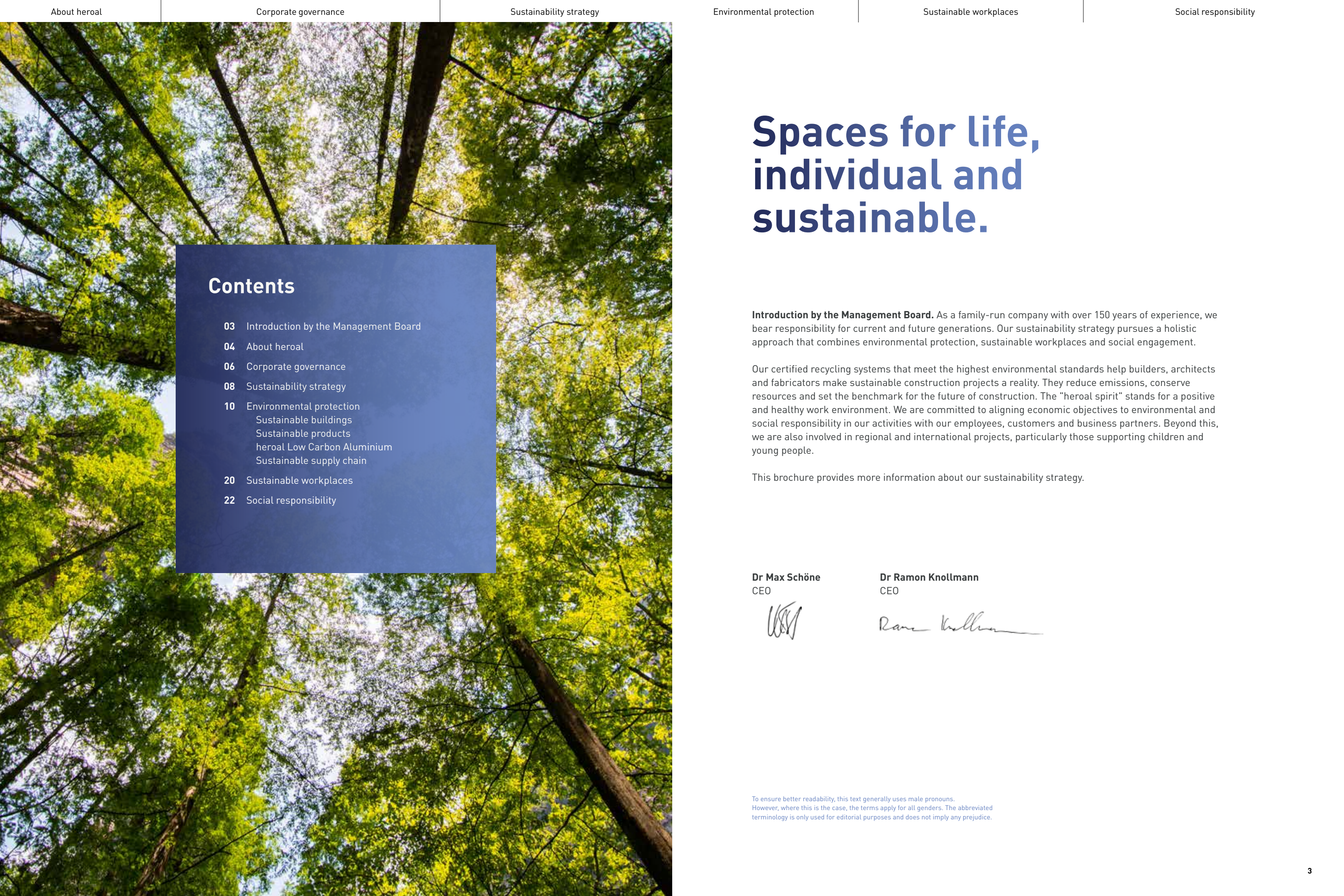




**Sustainable.
heroal.**

heroal



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Spaces for life,
individual and
sustainable.

Introduction by the Management Board. As a family-run company with over 150 years of experience, we bear responsibility for current and future generations. Our sustainability strategy pursues a holistic approach that combines environmental protection, sustainable workplaces and social engagement.

Our certified recycling systems that meet the highest environmental standards help builders, architects and fabricators make sustainable construction projects a reality. They reduce emissions, conserve resources and set the benchmark for the future of construction. The "heroal spirit" stands for a positive and healthy work environment. We are committed to aligning economic objectives to environmental and social responsibility in our activities with our employees, customers and business partners. Beyond this, we are also involved in regional and international projects, particularly those supporting children and young people.

This brochure provides more information about our sustainability strategy.

Dr Max Schöne
CEO

Dr Ramon Knollmann
CEO

To ensure better readability, this text generally uses male pronouns. However, where this is the case, the terms apply for all genders. The abbreviated terminology is only used for editorial purposes and does not imply any prejudice.

heroal: simply better spaces for life.

Our company

heroal is an international market leader in the manufacture of aluminium system solutions for roller shutters, sun protection, roller doors, windows, doors, sliding doors, curtain walls and patio roofs. The family-run company was founded in 1874 and has over 900 employees at its head office in Verl, Germany, as well as sites in France, the Netherlands and the Czech Republic and is involved in the construction of sustainable residential and commercial buildings worldwide. For heroal, the focus is on innovative and high-quality complete solutions for fabricators, architects, planners, investors and builders, that are characterised by first-class quality, industry-leading customisation options and consultancy and services at every phase of the building life cycle. heroal systems are developed and manufactured in Germany.

Our mission and vision

As an international family-owned company, we have spent decades working together with our partners to create sustainable, secure, comfortable and unique spaces for life. Our vision "We create spaces that enrich lives" together with our corporate strategy WE2025+ is our response to tackling current and future challenges. Our goal: To improve living and working environments for both current and future generations – with system solutions for the building shell as well as indoor and outdoor spaces. Our promise: Fabricators benefit from efficient and innovative solutions, efficient logistics and a comprehensive service offer. We give architects and planners the greatest possible design freedom and greater planning certainty, while investors receive added value for commercially successful projects and private builders enjoy a customised, sustainable, and secure home for generations.

Our claim

"Simply better *spaces for life*": heroal ensures greater sustainability, security, comfort and design with industry-leading system solutions for the building shell as well as indoor and outdoor spaces. Our company claim reinforces the tangible added value that we provide for our partners and customers – fabricators, architects, private builders, retailers and investors – and our commitment to making a positive difference to the construction and renovation of buildings in the cities of today and into the future.

heroal in numbers

Global sites	4
Production sites	2
Global employees	more than 900
Apprentices and students	63
Countries to which we deliver (2023)	29



Interview with the Management Board.



How important is sustainability to heroal?

As a forward-looking family-owned company that has been around for 150 years, we are well aware of our responsibility for the environment and society. Sustainability has always been an important part of our corporate philosophy and extends not just to the development of durable and recyclable products for energy-efficient and high-quality buildings, but to all aspects of our corporate activities. We are convinced that our products and services can help to design more tailored, comfortable, secure and liveable buildings in the future as well as making an important contribution to combating climate change, the scarcity of resources and the impact of rising energy prices. This is reflected in our corporate vision "spaces for life".

What role does aluminium play in terms of sustainability?

As a provider of system solutions for the building shell as well as indoor and outdoor spaces, we are committed to using aluminium, which we believe is the material of the future. The combination of its outstanding material properties together with our long-standing know-how in the development and construction of aluminium system solutions allows us to maximize performance in terms of durability, heat insulation, security and design while also using the least amount of material possible. What's more, aluminium is 100% recyclable and can be infinitely recycled using just 5% of the energy compared to the production of primary aluminium without changing its material properties. Besides this, the use of recycled secondary aluminium and the ever-increasing use of renewable energies for the production of primary aluminium will help to continuously improve aluminium's overall carbon footprint. From 2025, heroal will also include a CO₂-reduced aluminium and recycled post-consumer aluminium for particularly demanding sustainability requirements.

What medium-term goal has heroal set itself with a view to reducing CO₂ emissions and how will this be achieved?

In terms of reducing CO₂ emissions, we have defined ambitious goals in line with the Science Based Target Initiative (SBTi) and the Paris Climate Accord to limit global warming to 1.5 degrees. We are also aligned to the UN Sustainable Development Goals. We are using these as a basis for identifying the potential for reductions across all areas and are pursuing a multi-year action plan to fully exploit these potentials. Our goal is to reduce our CO₂ emissions in scope 1 to 3 by 50% by 2030. Important measures to achieve this objective are the continuous optimisation of our production and logistics, the use of electricity from 100% renewable energies, the use of CO₂-reduced materials from local suppliers to manufacture our products and actively contributing to closing the material cycle.

What role do employees play in the sustainability strategy?

heroal is a team of employees with diverse backgrounds who span a whole range of functions and share a common goal. Every day we work to provide the best possible support to builders, investors, architects and fabricators in the acquisition and realisation of challenging construction projects as well as progressively developing, aligning ourselves to the future and continuously improving. Our team is the key to successfully navigating this path. For our part, we create a positive, constructive work environment with a wide range of creative and development opportunities, the opportunity to take responsibility, try out new things, and grow as a person. Safe and healthy workplaces as well as flexible working time models are just as much a part of the overall offer for the heroal team as the diverse range of regular team activities and employee events that we hold.

Acting sustainably.

heroal creates spaces for life that are **SIMPLY. BETTER.**

As a family-owned company with over 150 years of experience, sustainable action is part of our DNA. We believe that spaces for life can only be SIMPLY. BETTER. if they are both environmentally and economically sustainable. Our understanding of sustainability extends beyond the products to encompass all corporate activities. Besides this, we also support healthy, family-friendly workplaces and individual employee development to strengthen diversity and personal growth.

Commitments to international standards and guidelines

As an international family business, we are aware of our responsibility to our employees, business partners, society and the environment. As a result, we are committed to the following international standards and goals as the basis for our actions:

- Universal Declaration of Human Rights of the United Nations
- United Nations Convention on Human Rights
- UN Convention on the Rights of the Child
- Core Labour Standards of the International Labour Organization (ILO)
- UN Sustainable Development Goals

We defined the plan to reduce our CO₂ emissions in line with the Science Based Target Initiative (SBTi) and the Paris Climate Accord to limit global warming to 1.5 degrees.

Certified management systems

Our goal is to ensure and continuously improve the high quality standards of our products, services and our environmental protection through an integrated management system. This commitment documents the certification of our quality management system in line with ISO 9001:2015, our environmental management system in line with ISO 14001:2015 and our energy management system in line with ISO 50001:2018.

Sustainability Board

The heroal Sustainability Board was established in 2021 and is comprised of the key managers and members of the Management Board. Its tasks include the development and implementation of the sustainability strategy in accordance with the Management Board.



The heroal value chain.



This illustration is merely intended to provide an overview and is not a complete representation.

The heroal sustainability strategy.

We act responsibly towards the environment, employees and society

Climate change is one of the greatest global challenges of our time. As a forward-looking family-owned company, heroal takes responsibility for the environment and society. Sustainability is a core part of our business strategy. We support sustainable living and working environments for current and future generations. Our approach encompasses all the activities along the value chain and is structured into three action areas: environmental protection, sustainable workplaces and social responsibility. We are committed to conserving resources, fair working conditions and supporting local communities to ensure sustainable long-term growth.

This vision is the foundation of our sustainability activities, providing the structural framework as well as allowing us to establish long-term goals in line with the expectations of the various stakeholders and external boundary conditions. We have broken down our activities into **3 areas of action** with **9 core topics**.

01

Acting responsibly towards our environment
Environmental protection

Environmental protection is our top priority. We are committed to the responsible use of resources and energy in production as well as in terms of the impact of our systems. We have been preparing a carbon footprint since 2020, from which we derive targeted measures to reduce our CO₂ emissions. We support renewable energies and work together with partners to reduce the carbon footprint of our products. Our outstanding "Cradle to Cradle" certifications in the categories of material reuse and CO₂ management are a testament to our efforts in this area. For instance, we offer solutions for sustainable buildings with the most stringent requirements.



Sustainable buildings
→ Energy-efficient complete solutions
→ Data transparency and building certification



Sustainable products
→ Circularity and decarbonisation
→ Material efficiency and product performance



Sustainable supply chain
→ Energy-efficiency and renewable energies
→ Sustainable distribution

02

Acting responsibly towards our staff
Sustainable workplaces

Our corporate culture shaped by our heroal values creates a positive, constructive work environment that is based on the pillars of fairness, equal opportunities and social responsibility. Personal development plays a key role when it comes to the motivation, satisfaction and loyalty of our employees. Individual career paths are supported with development opportunities in order to adapt to ever-changing requirements. These activities are reinforced by healthy, safe and family-friendly workplaces that encourage a work/life balance.



Sustainable corporate culture
→ Community and teamwork
→ Corporate values



Personal development
→ Individual career paths
→ Lifelong learning



Work safety and health
→ Occupational health and safety management
→ Health promotion

03

Acting responsibly towards our society
Social responsibility

We act responsibly towards society by encouraging ethical behaviour and targeting healthy, long-term corporate growth. Our sustainability strategy is based on combining commercial objectives with environmental and social aspects to not only secure our success, but the well-being of our environment and society as well. We also actively encourage and support local, national and global associations and projects to help make a positive difference to our social and ecological environment.



Responsible business
→ Compliance
→ Whistleblower system



Responsible partnerships
→ Supplier code
→ Due diligence audits of our business partners



Social responsibility
→ Support non-profit organisations
→ Regional involvement

Building for tomorrow, today.

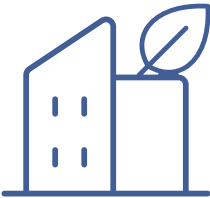
Energy-efficient products for energy-efficient buildings

Buildings shape the appearance of our cities. People spend up to 90% of their time in rooms and the CO₂ emissions from construction and the use of buildings are responsible for around a third of CO₂ emissions in Germany. This is where we want to make a difference with our vision "spaces for life" and products that contribute to improving the buildings of today and tomorrow – with more sustainability, security, comfort and the highest design standards and architectural freedom. The environmental footprint of a building is calculated using the "Whole Life Carbon" approach, which covers the whole building life cycle, starting from the extraction of raw materials, the manufacture of the products used, erection, the energy and heat requirement during operation, through to maintenance and the disposal of materials after demolition. heroal supports architects and planners from the early planning phase of sustainable construction projects by providing all planning-related information for the certification of buildings in line with DGNB, LEED or BREEAM standards.

An important instrument in this area are the Environmental Product Declarations (EPDs), a kind of "fact sheet" that documents the environmental performance of a building product. Independently verified, EPDs support the objective and transparent communication of environmental information about building products and ensure neutral comparability. They are the basis for product as well as building certification programs. heroal provides EPDs for the frame profiles of windows, doors and curtain walls as well as roller shutter elements and exterior sun protection. heroal fabricators have the opportunity to independently create product- and project-specific EPDs using the Orgadata LogiKal software and the heroal EPD tool. This meets all relevant standards and is certified by the ift Rosenheim.

heroal system solutions don't just impress with their diversity of designs, their efficient use of renewable energy and the use of CO₂-reduced, recycled raw materials in construction also help to reduce our carbon footprint.

In the operation of the buildings, heroal system solutions distinguish themselves with exceptional heat insulation values (protection from the cold and heat) as well as their long service life and low maintenance requirements.



Sustainable buildings

Sustainable thanks to heroal

Just three of countless examples of environmentally certified buildings fitted with heroal systems.



Stelling Höfe
Hamburg, Germany
DGNB Gold certified



Kotelna Park II
Prague, Czech Republic
BREEAM "Very good" certified



AFI Vokovice
Prague, Czech Republic
LEED Platinum certified



Sustainable systems.

Sustainability and performance combined

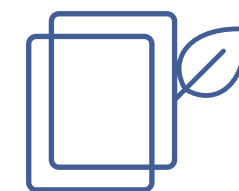
The focus on environmental criteria when developing new products is greater than ever before. Back in 1977, heroal laid the cornerstone for its integrated and sustainable construction approach with the development of the first heroal window system that considers and reconciles both economic and environmental aspects.

From the very beginning, this product development process has been based on the selection of the right materials and the use of non-toxic, recyclable CO₂-reduced materials with a recycling mix of up to 100%.
→ see page 14, "The material of the future."

The heroal construction principle as well as the highest standards in research and development allow heroal system solutions to achieve the best performance characteristics in matters of security, ease of use and structural engineering as well as heat insulation (protection from the cold and heat), while keeping the use of materials to a minimum. This not only reduces the initial material input and carbon footprint of a building, it also contributes to a low long-term energy use by the building without having to compromise on function, appearance and architecture. Our products therefore make an important contribution to building certification in line with international sustainability standards such as DGNB, LEED and BREEAM.

Thanks to the heroal modular and system concept, different product areas can be seamlessly combined in a building project and the concepts set themselves apart with their high level of standardisation, use of the same parts and flexibility. For instance, heroal's W 77 window system and the heroal C 50 HI curtain wall system together with the heroal VS Z CS textile screen provide a modular and perfectly coordinated complete solution for all performance characteristics up to passive house compatibility with maximum durability.

The use of recyclable materials such as aluminium means that heroal systems can be largely recycled at the end of their service life and after removal from a building. The next section takes a closer look at the certified recyclability of our systems and aluminium.



Sustainable products

The material of the future.



CO₂-reduced aluminium

heroal uses aluminium in many areas of the product portfolio. This is a material whose exceptional properties set it apart in a whole range of respects. The coating technologies give aluminium products an extremely durable, high-quality surface that retains its exceptional weather- and corrosion-resistant properties even after decades of use and is essentially maintenance-free. The high material stability enables unique aesthetics with slender profiles, even for very wide structures – all while keeping the use of material and weight to a minimum. To further reduce the carbon footprint of aluminium, heroal uses CO₂-reduced aluminium. By doing so, heroal actively contributes to climate protection while still offering technologically and environmentally sustainable solutions.

CO₂-reduced aluminium is produced using renewable energies generated by wind, water or the sun. This enables a significant reduction in CO₂ emissions during production. Another major aspect is the increased use of recycled aluminium, which uses just 5% of the energy compared to primary production. As this can be manufactured without any loss of quality, the material can be infinitely reused. As a member of the A|U|F e.V., we support the environmentally-friendly reuse of aluminium from old construction elements. This allows us to ensure that our products are recycled at the end of their life cycle, which conserves resources and helps to reduce CO₂ emissions in the building industry.

heroal Low Carbon Aluminium*:

- Carbon footprint: Has a global warming potential value up to a minimum of 1.9 kg CO₂ e/kg aluminium (LC-Al C1.9) per profile
- Recycling ratio: Contains a share of up to 75% post-consumer material (LC-Al R75)

* based on a mass balance approach as defined by ISO 22095

New materials, extended portfolio

In 2025 we will be expanding our product portfolio for windows, doors and curtain walls with CO₂-reduced and recycled aluminium – heroal Low Carbon Aluminium. This will reduce the carbon footprint to up to 1.9 kg (LC-Al C1.9) with a recycling rate of up to 75% (LC-Al R75). This offer is certified by DEKRA. Compliance with the characteristic values is therefore constantly externally reviewed and ensured.

The path to a more climate-friendly future

The combination of renewable energies, innovative production methods and recycling has transformed aluminium into a critical material on the path to climate neutrality. heroal Low Carbon Aluminium is our contribution to improving the sustainability of buildings and reducing their carbon footprint.

heroal Low Carbon Aluminium is more than just a short-term response to current emissions reduction requirements, it is an innovative material for sustainable living spaces. heroal's Low Carbon Aluminium offer provides tailored solutions for fabricators, architects and planners alike. It enables a significant reduction in the emissions generated during the construction phase. At the same time, our partners benefit from a transparent overview of the CO₂ values and recycling mix of the materials used as well as from the recycling potential at the end of the product life cycle. This documentation helps heroal partners plan and realise high-quality and sustainable building projects.

heroal is committed to Low Carbon Aluminium because we are convinced that sustainable solutions are the path to a climate-neutral future. By working together, we can help shape the future of the building industry with a focus on innovation, climate protection and responsibility.



Sustainable products

Exceptional product life cycle.

Cradle to Cradle-certified heroal products

Buildings are responsible for around 40% of global energy consumption. At the same time, they also account for a significant amount of raw materials that can be reprocessed and reused if they are incorporated in a recycling loop. This is precisely what the Cradle to Cradle principle describes.

The sustainability of a building lives and dies by the materials used. Certification according to Cradle to Cradle Certified® attests to the comprehensive sustainability of products along the entire product life cycle – from production through to use and ultimately their return to the recycling loop. As the environmental compatibility of materials and production, the separability of the components and their reusability and recyclability need to be considered in the product planning phase, the Cradle to Cradle (C2C) certification is another step towards integrated sustainability in construction.

heroal products have been C2C certified since 2022. heroal window, lifting/sliding systems, door systems and curtain wall systems, fire protection doors and curtain walls are certified with C2C Bronze.

The certification includes 36 heroal window, door and curtain wall systems. The recertification in 2024 showed the progress that we have made in the criteria as well as expanding our retail portfolio with various complementary products in collaboration with our suppliers.

As a result, we can offer builders, investors and architects complete system solutions fully certified in line with the Cradle to Cradle seal guidelines for their building projects.

Besides the aspect of Cradle to Cradle-certified recyclability, the sustainability of heroal system solutions is also verified by a range of additional tests and audits. Life cycle assessments as defined by DIN EN ISO 14040/14044 analysed the effect of more than 30 environmental indicators, including GWP expressed in CO₂-equivalents, over the entire product life cycle. The results are documented in EPDs as per 15804+A2. As 80% of the air that humans breathe in every day is indoor air, heroal window, door, sliding and curtain wall systems underwent VOC testing based on the AgBB scheme and the French regulation concerning VOC emissions. The results speak for themselves – and for the sustainability of heroal products and systems.



Sustainable products



cradle to cradle

36 heroal systems are Cradle to Cradle Certified®

Category	Windows	Doors	Lifting/sliding doors	Curtain walls	Fire protection doors	Fire protection curtain walls
Material health	Bronze	Bronze	Bronze	Bronze	Bronze	Bronze
Material reuse	Gold	Gold	Gold	Gold	Gold	Gold
Renewable energies and CO ₂ management	Silver	Silver	Silver	Silver	Silver	Silver
Water and soil management	Silver	Silver	Silver	Silver	Silver	Silver
Social responsibility	Gold	Gold	Gold	Gold	Gold	Gold

Sustainable right from the very beginning.

From the material through to delivery: our sustainable supply chain

The responsible use of resources has long since been part of heroal's corporate philosophy. These days, this is backed up by countless examples, from the selection of raw materials through to energy savings in the production process and the climate-friendly distribution of our products. We are constantly seeking new opportunities to optimise the carbon footprint of our system solutions, which they generate from their manufacture and decades of use, along the supply chain. In procurement, we have been selecting local suppliers for decades. The transparency required from our suppliers in terms of sustainability criteria has enabled us to determine our complete carbon footprint since 2020.

The use of the latest energy-saving production plants allows us to further reduce our energy requirements. This is reduced even further through intelligent combination. For instance, we use the waste heat in one step of the production process as the energy source for another. We are constantly analysing the use of new technology to reduce our current energy use. We are also constantly expanding the use of renewable energies and continuously reducing energy losses along the value chain. We already cover 100% of our electricity demand with renewable energies.

For transportation, we predominantly use reusable pallets and have our own modern, energy-efficient fleet of lorries, with Euro 6 badges, for our European deliveries.

Our action plan to reduce the carbon footprint is based on two pillars with a view towards the supply chain: in addition to reducing emissions as a consequence of our production activities, which we can influence directly, our activities also target indirect emissions that occur along our value chain. As they account for a relevant portion of our total carbon footprint, we are working together with our partners to continuously reduce these as well. Overall, we are targeting a 50% reduction in our total carbon footprint by 2030 compared to 2020.



Sustainable supply chain





Motivating workplaces.

The heroal spirit – values that are important to us

Proximity to the customer, innovation, quality, teamwork and responsibility – these values describe what heroal stands for. We call them the "heroal spirit", which characterizes our work and our interaction, and also represents a promise to our customers and business partners. The heroal spirit creates a positive, constructive work environment that gives all employees the opportunity to contribute their individual strengths, further their personal development, join together as the heroal team to make a difference and, ultimately, provide the best possible service for our customers.

We know that we can only pursue and realise our goals together as a team. That's why the collaboration at heroal is based on openness, trust, mutual respect, a focus on results and commitment. The heroal Leadership Framework supports the implementation and development of these goals at both an organisational and individual level.

Personal development and lifelong learning – working together for a successful future

The commitment and expertise in the heroal team are the foundation for the successful implementation of our corporate strategy and for ensuring that we remain the first choice system partner for our customers in future. We support this by creating a modern work environment that promotes individual strengths and enables personal development. Our onboarding process ensures a successful start and helps quickly integrate new employees. The heroal orientation days encourage networking and help new employees get to know the company. This networking continues to be fostered with after-work events.

We support the continuous development of our employees with regular meetings that identify strengths and areas of development. What's more, we are also an Entrepreneur Club partner, which



focuses on transparently highlighting career opportunities in family-owned companies. The heroal Academy offers training and further education to enable flexible learning. Lifelong learning is critical if we want to adapt to changing market requirements. We place great importance on training young people and have been awarded the BEST PLACE TO LEARN® seal of quality.

Work safety and health – the heroal occupational health and safety management system

The health and safety of our employees is a top priority. To ensure that this remains the case into the future, heroal introduced the occupational health and safety management system (OHSS). Healthy employees naturally require healthy workplaces. Workplaces are constantly optimised through their ergonomic design and workplace health promotion. Employees have access to medical offers and have the opportunity to get actively involved in a range of sports teams. Beyond this, we also place great value on mental health and family-friendly workplaces. For instance, we have set up a daycare centre to provide a better work/life balance. Events such as heroal After Work, Christmas@heroal, apprentice excursions and family events provide a great opportunity to spend time with colleagues and have a chat in a relaxed environment.



Sustainable corporate culture



Personal development



Work safety and health

Active for the community.

Compliance management system

The compliance management system set up by heroal aims to ensure responsible and ethical conduct and compliance with statutory regulations across all areas of the company and in all situations. Our transparent and compliant guidelines establish a code of conduct for business activities, ranging from integrity to competition rules. Open and proactive communication informs employees about all compliance topics. The heroal whistleblower system encourages all employees to report suspected misconduct.

The compliance organisation, comprised of the Compliance Officer and Compliance Committee, takes action if there is a possible indication or report of a compliance case.

Responsible partnerships

The sustainability strategy is firmly entrenched across the entire value chain and is also a contractual requirement in heroal's relationships with suppliers and business partners as part of the heroal Code of Conduct. Laws and standards as well as our national and international growth ambitions require a careful and sustainable risk analysis and the consistent and standardised auditing of our business partners.



Aktion Kleiner Prinz
Internationale Hilfe für Kinder in Not e.V.



Just three examples of the countless associations and organisations that heroal supports.

We regularly conduct these audits using a "Third Party Monitoring Tool". heroal has a comprehensive Due Diligence system in place that it uses to audit all existing and potential business partners for compliance with ESG criteria (human rights and environmental due diligence obligations, fraud and corruption) as well as other economic, legal and financial risks. The Management Board's mission statement and the third-party guideline affirms our commitment to taking responsibility for the protection of human rights and the environment within our supply and value chain.

Social responsibility

As a company with regional roots, we feel very strongly about our local environment, region and people. For instance, heroal supports local foundations, aid organisations and cultural events as well as regional schools and sports clubs either financially or with donations in-kind.

Yet we also support non-profit associations, organisations, projects and initiatives beyond the region, particularly those in the social and environmental sphere. This extends from sport and health, art and culture, education and science, through to charities and programmes as well as support for international aid organisations.



Responsible business



Responsible partnerships



Social responsibility



"We believe that part of our responsibility is to make a positive contribution to tackling the social challenges of our time at both a regional and global level. We support both regional as well as international charitable projects, with a focus on supporting children and young people who are in particular need of support."

Dr Max Schöne, CEO (fifth generation)



MIX
Papier | Fördert
gute Waldnutzung
FSC® C021366

Roller shutters | Sun protection | Roller doors

Windows | Doors | Sliding doors | Curtain walls | Patio roofs

heroal – Johann Henkenjohann GmbH & Co. KG

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