

[ Hako. Sustainable. Better. ]



# Hako. Sustainable. Better.

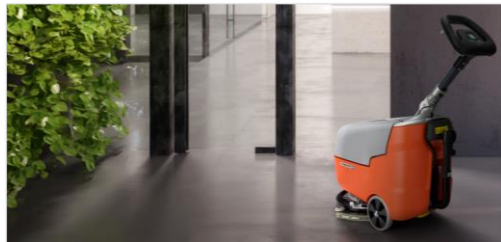
## Our Definition of Sustainability



As part of our commitment to sustainability, we focus on the needs of our customers and employees. Because sustainability is a team effort, we work in interdisciplinary project teams on sustainability issues in the following areas:

### Sustainable products

High quality.  
Durable.  
Intelligent.



### Employee development & social responsibility

Fair.  
Equal opportunities.  
Together.



### Ecological responsibility

Environmentally conscious.  
Resource-saving.  
farsighted.



### Sustainable business models

Holistic.  
Flexible.  
Customer-oriented.



The starting point for the development of our sustainability program is the materiality analysis carried out in 2022. We have formed interdisciplinary project teams for topics where there are major differences between the status quo and our strategic positioning.

<b>Circular economy</b>	<b>Energy and water consumption of products</b>
<b>Ecological management</b>	<b>Product-specific sustainability information</b>
<b>Diversity and equal opportunities</b>	<b>workational Training and further education</b>
<b>Communication and appreciation</b>	<b>Work-life balance and health</b>
<b>Compliance</b>	

<b>4 QUALITY EDUCATION</b>	<b>SDG 4: Quality education</b>	Education and training
<b>5 GENDER EQUALITY</b>	<b>SDG 5: Gender equality</b>	Reconciliation Work & Family Diversity & Equal Opportunities
<b>6 CLEAN WATER AND SANITATION</b>	<b>SDG 6: Clean water and sanitation</b>	Energy and water consumption Ecological management
<b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b>	<b>SDG 12: Sustainable consumption and production</b>	Circular economy Energy and water consumption Ecological management
<b>13 CLIMATE ACTION</b>	<b>SDG 13: Climate action</b>	Ecological management

When developing our products, we consider their impact on resources, people and the environment throughout their entire life cycle.



**Water reduction:**

- Our **AquaStop** water retaining ring leads to a water reduction of up to 50%
- Additional water can be saved through speed-dependent **water dosing**

**Energy savings:**

- Energy savings of up to 30% can be achieved with our **Eco Mode**
- Our **fully electric Citymaster 1650 ZE** is the beginning of the electrification of our municipal vehicles



**Noise emissions:**

- Noise emissions can be reduced by up to 30% (2dB) with our **Eco Mode**
- **Quiet brushes** reduce noise to a minimum
- Our particularly quiet municipal vehicles have been awarded the “**Blauer Engel**” environmental label

**Dust emissions :**

- We achieve a dust reduction of up to 90% with our award-winnig **DustStop**
- The **Eunited PM 2,5-10** certifications stand for the minimisation of fine dust emissions

**Chemical savings:**

- Our intelligent **dosing system** minimises the use of cleaning chemicals

**Ergonomics:**

- The excellent ergonomics are confirmed by the “Campaign for healthier backs” certification

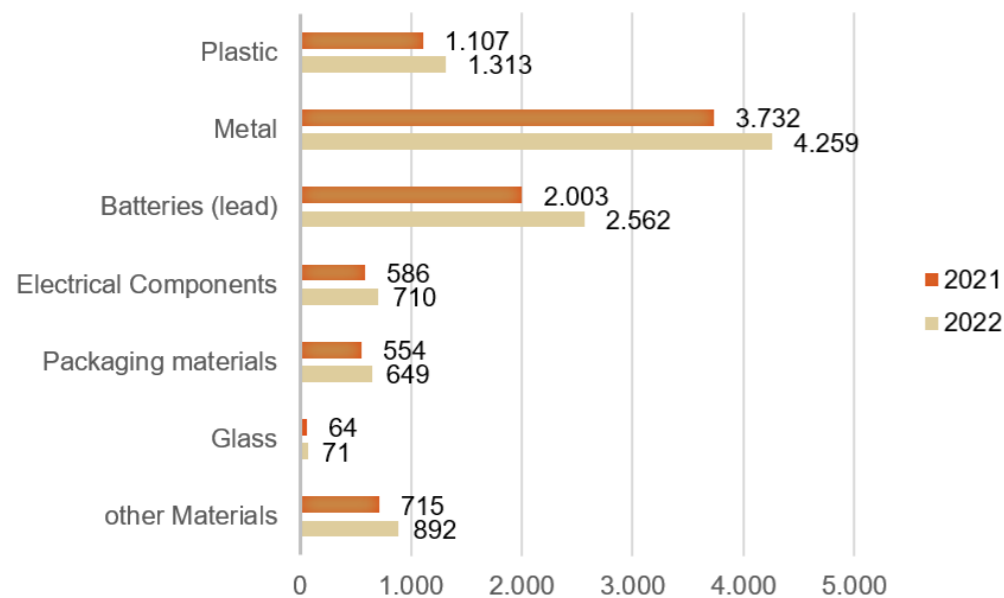
**Circular economy:**

- We use pollutant-free, durable, repairable materials for this purpose
- Our machines are made from up to 95% recyclable materials



Careful use of materials and sustainable waste management make an important contribution to realising the circular economy.

**MATERIAL USE IN TONS**



**Materials:**

- Environmentally friendly and durable materials to conserve resources and minimise waste
- Material-efficient and high-quality machine design
- Compliance with legal regulations in the context of material compliance

**Waste:**

- Waste separation by type wherever possible, to achieve high recycling rates
- Analysing waste data to identify potential for improvement
- Introduction of reusable packaging and transport containers in cooperation with our suppliers

# Hako. Sustainable. Better.

## Transparent sustainability data



The carbon footprints of our machines are regularly determined based on Scope 1 and 2 emissions. Compared to 2021, we have achieved savings of 19% per machine.

### PCF: Scope 1 & 2 (2022)

<b>Maschinentyp</b>	<b>CO2e [kg]</b>	<b>Maschinentyp</b>	<b>CO2e [kg]</b>
SCRUBMASTER B30	45,4	CITYMASTER 600	305,2
SCRUBMASTER B45	44,5	CITYMASTER 650	305,2
SCRUBMASTER B70	68,9	CITYMASTER 1250	366,2
SCRUBMASTER B75 R	82,3	CITYMASTER 1600	430,8
SCRUBMASTER B90	76,2	CITYMASTER 1650	430,8
SCRUBMASTER B120 R	107,1	CITYMASTER 1650ZE	359,0
SCRUBMASTER B175 R	200,0		
SCRUBMASTER B260 R	216,7	CITYMASTER 2250	4317,5
SCRUBMASTER B400 R	322,6	M27	2179,3
SWEEPMASTER 650	67,2	M29	3165,4
SWEEPMASTER 800	77,7	M31	2442,2
SWEEPMASTER 800 R	103,1	M31 Hydrostat	2748,5
SWEEPMASTER 900 R	126,9		
SWEEPMASTER 980 R	155,6		
SWEEPMASTER 1200 R	225,3		
SWEEPMASTER 1500 R	515,5		

Independent verification of our sustainability activities is important to us. We regularly undertake external certification in new areas.

TÜV certified  
AquaStop System

ISO 9001 / ISO  
14001 / ISO 45001  
Certificate

Certificate  
„Campaign for  
healthier backs”

Blauer Engel  
Certificate

EUnited PM2,5-10  
Certificate

EUnited Cleaning  
Efficiency Certificate



# Hako. Sustainable. Better.

## Transparent sustainability data



Hako. Sustainable. Better.

### Scrubmaster B5

Sustainability data

**Good for the environment. Good for the future.**  
The impact on resources, people and the environment has been considered right from the start and throughout the different development stages.

Optimal recyclability is achieved by using environmentally friendly, recyclable and durable materials.

- **Recycling:** Scrubmaster B5 is > 90 % recyclable\*
- **Reduction:** Cleaning tool carrier made of mono-material with > 50 % recycle

The patented, double-orbital cleaning system facilitates sustainable cleaning.

**DELTA**  
Cleaning System®

- Increased service life of the cleaning tools
- Reduced power consumption\*\*
- Reduced water consumption\*\*
- Consistent cleaning quality over the entire service life of the brush\*\*
- Reduced brush wear\*\*
- Reduced noise emissions
- Produced in Germany



\* The stated value refers to the theoretical recyclability of the materials used (85 % capture rate).  
\*\* Compared to a comparable machine with rotating brush head



Environmental supplier declaration according to DIN EN ISO 14021 [www.hako.com](http://www.hako.com)

Transparency and customer relationships are important to us.

We therefore prepare sustainability-related data on our machines and our company as transparently as possible.

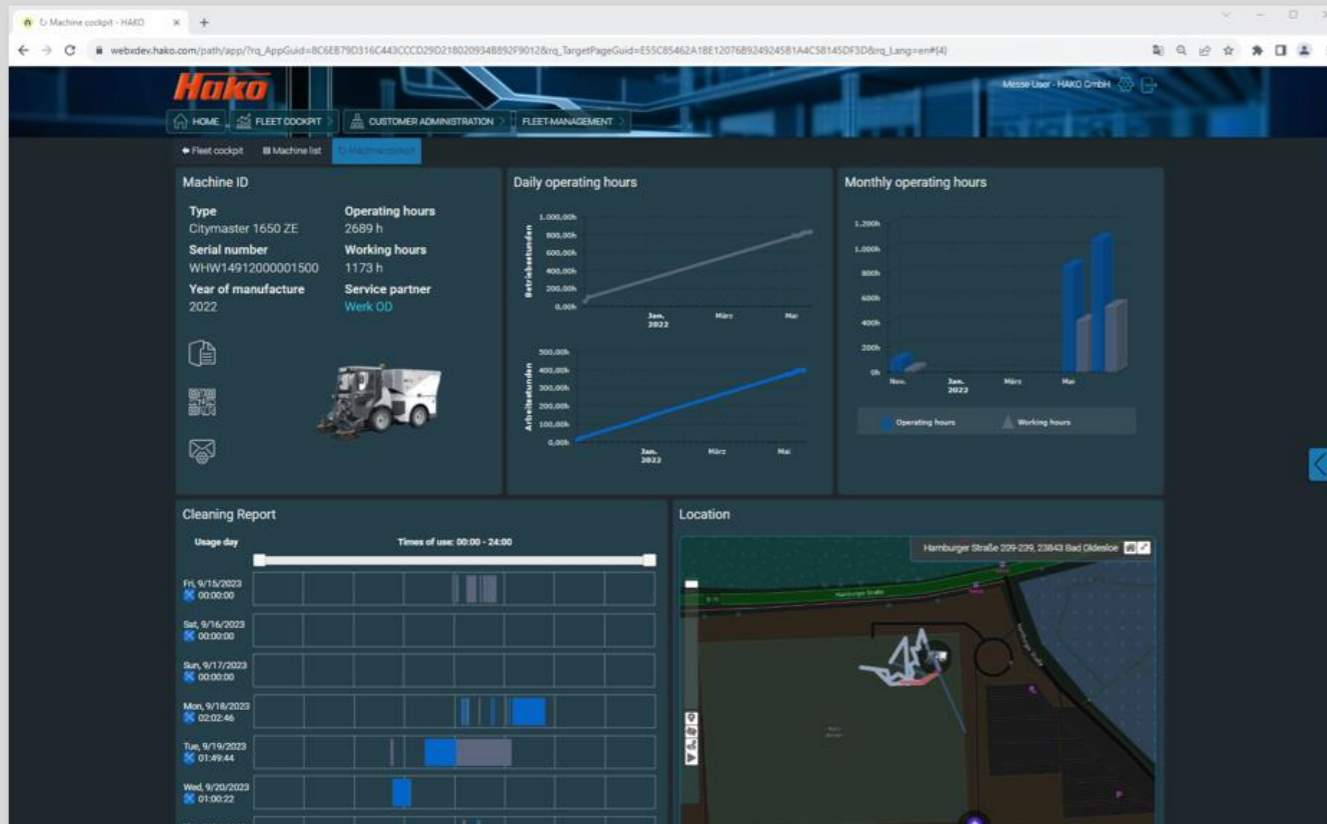


# Hako. Sustainable. Better.

## Sustainability data in the use phase



By integrating sustainability data into Hako Fleet Management, we aim to provide digital information on sustainability at machine level.



### Data from Fleet Management:

- Working and operating hours
- Machine utilisation (cleaning report)
- Service requests

### Sustainability data (in progress):

- CO2 footprint per machine
- Water consumption
- Energy consumption
- Recyclability
- Optimised use and maintenance for a long service life
- ...

We believe that all people should have the same opportunities to reach their full potential. We aim to achieve this through our involvement at several levels



Gruppe  
Norddeutsche  
Gesellschaft  
für Diakonie

#### **Integration company di.hako.tec:**

- As part of our shareholding in di.hako.tec, one of the largest inclusion companies (sheltered workshop) in Schleswig-Holstein, we are committed to employing people with disabilities in cooperation with the social welfare organisation Diakonie
- As a specialised machining and welding company, we prove that inclusion can succeed at the highest technical level

#### **Sheltered workshop Stormarner Werkstätten:**

- The **Sweepmaster M600** is manufactured in the sheltered workshop of the Stormarner Werkstätten

#### **Vocational training:**

- As a professional training company, we invest in the future of young talents and thus secure our future viability

#### **Social employer:**

- The well-being of our employees is important to us, we value good working conditions and collegial atmosphere.

#### **Occupational health and safety:**

- We ensure the health and safety of our employees with extensive measures such as monitoring accident and illness rates

#### **Diversity and equal opportunities:**

- It is important to us that all employees have the same opportunities and are treated equally, regardless of characteristics such as gender or skin colour

**STORMWERK**



Stormarner  
Werkstätten  
Bad Oldesloe



It is our responsibility to ensure that social and environmental standards in our supply chain are monitored and adhered to. Our Code of Conduct for Suppliers defines these standards and requires the commitment of our business partners.

#### **Supplier Code of Conduct:**

The Code of Conduct aims to ensure a high level of social and ethical competence through the best possible transparency.

The following basic principles are addressed:

- Compliance with laws
- Compliance with health and safety standards
- Responsibility for the environment
- Social responsibility through compliance with human rights
- Strengthening inclusion and diversity
- Fair competition
- Exclusion of bribery, corruption and tax evasion
- Ensuring the highest quality in products and services



We want to contribute to stopping climate change with a sustainable production. To this end, we are working on various measures to reduce our greenhouse gas emissions and close our material cycles.



**CO2-tracking:**

- We are tracking our Scope 1 and 2 emissions worldwide since 2021
- To fully assess our CO2 emissions, we are also working on calculating our Scope 3 emissions

**Measures to reduce emissions:**

- High building standards
- Usage of renewable energies
- Energy efficiency projects

**To close internal material cycles:**

- Use of reusable packaging
- Returning reusable materials to the production

Hako. Sustainable. Better.  
**Scope-1 und Scope-2 GHG-emissions**



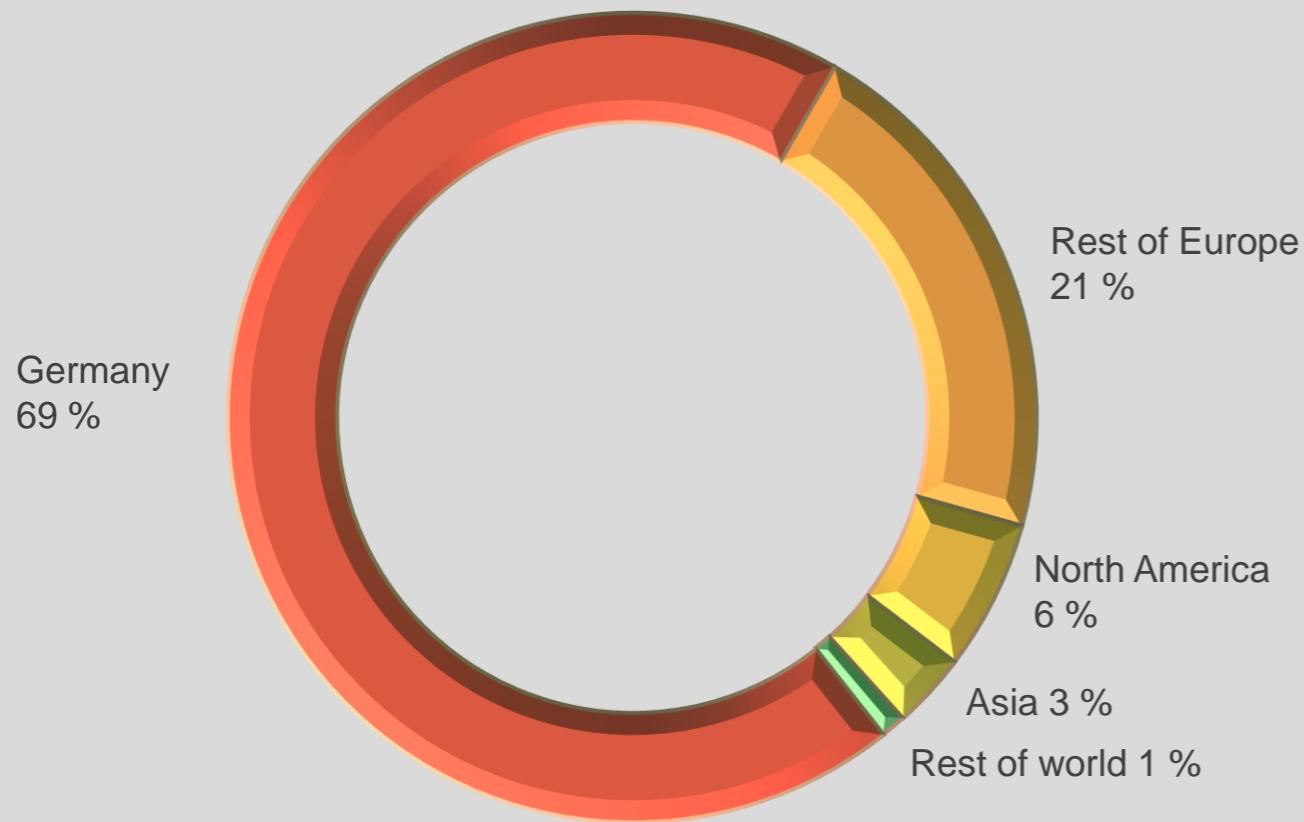
We continuously record and monitor our energy consumption and analyse the energy flows at our sites. From this, we derive specific measures to reduce energy consumption and increase energy efficiency.

kg CO <sub>2</sub> e		2022	2021
Scope 1	Diesel	1.626.526	1.687.828
Scope 1	Petrol	24.581	28.891
Scope 1	Natural gas	1.702.856	1.977.431
Scope 1	Biogas	651.105	852.972
Scope 1	Liquid gas	0	130
Scope 1	Heating oil	119.082	121.035
Scope 2 Electricity (conventional)		1.643.206	1.665.351
<b>Total</b>		<b>5.767.357</b>	<b>6.333.637</b>

**CO2 reduction:**

- Thanks to various energy efficiency measures and a change in heating behaviour, natural gas and biogas consumption was reduced by more than 2.000.000 kWh in 2022 compared to 2021.
- Together with other saving measures, this reduced our CO2 emissions by more than 500.000 kg of CO2.

We foster long-term and fair partnerships with our suppliers. In order to minimise transport routes, we attach great importance to regional partners wherever possible.



Local sourcing is important to us. For this reason, 69 % of our suppliers come from Germany and a further 21 % from the rest of Europe.

We monitor our global supply chain via an online platform to identify any violation of social and environmental standards in accordance with the German Supply Chain Act.

Producing durable and high-quality products is in Hako's DNA - this goes hand in hand with strengthening the recycling economy and protecting the environment and resources. Through flexible usage-models and excellent service, we pay attention to the environment.



**Extending machine service life:**

- Professional repair & full service offers keep the machines in optimum condition
- We give new life to our machines through professional refurbishment at our Used Machinery Centre and other locations.

**Flexible usage:**

- Rental options allow our customers to get the machine they want for exactly the time they need it.
- The multifunctionality of our machines enables different jobs to be carried out with just one machine

**Digital Service:**

- Hako Fleet Management allows you to record real operating data, save resources, automatically track service and maintenance, and automatically transmit machine data.

We will continue to focus on sustainability in the future. We are constantly working to make our products and our business more sustainable. This is why we have set ourselves concrete sustainability goals over the next years.

**Sustainable products**

High quality.  
Durable.  
Intelligent.



- Strengthening the circular economy
- Reduction of energy and water consumption

**Employee development & social responsibility**

Fair.  
Equal opportunities.  
Together.



Strengthening employee retention, diversity and equal opportunities

**Ecological responsibility**

Environmentally conscious.  
Resource-saving.  
Farsighted.



- Further reduction of CO2 emissions
- Reducing waste and water consumption

**Sustainable business models**

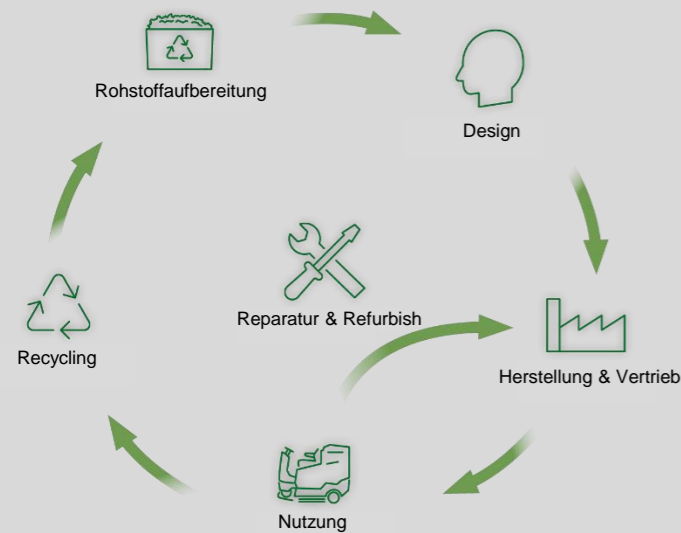
Holistic.  
Flexible.  
Customer-oriented.



Strengthening sustainable business models



A core concept for increasing product sustainability is circular economy. The circular approach conserves resources and reduces waste and emissions.



### Circular economy:

For a circular economy to be effective, the entire value chain needs to be considered - from the design of products, to extending their lifespan, to recycling and the return of resources.

We have already achieved a lot, particularly in the areas of durability and repairability, but we want to get closer to the vision of a circular economy by:

- Increasing the proportion of **recycled materials**
- Determining the **CO2 footprints** of our products
- Creating **guidelines** for the most **sustainable product development** possible

### Reducing the energy and water consumption of our machines:

The most energy-efficient machines possible with the lowest possible water consumption: this is the goal we are pursuing with this area of action, to which an entire project team is dedicated. A milestone will be the **100% electrified** new development of our **Sweepmaster** models.



Hako. Sustainable. Better.  
**The first step towards a circular economy**



We are starting on the path to a holistic circular economy with our B25 - the standard version is equipped with a fresh and wastewater tank made from 100% recycled plastic!



To ensure Hako quality, we only use our internal industrial recyclate. By reusing offcuts and rejects to manufacture the recyclate tanks, we close internal cycles. A controlled process of collecting, shredding and processing the PE material by type enables us to ensure identical quality compared to virgin material. A difference to tanks made from virgin material can only be seen if you look very closely, due to different coloured particles appearing from time to time.

We will start the series with **the B25 with recycled tanks on 31 March 2024!**

As the quantities of offcuts and rejects in our production are low, further hand-guided cleaning machines can only be realised as custom-made products on special customer request - with tanks in a unique mixed colour.

Hako. Sustainable. Better.

## **Employee development & social responsibility– our Goals**



Employee development is a key factor in further strengthening our sustainability objectives. We have therefore set ourselves targets in various areas.

### **Diversity and Equal Opportunity**

All employees should be treated equally and valued by us, regardless of gender, background or other characteristics. In order to further strengthen this principle, we will sensitize our employees in this respect and contribute to education: through constant information offers and the training of our managers.

### **Training and development**

Our training and development program aims to train young people, develop our employees and give everyone the opportunity to develop within Hako. To this end, we will expand our training program in the coming years, optimize our training standards and take measures to promote the development of our employees.

### **Communication and appreciation**

Transparent internal communication and mutual appreciation are the basis for an open, constructive and successful working environment. We aim to build on these strengths and ensure a better flow of information between our sites.

### **Work-life balance**

With a pilot project to introduce a 4-day working week and the targeted promotion of parental leave through information programs for employees, we aim to further improve the compatibility of work and family life.

We are constantly working on new measures to further reduce our CO2 emissions and continuously reduce the resources we use and the waste we produce.

### **Ecological management**

Making Hako more ecologically sustainable - this is the goal we are pursuing in the area of environmental management.

The most important areas that we can influence and want to reduce through our structures and processes are

- Energy consumption
- CO2 emissions
- Water consumption
- Waste generation

Our aim is therefore to set ourselves an SBTi-compliant climate target in the near future in order to sustainably reduce our CO2 emissions.

In addition, we want to test measures to reduce waste and water consumption through pilot projects at various locations to roll them out across the company if they are successful.