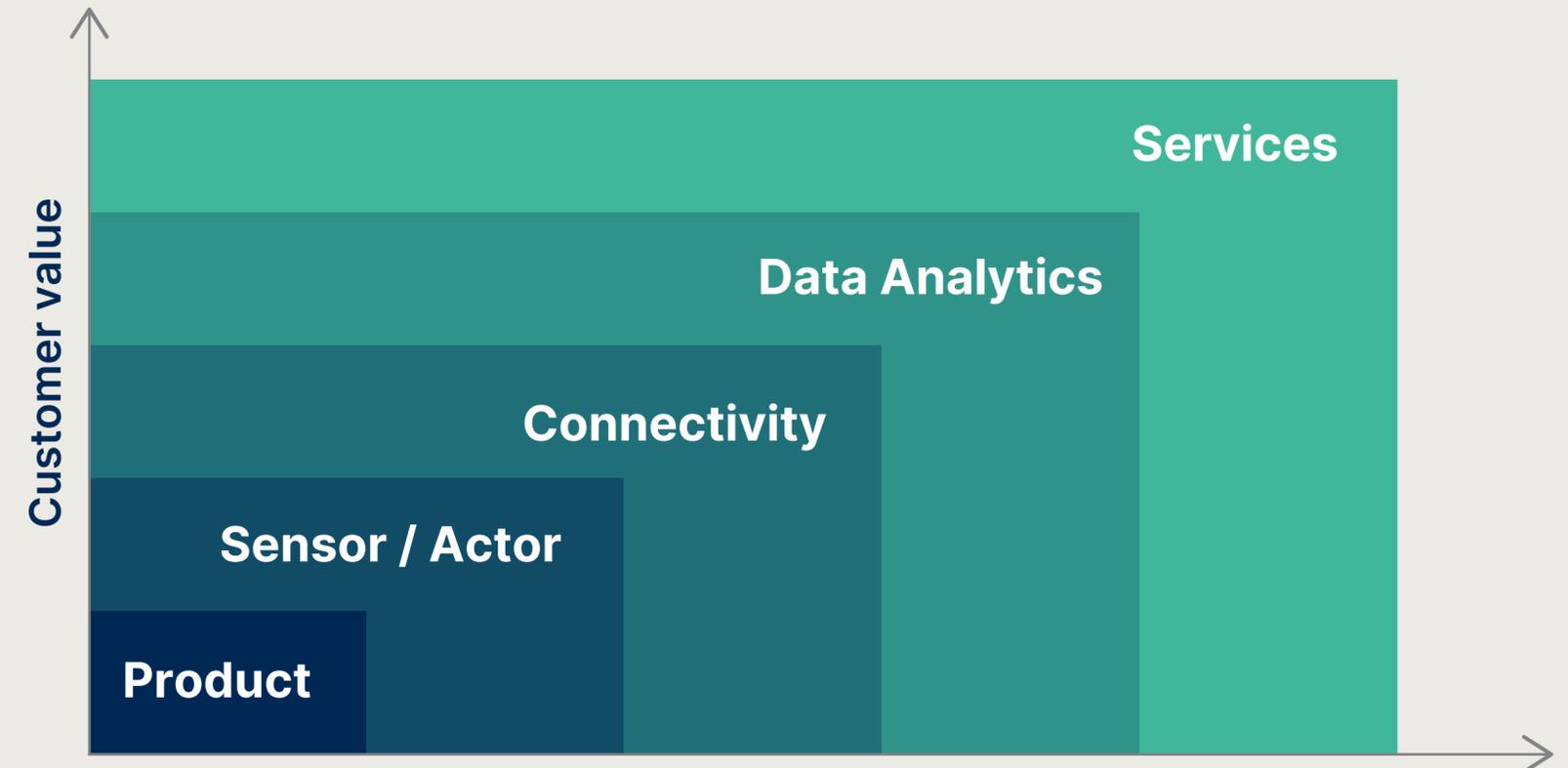
### Digital is the way to go

The digital service division of Renson creates services through digital interactions via apps (user, installer), web portals (installer, service), and API's/ home automation. This servitization with different stakeholders like residents, installers, service companies, building owners is quite diverse, such as:

- o **Project preparation and planning** > installation, system calibration and commissioning
- o **Push notifications** > via smartphone for filter warnings and error detection
- o **Visual representation** > real time/historic air quality and ventilation levels
- o **Service management and follow-up** > remote inspection of functioning/maintenance
- o **Automatic software updates**
- o ...

### Solmate: cloud controlled solar shading

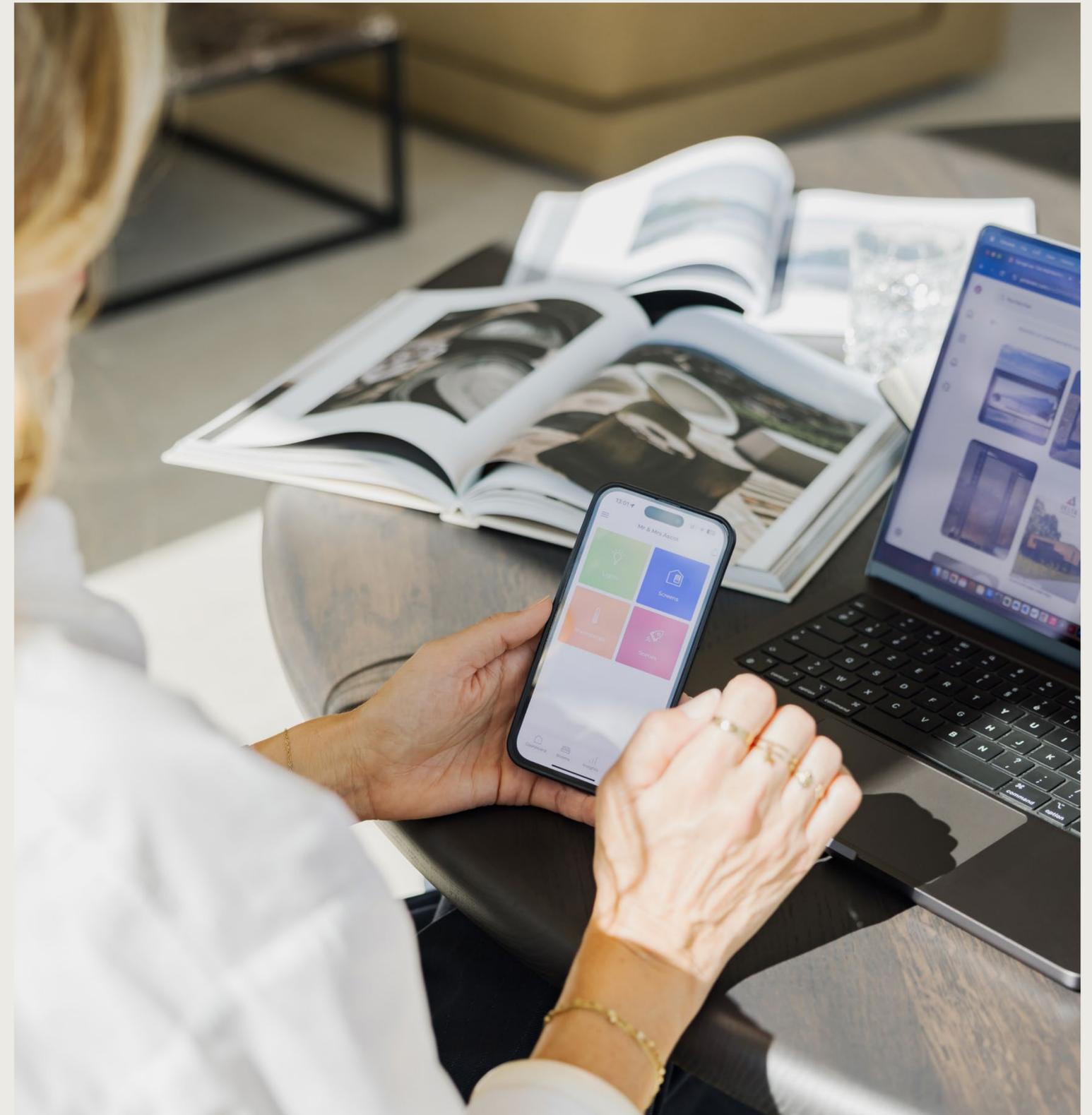
To guarantee maximum positive impact, we are committed to automating our solutions as much as possible, as illustrated with Solmate. This add-on enables advanced control of your external solar shading via the home automation, without the need for solar radiation sensors. Solmate retrieves current weather data directly from the cloud, enabling it to respond quickly. For an ideal indoor climate in every season, without the need for human intervention.



## A world of possibilities

A smart building opens the door to many opportunities to meet personal comfort requirements and sustainability goals. Here are just a few of the possibilities. In some of them, Renson is already actively involved. Others can be integrated in the Renson system, if desired:

- Personalize the user experience: thermal comfort, light levels, indoor air quality, noise reduction, etc.
- Find people and resources: find available meeting rooms, workstations, parking lots, colleagues, etc.
- Optimize services and use of space through data analysis: optimizing cleaning services, analysing the occupancy of meeting rooms, allocating of occupancy costs, optimizing catering facilities, etc.
- Communication between different types of building users: communicating with employees, wayfinding, notifications in case of emergency, etc.
- Sustainable resource management: energy production, energy storage, power management, waste management, sustainability reporting, etc.
- Controlling the operation of facilities: controlling HVAC and lighting, facility and maintenance management, benchmarking of the property portfolio, etc.
- Security of people and resources: access control, visitor management, hazard detection, cybersecurity, emergency localisation, etc.



### 3. Zero-emission buildings

The energy level of buildings evolves to a wider sustainability level. What does this mean? The most energy efficient building products or systems are not automatically the most sustainable ones, as illustrated on the figure below. Embodied elements as well as energetic aspects determine the sustainability level. When considering the building, zero-emission is the target.

### Zero-emission by improving the building life cycle

The approach to and opportunities for buildings vary with the building type. However, we develop and build technical innovations for all these applications:

- Buildings and apartments (prefab, modular, low tech, compact)
- Healthcare and schools
- Data centres

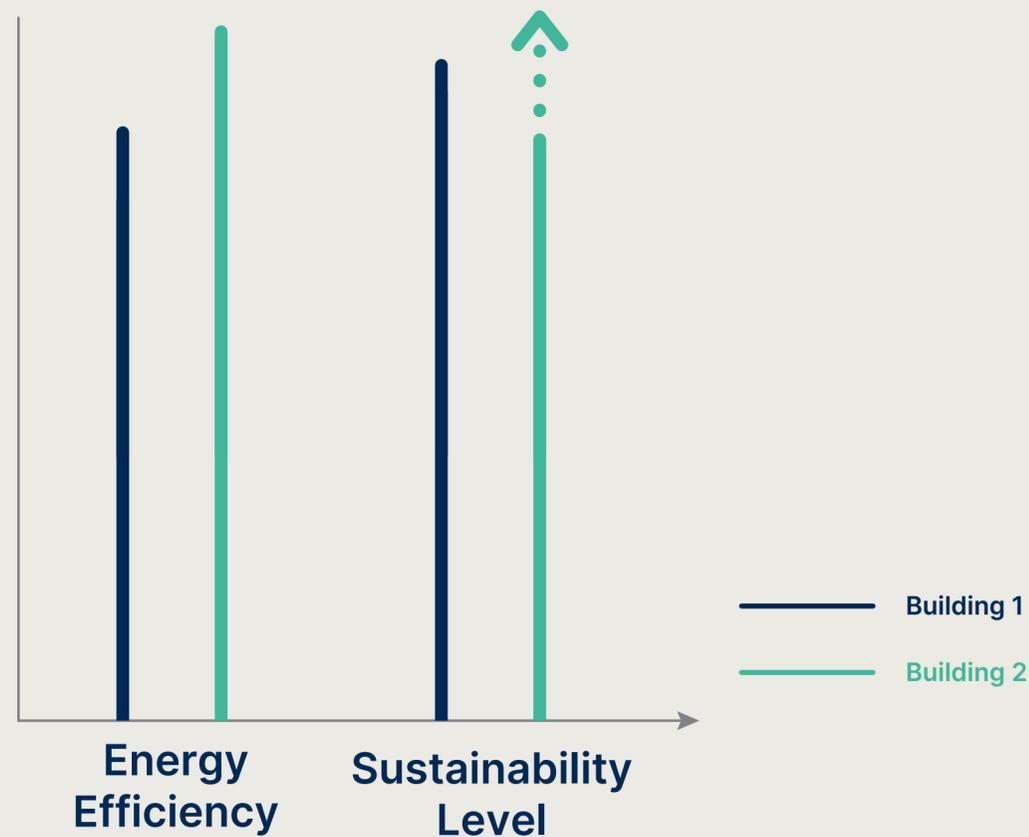
Buildings play a critical role in achieving the EU's ambition of becoming a climate-neutral continent by 2050. Since 2021, all new buildings in the EU are required to be 'nearly-zero energy buildings'. This will be replaced by a further enhanced 'zero-emission buildings' requirement, starting from 2028 for new buildings owned by public bodies and in 2030 for all other new buildings.

The construction phase as well as the operation phase of the building determine to a great extent the building's emission level. The indoor climate solutions offered by Renson to ventilate, heat, cool and protect the building against overheating all contribute to a zero-emission operation phase of the buildings. Therefore, Renson combines passive as well as active measures to:

- Reduce the yearly energy demand
- Use renewable energy
- Minimize grid consumption

To lower the embodied carbon of the building materials and techniques, Renson focuses on:

- Minimizing the amount of materials used
- Use of low-carbon produced raw materials and of recycled materials
- Increasing the possibility to recycle end-of-life products
- Performing life cycle assessments (LCA) to evaluate and reduce the environmental impacts across the entire life cycle



# SUMMARY OUR MAIN OBJECTIVES BY 2030:

## Environmental

### Product sustainability

- Sustainable sourcing of raw materials, mainly focusing on purchasing materials (aluminium, ...) with a lower emission factor
- Increase of the average recycled share of used aluminium and plastic materials with 10%, while guaranteeing product quality
- Analysis to further reduce the environmental impact of coating powders
- Evolving to digital product passports (DPP) for the main products, which facilitates the product data to be available during the different life cycle phases of the product

### Production sustainability

- Increase in the efficiency of the production process, including the storage of upstream and downstream components and products by:
- More centralization

- higher efficiency in use of space
- Higher use of on-site produced renewable energy into the production process to lower fossil gas consumption by 25%
- Further implement the reuse of heat that is released in production processes for heating the production facilities

### Packaging and Packaging Waste

- Prevention: reduction of the amount of packaging by 10%, if the quality of the delivered product can be guaranteed
- Recycled content: increase the share of post-consumer recycled (PCR) plastics in packaging to at least 35%
- Design for recycling (D4R): only packaging which is at least 70% recyclable
- Reuse: Increase of the amount of reusable packaging by 10%, with a minimum of 40%



## People management

- Assuring that every employee gets a qualitative performance review with elaborated feedback
- Using the input and results from this performance review round to set up and support our talent management roadmap for 2026, including training and development programs
- Analyse and improve if needed, safety and ergonomics during working time



## Governance

- Evolve to a complete carbon footprint analysis of the Renson group, as a basis for the sustainability program of Renson
- Based on the Renson footprint, assess progress to date and define SMART objectives
- Implementation of regulations such as DPP, CBAM & PPWR, according to the requirements for Renson
- A higher vertical integration for all business units to enhance the focus from start to end
- To guarantee the product performances:
  - Optimization of production processes
  - Improvement of the factory production control (FPC)
  - Increase of the number of products under technical approval or certification
- Adaptation of the several Renson Codes of Conducts according to the changing needs, regulations and objectives.



# GLOSSARY

- CBAM: Carbon Border Adjustment Mechanism, an EU regulation that promotes fair competition by reducing the carbon adjustment if an importer can demonstrate that a carbon price was paid in the country from which a product was imported
- Code of Conduct (CoC): a set of principles, rules, and expectations that guide ethical and responsible behaviour in all interactions, both within an organisation and with external partners such as suppliers
- Carbon+alt+delete software: carbon accounting software for sustainability calculations
- CSRD: companies subject to the Corporate Sustainable Reporting Directive (CSRD) must report according to European Sustainability Reporting Standards (ESRS)
- DPP: digital product passport according to the Ecodesign for Sustainable Products Regulation (ESPR)
- Ecodesign: ecodesign considers environmental aspects at all stages of the product development process, striving for products which make the lowest possible environmental impact
- ESG: ESG stands for Environmental, Social, and Governance, and offers a framework for sustainable businesses
- EPBD: the Energy Performance of Buildings Directive (EPBD) of the EU sets rules to improve the energy efficiency and environmental performance of buildings
- EPD: Environmental Product Declarations (EPD) is a standardized, third-party verified document that transparently communicate a product's environmental impact throughout its entire life cycle, from raw material extraction to disposal, based on a Life Cycle Assessment (LCA)
- EU Renovation Wave: the European Commission's strategy, launched in 2020, to drastically increase the rate and depth of energy renovations in Europe's building stock, aiming to double annual renovations by 2030 to meet Green Deal goals
- Factory Production Control (FPC): EU legislation that sets requirements to improve the environmental performance and energy efficiency of products that use or impact energy throughout their lifecycle
- HVAC: short for Heating, Ventilation, and Air Conditioning
- ISO 9001: the globally recognized standard for Quality Management Systems (QMS)
- LCA: Life Cycle Assessment
- MTech+: the career fund from the metal and technology industry sector
- P.C. 209: the Belgian Joint Committee for employees in the metal manufacturing industry, which regulates the pay and working conditions
- PPWR: Packaging and Packaging Waste Regulation (PPWR), a new, binding EU law, aiming to drastically cut packaging waste, boost reuse/recycling, and ensure all packaging is recyclable or reusable by 2030-2035
- Physicochemical water purification: a combination of physical processes (like settling, filtration) with chemical treatments (like coagulation, flocculation, oxidation) to remove contaminants, transforming pollutants into separable forms (flocs)
- SDG: the Sustainable Development Goals (SDGs) are a set of 17 global goals adopted by the United Nations in 2015 to achieve a more sustainable and prosperous future for all by 2030
- Scope 1/2/3: categories for classifying greenhouse gas (GHG) emissions based on their source, helping companies measure their carbon footprint: Scope 1 covers direct emissions from owned sources (like company vehicles); Scope 2 covers indirect emissions from purchased energy (like electricity); and Scope 3 covers all other indirect emissions in the value chain (like from suppliers, employee commutes, and product use/disposal)
- Taxonomy: the science of naming, describing, and classifying organisms into hierarchical groups based on their shared characteristics and evolutionary relationships
- VAL-I-PAC: the accredited organization in Belgium managing the Extended Producer Responsibility (EPR) for commercial and industrial packaging, helping companies meet legal recycling obligations for packaging waste like boxes, pallets, and plastic films
- WWR/WFR: key metrics in building design to assess energy performance, daylighting, and thermal comfort: WWR is the ratio of window area to total wall area (good for façade efficiency) and WFR is the ratio of window area to floor area (good for interior daylighting)

All photos shown are for illustration purposes only and are solely an indication of a usage situation. The actual product may vary due to adjustments to the product. Renson reserves the right to make technical modifications to the products shown. The latest brochures can be downloaded from [renson.net](http://renson.net)

