

Your partner in a more sustainable future with

**circular textile
services**

Lindström in a nutshell

We are a family-owned textile service company with a business model anchored in circular economy principles. Our customers in diverse industries can focus on their core business while we take care of their textile needs with our care free solutions.

Headquartered in Helsinki, Finland, our global footprint extends to 23 countries across Europe and Asia. Our services range from workwear and clean-room textiles, mats, industrial wipers and washroom products to textiles for hotels, restaurants and health-care. The comprehensive service includes textile supply, their washing and maintenance, and end-of-life recycling.

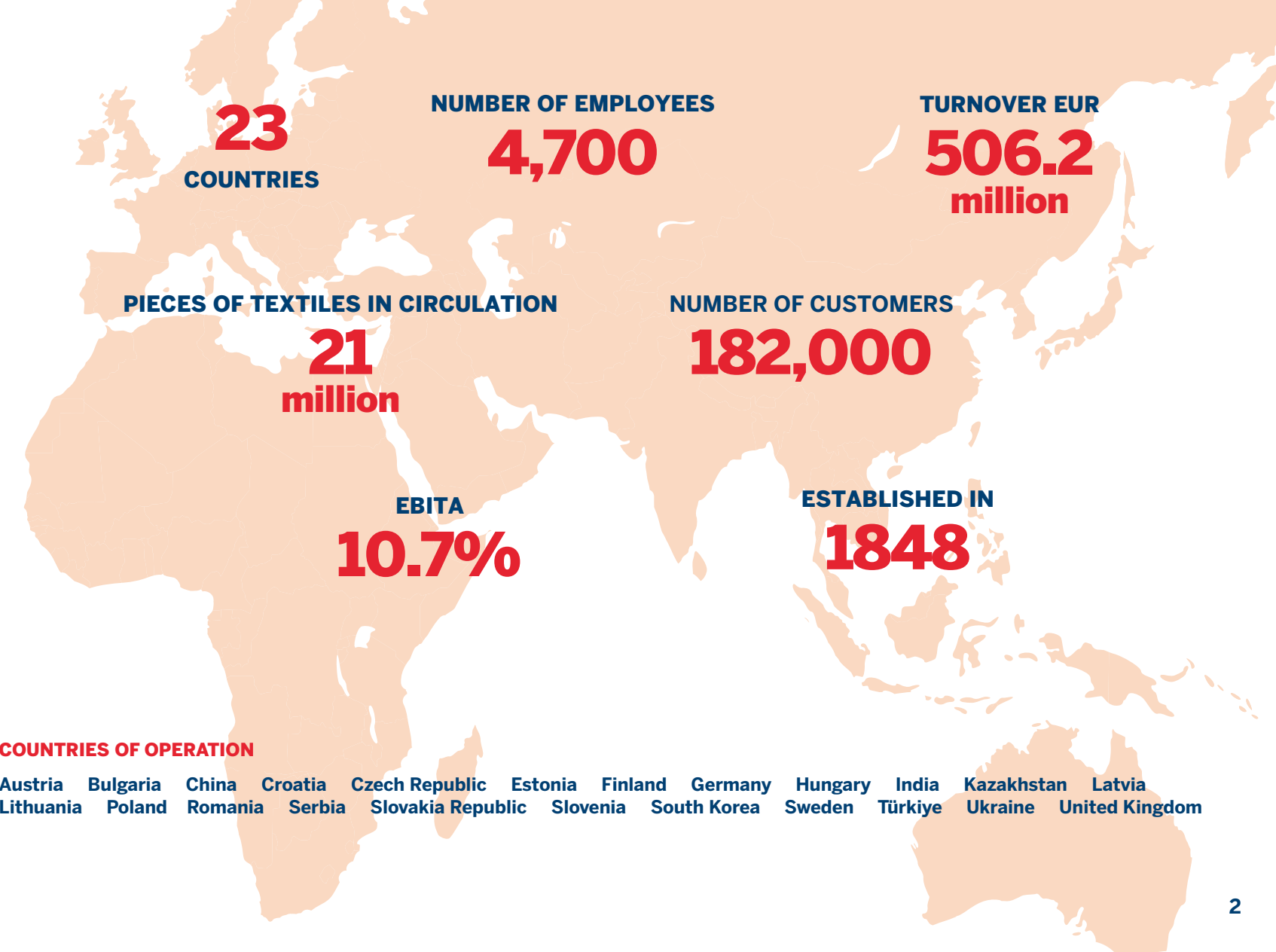
Our purpose

We care for people and our planet by inspiring people to shine and businesses to grow in a sustainable way.

Our values

- Profitable growth
- Responsibility
- Long-term customer relationships
- Enthusiasm and joy of learning

Key figures 2023

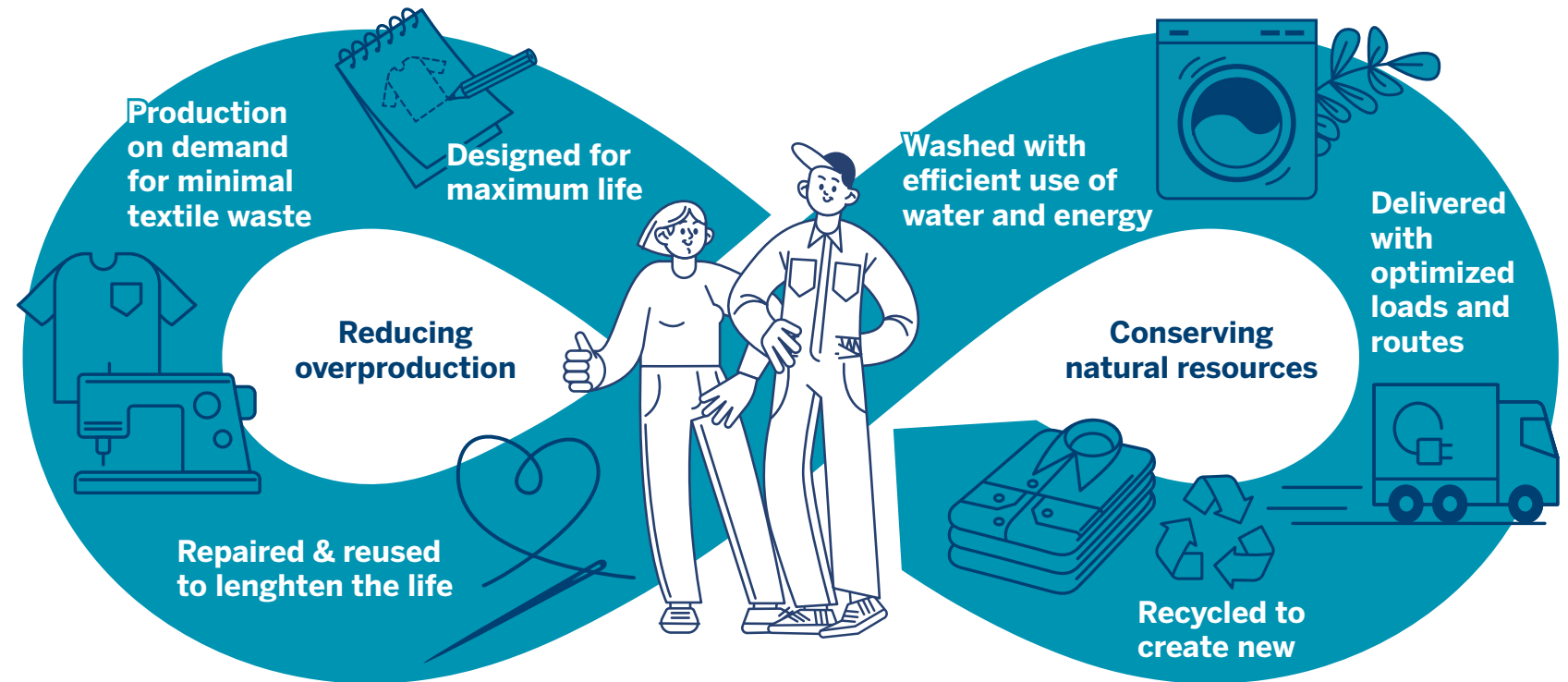


Circular business model minimises the environmental impact

Our service reduces textile overproduction by extending the lifetime of textiles and by producing new textiles only when needed. By using durable materials and designing for circularity, we promote sustainable practices at the very beginning. We avoid millions of kilos of unnecessary textile production by repairing and reusing our garments.

We manufacture additional orders on demand in our own workwear manufacturing facilities, Prodems, which is as effective way to eliminate the textile obsolete risk in the stocks.

To conserve natural resources, we optimise the use of water and energy in our laundries as well as our customer delivery loads and routes. In the washing process, we recycle water and utilise heat from wastewater to warm fresh water. When textiles reach the end of their lives, we recycle them as new products or raw materials.



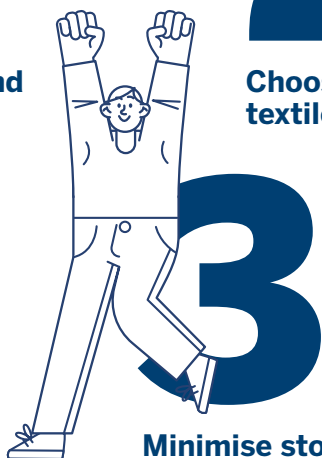
Choices you can make to reduce the environmental impact of textiles



Choose durable and repairable textiles



Choose reusable textiles



Minimise stocks and inventories



44% reduction
in emissions when doubling the times a garment is worn*

2.2 kg CO₂
can be avoided per person in a year when using reusable garments**

9 months
longer lifespan
20–30% smaller environmental impact*

*Environmental Coalition on Standards (ECOS)
** Study done by Gaia Consulting 2021

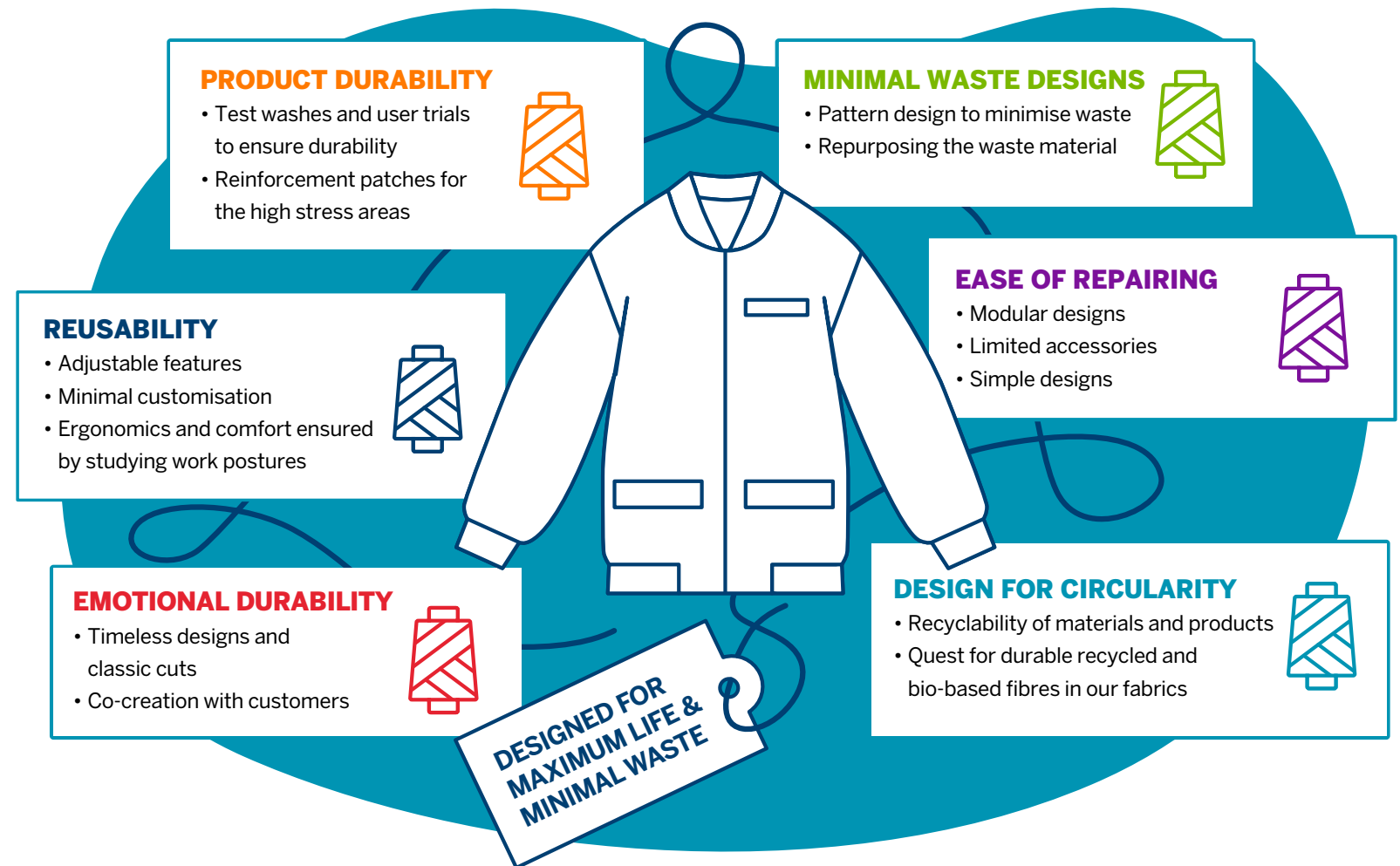
Choose durable and repairable products

Extending product life yields a greater environmental impact than any other measure. Extending the life-time of clothes by nine months would reduce environmental impact by 20%–30%. Doubling the number of times a garment is worn on average would reduce GHG emissions by 44% compared with producing a new garment.

Textile rental companies are guided by their business interest to make durable textiles that are designed and built to last, repaired and reused to lengthen the lifespan.

We ensure the durability of our materials via test washes, user trials, and the use of reinforcement patches in high-stress areas of our garments. Reusability and repairability are considered as early as the design phase, for example, with adjustable features and modular designs.

We continuously work with suppliers and recycling partners to improve the recyclability of our products and to increase the share of recycled materials in our textiles. Our target is that by 2025, 30% of our new products include recycled or bio-based fibres.



Choose reusable products

Reusing has a significant impact on environment as it reduces the number of garments needed. Customisation of workwear always limits their reusability. Efficient workwear management with different user groups is an impactful way to promote this.

Reusability of garments means that

67% less garments are needed compared to non-reusable, customised garments

2.2 kg CO₂ can be avoided per person in a year



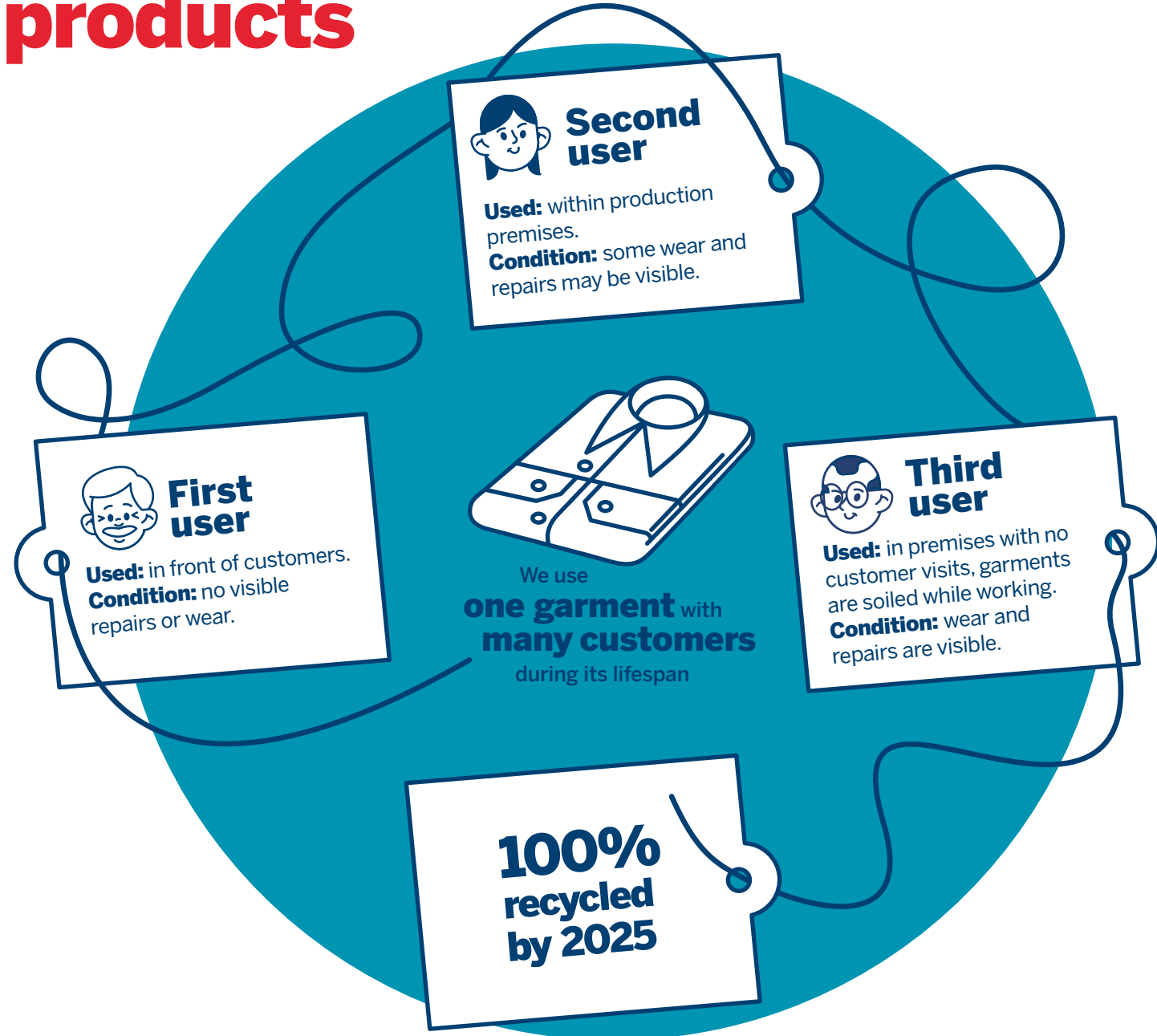
Less raw materials such as cotton and fossil fuels



Less fabric and clothing manufacturing and transportation needed in the whole supply chain



Less waste is generated



Minimise the stocks and inventories

Efficient stock management helps to reduce textile overproduction and minimise waste by reducing textile obsolescence risk at stocks.

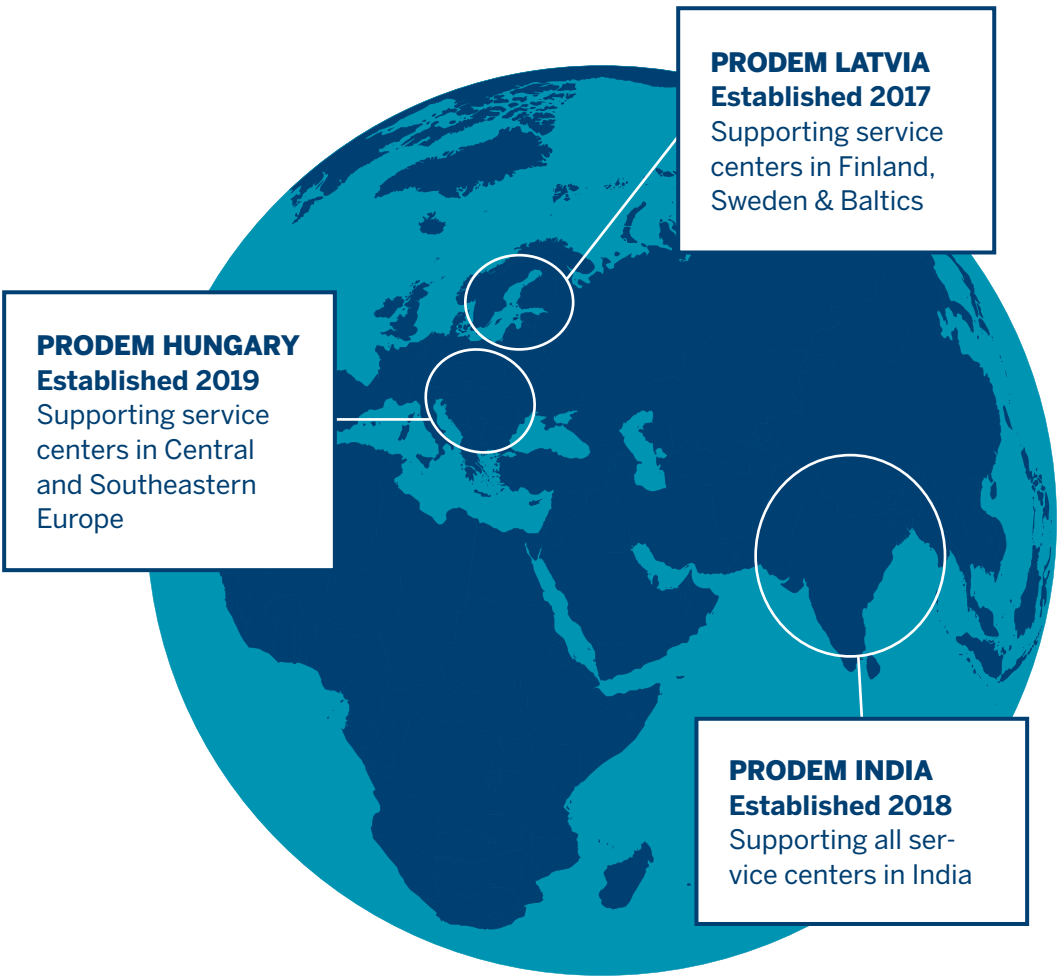
How we minimises the number of textiles in stocks

- Accurate forecasts of the number of textiles needed
- Cross-use of regional stocks before ordering new textiles
- On-demand garment production in our Prodems

Prodem – a unique on-demand manufacturing practice

Our Prodems facilities use a dynamic customer-driven textile manufacturing practice developed by Lindström. It enables us to react quickly to our customers' needs. The customer order acts as a signal to start production in the nearest Prodem facility.

Such manufacturing practice can meet even a small-scale need with the shortest lead time. Simultaneously, it reduces textile overproduction, minimises waste and improves cost efficiency. As workwear is produced on demand, no unused garments are in stock or capital tied up in the inventory. Being stationed close to our customers, we also avoid costs and carbon emissions from deliveries and excess stocks.



Prodem in figures (2023)

Number of employees
377

Production
663,072 pcs

Number of orders
163,253

Average order quantity
4.1 pcs

Average delivery time for replacements
4.9 days

Average delivery time for additional orders
8.5 days

Average delivery first orders (less than 100 pcs)
15 days

How we conserve natural resources in textile maintenance



Efficient use of resources



Aiming for net-zero emissions



Textile recycling and recycled materials

74%

textiles recycled at the end of their lives in 2023

4.8

million pieces of textiles saved by repairing in 2023

50%

reduction in water and energy usage per washed textile kg since 1993

9.3%

decline in emission intensity of laundry and delivery services in 2023



Efficient use of resources

For decades we have optimised our laundry process to reduce the use of water, energy and detergents.

Water recycling

In most laundries, water is recycled by recovering it from the rinsing phases and using it again in the washing phase. In a few larger plants with more than one service line, washing and rinsing water of cleaner products is used to wash dirtier textiles.

Energy efficiency

We have installed heat recovery systems in many laundries to collect heat from wastewater and dryers. We also conduct energy audits and surveys to find energy-saving possibilities. Process control procedures make sure that our machines work properly and consume less water and energy.

Automatic dosing system of detergents

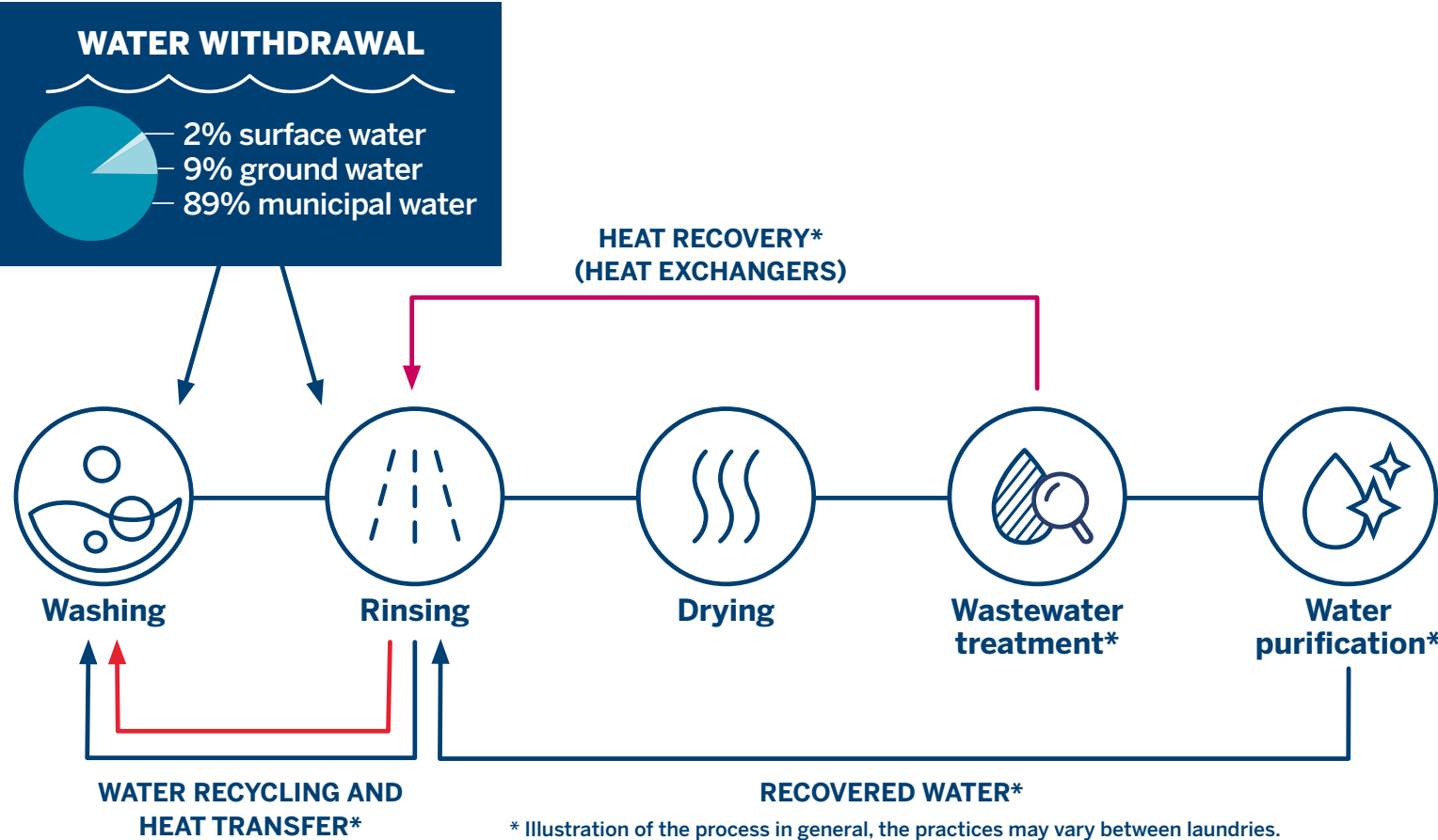
Our automatic dosing system helps us to dispense exactly the desired amount of chemicals. The professional detergent suppliers provide us with the latest technology and environmentally sustainable processes and detergents.

Environmental program

Each laundry creates a yearly environmental program to set targets for resource usage, and find and plan actions for reductions. In addition, we have set a group-level benchmark value and share best practices between the laundries.

Collaboration

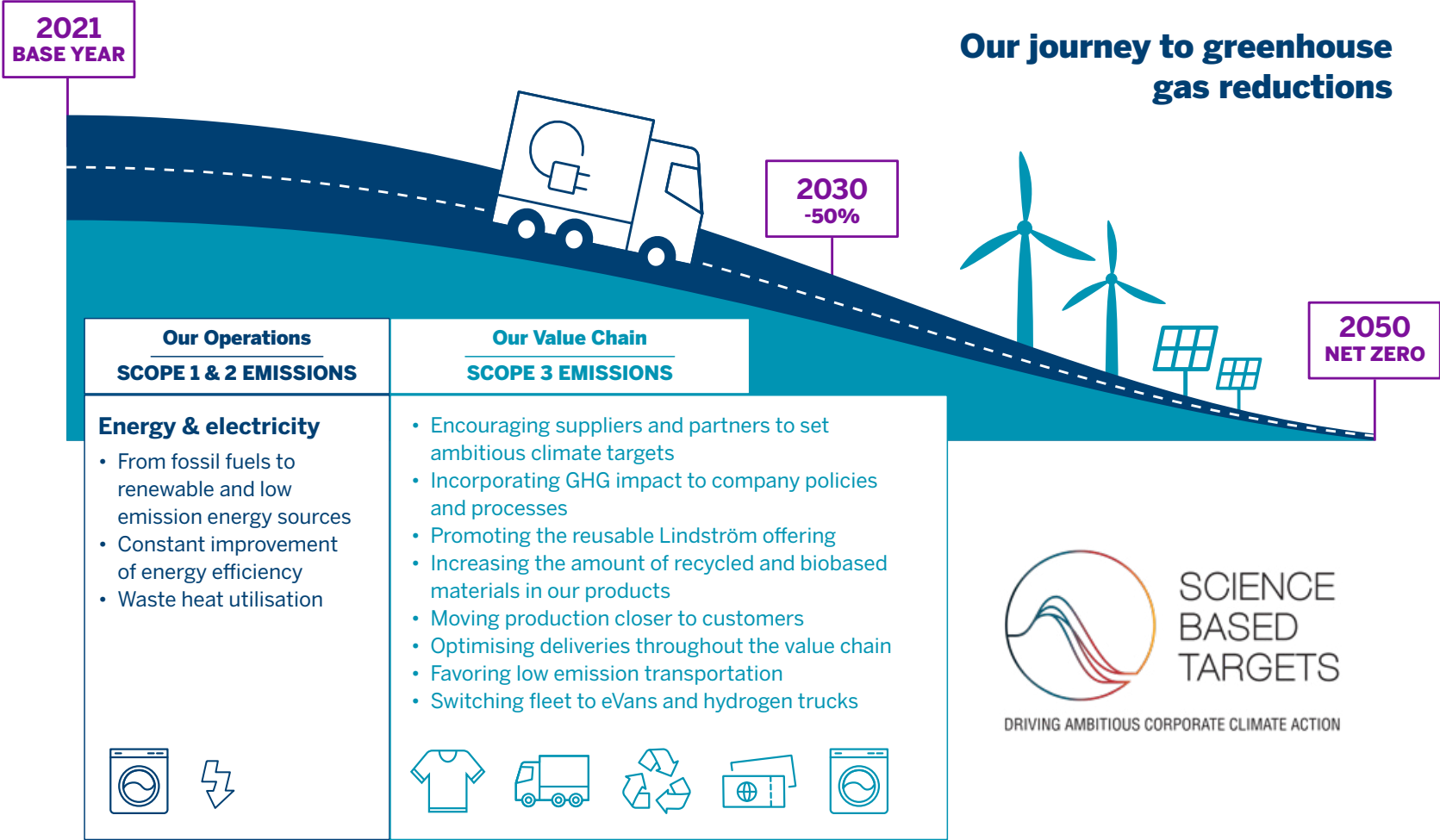
To further optimise the washing process, we collaborate with our partners, such as detergent suppliers and in industry-level workgroups of the European Textile Service Association.



Threads reshaped for a net-zero emissions

We are committed to halve our greenhouse gas emissions across the value chain by 2030 and reach net-zero emissions by 2050. Our targets have been approved by the Science Based Targets initiative that ensures that they are in line with the latest climate science.

Over the next decade, customers will witness several sustainability improvements in our services. Recycled and biobased materials will increasingly replace virgin materials in the textiles. These textiles will be manufactured at a shorter distance by suppliers who are committed to reducing their emissions. The energy used for maintenance and washing will increasingly come from renewable sources. Deliveries of textiles will rely more on e-vehicles, biogas, and hydrogen trucks.



Aiming for 100% textile recycling

Our ambitious goal is to recycle 100% of our textile waste by 2025. We do not only seek to reduce the amount of waste but also to decrease the need to use virgin materials. Textile waste can be used as raw material for different industries, including the textile industry itself.

Our bold aim is to close the loop, using end-of-life textiles as raw material for new textiles. We are committed to increasing the number of purchased materials using recycled and bio-based fibres to 30% by 2025.

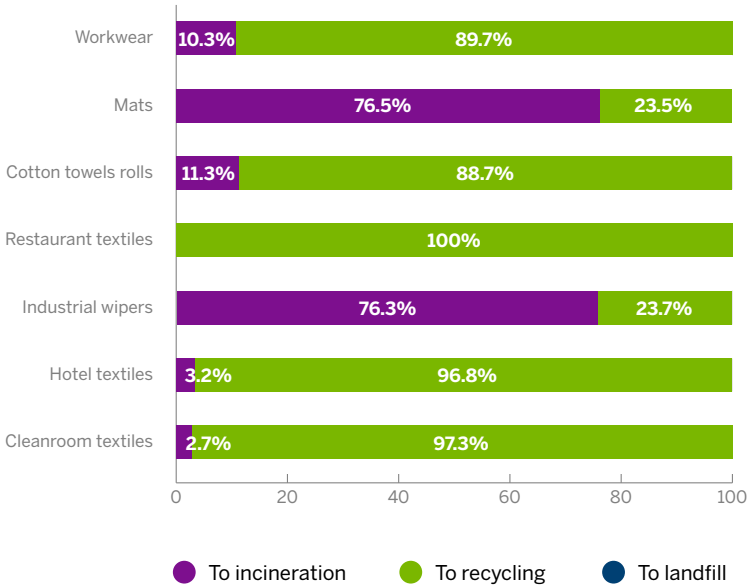
The recycling rate as well the amount of recycled fibre used in our new products varies quite a lot between service lines. As we increase the amount of recycled fibres, we must find a balance that does not compromise their durability.

We collaborate with several local recycling partners to recycle your end-of-life textiles

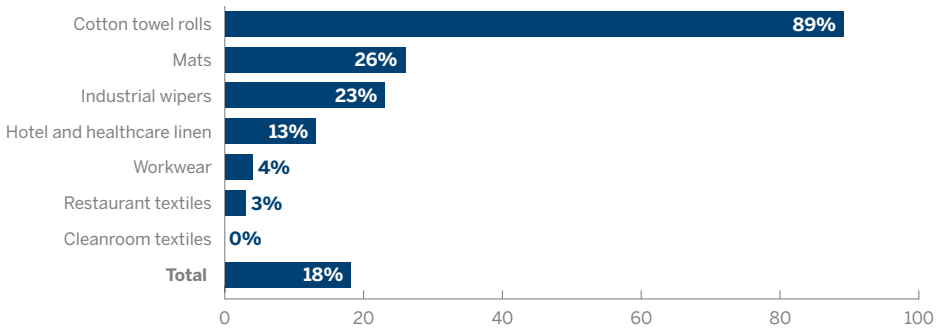
- 1. Shopping bags produced from discarded linen.
- 2. Branded gifts made of end-of-life workwear
- 3. HoReCa collection that utilises recycled fibres from end-of-life workwear



RECYCLING BY PRODUCT



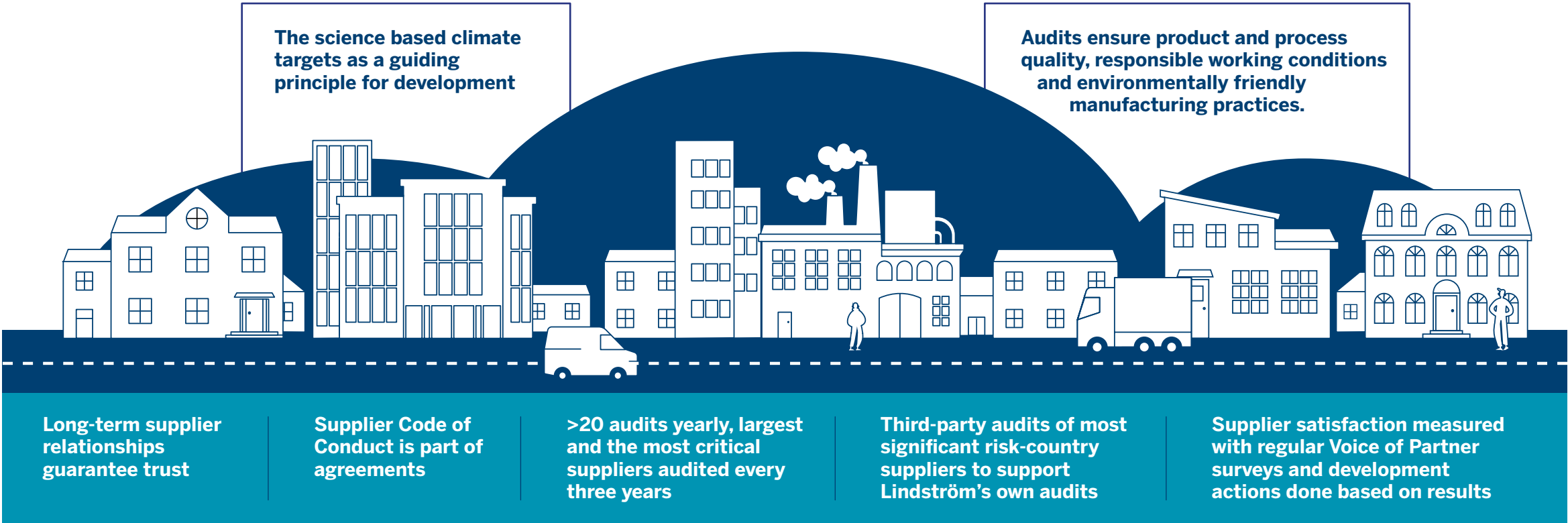
THE SHARE OF PURCHASED PRODUCTS WITH RECYCLED OR BIO-BASED CONTENT



Sustainable supply chain

Our supply chain has a major impact on the overall sustainability of our business. We work towards our sustainability goals with suppliers in two ways: We select suppliers whose sustainability aspirations match our own and we engage with our suppliers to

reduce emissions and create positive social results. Through audits and continuous dialogue, we help our suppliers manage their impact and develop their operations. We require all our suppliers to comply with our Supplier Code of Conduct.



Sustainable supply chain



OUR COMMITMENT TO INITIATIVES

- The ICC Business Charter for sustainable development
- The Principles of the UN Universal Human Rights Declaration
- The ILO Declaration of Fundamental Rights and Principles
- The Guidelines of the OECD for Multinational Enterprises
- The Science Based Targets initiative (SBTi) *
- The United Nations Global Compact

OUR CERTIFICATES

- Our management system is in compliance with four international management system standards:
 - ISO 9001 for Quality
 - ISO 14001 for Environment
 - ISO 45001 for Health and Safety
 - EN 14065 Hygiene and biocontamination control
- Öko-tex certificate is a basic requirement for the textiles we use.
- We have a gold certificate by a global sustainability ratings provider EcoVadis.

OUR POLICIES AND GUIDELINES

- **The Supplier Code of Conduct** defines the fundamental responsibilities and ethical requirements expected of our suppliers and partners, also covering their entire supply chain. It is an integrated component of our supplier agreements.
- **The Employee Code of Conduct** describes the essential requirements of ethical behaviour placed on our own and outsourced employees.
- **The Quality Assurance Handbook** ensures the quality of our supply chain, requiring that all incoming goods and materials are manufactured in accordance with our instructions and standards.
- **The Slavery and Human Trafficking Statement** affirms our commitment to preventing slavery and human trafficking within our business or in our supply chain.
- **The whistleblowing channel** enables anyone to anonymously report concerns about possible misconduct in business or wrongdoing within our company, fostering transparency and accountability.

*We are committed to halve our greenhouse gas emissions across our value chain by 2030 and reach net-zero emissions by 2050



Supplier audits help shape responsible partnerships

Without our suppliers, offering sustainable solutions to customers across various industries wouldn't be possible. We conduct supplier audits to ensure our suppliers align with our ethical principles and help us reach our goal of net-zero emissions by 2050 across our value chain.

We address a range of topics throughout the auditing process — from environmental issues to social responsibility and employment practices. The questions we ask are tailored to the specific type of supplier we're auditing. Supplier audits benefit our customers in several ways:

- By auditing our suppliers' **processes**, we can guarantee a properly working supply chain, ensuring our customers get the right products at the right time.
- Auditing our suppliers' **environmental impact** contributes to ongoing improvements, aligning with our commitment to sustainability and supporting our customers in their own sustainability goals.
- Auditing **social responsibility** aspects gives customers assurance that the products they receive are produced by people who are paid fairly, don't work overtime, aren't under forced labour conditions, and work in safe environments.

[Read the full story on our website](#)



Prodem Hungary – paving the way towards net-zero workwear manufacturing

Prodem is a unique concept where workwear is produced only on customer demand with extremely short lead times. In 2023, the average order size from Prodem Hungary, one of the three Prodem factories operated by Lindström, was only 2.5 clothing items. The innovative model reduces the factory's carbon footprint and textile waste significantly.

Lindström acquired the Hungarian factory in 2019 and has invested in new, energy-efficient infrastructure. Solar panels produce almost a quarter of all the electricity consumed, and battery packs ensure that the power generated during non-working hours is not wasted. In 2023, the renewed system reduced the factory's emissions by 29 tons of CO₂.

A smart heating control system allows the adjustment of temperatures in different areas and has led to a 30% decrease in natural gas consumption. Old water boilers and pumps have been replaced with modern solutions.

"Prodem factories are proof that with a good concept and the right people, we can offer considerable operational, financial, and sustainable benefits to our customers," says **Zsolt Keresztes**, Managing Director for Prodem Hungary.

In 2023, the factory received two awards: Innovation in Manufacturing prize in the Hungarian Business Awards and Sustainable Manufacturing Grand Prix in the European Milestone Business Awards.

[Read the full story on our website](#)



From virgin fibre to recycled: introducing more sustainable mat collection

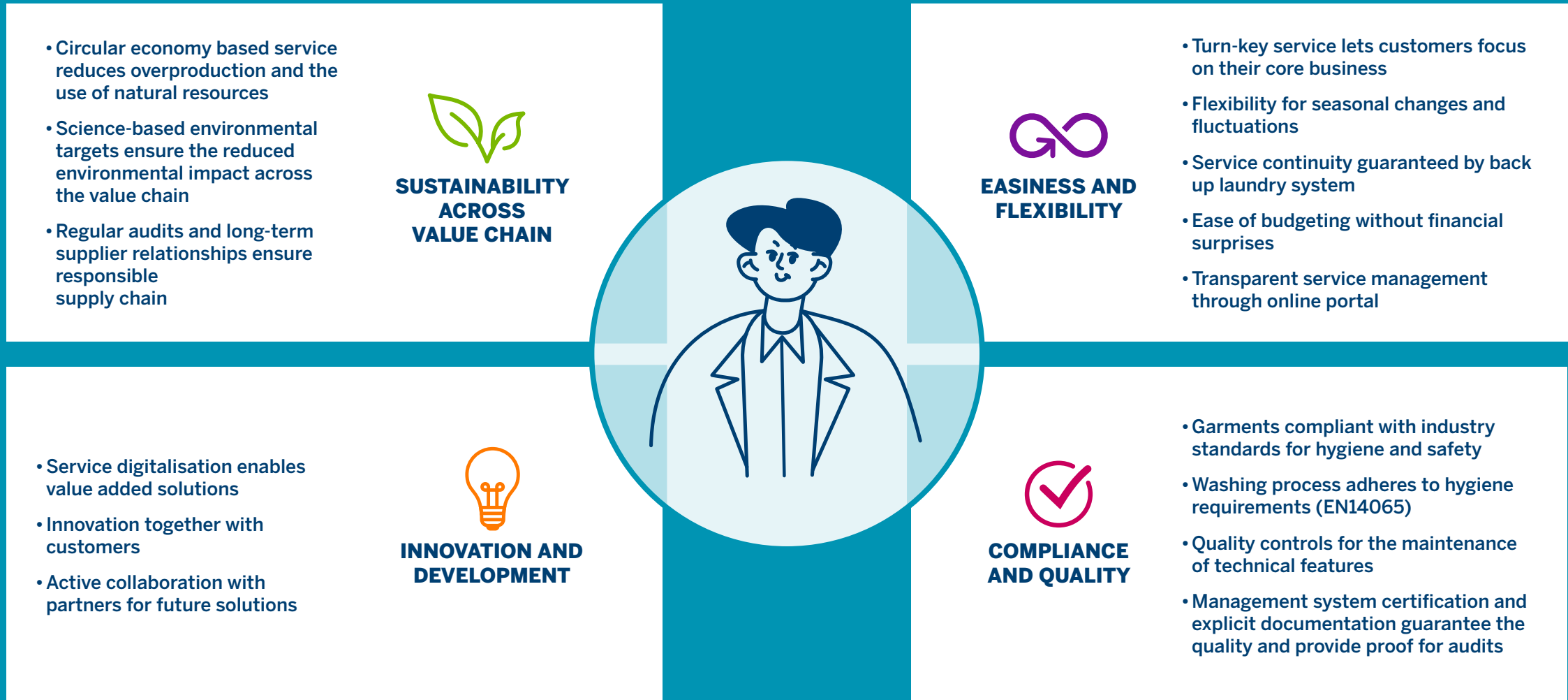
Our standard mat collection is taking a huge sustainability leap, as all mats will be made with 75% recycled fibre and phthalate-free rubber. Incorporating recycled material into production not only reduces our carbon footprint but also lowers our customers' environmental impact.

"The durability and hence the lifetime of the products made of recycled materials is often a challenge. But with our mats that are made from Renycle yarn and phthalate-free rubber, the durability and quality are the same as with mats made of virgin materials. And last but not least, the collection is still very cost-effective as well," notes **Taru Jokinen**, Director of Concept Development at Lindström.

Switching to recycled materials has been a true collaborative effort with RadiciGroup, one of the world's leading manufacturers of polyamides, synthetic fibres and engineering polymers, and Kleen-Tex, a global mat manufacturer and our long-time partner. "Collaboration is key in circular economy and an important driver in transforming the entire value chain, says **Giada Angeli**, Marketing Product Manager at RadiciGroup, manufacturer of Renycle yarn. **Elaine Smith**, European Marketing Director at Kleen-Tex asserts: "By working together, and continually testing to ensure that the product we bring to market are best in class, we continue to delight our customers."

[Read the full story on our website](#)

Creating value for our customers





www.lindstromgroup.com

