



SUSTAINABILITY REPORT 2024

# Breakaway riders in sustainability - our roadmap



<sup>»</sup> Sustainability at management level

#### 2022

- » Carbon neutral Scope 1 & 2
- » Health & Safety ISO 45001 certification
- » Increased share of recycled raw materials
- » Signed Packaging Pledge

### 2021

- » Increased use of energy-efficient technology
- » Completed Lifecycle Assessments on key products
- » Added two new more sustainable raw materials and continued the research for more sustainable raw materials
- » Developed and launched a spoke protector made of recycled materials
- » Renewable & FCS certified packaging
- » First annual GHG calculations for Scope 1, 2 and 3 (baseline year 2019)



- nology » Electrical fork-lift trucks for internal logistics
  - Increase of internal recycling of production waste
  - » Developed and launched Grip Nucore with biobased raw materials.
  - » Deepened LCA knowledge
  - » Eco-Design Guidelines
  - » Product scoring from a sustainability point of view



- Increased share of biobased raw material in Grip Nucore, with OK Biobased certification from TÜV Austria
- Implemented recycled raw materials for chainguards and selected lights (CL3, Nordic Carrier)
- » Continued research for biobased and recycled raw materials for rimtapes
- » Continued research and tests, recycled aluminum for lockrings
- » Improved productivity and reduced waste
- » Implemented new safety observation tool

# What are we working on next?

2025

- 1. Embracing AI and smarter ways of working
- 2. Stronger inhouse LCA calculation capabilities
- 3. Waste reduction projects in the manufacturing process
- New research and testing facilities, for even faster testing and implementation of biobased and recycled materials.

# Scope 3 is the challenge – let's deal with the hard part

When we made our first  $CO_2$  carbon footprint assessment back in 2020 it became obvious that Scope 1 and 2 will be the easy parts. As for most other manufacturing companies, scope 3 is the hard part that needs to be addressed to make a real impact.

Measuring is knowing, but a goal is just a simple wish without a plan. So, we set ambitious goals, and we outlined a step-by-step plan, with the aim to reach carbon neutrality by 2035.

#### **The hard part:** Tackling Scope 3

A plan without execution has no value as such either. Since 2022 our operations are carbon neutral in Scope 1 and 2 and we have now turned our full focus to Scope 3, where the real emissions lie. The main opportunity in scope 3 for us all starts with how we design our products. After endless hours of trial and error, I'm especially proud that we've implemented more biobased materials alongside recycled materials. key to transparency. And this isn't just talk – our Nucore Grip Series is now TÜV-certified with a two-star Biobased OK rating. Our R&D team is always on the lookout for new technologies and more sustainable materials to make sure our products are increasingly environmentally friendly, while keeping top-notch quality and performance.

# Lowering waste and pushing material development further

We are also continuously finding ways to cut down on waste in our manufacturing process. **We grind and reuse our own production scrap**, and continue optimizing processes to reduce waste at the source. Our extensive research project together with universities and local partners to find future possible ways to progress in both new materials and product scoring has geared up.

#### **People First:** Our Social Responsibility

A respectful, inclusive culture isn't a benefit - it's a requirement and the baseline for how we work together.

Our company value lead words Hungry & Humble, while Kind & Professional fuels a driven, inclusive and collaborative team, driving innovation and success.

#### Partnering for Impact

Sustainability is an ongoing journey that needs teamwork and creativity, because all solutions do not exist yet. That's why we work with suppliers, customers, and other partners to push for sustainable practices throughout our value chain. By joining forces, we can create solutions that benefit our business, the planet, and society as a whole.

#### Let's move faster - Together

As we move forward, we're determined to keep improving and inspiring others to join us in this crucial mission. It doesn't get any easier, but **we can go further and faster together!** Thank you for your continued support, and let's work together to build a more sustainable future.



"It would be easy to find many excuses for not making sustainability a priority in the current geopolitical and market situation, but we have made a conscious choice to keep up the work, and we will continue to walk the talk", Herrmans' CEO **Dan Liljeqvist** firmly states.

Standardisation and certification are

# Four ways we're reducing material impact

There isn't really a completely green bike grip or front light. Not yet. And we recognize that there are still many challenges to overcome in our industry. But that hasn't and shouldn't stop us in the bike industry from pushing forward and aiming to do better every day.

One of the most important ways we can reduce our impact is by cutting emissions in Scope 3, mainly through the materials we use in our products.

We're working on several parallel paths to make this happen:

## 1. Biobased plastics

Reducing our dependence on fossil-based materials is a key priority. We're shifting toward biobased plastics, made partly or entirely from renewable biological sources. The raw materials we use come from responsibly grown vegetable crops intended for industrial use, grown in poor soil not suitable for food production. These crops also absorb  $CO_2$  while growing, making it a win-win. Our Nucore grip is now TÜV-certified with a 2-star Biobased rating, which confirms our progress.

## 2. Recycled materials

There's already a lot of fossil-based plastic in circulation, so it makes sense to reuse it where possible, without compromising on performance. We've introduced several new products using recycled plastics, including chainguards, the CL3 front light, and the Nordic Carrier rear light. In product development, we always explore how recycled materials can be used, and we continuously evaluate existing products for potential material updates.

# 3. Waste reduction and recycling

We reuse scrap material from our own production by grinding it back into granules and mixing it with new material. But we also aim to prevent waste from occurring in the first place – through thoughtful product design and efficient production. We carefully sort all waste to maximize what can be recycled, and we're working to reduce the waste percentage year by year.

## 4. Circular design

Durability is key – but we also want to make our products easier to repair and upgrade in the future. We're still in the early stages of exploring what circularity should mean for our product design. We're currently developing a scoring system that will help assess and compare sustainability and repairability across our product portfolio. It's a complex challenge, and we don't have all the answers yet, but we're especially interested in how modularity and part availability could help create smarter, longer-lasting bike components over time.

# Greenhouse Gas Emissions – 2024 Update

It's a demanding target, but we remain committed to fighting climate change. Despite a year of market downturn, we have maintained our determination and continued to push forward with concrete actions toward that target.

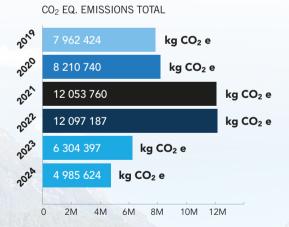
In 2024, our total carbon footprint was 4986 t CO<sub>2</sub>e, marking a 20% decrease compared to 2023. Importantly, our relative carbon footprint – which reflects emissions per euro of revenue – decreased from 0.32 to 0.31 CO<sub>2</sub>/EUR, demonstrating steady progress even in a year of reduced operations.

Scope 1 and 2 emissions remained at zero, with just 4 t  $CO_2e$  from one diesel forklift and a company car – both offset through a VERRA-certified project aimed at preventing deforestation in Borneo, Indonesia.

As in previous years, most of our greenhouse gas emissions came from purchased goods, especially raw materials. A reduction in overall raw material purchases contributed to the lower emissions this year.

While year-to-year changes depend on many factors, what stands out is that our progress didn't pause – even in a slower business year. We are proud to report that Herrmans Bike Components continues to move in the right direction.

### Carbon Footprint Scope 1-3 <sup>CO₂ Total</sup>



Achieving carbon neutrality starts with understanding where our emissions come from – and taking honest stock of where we stand today.

# Carbon Footprint Intensity CF Intensity CF/€

CO<sub>2</sub> EQ E / REVENUE INDEX



# **Carbon footprint – Measuring progress**

By calculating our carbon footprint, we gain insight into the volume of greenhouse gases generated by our activities. This value, expressed in tons of  $CO_2$  equivalents per year, reflects a combination of direct and indirect factors including product groups, market trends, and the emissions associated with our supply chain, production, and business operations. Factors like changes in sourcing, materials, or product mix can cause our footprint to fluctuate year to year. To ensure accuracy, our calculations are aligned with the GHG Protocol, which defines a range of **scopes and categories**. These determine what types of emissions are included and how responsibility is allocated. We prioritize emission sources that are both material and within our influence, while planning to expand our coverage as our tracking capabilities grow. It's important to note that measurement accuracy is an evolving process. As data and methods improve, so does the quality of our insight into our footprint. Changes in scopes or newly included categories move us closer to a truly comprehensive view. As our understanding grows, so does the credibility and completeness of our data.

All emissions associated with our headquarters and production facility in Pietarsaari, Finland are accounted for. We treat sustainability as a long-term commitment – one that calls for consistency, collaboration, and a clear sense of direction. Our efforts this year show consistency under pressure, and a commitment to doing better, even when resources are limited. There is more to be done, and we are keeping the foundation strong for the next big steps.



Carbon footprint calculations include operations in Finland.

Not included in the calculations

# Certified biobased material for Nucore grips

As part of Herrmans Bike Components' commitment to more sustainable product development, the Nucore grip series has received the OK Biobased 2-star certification from TÜV Austria. This third-party certification confirms that the grips contain a significant proportion of renewable raw materials.

The OK Biobased system provides a standardized method for measuring the biobased content of products. It uses carbon-dating (C14 analysis) to classify products on a star scale from 1 to 4, based on the percentage of renewable carbon content. Products with 20–40% biobased content receive 1 star, while 4 stars are awarded to products with more than 80% renewable content.

For the Nucore grips, the outer layer is made of a biobased TPE compound derived 60% from renewable sources. When considering all components of the grip, the total biobased content reaches approximately 50%, placing the product in the 2-star category under TÜV Austria's certification scheme.



This certification provides independent validation of the material composition, reinforcing Herrmans' efforts to improve transparency and traceability across its product portfolio. It also supports a broader shift away from fossil-based plastics by enabling more accurate comparisons of renewable content within and across industries.

Biobased between 20 - 40 %



Biobased between 40 -60 %



Biobased between 60 - 80 %



Biobased more than 80%





Joel Savikko, General Manager R&D at Herrmans Bike Components, explains:

"Certifications like OK Biobased give us a reliable way to communicate what's behind the materials we use, with the help of transparent, scientifically backed data. The certifications bring clarity to sustainability discussions and support customers, partners, and stakeholders in making informed choices. With a third-party test, it's possible to make real comparisons between products available on the market."



BIOCOMPOSITE with natural fibers and recycled polypropylene



from plant and vegetable crops

# Growing our portfolio of products made of recycled material

At Herrmans Bike Components we continue to expand our sustainable product portfolio, following our commitment to reducing environmental impact through dedicated material research and product innovation.

As a direct result of this targeted research, we have successfully transitioned all black chainguard models of chainguards Halo, Slim and Slyde to 100% recycled ABS plastic. These updates expand Herrmans' portfolio of chainguards in recycled ABS plastic to four models, including the previously launched Fuse chainguard.

This significant step forward enables a considerable reduction in the carbon footprint of these components – by up to 90%, depending on the specific model.

"Our commitment to sustainability drives each new step we take", explains **Ronnie Mattsson**, Product Owner Grips, Guards and Rim tapes at Herrmans Bike Components. "Through thorough testing and continuous improvement, we ensure that our recycled ABS chainguards deliver the same excellent surface finish, durability, and overall quality as traditional virgin materials. As an environmental engineer and passionate cyclist, I couldn't be prouder of how Herrmans is helping to move the industry forward".

These changes are one more step in reducing the impact of our full product portfolio – and in showing that smart material shifts are possible without trade-offs.

**Our goal remains clear:** to steadily replace virgin plastics with more sustainable, recycled alternatives, without compromising on the high-quality performance and durability our customers expect.

Our first front light with housing made of 100% recycled plastic – the small but mighty Nordic CL3

Nordic CL3 is the latest sibling to enter the Nordic family of front and rear lights. It is a minute and compact light, but one that comes with a strong personality. It uses a collimator lens, which makes it possible to keep the size of the light small, the price appealing and offer a very good light pattern with its 30-lux output. The low energy consumption makes it possible to use recycled plastic in the housing, something that in many cases is difficult to do. A LED light needs efficient cooling to maintain the promised light output, so normally you need to use a less sustainable plastic or aluminum, which both come with a much larger carbon footprint. In the case of CL3, our R&D team managed to combine the best of two worlds, using a recycled plastic raw material with 94% lower footprint than the virgin equivalent.

#### **Ronnie Mattsson:**

What are the next steps for Herrmans' portfolio of products made of recycled materials?

Ronnie is secretive but gives a few hints: "We are testing options for how to replace aluminum components with recycled aluminum instead. Aluminium has quite a large footprint, and replacing these materials with recycled options can quickly make a big impact. We are also testing bio-based plasticizers for some products." "We are always scanning for raw material developments, and we are testing several options that can replace plastic or metal parts that are so far only available as virgin materials in our products, especially in lights and grips", Ronnie mentions.

Recycled materials will not solve all the sustainability challenges in our industry, but they are an important sheet among the blueprints to offer bike manufacturers and consumers the possibility to choose products that are responsibly made with sustainability in mind.











# The art and science of sustainable design

At Herrmans Bike Components, Creative Lead **Thomas Finnäs** plays an essential role in merging innovative design with practicality. His work isn't just about creating visually appealing bike components; it's about designing products that are efficient, durable, and environmentally responsible.

"Using sustainable materials adds value to the product if done right," Thomas explains. His approach is a combination of curiosity, creativity, and technical expertise, all aimed at pushing the boundaries of sustainable design.

## Sustainability is a spark, not a limitation

For Thomas, sustainability is not a limitation - it's a creative challenge that sparks innovation. His journey began with experimenting with different bio-based materials, eventually leading to the breakthrough Nucore grip series. A significant step was collaborating with suppliers to develop novel customized materials, which enabled Herrmans to obtain TÜV certification for the Nucore series.

## Pushing boundaries of what is possible in sustainable manufacturing

The process, however, is not without its difficulties. "*Testing, testing, testing,*" Thomas emphasizes. Finding materials that meet high standards of performance, aesthetics, and sustainability is an ongoing challenge. "*There are many materials out there, choosing one that works, and is scalable to industrial use isn't easy.*" Collaboration plays a key role. "*It's a long collaboration from the very first idea to a* 

*finished product,*" he explains. Working closely with engineers, sales teams, and external partners is essential to transform innovative concepts into practical, market-ready products.

## Ambitious goals for designing a better future

Looking ahead, Herrmans' research team has an exciting vision: a product portfolio made up of 50% biobased and 50% recycled materials by 2030. Achieving this vision requires strategic planning, extensive testing, and boosting production volumes to make sustainable options more affordable. "*The goal is clear - now we make it happen.*"

Ultimately, Thomas's work is about more than just creating appealing designs. It's about contributing to a more sustainable future for the cycling industry. "*It's about making something better - not just for today, but for the future – and of course, the products have to look cool too.*"



Creating beautiful, functional, and sustainable products requires a delicate balance between creativity and pragmatism. "*It's a bit like cooking – you make the best of the ingredients you have*," Thomas Finnäs says, describing his approach of letting materials speak for themselves rather than forcing them into predetermined designs.



# People first – making safety a part of how we think

At Herrmans, we believe that our people are our foundation. Maintaining our health, keeping us safe, and improving our wellbeing is first a core part of our company culture and values, and a legal obligation second. It reflects our values: being Hungry and Humble, while always Kind and Professional.

In 2021, we launched a dedicated Health & Safety uplift project, laying the groundwork for a safer and more proactive working environment. This commitment helped us successfully earn ISO 45001 certification in 2022, a big milestone on our path to improve everyday safety. We strengthened and formalized our approach to continuous safety risk management.

We are not shy about asking for help when needed. Throughout the process, we have worked closely with local authorities to benchmark against best practices – not just to meet minimum standards.

#### Indicators of Success

## To measure our progress and maintain momentum, we focus on several key indicators:

- More safety observations, and we can see results in more people actively engaged in preventing accidents
- An increased number of improvement proposals, showing active participation and ownership
- Risk assessments show a decrease in risk
- More internal health and safety trainings that raise awareness and competence

#### 2024 Wins

#### - Zero Workplace Accidents

One of the most significant achievements in 2024 was the implementation of our new safety observation tool, which helped us achieve something we are proud of: zero workplace accidents in 2024. That result reflects day-to-day attention from everyone, not just new tools.

"We continue to develop a safety culture where everyone is engaged and aware. True safety isn't just about policies, it's about looking out for one another, speaking up, and learning together"

#### Erik Brännbacka

Operational Excellence Director

# Resilience and commitment in challenging times

The past few years have been demanding for the entire bicycle industry, and Herrmans Bike Components has been no exception. Like many others, we have had to make difficult decisions, adapt to changing market conditions and unfortunately say goodbye to some of our valued colleagues. However, throughout these challenges, our commitment to success has remained strong.

Guided by our core values – Hungry and Humble, while always Kind and Professional – we have navigated this period by relying on our strengths and staying true to what makes us Herrmans.

# Extensive experience meets fresh perspectives

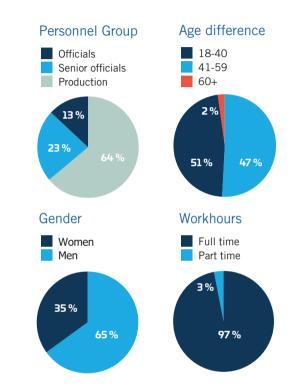
At Herrmans, our people are the foundation of our success. We are proud that many employees have been with us for 10, 20, 30, and even 40 years, reflecting deep industry expertise, consistency, and dedication that directly benefit our customers. At the same time, with an average age of 43, we combine extensive experience with fresh perspectives, creating a dynamic and innovative environment that translates into better products, faster problem-solving, and reliable service.

## Staff wellbeing to ensure best-in-class service

We believe in working smart and efficiently by creating a sustainable work culture that ensures our employees can both thrive professionally and lead fulfilling lives outside of work. As a customer or partner, we want you to interact with energized and committed Herrmans professionals, who are genuinely engaged in delivering excellent service. This is why we continuously invest in well-being initiatives, ergonomic improvements, health support, and leadership development. These efforts ensure our workforce remains motivated, healthy, and capable of delivering the exceptional service you can expect now and in years to come.

Looking ahead, we continue to build on our strengths, investing in innovation and sustainability while ensuring our employees have the tools and support to succeed. The challenges of recent years have reinforced our belief in the power of teamwork and a shared vision. With our dedicated people and strong values, Herrmans is well-positioned to continue shaping the cycling industry, supporting your success through quality, reliability, and passion.





"Our staff's capability to stay passionate and committed even during tough times has been amazing. The way our teams have continued to ensure that our customers and partners can rely on stable, consistent quality and service has truly impressed me during the last two years"

Veronika Holm HR Business Partner



# Getting better where it matters

# EFFICIENCY, COMMUNICATION, AND LESS WASTE

In 2024, we made significant progress in enhancing our production processes, internal communication, and sustainability efforts. By systematically addressing daily operational challenges, we improved productivity and reduced waste across the company. These achievements not only strengthen our manufacturing capabilities but also contribute to Herrmans' commitment to sustainability and quality.

## Clearer communication and planning

One key area of focus was improving how our production teams communicate and react to changes. We placed considerable efforts on making daily communication smoother and more efficient, enabling quicker responses if something interferes with our plans.

We implemented a new planning system to increase transparency across all departments. Plans are now clearly visible company-wide, making information easily accessible and reducing uncertainties. The new system also lays a strong foundation for future digitalization efforts planned for 2025.

#### 300 improvements – and counting

In 2024, we significantly enhanced our measurement and monitoring capabilities. By introducing new Key Performance Indicators (KPIs), we improved our decision-making processes, particularly regarding production efficiency and waste management.

But measuring alone isn't enough to change anything. Throughout the year, we actively addressed identified inefficiencies by implementing over 300 improvement initiatives within production. Many of these improvements focused on eliminating the seven types of waste (known as "seven mudas"): transportation, inventory, motion, waiting, overproduction, over-processing, and defects.

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## Significant waste reduction in injection molding

A tangible result of our focused improvements was a 1 percentage point reduction in scrap generated by our injection molding operations – which is quite a huge achievement in manufacturing contexts.

This improvement was achieved through practical measures, such as enhanced sorting methods on high-volume machines, leading to better separation of usable materials from waste. We also installed additional conveyor belts, reducing manual handling waste and increasing material efficiency.

## Optimizing warehouse operations and reducing plastic use

Our warehouse team enhanced efficiency by streamlining the picking and shipping processes for customer samples. A notable improvement was the introduction of a paper void fill machine, significantly reducing our use of plastic packaging in sample shipments.

## Automated Assembly for the Nordic CL3

We've developed a completely new cell for fully automated light assembly of the new CL3 light. This setup eliminates unnecessary internal movements and transportation during production, streamlining the process and saving both time and resources. The result: faster production, more efficient use of resources, and a clear ergonomic improvement compared to traditional manual assembly.



Joel Kaitfors, Production & Supply Chain Director is pleased and rightfully so:

"Together, these initiatives have increased our factory's efficiency by over 10% when measured by output per work hour. We've implemented 300 improvements initiatives and reduced injection molding scrap by 1 percentage point, which is a huge step in reducing waste and increasing efficiency.

Success stories like these are only possible when the whole team is open to tackle challenges head-on. We have a team that is actively trying to improve the ways we work and doing so with great impact."