

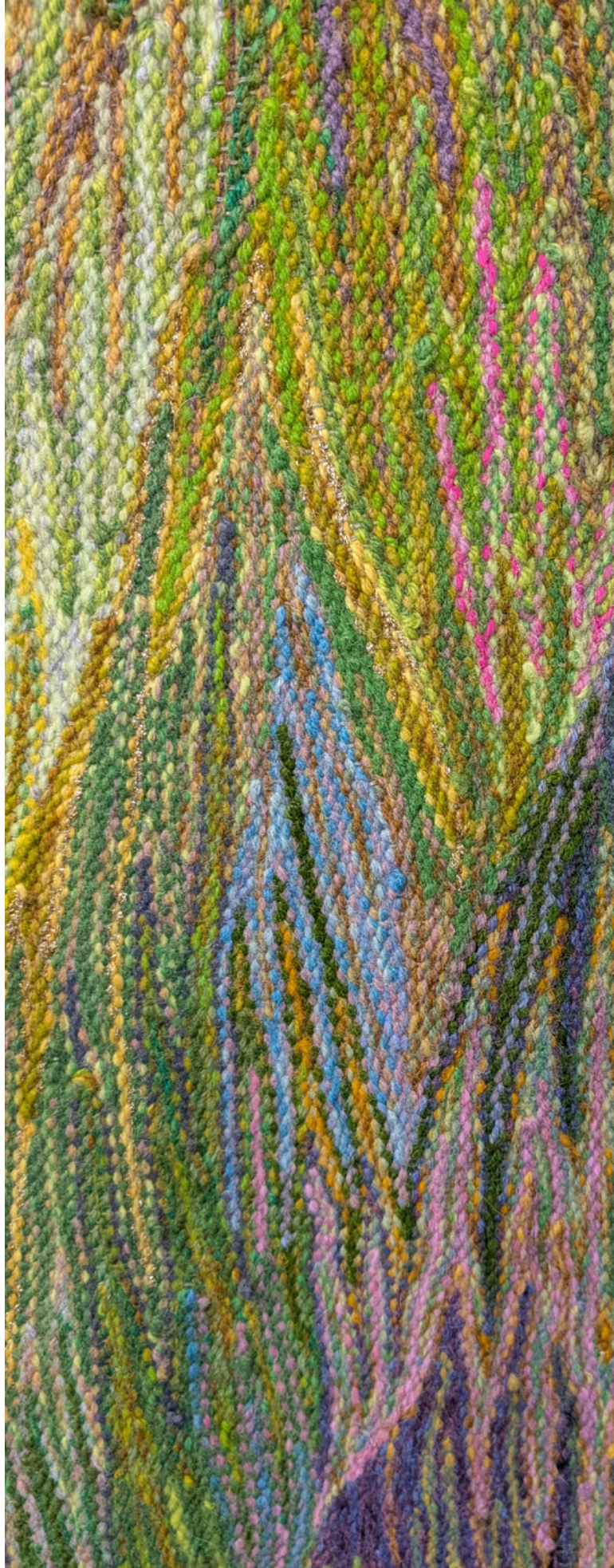


Livonia_{print}

Sustainability
Report 2024

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At Livonia Print we believe that sustainability is not a separate function – it is embedded in every decision we make and every book we produce.

Over the past year our guiding principle, MAKE THE RIGHT CHOICE, has become even more central to our work. It means choosing wisely at every stage of a book's life – from the initial concept and design, to the selection of materials, technologies, partners and the methods we use to bring it into readers' hands.

We continue to work closely with our publishing partners, sharing our expertise and guiding them in making responsible and cost-effective decisions that do not compromise on quality or creativity. By doing so from the earliest stages of a project, we ensure that sustainability is considered not as an afterthought, but as a core part of the book's journey.

Internally, we remain committed to improving the traceability of materials and deepening collaboration with our suppliers through regular evaluations. It is essential that we and our partners stay aligned, with a shared focus on reducing environmental impact and ensuring responsible sourcing.

Our technical flexibility allows us to tailor each production process to the unique needs of every book, optimizing both sustainability and cost-efficiency. And, while we are proud of our emissions results this year, we treat them not as a finish line, but as motivation to keep progressing.

Beyond production, we also see ourselves as active participants in the cultural mission of keeping the printed book alive and valued. Through our "All You Need Is Book" campaign and other marketing efforts, we have aimed to remind people of the joy, importance and irreplaceable nature of reading physical books. This mission unites everyone in our industry – authors, designers, publishers, producers and suppliers alike – in a shared responsibility to deliver not only beautiful books, but also those made with sustainable choices.

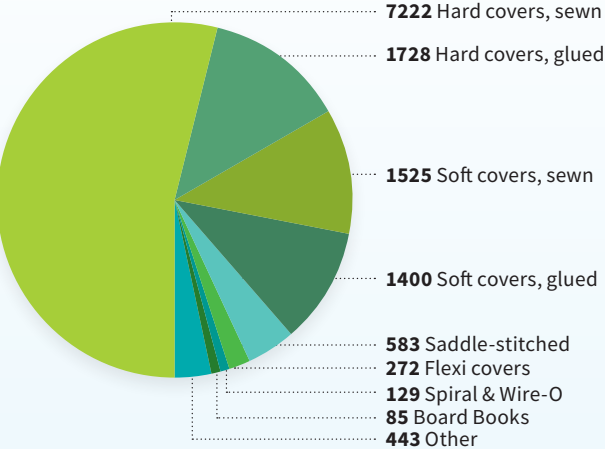
We are proud of what we have achieved so far. But even more, we are motivated to continue learning, improving and making the right choices every single day.

Trond Erik Isaksen
CEO of Livonia Print

Livonia Print 2024

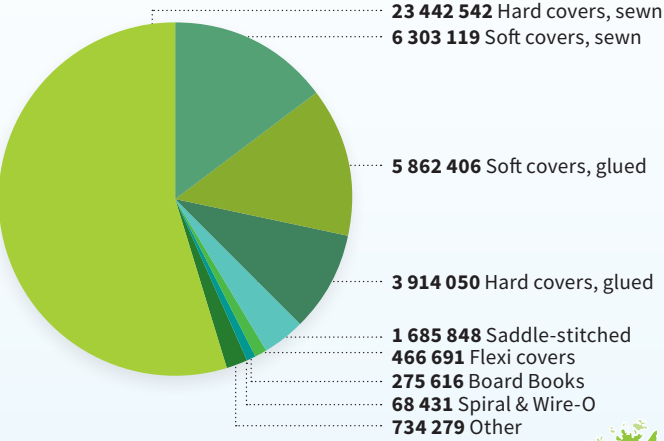
13 387

orders



42 752 982

copies of books



544

employees

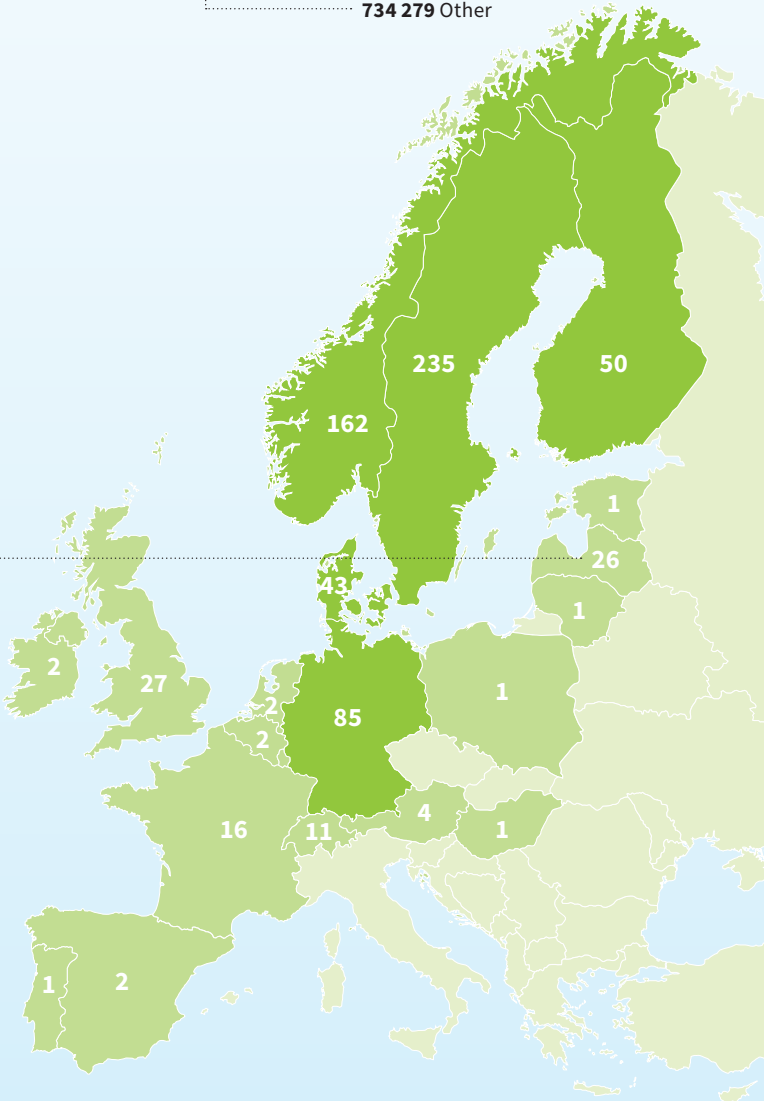
32 100

m² floorspace

698 clients from 22 countries

✈️ USA – 4

- | | |
|---------------------|---------------------|
| Sweden – 235 | Iceland – 3 |
| Norway – 162 | Ireland – 2 |
| Germany – 85 | Belgium – 2 |
| Finland – 50 | The Netherlands – 2 |
| Denmark – 43 | Spain – 2 |
| United Kingdom – 27 | Aland Islands – 1 |
| Latvia – 26 | Estonia – 1 |
| France – 16 | Lithuania – 1 |
| Switzerland – 11 | Hungary – 1 |
| USA – 4 | Portugal – 1 |
| Austria – 4 | Poland – 1 |



Electricity

Green Electricity

Livonia Print uses electricity produced from 100 % renewable energy sources.

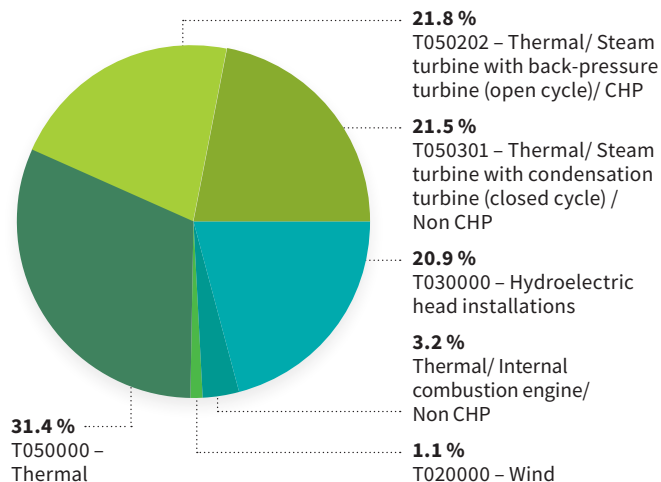
Most of our consumed electricity during 2024 comes from thermal sources, by combusting biomass and waste (67.7 %), by combusting oil (10.2 %) and from hydroelectric power plants (20.9 %).

Livonia Print assures that the renewable electricity consumed is sourced as declared, allocated exclusively to Livonia Print and not a subject to double counting or onward trading (according to Electricity Cancellation Statements).

Purchased electricity in 2024 – 9490 MWh (in 2023 – 8800 MWh, in 2022 – 11 888 MWh, in 2021 – 11 951 MWh)

In 2024 electricity consumption remains the same as in 2023 – 0.222 kWh/average book and 0.03 kWh/printed sheet.

Livonia Print is making significant efforts to reduce electricity consumption. In 2024, we installed three new electric transformers, achieving an estimated electricity saving of approximately 5000 kWh per month.



Waste Management



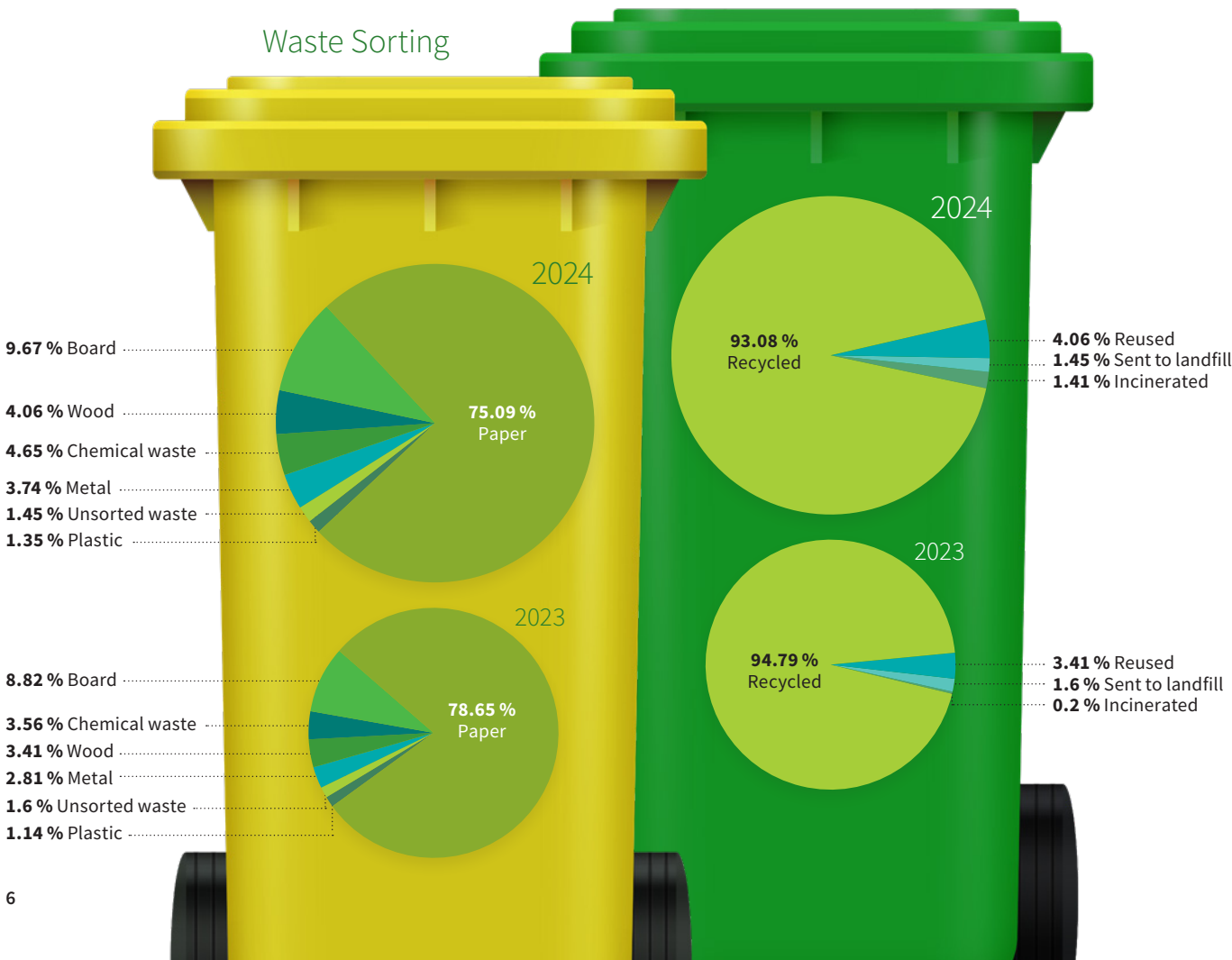
We continuously work to improve waste sorting, aiming to support the circular economy by finding new ways to give secondary materials new life instead of treating them as waste.

At the same time, better sorting helps us to reduce the amount of general waste sent to landfill, diverting more material toward recycling and reuse.

Overall, in 2024 Livonia Print generated 7477,668 tons of waste, which is 2.45 % less than the previous year and 2.62 % less than 2022. In 2024 we have managed to reduce unsorted waste amounts compared with 2023 by 0.15 % (13.58 t).

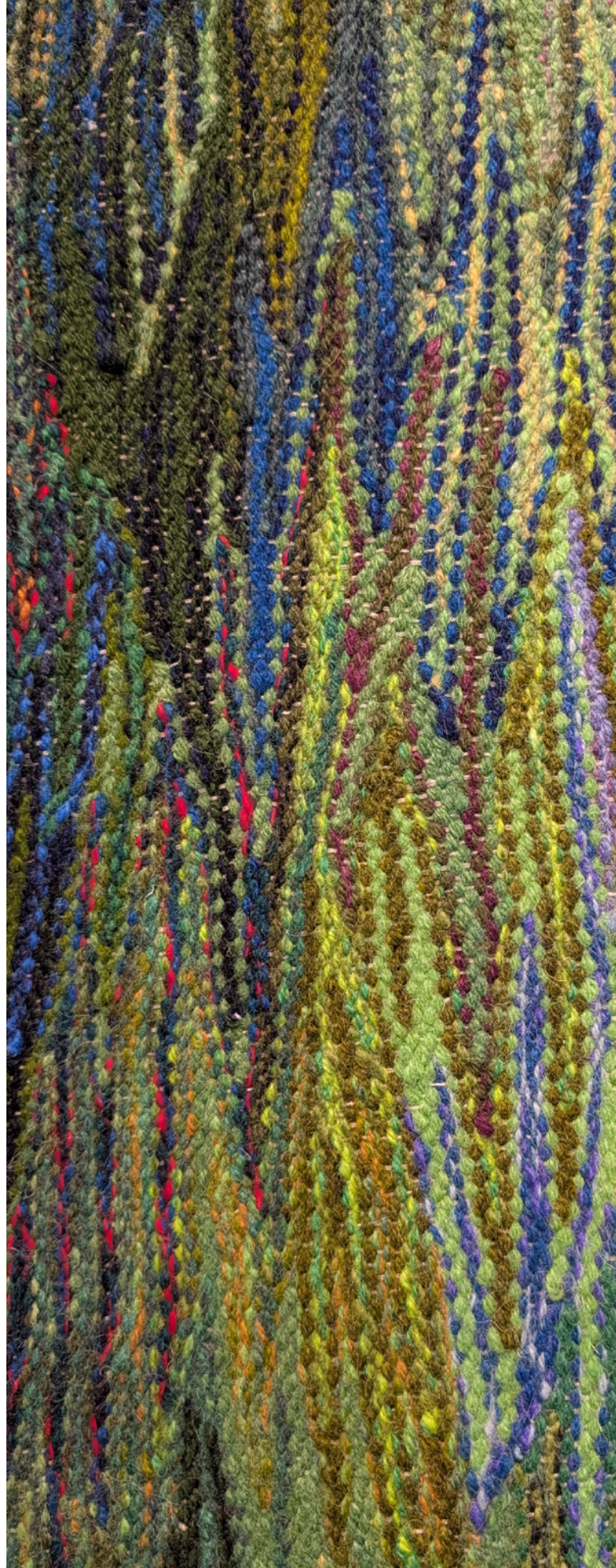
Waste Management Methods

Waste Sorting



Through LEAN approach and employees' initiatives the company has implemented several solutions to prevent material left-overs becoming waste:

- leftover coloured paper is donated to the Children's Clinical University Hospital and offered to workers for private use such as giving to kindergardens and schools;
- in cooperation with material suppliers unused components are returned back to them, for example cores of material rolls;
- kraftpaper used in supporting activities in production is reused;
- plastic films are collected in transparent bags to ensure sorting together with packaging;
- we have reduced our paper stock, thus improved paper circulation.



LEAN Culture & Process Improvements

At Livonia Print, the application of LEAN principles serves as a uniting basic tool to enhance development of the company. It helps to ensure long-term progress, product quality and improves operational efficiency through continuous improvement (Kaizen).

A key element of our LEAN approach is encouraging employee involvement and making the best use of their competence. This not only contributes to a safe and positive work environment, but also supports our environmental goals and the overall sustainability of our business operations.

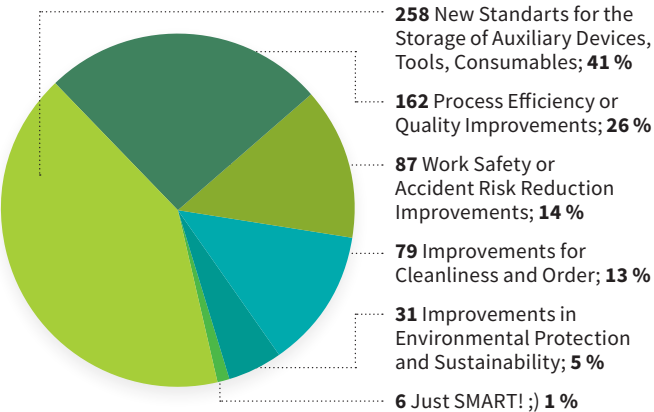
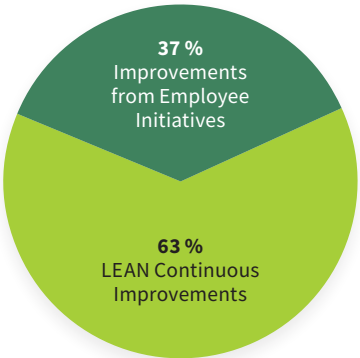
To assess the progress of LEAN implementation and monitor improvements in the company culture, Livonia Print evaluates five key criteria alongside with other business performance indicators (KPIs):

- 1. Proactive collaboration
- 2. 5s or cleanliness and order score
- 3. Number of implemented improvements
- 4. Employee-initiated discussions during Gemba Walks
- 5. Self-initiated actions by employees

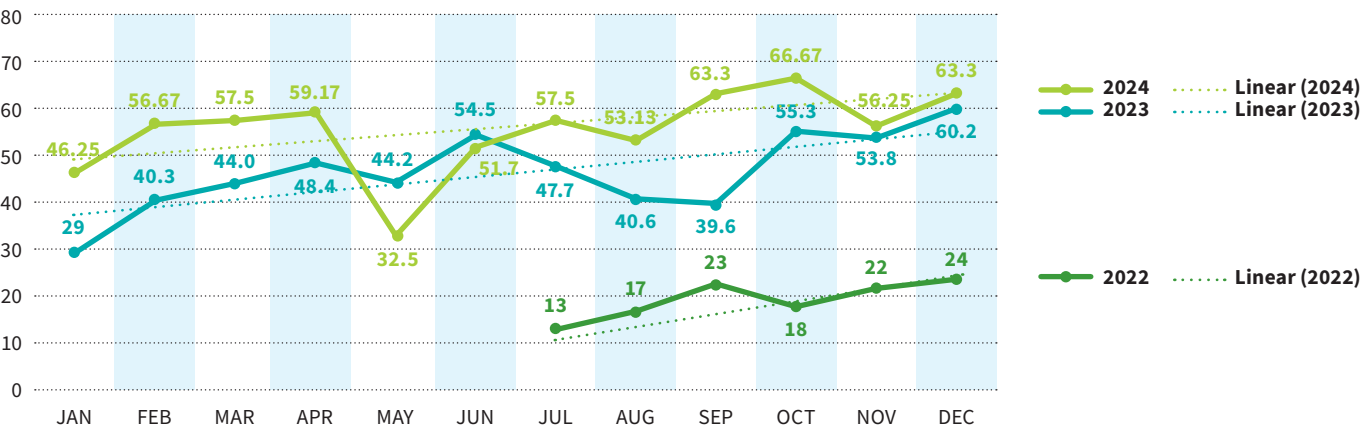
The chart below illustrates the annual sum of these five criteria, confirming that the LEAN implementation process is progressing successfully and showing a positive growth trend. Our target for 2025 is to reach a combined score of at least 70.

Between July 2022 and 2024, LEAN implementation focused on employees, improving their work environment and organizing core processes through 5S. The goal was to establish LEAN thinking as a habit and integrate it into daily routines.

In 2024 alone, a total of **623 improvements were implemented** – a strong indicator of a well-established LEAN culture, especially in relation to the number of employees. Notably, 37 % of these improvements came from employee initiatives.



LEAN culture implementation progress



LEAN Goals for 2025

Advancing Towards Operational Excellence

For 2025, Livonia Print has set new LEAN goals focused on increasing **employee involvement** in process improvements – with a target of at least 50% of all improvements coming directly from employees. At the same time, we aim to **strengthen our LEAN management system** to advance to the next level of LEAN culture – moving closer to Operational Excellence.

Building a Transparent and Aligned Organization

We plan to **implement daily huddles** that encourage clear communication, shared accountability and a better understanding of how each person's role contributes to the company's overall success.

Developing a Culture of Ownership and Problem-Solving

We are going to introduce **daily key performance indicators** which will help the teams to detect and address small deviations early. This shift from reactive problem-solving to **proactive issue prevention** is a crucial step toward a more resilient and efficient workplace.

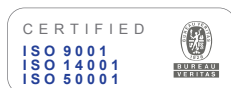
Empowering Employees to Drive Continuous Improvement

Our work environment and processes have to be **well-organized and standardized**, allowing employees to:

- take full responsibility for their area of work;
- recognize deviations from the standard;
- know, how to resolve issues independently, without management's intervention.

Benefits of our LEAN culture result in successful international audits:

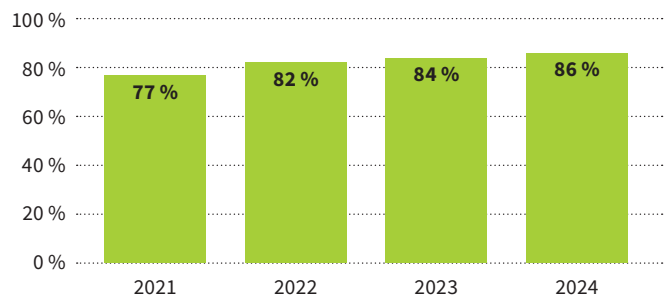
- ISO 9001 – Quality Management System standard
- ISO 14001 – Environmental Management System standard
- ISO 50001 – Energy Management System standard
- RBI – Restaurant Brand International requirements for Good Manufacturing Practice
- SMETA – SEDEX ethical and responsible business practices



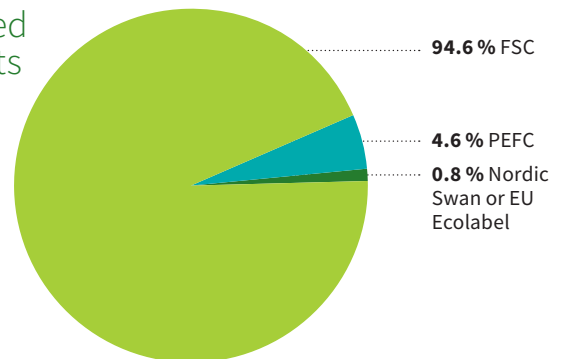
Certified Projects

In 2024, 86% of all orders were FSC, PEFC, Nordic Swan or EU Ecolabel Certified, which is the highest “green project” share compared to previous years. We educate our clients on the benefits of each certification and are pleased to see more customers choosing sustainably produced books.

Certified projects out of total



Certified Projects 2024



Livonia Print has renewed its Nordic Swan license to comply with the new, stricter criteria. This involved reviewing our suppliers and selecting less harmful chemicals and more sustainable papers. We are proud to report that more than 79% of **all paper used** in our books by weight in 2024 was either **Nordic Swan Ecolabelled, inspected, or EU Ecolabelled.**



Product Safety

To ensure product quality and safety, Livonia Print has defined seven types of board books intended for children under the age of three. These, along with two additional saddle-stitched types designed for children over the age of three, have all been **tested in certified laboratories and comply with EN 71 standards** (Parts 1, 2, 3, and 9) and the EU Toy Safety Directive.

For production that follows our tested book types, we have established strict procedures and can confirm that no harmful substances are used.

Livonia Print continuously strives to minimize the use of materials that may pose risks to human health or the environment not only in eco-labelled products, but across all our production processes. To support this, our material suppliers regularly provide documentation confirming compliance with relevant EU legislation.

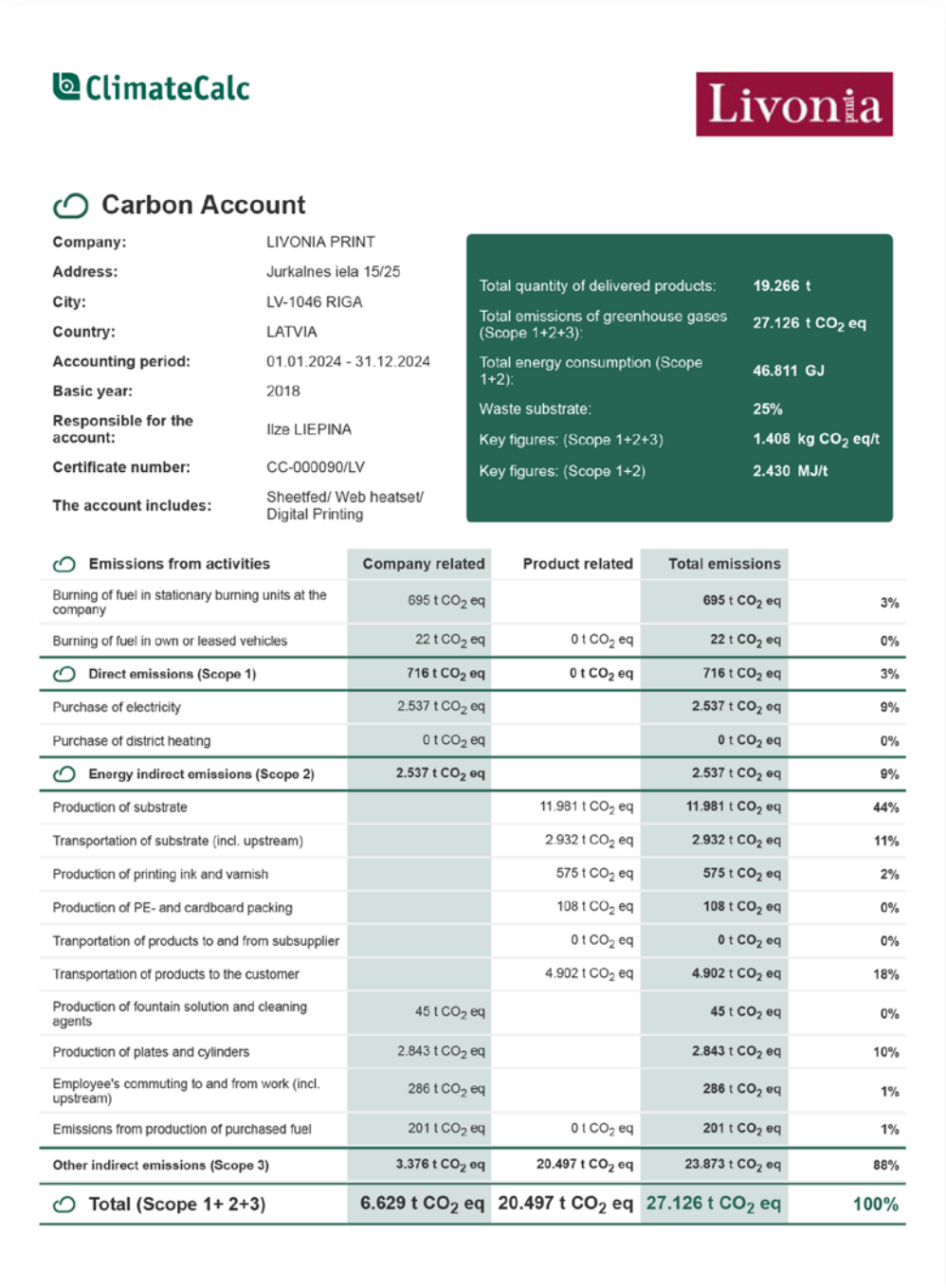


All materials used in our book production **comply with the REACH Regulation**, do not contain any **Substances of Very High Concern** (SVHC) above 0.1%, are free from PVC plastic, and do not contain lead, cadmium, mercury, hexavalent chromium, or their compounds. They are also free of phthalates in concentrations above 0.1%.



Emissions & Climate Action

Livonia Print Market based carbon account by  ClimateCalc™



According to ClimateCalc calculation for the whole company, with the accounting period 01.01.2024–31.12.2024, our total CO₂ emissions from economic activities are **27 126 t CO₂ eq (market based) or 29 762 t CO₂ eq (location based).**

In 2024 we had more than 350 CO₂ calculation requests from our customers for specific book projects. We are glad that our customers take an interest in their emissions and collaborate with us by choosing papers and printing methods with a lower carbon footprint.

Since 2020 Livonia Print has prepared an annual Greenhouse Gas (GHG) emissions report in accordance with the GHG Protocol, in collaboration with South Pole.

This report combines ClimateCalc emission calculations with South Pole's accounting of additional emission sources not covered by ClimateCalc, such as waste generated during production, business travel, employee commuting and end-of-life treatment of sold products – to provide a comprehensive GHG inventory for Livonia Print.

GHG emissions by scope and greenhouse gas

Scope	Total (t CO ₂ e)
Scope 1: direct GHG emissions	725.9
Scope 2: indirect GHG emissions from purchased electricity, heating and cooling	0
Electricity (location-based)	686.15
Scope 3: other indirect GHG emissions	34 664.8
Total GHG emissions (market-based)	35 390.7

(Source: South Pole, based on Livonia Print, April 2025)

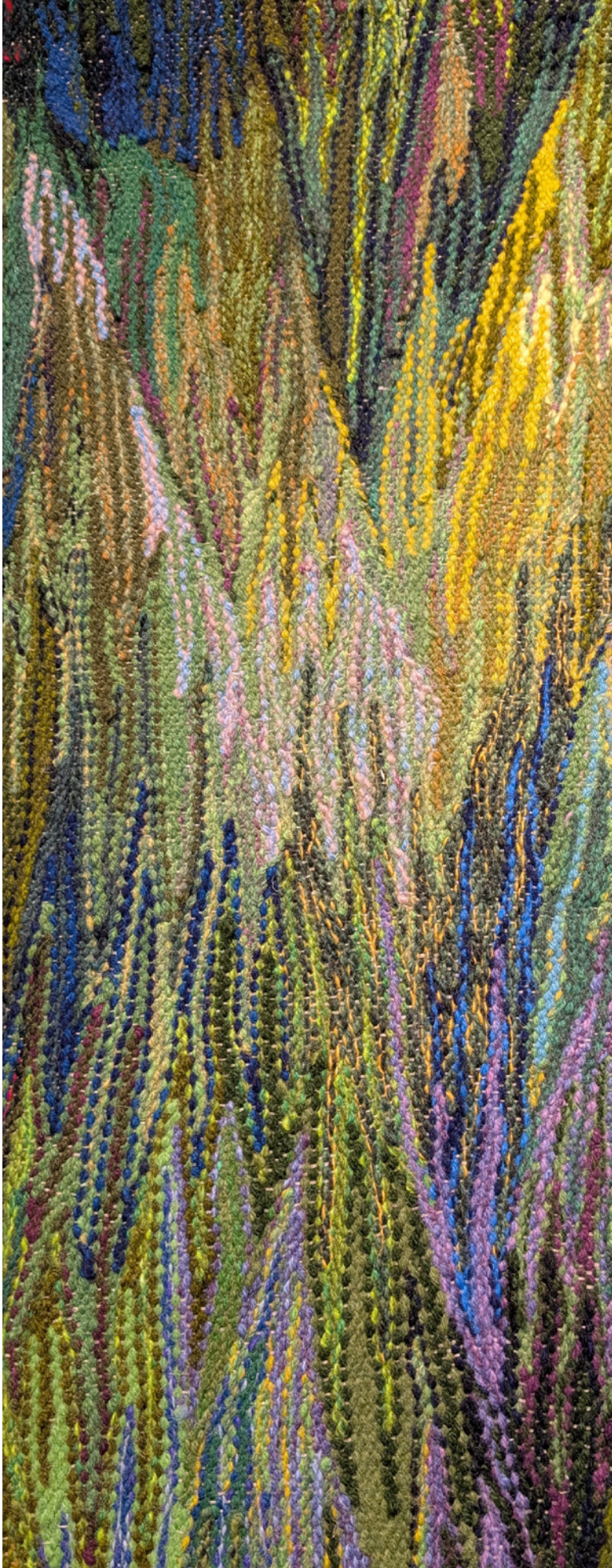
GHG emission comparison by years

	2022	2023	2024
Total emissions, tCO ₂ e, by SouthPole	60 973.7	41 041.5	35 390.7
Comparison with a previous year	-1.9%	-32.7 %	-13.8%
Emissions per ton of produced books, tCO ₂ e By SouthPole	2.345	2.317	1.961

According to the South Pole GHG emissions report, Livonia Print’s overall emissions **decreased by 13.77% from 2023 to 2024**, and **by 25.2% compared to 2020**. The most significant reduction comes from our main raw material–purchased paper, which saw a 24.28% decrease, even as production volumes increased.

Our climate action has resulted in progress thanks to the efforts of our upstream partners (paper producers) in reducing manufacturing emissions, our own commitment to selecting more closely sourced, lower-emission papers, and the support of our downstream partners – publishers, who make informed, sustainability-focused paper choices.

As paper accounts for the largest share of our Scope 3 emissions, Livonia Print has set a target for 2025 to further reduce paper-related emissions by 5%, by continuing to prioritise more environmentally friendly paper options.





General Product Safety Regulation & EU Deforestation Regulation

General Product Safety Regulation – applicable from 13.12.2024

The General Product Safety Regulation (GPSR), which replaces the General Product Safety Directive (GPSD), entered into force at the end of 2024 to strengthen consumer protection across the EU. It introduces stricter obligations for manufacturers, including clearer traceability, mandatory safety documentation, and faster response requirements for product safety issues.

Although Livonia Print is not classified as the responsible party (manufacturer) under GPSR, we ensure traceability for each book – from the material supplier and producer to the customer.

In line with the GPSR, the manufacturer (publisher) must ensure that a book includes contact details such as the name and address of the responsible party, as well as identification elements like an ISBN number supplemented with a batch, edition, or other reference that links the product to a specific manufacturing date.

EU Deforestation Regulation – applicable from 30.12.2025

EU Deforestation Regulation (EUDR) has been a major topic across the graphic industry throughout 2024, raising many questions and challenges. While its implementation has been postponed to the end of 2025 and various aspects of the regulation are still under review or potentially subject to simplification, the preparation work continues.

At Livonia Print, we actively follow all the developments, value the guidance and updates provided by EU, Intergraf and maintain a close exchange of information with both – our suppliers and clients. Our goal is to ensure we are fully ready to meet the requirements once the regulation comes into force.

Livonia Print meets EUDR

Non-SME

Operator

Full material traceability
within production

100% paper produced in Europe

DDS for each book

FRANZ KAFKA *Tapte fragmenter*

SKK3

Martin Slaatto: Transporteringsdans Sidsel Pape

SKK1

Grenland Friteater: Harde Tak Chris Erichsen

JANNICKE ØIEN ♦ LEVE UTE, LEV

SIMON EDVARDSEN

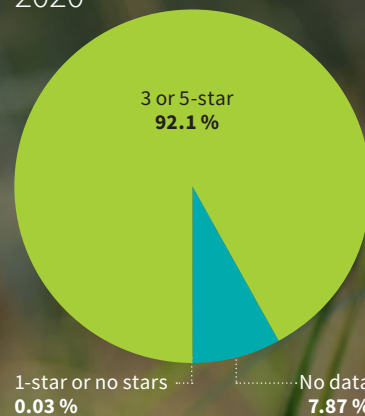
The Book Chain Project



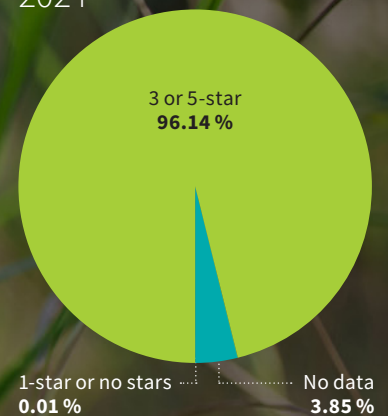
Livonia Print has been participating in Book Chain Project (BCP) system since 2017. Since 2019 we submit Environmental self-assessment which helps to work towards sustainability by providing verified data on paper rating using a traffic light system (green/yellow/red) based on sustainability criteria. BCP helps publishers and printers trace paper back to its origin, supporting compliance with policies like EUDR (EU Deforestation Regulation), thus encouraging selection of environmentally responsible paper grades. We update our paper and environmental information regularly to give our customers the opportunity to see Livonia Print's Environmental performance and achievements.

According to the Book Chain Project PREPS list, each paper mill's forest source is inspected and awarded a 1 to 5 star rating. Livonia Print's goal is to use as much of 3 or 5-star rated paper as possible by weight.

2020

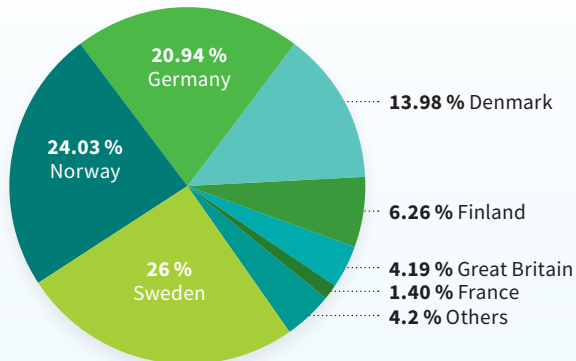


2024

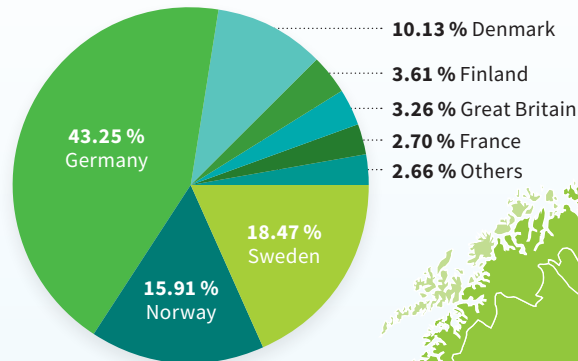


Transportation & Packaging

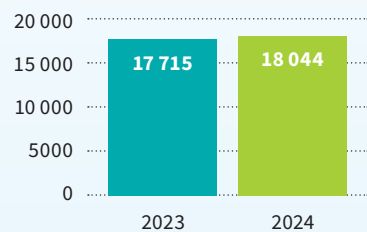
Number of orders 2024



Transported weight 2024

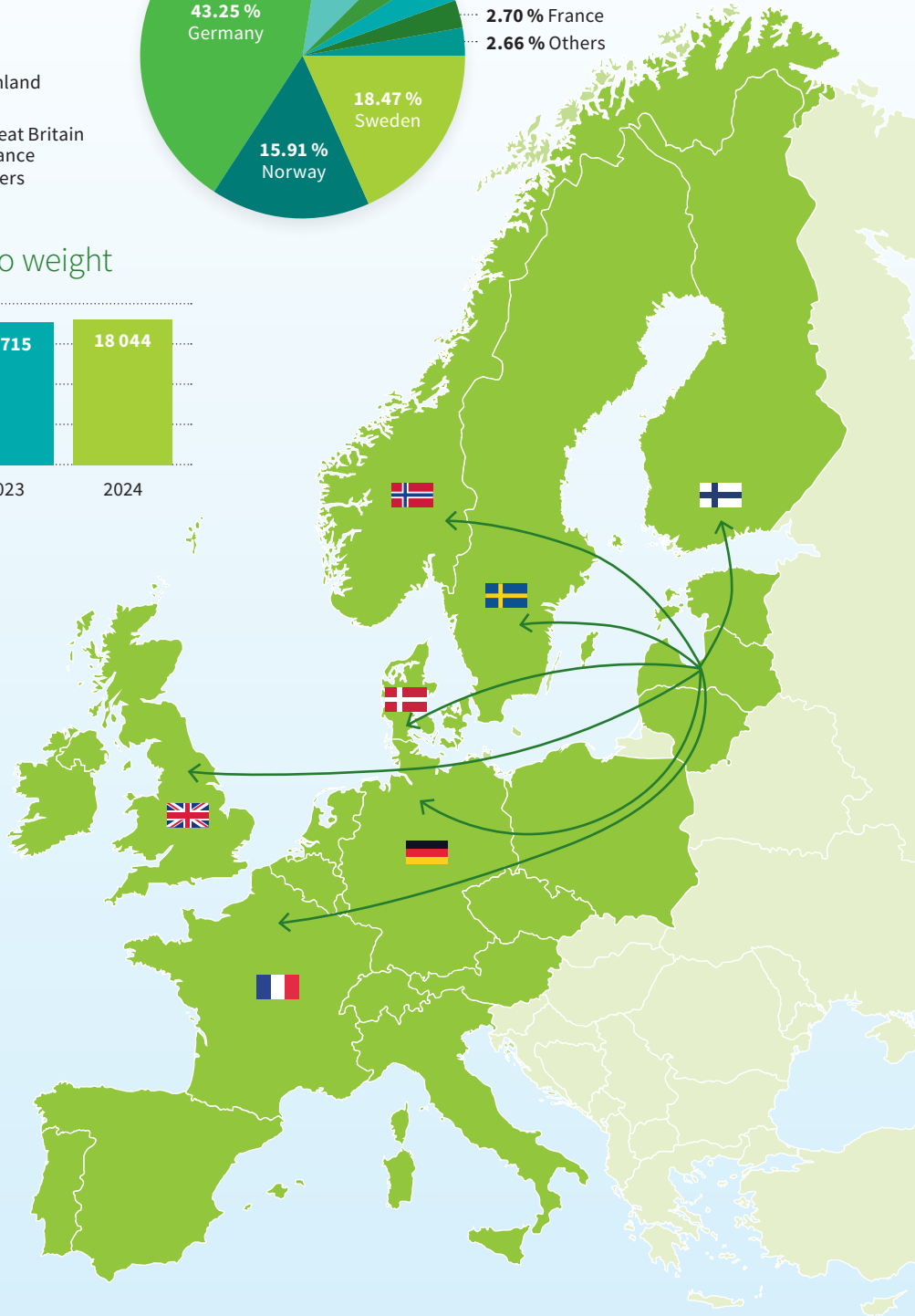


Total netto weight



We are continuously working to improve our logistics efficiency. Around 95% of all deliveries are made as full truck loads (FTL) using trucks over 16 tonnes. Smaller or more complex deliveries are organized as less-than-truckload (LTL) shipments by trucks under 16 tonnes. To reduce the partly loaded trucks, we also consolidate multiple orders from different customers into a single delivery, when shipping to the same warehouse.

A major part of our deliveries is carried out using renewable diesel. Our transport partners actively support sustainability, installing solar panels at their terminals, holding EcoVadis certification and implementing other green initiatives.



Packaging

Our commitment to sustainable packaging is reflected in both: the materials we use and the choices we offer to our customers.

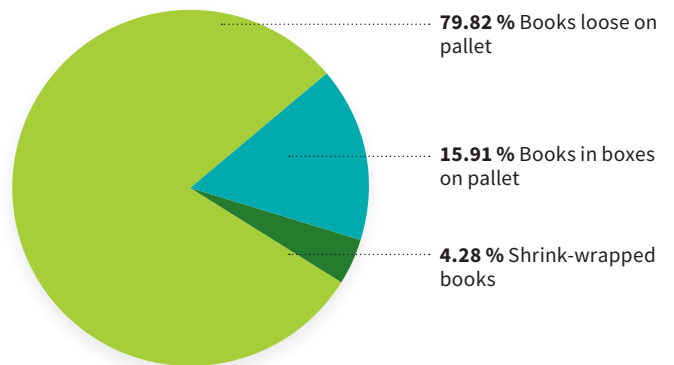
Materials

We continue to reduce our packaging footprint by using:

- pallet shrink-wrap containing 30% recycled polymer;
- 100% recycled cardboard for pallet covers;
- corrugated boxes made from at least 50% recycled material for shipping books;
- heat-treated FSC certified pallets.

Smart Choices for Lasting Protection

Each book project is different and so are its packaging needs. Either books are packed loose on a pallet, in boxes or shrink-wrapped, we encourage customers to make a conscious choice based on the chosen materials, type of binding, type of transport and destination.



Safe and responsible packaging for transportation ensures book quality and minimizes unnecessary losses in the long term.

Our goal is to balance protection and sustainability by helping our clients to choose the most efficient and environmentally sound packaging for each specific case.

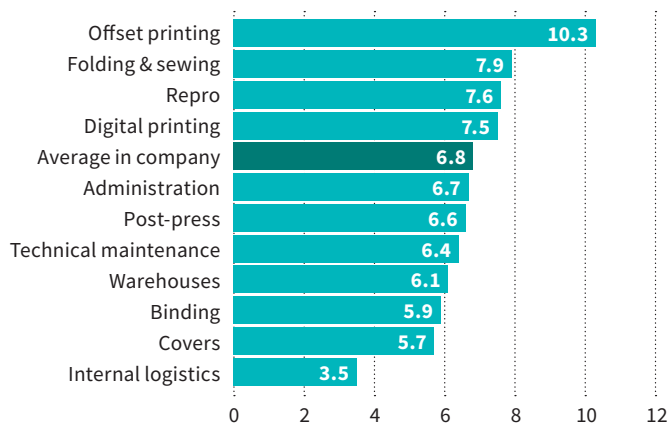


People

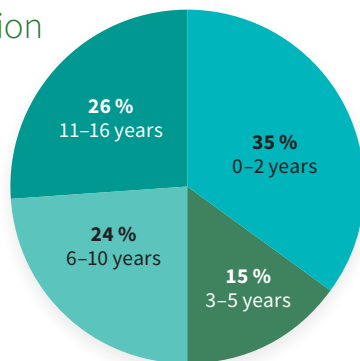
Livonia Print employs a team of **544 professionals** across various departments.

The average length of employment is close to **7 years**, which reflects strong employee retention. Some departments, such as offset printing, have an even longer average tenure, indicating deep-rooted expertise in core production areas.

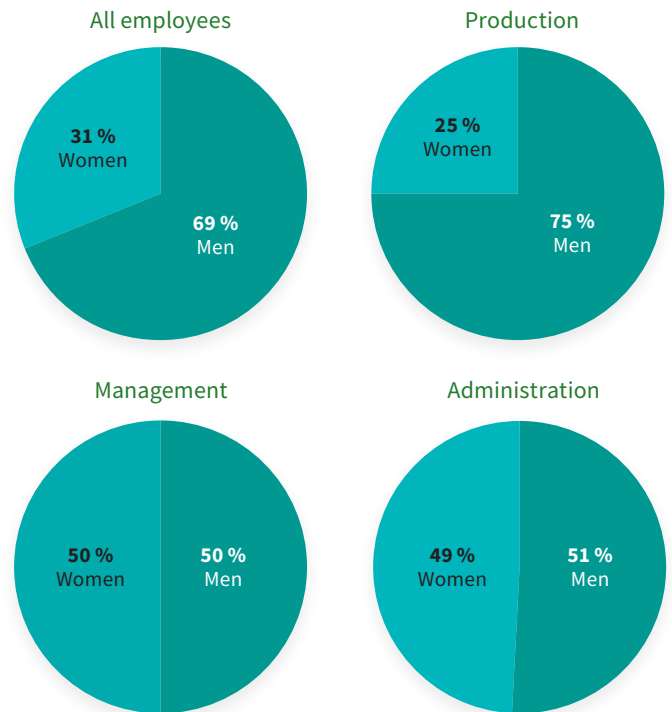
Average duration of employment 2024 (in years)



Employee distribution by time of employment



Approximately half of our team members have been with the company **for 6 to 16 years**, while the other half have worked at Livonia Print for up to 6 years. This creates a healthy mix and balance of experience and fresh perspectives – long-standing employees bring a wealth of accumulated knowledge and skills, while newer colleagues contribute new ideas, up-to-date know-how and diverse experience from other backgrounds. Beyond ensuring physical safety, we are committed to fostering an inclusive workplace that embraces diversity, including efforts to attract and support more women in manufacturing roles.



Currently, more than 30% of all Livonia Print employees are women.

A closer look shows that the proportion of women in production roles is smaller, but still notable and representative.

When examining gender diversity in Administration and Management, we can proudly say the representation is close to or at an ideal balance.

Advancing Gender Diversity and Inclusive Workplaces

- Promote gender diversity across all levels of the company.
- Encourage manufacturing as a modern, rewarding career choice for women.
- Ensure recruitment and selection processes are fair and unbiased.
- Foster supportive work environments and policies tailored to women's needs.
- Advocate for increased representation of women in leadership roles.
- Support work-life balance initiatives.
- Provide infrastructure and facilities designed to accommodate all employees.

Employees & Social Responsibility

We believe our employees are our greatest asset. The cornerstone of Livonia Print's social and personnel policy is to provide a workplace where everyone feels respected, included, and valued as an individual with their own rights and fundamental needs. Equally important is the quality of the environment in which we live and work – both individually and collectively.

The success of Livonia Print is closely tied to our core values and strong management systems, which are grounded in EU regulations, the Ethical Trading Initiative (ETI), the UN Guiding Principles on Business and Human Rights and the legislation of the Republic of Latvia.

To ensure our policies and practices are aligned with international standards, we apply the **SMETA** – Sedex Members Ethical Trade Audit – methodology. This allows us to benchmark our operations against the ETI Base Code, the International Labour Organization (ILO) Conventions and national legislation.

SMETA is based on four pillars:

1. Labour Standards
2. Health and Safety
3. Environment
4. Business Ethics

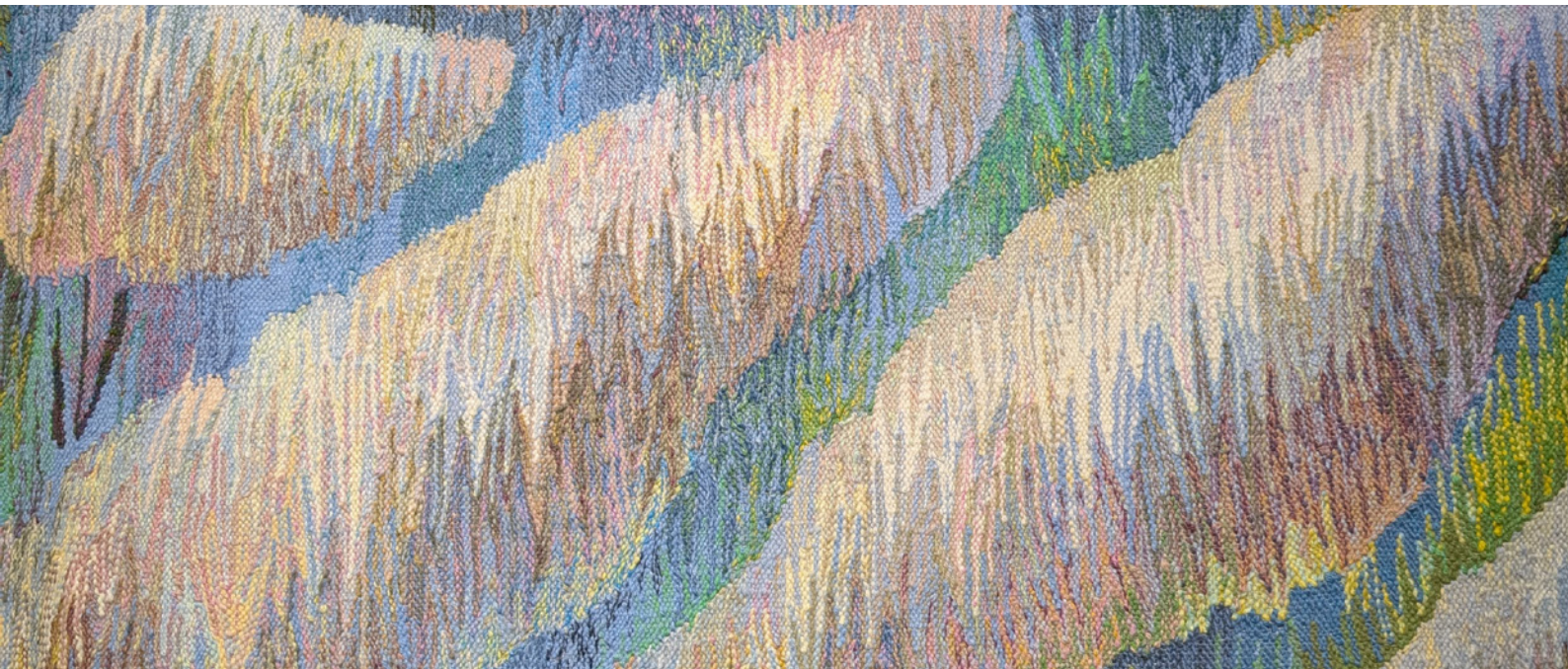


What does this mean for our employees?

The use of SMETA provides our workforce with assurance that:

- **Labour rights are fully protected** – The ETI Base Code guarantees key rights, including freedom of association, the right to a living wage, and the right to a safe and healthy workplace.
- **Clear standards are upheld** regarding working conditions.
- **Employees are encouraged and empowered** to raise their voices and participate in decisions that impact their work environment.

Our most recent SMETA audit was successfully completed in November 2024. We are proud to report that we received no remarks or recommendations for improvement. All our social, personnel and health & safety policies were found to be fully compliant with the ETI Base Code and consistent with global best practices in human rights and workplace standards.



Health & Safety

Maintaining a safe and healthy work environment remains one of our core priorities. Livonia Print has joined the “**Mission Zero**” initiative (misijanulle.lv) – a voluntary movement bringing together over **150 organisations and 70,000 employees** across Latvia, united by the goal of zero workplace accidents.

“Mission Zero” encourages a culture of safety, trust, and mutual care, emphasising that well-being and safe working conditions must be developed and upheld every day. By joining, we demonstrate our commitment to further strengthening our internal health and safety standards.

Our goals include:

- Raising awareness and safety competence among employees
- Sharing experience and learning from others
- Continuously improving preventive measures

We believe that **fostering a strong safety culture is essential** to ensuring that every employee returns home safe and healthy at the end of the workday.



Livonia Print School & Annual Award

In 2024, we launched our internal educational initiative – **Livonia Print School**. What began as a small experimental project, driven by limited resources but great enthusiasm from a few dedicated employees, has since evolved into a robust training movement. It now actively engages and inspires colleagues to develop new skills and gain deeper insight into production processes before and after his/her current work task.

2024 Training Highlights

- **27 training sessions** on “How Books Are Produced”, attended by over **130 employees** who gained comprehensive knowledge of the entire book manufacturing cycle.
- **38 new operators** trained from “zero” level, now confidently producing **40–50 different projects daily**.
- **2 large-scale workshops** focused on paper and adhesives, designed to enhance knowledge and practical skills across teams.
- We promote our employees upgrading their professional skills at the Riga State Technical College.

The achievements of 2024 reflect our strong commitment to employee development.

We prepared and published 13 articles in our series on the history of writing and book publishing.

We are sincerely proud of the learning culture we have cultivated and the ongoing growth of our employees.

Annual Award – Employees of the Year

To foster pride in our skills and strengthen employee engagement, Livonia Print established a new tradition in 2023: the **Annual Employee Awards**. In 2024, this tradition was continued with great enthusiasm, recognizing the best employee in each department through a peer voting process.

The term “best” reflects not only professional expertise but also qualities such as being a supportive and collaborative colleague. Nominations include written justifications describing the nominee’s positive attributes and contributions.

The award presentations are heartfelt occasions, where the winner’s name is announced along with the kind words shared by their colleagues, making the recognition truly meaningful and inspiring.



Sustainable Book Design & Production: Balancing Design and Sustainability

Sustainability and Book Design – Hand in Hand

At Livonia Print, we believe that sustainability should be an integral part of book design and production. Publishers and book designers have a significant role in making conscious choices that minimize environmental impact while maintaining high-quality production standards. Sustainable book production requires balancing functionality, efficiency, and longevity to create books that are both beautiful and environmentally friendly.

Understanding the Function, Target Audience and Lifespan

The purpose of a book and its expected lifespan play a crucial role in determining the most sustainable production choices. **Books with a short lifespan** – such as paperbacks, activity books, and coloring books – should utilize the most environmentally friendly materials and production methods. **For books meant to endure for generations**, selecting durable materials and high-quality binding ensures their longevity.

Optimizing Size, Page Count, and Materials

Choosing the right book format, number of pages, and materials is essential for reducing waste and energy consumption. The selection of embellishments and effects should be intentional, as each additional process requires extra materials, electricity, machine hours, and results in more waste. **Sustainable choices mean opting for effects that add value rather than excess.**

Employing the Most Efficient Printing and Binding Techniques

Selecting the right printing and binding technologies can significantly impact book's life span. High-quality materials, thread-bound book block and wood-free paper, ensure extended usability. By avoiding unnecessary embellishments and using eco-friendly alternatives, publishers can create books that are both sustainable and aesthetically appealing.

A New Resource: *Make The Right Choice* Cover Embellishment Catalogue

In May 2024, we introduced *Make The Right Choice*, a unique cover embellishment catalogue designed as an educational and practical tool for our customers. This initiative fosters collaboration between our printing house, publishers, and designers to make informed decisions about cover materials and embellishments from both: sustainability and cost-efficiency perspective.

By providing insights into available solutions, *Make The Right Choice* empowers our customers to select embellishments that enhance book design without unnecessary environmental and financial impact. Our intention was to create a **smart book production guide where "less" sometimes does "more"**.





ALL YOU NEED IS BOOK



Progress Towards 2020–2025 Sustainability Goals

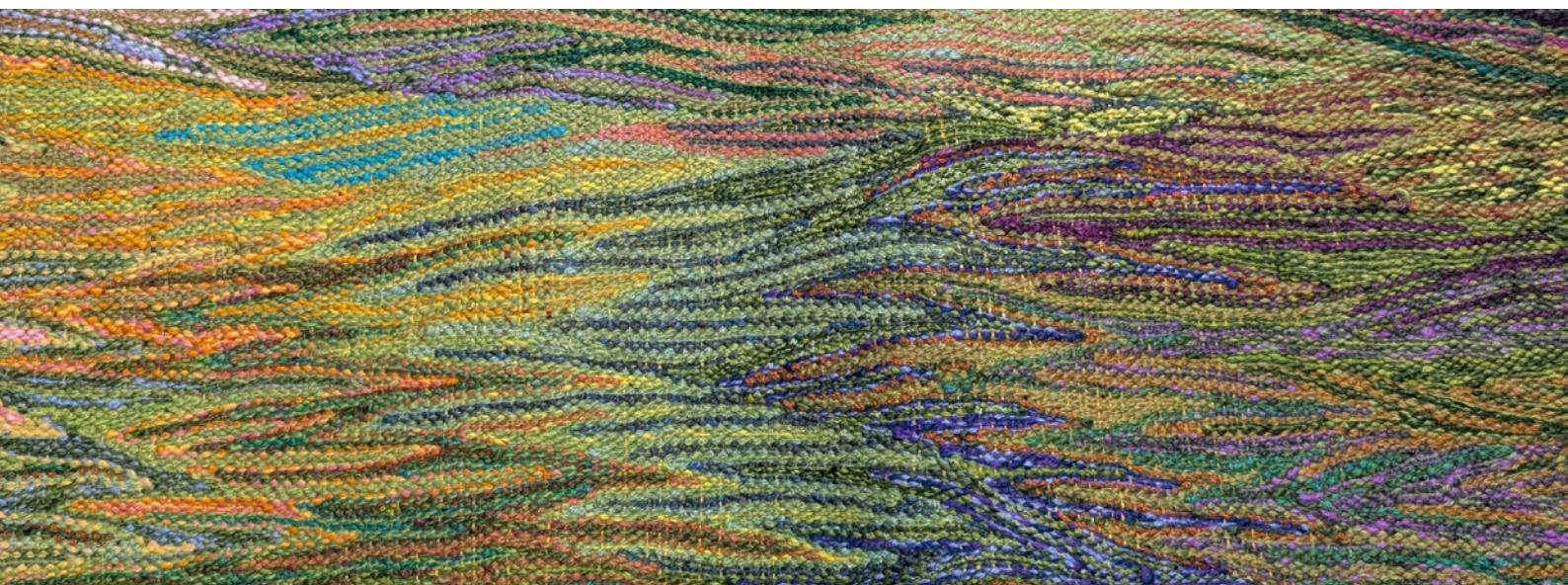
2024 Achievements and Key Measures

- ✓ **Waste** – 5-year goal achieved! Unsorted waste share reduced by 58% (from 3.46% to 1.45%). We continue exploring new sorting methods.
- ✓ **Recycling** – New methods identified to improve both the quality and volume of recycled waste, along with additional opportunities for material reuse.
- ↘ **Water** – Consumption optimized by installing humidity sensors in the digital printing paper warehouse (for monitoring and humidifying). Since 2020, total water consumption has decreased by 3.5%.
- ✓ **GHG Emissions: Scope 1 and 2** – Absolute Scope 1 and 2 emissions reduced by 83.9% compared to 2020. Target already met.
- ↘ **GHG Emissions: Scope 3** – Scope 3 emissions per ton of books produced reduced by 1%.
- ↘ **Energy** –
 - Installation of another air compressor station;
 - 3 new electric transformers;
 - Reduction of equipment make-ready times.

To fulfil our 5-year targets and align with the latest sustainability trends, Livonia Print sets annual environmental goals and works diligently to meet, and often exceed them.

For year 2025, our key environmental and sustainability targets include:

- Implementing the ISO 50001 Energy Management System standard. Accomplished in June, 2025.
- Reducing the company's paper-related emissions by 5% by using more environmentally friendly paper.
- Introducing new materials made from recycled or reused components.
- Evaluate "Health, Safety and Environmental Compliance" risks for all suppliers undergoing a risk assessment.
- Ensuring full compliance with all requirements of the EU Deforestation Regulation (EUDR).





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Photos by Eva Veitnere and Livonia Print team
Artwork photos: "Pļava" ("Meadow") exhibition by Iveta Vecenane
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