

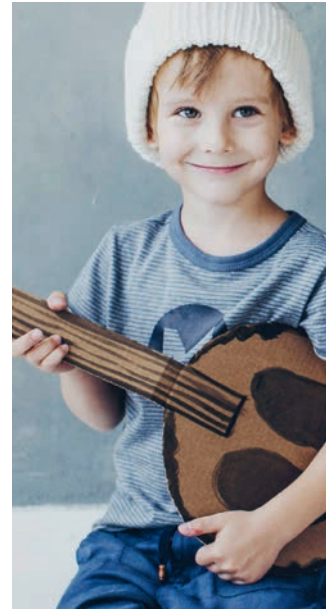


Livonia_{print}a

Sustainability Report 2023

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Dear Partners, Colleagues, and Friends,

At first glance, Livonia Print's state-of-the-art machinery and the vast expertise of our team might catch your eye. Upon a closer look we recognized that our real advantage lies not just in our resources, but in our mindset, our continuous readiness to change and adapt while not giving up on our values.

In 2023, two fundamental developments shaped Livonia Print's mindset and operations decisions.

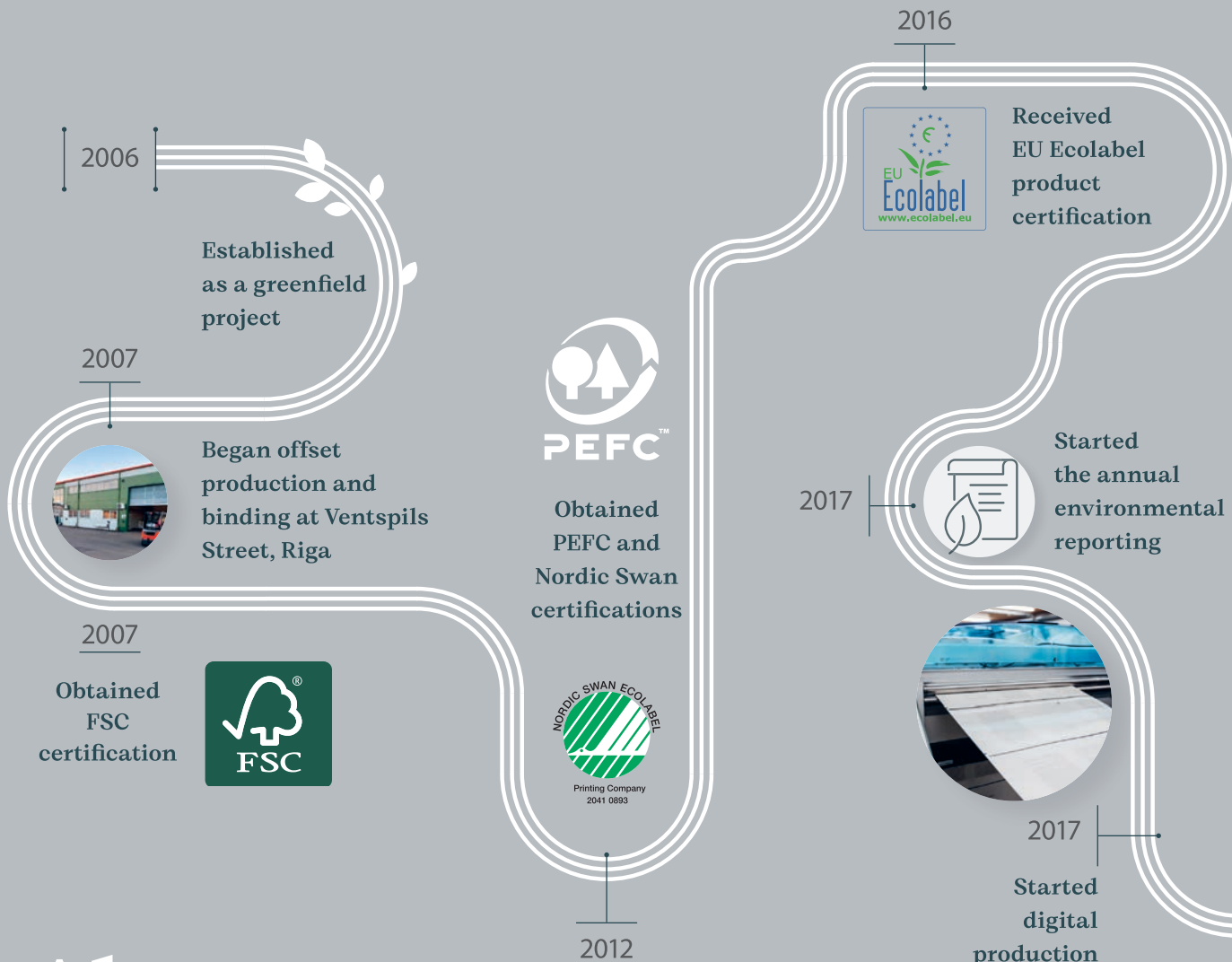
First, in light of the slowing down of the Nordic economies, we decided to do less - but do it smartly. Early in 2023, we transitioned from the industry standard 24/7 operations to a more sustainable 24/5 production schedule. This change enabled more sustainable workflows, improved our overall production quality, and boosted employee morale along the way.

Simultaneously, we forged new partnerships with companies that share our values. These collaborations have enabled us to power our operations with 100% renewable energy, allow for a new life over 95% of our paper waste, and streamline our processes through work automation.

The second significant shift in our mindset came in response to the European Commission's latest directive against greenwashing. We welcomed this long-awaited change by shifting our focus from distant, outsourced CO₂ offsetting initiatives to more transparent, locally managed environmental actions. From the perspective of pure offsetting, we continue to responsibly cover our Scope 1 and 2 emissions, along with customer delivery emissions.

Thank you for being part of our story. Let's continue moving forward, together.

Yours sincerely,
Raimonds Freimanis
Managing Director

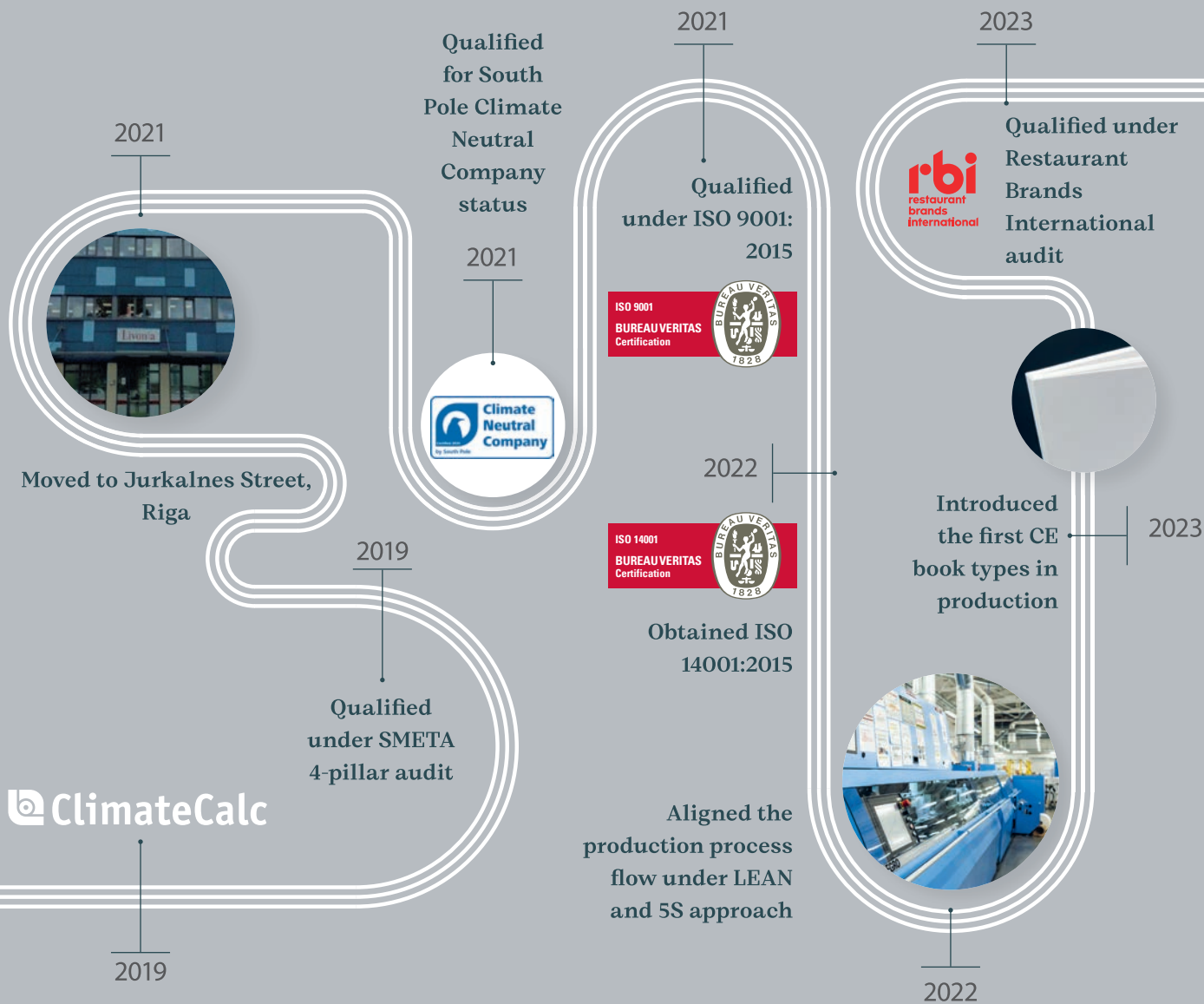


About us

We assist major European publishers by producing high-quality books through an efficient manufacturing and multilingual client service.

Vision

Started 2007 in Riga, Latvia, Livonia Print emerged from the ambition to become Northern Europe's leading high-quality book producer. Leveraging Latvia's rich printing history, skilled workforce, and the latest printing technology, we swiftly rose to become the region's top provider of sustainable, high-quality books.

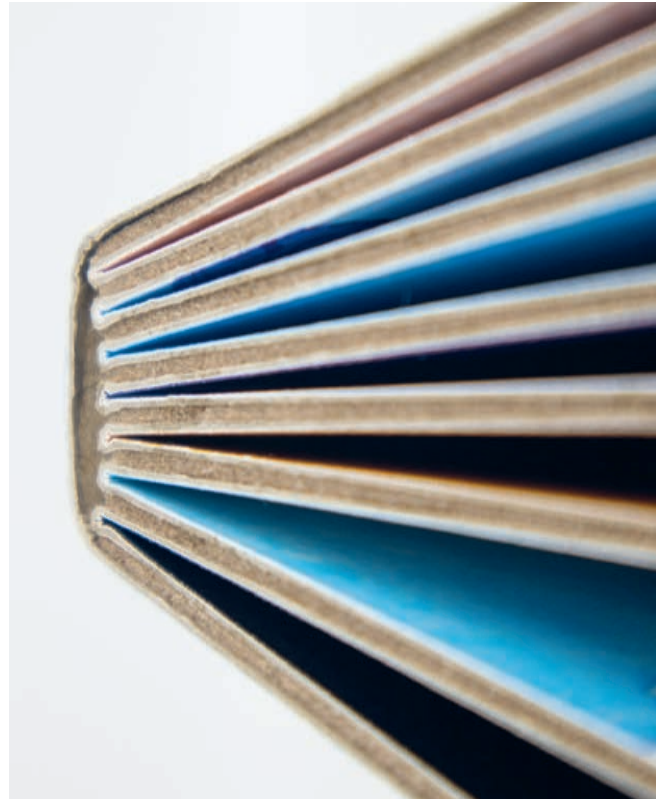


Sustainable book production

A profound commitment to our clients, employees, and the environment lies at the core of our operations. Through focused CO2 emission reduction initiatives and eco-friendly sourcing policies, we uphold our dedication to the planet while boosting operational efficiency. Integrating sustainability with Lean practices allows us to drastically reduce resource wastage, underscoring our belief in the enduring value of printed books.

Client Service: Tailored in more than ten languages

Since the very beginning, we have serviced our clients in their language. Our dedication to customization and efficient production processes brings publishers' visions to life in various book formats. Whether it's stitched, glued, spiral, or board books, we provide diverse binding options such as soft, hard, or flexible covers. ●



Books for future generations - safe and sustainable



We offer a wide range of children's books, from tactile board books for toddlers to educational resources for school kids.



In 2023, we passed our first Good Manufacturing Practices audit, ensuring our processes meet quality standards across products, processes, procedures, premises, and people. Our GMP compliance positions us as leaders in producing engaging and safe books for young readers.

Trust Livonia Print to deliver children's books meeting RBI audit standards, guaranteeing safety for all, even those who explore them with all their senses.



Designing our supply network with environment in mind

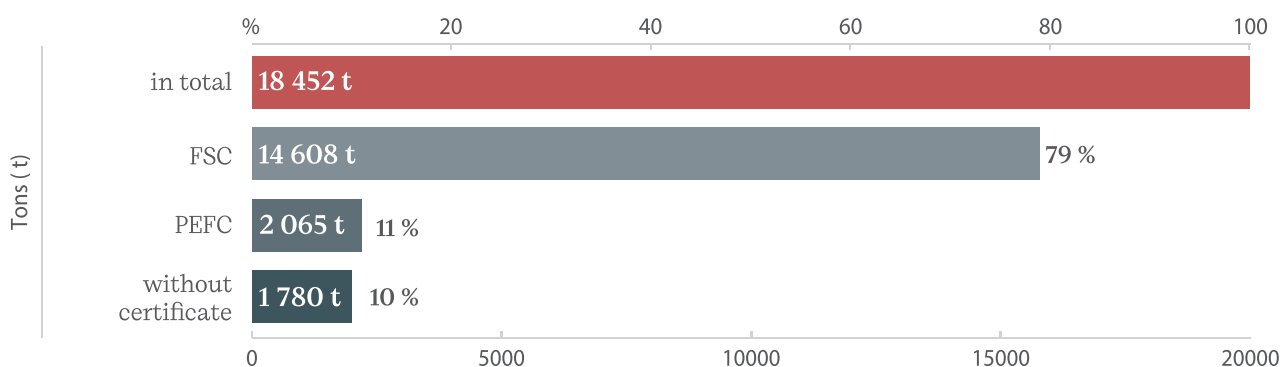
In 2023, we closely examined our role in enabling book publishers to choose environmentally responsible production options. Our review of vendors and supply chains aimed to make the sustainability path smoother for our clients. Through continuous updates to our supply chain, we ensure that eco-friendly alternatives are readily available

for every standard material in book production, including paper, boards, inks, finishings, packaging materials, and delivery methods.

This approach provides our clients with options such as low CO₂ paper and eco-conscious inks, supporting high-quality production that aligns with sustainability. Our strategy is straightforward: embedding

sustainability into our supply chain reduces our environmental footprint and motivates our clients to do likewise. We are committed to our sustainability efforts as they bolster our clients' aspirations for a more sustainable future. Together, we're not merely creating books; we're jointly nurturing a legacy of environmental care and preservation.

2023 paper purchases



Partnerships for optimized environmental footprint

In early 2023, we developed the Livonia house paper to further minimize the environmental impact of book production. Our current house paper, developed in collaboration with Lessebo Paper AB, boasts an exceptionally low CO₂ footprint, binding only 25 kg of CO₂ per ton of paper. To illustrate, considering 1 kg of paper can produce around three average-sized books, each book printed on our Livonia house paper has a carbon footprint of less than 10 grams of CO₂ related to the paper itself.

The carbon footprint of a book can vary significantly depending on materials, production processes, energy sources, and transportation. However, we aim to further reduce these environmental impacts by focusing on sustainable practices, optimized waste and energy management, and efficient logistics. It's worth noting that Livonia Print utilizes 100% renewable, green energy for book production, and we achieve a remarkable 95% waste reuse or recycling rate.

Reflecting on the past year, we are proud of the steps we and our partners have taken towards sustainable book production. The success of initiatives like our house paper exemplifies the positive impact achievable within the book production industry. While specific paper products may evolve over time, our commitment to offering customers sustainable choices remains constant. ●

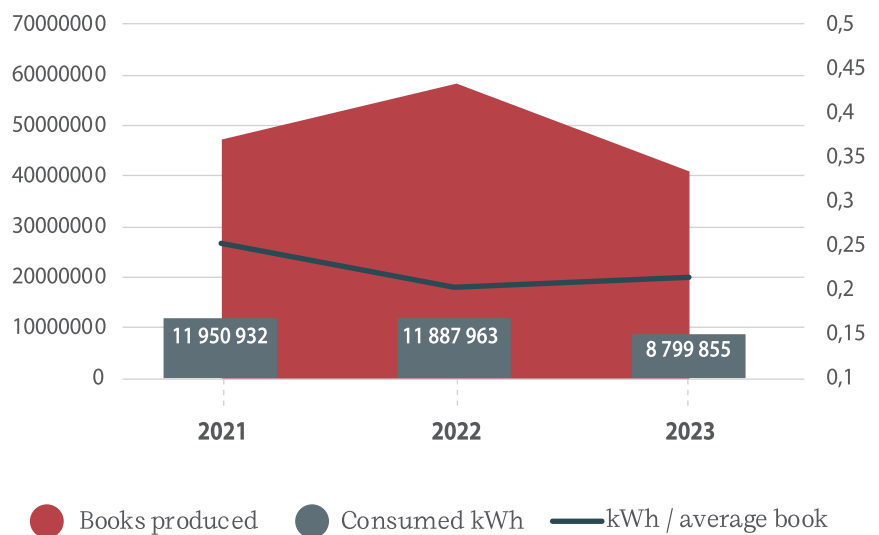




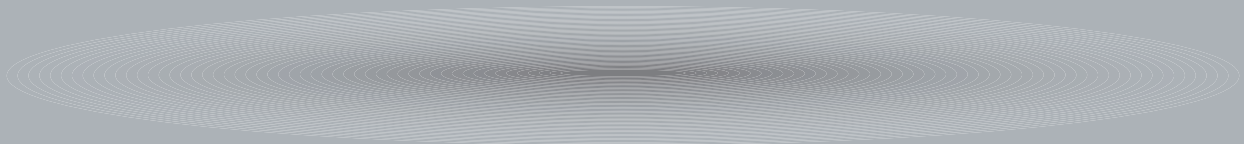
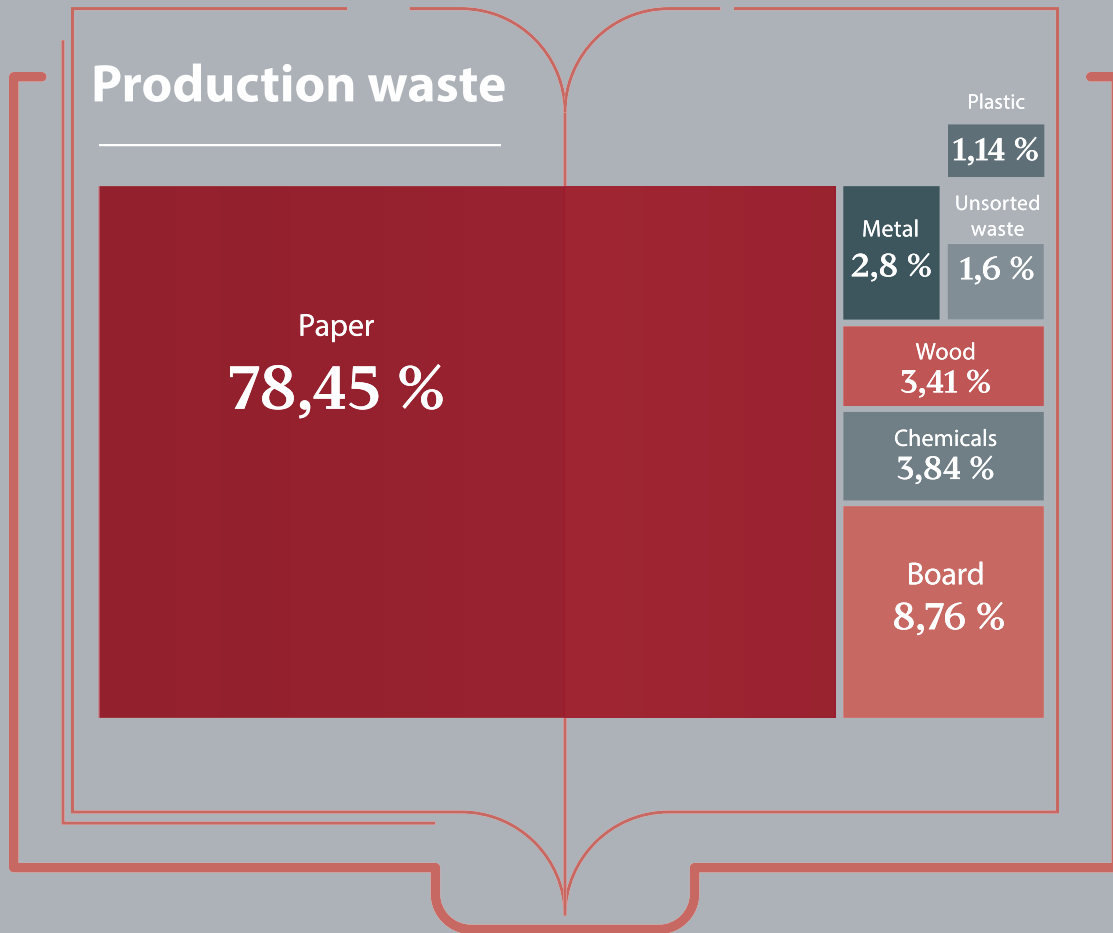
Use of electricity

At the beginning of 2023, Livonia Print altered its electricity consumption pattern by switching from a 24/7 to a 24/5 work schedule. Our new work organisation resulted in a **25% decrease in total electricity use** compared to 2022, despite a slight increase in electricity consumption per book.

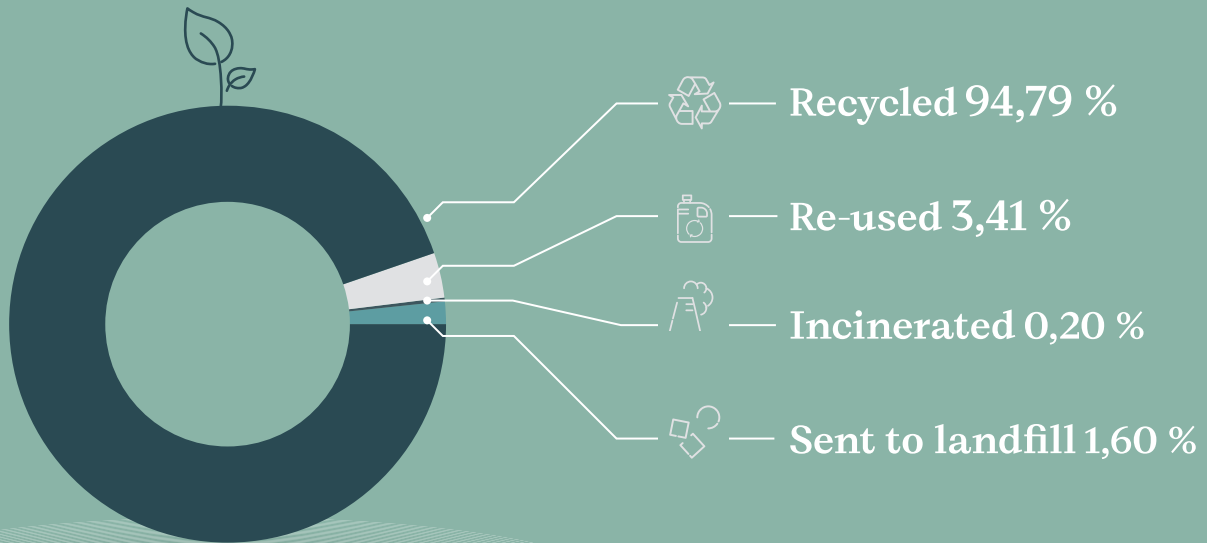
Traditionally, printing houses are businesses that never sleep. The decision to move to a five-day work week was based on an internal data analysis and employee feedback. Our findings highlighted that quality issues were more prevalent during weekend shifts and that our team greatly valued having weekends off. So far, this change has resulted in **measurably improved overall production quality**. In 2023, we maintained 2022's level of electricity consumption per book despite considerably lower production output and working hours. ●



Waste management



What happens with our production waste?



In 2023 Livonia Print signed a waste recycling contract with a local partner that manufactures paper-based hygiene products. Our production waste now is a substrate for new products and productions.

Now, up to 95% of our paper waste is recycled and lives another life as paper towels, napkins and other paper-based goods.

Starting 2023, 100% of HDPE cans from our production are turned into pellets and reused as substrates for new products.

Carbon account in 2023

In 2020, Livonia Print took a significant step towards environmental leadership by setting ambitious CO₂ emission reduction targets aligned with the global Science-Based Targets (SBT) approach.

Progress: 78% reduction in emissions

By the end of 2023, we have exceeded our initial SBT-aligned target of Scope 1 and Scope 2 reduction by 21%. Since establishing our baseline in 2020 (4,518.2 tons), we have achieved a remarkable 78% reduction in our GHG footprint. This translates to current emissions of only 967.3 tons at Scope 1.

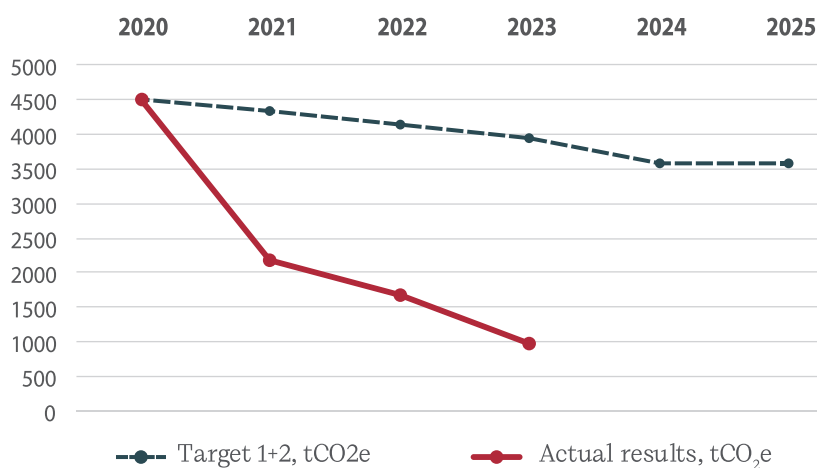
What do GHG emission scopes stand for?

Scope 1: Direct GHG emissions from owned or controlled sources.

Scope 2: Indirect GHG emissions from purchased electricity, heat, or steam consumption.

Scope 3: Other indirect emissions occurring upstream and downstream in the value chain. ●

Progressing towards zero emissions







Target: reduce absolute Scope 1 and Scope 2 GHG emissions by 21%.

“Livonia Print remains committed to leading sustainable book production through continued collaboration and incremental innovation.”

Carbon Account

Company:	LIVONIA PRINT
Address:	Jurkalnes iela 15/25
City:	LV-1046 RIGA
Country:	LATVIA
Accounting period:	01.01.2023 - 31.12.2023
Basic year:	2018
Responsible for the account:	Toms Valpēters
Certificate number:	CC-000090/LV
The account includes:	Sheetfed web heatset/Digital Printing

Total quantity of delivered products:	18.287 t
Total emissions of greenhouse gases (Scope 1+2+3):	29.762 t CO₂ eq
Total energy consumption (Scope 1+2):	47.815 GJ
Waste substrate:	25%
Key figures: (Scope 1+2+3)	1.628 kg CO₂ eq/t
Key figures: (Scope 1+2)	2.615 MJ/t

 Emissions from activities	Company related	Product related	Total emissions	
Burning of fuel in stationary burning units at the company	887 t CO ₂ eq		887 t CO ₂ eq	3%
Burning of fuel in own or leased vehicles	19 t CO ₂ eq	0 t CO ₂ eq	19 t CO ₂ eq	0%
 Direct emissions (Scope 1)	906 t CO₂ eq	0 t CO₂ eq	906 t CO₂ eq	3%
Purchase of electricity	716 t CO ₂ eq		716 t CO ₂ eq	2%
Purchase of district heating	0 t CO ₂ eq		0 t CO ₂ eq	0%
 Energy indirect emissions (Scope 2)	716 t CO₂ eq		716 t CO₂ eq	2%
Production of substrate		15.823 t CO ₂ eq		53%
Transportation of substrate (incl. upstream)		2.687 t CO ₂ eq		9%
Production of printing ink and varnish		533 t CO ₂ eq		2%
Production of PE- and cardboard packing		78 t CO ₂ eq		0%
Transportation of products to and from subsupplier		0 t CO ₂ eq		0%
Transportation of products to the customer		6.531 t CO ₂ eq		22%
Production of fountain solution and cleaning agents	30 t CO ₂ eq		30 t CO ₂ eq	0%
Production of plates and cylinders	2.010 t CO ₂ eq		2.010 t CO ₂ eq	7%
Employee's commuting to and from work (incl. upstream)	295 t CO ₂ eq		295 t CO ₂ eq	1%
Emissions from production of purchased fuel	155 t CO ₂ eq	0 t CO ₂ eq	155 t CO ₂ eq	1%
Other indirect emissions (Scope 3)	2.490 t CO₂ eq	25.651 t CO₂ eq	28.140 t CO₂ eq	95%
 Total (Scope 1+ 2+3)	4.112 t CO₂ eq	25.651 t CO₂ eq	29.762 t CO₂ eq	100%

Daiga Leimane,
Continuous
Improvements
Manager



“ Each worker has the power to contribute to operational excellence through LEAN, much like bees in a hive.”



Lean and sustainable – two sides of the same story

Daiga, can you outline your role and how Lean culture and the 6S system enhance Livonia Print's operations?

Daiga: I focus on how to make Lean culture part of our company DNA. Lean stands for eliminating waste and fostering continuous improvement, while the 6S system helps to sustain a clean, orderly environment essential for our productivity.

You joined Livonia Print during a pivotal shift towards a deeper Lean mindset. How did you navigate this transition?

Daiga: Joining two years ago, we needed to deepen our Lean culture across all 500 employees, moving beyond audits to a fundamental mindset shift. We launched extensive training to embed continuous improvement as a core ethos. This led to a proactive culture where employees identify and propose ways to improve efficiency.

How do these methodologies support sustainability in book production?

Daiga: Lean practices are actually contributing directly to the broader sustainability goals. Through Lean, we reduce our ecological footprint and boost financial health. At the same time, an efficient workplace promotes employee well-being. On a macro scale, these methodologies enhance our agility and efficiency, which are crucial for meeting changing market demands and producing high-quality books cost-effectively.

Balancing efficiency and systematic quality is key in the highly competitive world of book production. At Livonia Print, Daiga Leimane champions continuous improvement through the Lean culture and the 6S system.

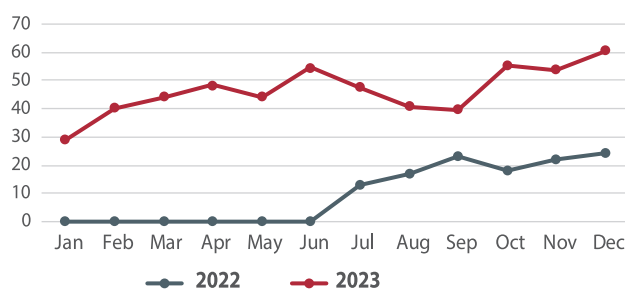
Could you discuss the impact of Lean culture and the 6S system on maintaining high-quality standards?

Daiga: What matters the most is that with a team of over 500 people, many working in shifts, we are building a culture that empowers people to address quality issues and risks proactively. Without a systematic approach guided by clear principles, it would be rather challenging to maintain quality standards.

Looking ahead, how do you see the evolution of these practices at Livonia Print?

Daiga: We'll continue refining our workplace culture, integrating technology and fostering innovation to stay at the forefront of sustainable, quality book production. Our approach is to stick to the plan and to keep our long-term goals in sight. Our mindset is the "secret sauce" that has powered the growth from the very start and will also help us navigate the field in the future. ●

LEAN culture implementation progress





Baiba Kapteine, Head of Quality

Quality Commitments

Each June, during the ISO audit, both Livonia Print and its suppliers' documentation and employees are randomly inspected to confirm that the company complies with ISO 9001:2015 and ISO 14001:2015 standards. Both active ISO 9001:2015 certificates held by Livonia Print are tied specifically to book manufacturing.

ISO 9001:2015 and ISO 14001:2015 are international standards providing guidelines for companies on establishing and maintaining quality and environmental management systems. These standards are particularly important in the B2B (business-to-business) sector, as they help companies improve their operations, efficiency, and reliability, while promoting sustainable development. Here's a detailed explanation of each standard and its benefits to the company's clients:



ISO 9001:2015 - Quality Management System Standard

ISO 9001:2015 is an international standard that specifies requirements for a quality management system. It helps companies ensure that their products and services consistently meet customer and regulatory requirements and that quality consistently improves.

ISO 9001:2015 certification demonstrates a company's commitment to providing high-quality products and services systematically.



ISO 14001:2015 - Environmental Management System Standard

ISO 14001:2015 is an international standard that specifies requirements for an effective environmental management system. It assists companies in reducing their environmental impact, promoting sustainable development, and complying with environmental legislation and other environmental obligations. Compliance with ISO 14001:2015 standards is direct proof that Livonia Print genuinely and systematically cares about environmental preservation and reduces its negative impact.

Overall, adherence to both ISO standards has not only improved Livonia Print's internal processes and reduced its environmental impact but also provides significant benefits to Livonia Print's clients, fostering trust and long-term cooperation.



Good Manufacturing Practices (GMP) Audits

In the summer of 2023, for the first time in Livonia Print’s history, we were audited based on GMP criteria for “good manufacturing practice” and its operational requirements to ensure the production of safe and quality products. The GMP audit standard ensures that the produced product – in the case of Livonia Print, books – meets quality standards across five quality aspects: products, processes, procedures, premises, and people.

The goal of the GMP audit was to certify that SIA Livonia Print can meet and fulfill our client Restaurant Brands International’s quality and product safety requirements. Such audits are typically applied to food processing companies with strictly defined requirements for safe food delivery to consumers.

By complying with GMP and RBI standards, Livonia Print can confidently state that our manufactured books are as safe for consumers – from both process and raw material perspectives – as if they were edible.

FSC and PEFC Environmental Certificate Audits

The annual international FSC (Forest Stewardship Council) and PEFC (Programme for the Endorsement of Forest Certification) environmental certificate audits at Livonia Print occur in the last months of the year. The purpose of these audits is to verify that Livonia Print continues to meet strict environmental requirements related to forest products and their traceability. The primary focus of FSC and PEFC audits in our industry is on the traceability and labeling of paper used in book production.

During the audit process, the traceability and labeling of certified materials are meticulously checked. This means verifying whether the materials used in the company’s products or services come from sustainably managed forests. The auditor examines documentation, visits production sites, and conducts interviews with employees to ensure that all processes comply with FSC and PEFC standard requirements.



The mark of responsible forestry

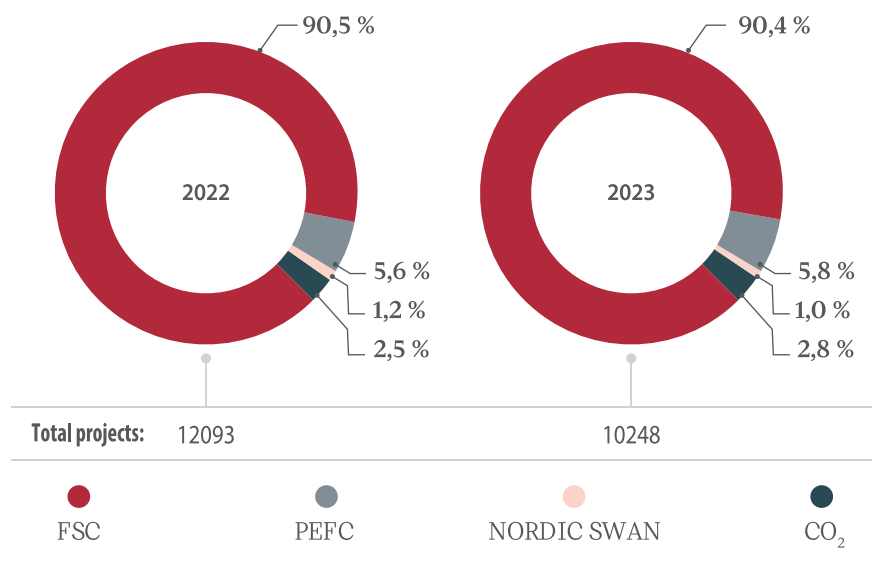


Promoting Sustainable

EU Regulation on Deforestation-free Products (EUDR) Regulation Integration

In connection with the requirements of the European Union's Deforestation Regulation (EUDR), FSC has begun to integrate these regulatory requirements into its standards. The EUDR aims to reduce the impact of products sold in the European Union market on global forest degradation by requiring companies to prove that their products have not contributed to deforestation. Integrating the FSC certificate with EUDR requirements means that companies adhering to FSC standards will more easily comply with EUDR requirements as well.

Green Project Count



Internal audits at Livonia Print

For three years now, Livonia Print has implemented a Quality Management System, certified according to the ISO 9001 standard requirements. The primary requirements of this internal quality system are:

- Establishing systematic and understandable internal processes for everyone;
- Clearly defining company objectives;
- Implementing tools for their continuous improvement.

A key element of our Internal Management System are regular in-

ternal audits, conducted according to ISO 9001 and ISO 14001 standards.

Audits provide an independent view of a specific process or its provision by individuals not involved in the process. The task of internal audits is to evaluate and identify opportunities for improvement in the following areas:

- Internal control processes
- Risk management processes
- Effectiveness of quality management processes

In 2023, Livonia Print conducted 42 internal audits, evaluating and documenting every production process in depth.

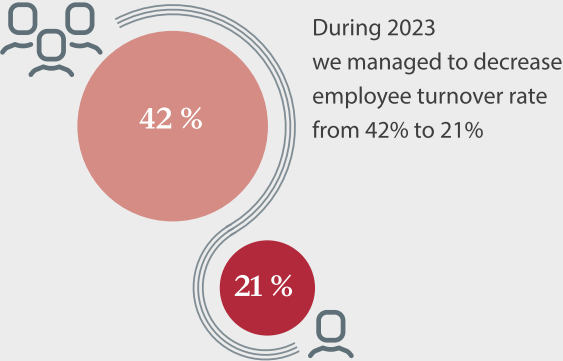
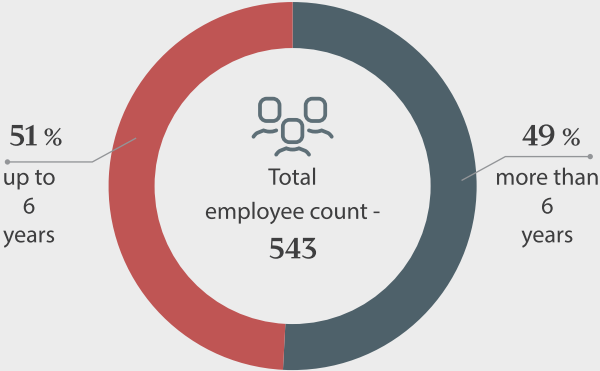
Supplier due diligence audits

Each year, Livonia Print conducts audits of material suppliers and partners to validate substrate and product compliance with Livonia Print's quality requirements, including traceability assurance.

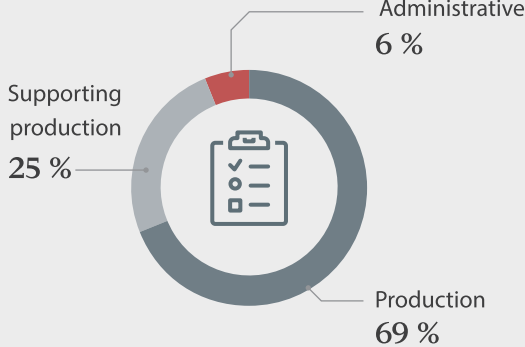
Each supplier is evaluated using the SMETA methodology (labor safety, cleanliness, attitude towards production, etc.). Each such audit is also an opportunity for quality communication with the supplier about aspects to be improved in the future. ●

Our People

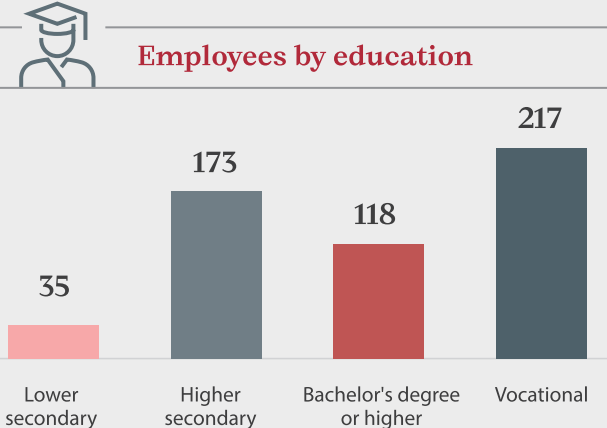
Employees by their tenure at Livonia Print



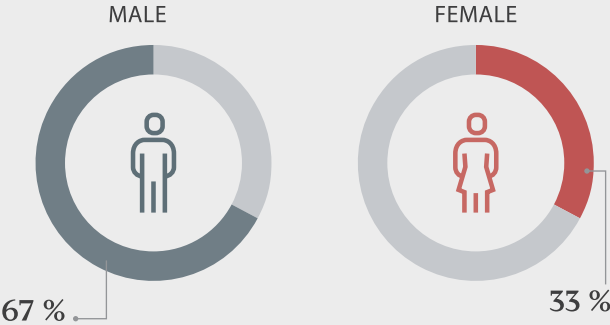
Employees by function



Employees by education



Employees by gender



Our average age is 40





Liene Stokenberga,
Human Resources Director

“When it comes to our people, every decision and action is guided by data, ensuring that our focus remains on meaningful, merit-based benefits, not just the latest trends. We choose to move forward systematically to genuinely benefit everyone according to their real contributions.”



Livonia School



Back in 2007, Latvia's rich book printing heritage and skilled workforce were crucial in founding Livonia Print. However, the shift towards digital media has stagnated professional education in printing technologies. For more than a decade, Livonia Print has been the largest book producer in the Baltic states. Thus, it is our responsibility to ensure the continuation and transfer of our employees' professional expertise.

Over the last couple of years, Livonia Print has increasingly focused on employee training and in-house education. In 2023, our team of roughly 550 people had diverse educational backgrounds, yet only a few were formally trained in printing and graphic arts. Nevertheless, each and every one of our employees took part in multiple trainings throughout the year, improving their skills and knowledge consistently.



Ralfs Vasiļjevs and Modris Rūķis, leading the new educational programme.

In 2024, we're enhancing our training efforts with the launch of the "School of Livonia Print," a new in-house educational formation targeting comprehensive development across our workforce.

The goal is not only to ensure our continued leadership in the field but also to create a workplace where employees can thrive and develop themselves based on aligning their strengths with the competencies demanded by the company. ●

Custom functional onboarding programs



Building up production competence

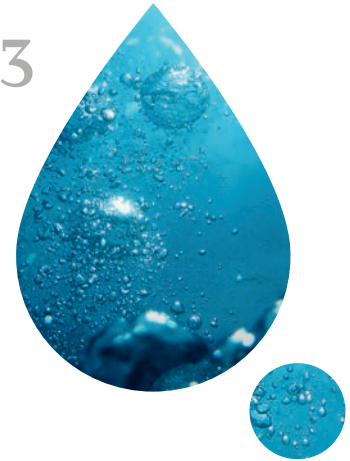


Expertise in materials, processes and technologies



History of book production and larger contexts.

Sustainability actions of 2023 and action plan for 2024



No. 1 Electricity

Livonia Print has switched to 100% renewable electricity, resulting in zero Scope 2 GHG emissions.

In 2024 continue improving energy efficiency through Employee Engagement (target No. 7).

No. 2 Heating

In 2023, the company completed installing the Heat Recovery System that allows for reduced heat loss at the production site by approximately 840 MWh annually, thus reducing GHG by 1709 kg/year – roughly 2 % of the total heating consumption, depending on the weather conditions. In 2024 an exchange of two electricity transformers is planned in order to minimize electricity losses.



No. 3 Water

For production purposes, Livonia Print uses water in a closed cycle, so no significant decrease in water usage is expected.

Regarding household use, water consumption reduction actions are detailed in the section Employee Engagement (target No. 7).

No. 4 Waste

In 2023, the company automated the offset ink supply system, which reduced chemical and metal waste volumes, saved employee time, and improved productivity.

We have also reduced offset make-ready paper waste by approximately 1.65% by incrementally improving our production processes and providing additional training to our operators.

In 2024, we will continue encouraging our customers to choose digital book production for small orders, which helps reduce production waste and improve the product's CO₂ rating.

No. 5 Recycling

By the end of 2023, the company had achieved its target of collecting 100% FSC-certified paper for reuse. Also, more than 95% of the production waste generated by the company is either recycled or reused.

For 2024, the company plans to make incremental improvements through weekly systematic site inspections, data collection, and analysis to identify potential areas for further improvement.

No. 6 Materials

Paper:

1. Educate customers on paper alternatives and encourage choosing papers with lower GHG emissions.
2. Systematically ask suppliers to update on changed paper profiles or data safety sheets, and also to update their paper profiles with CO₂ data for each paper grade, thus enabling us and our customers to compare papers by their environmental footprint.

Other materials:

1. Prioritise materials with less impact on the environment, both in production and in product packaging.
3. Continue offset ink system automation in 2024, thus further decreasing consumption and waste.
4. For packaging in 2024, use the FSC-certified packaging board and paper-based certified tape only.



No. 7 Employee Engagement

Education

Continue conducting quarterly education sessions to increase employee awareness about environmental actions. Display signs and consistent internal digital content promoting ways of saving natural resources.

Mobility

In 2023 we implemented multiple environmentally responsible and

health-conscious employee mobility initiatives, notably increasing the capacity of bike racks by 125% and installing EV charging stations in the employee parking area, enabling employees to use more sustainable and healthy ways of transportation.

In 2024, we will continue promoting sustainable daily commute options by informing employees about nearby city public transportation, including train schedules. ●

Tracking customer satisfaction

Listening to customers

After navigating the ripples of COVID-19, the paper crisis, and an economic slowdown impacting our Nordic European book publisher clients, Livonia Print made a decision to re-establish sustainable customer satisfaction practices in 2023. Recognizing the importance of our customer relationships, we reintroduced a customer satisfaction survey program using the Net Promoter Score (NPS) methodology. The NPS measures customer satisfaction and loyalty based on the likelihood of customers recommending a company to other industry peers.



72

A Solid Foundation: NPS Score of 72

The 2023 NPS survey results were positive, with Livonia Print scoring 72, indicating a solid base of loyal and enthusiastic customers (promoters). According to public data on manufacturing industries in European Union, the average NPS typically falls between 60 and 75. This benchmark underscores the company's strong customer foundation and provides a basis for further growth.

While we are grateful to our loyal customer base, the NPS approach's unique value lies in its qualitative customer feedback. Through this methodology, we have gained actionable insights into areas that need improvement and are adjusting our actions in 2024.

By sustainably addressing customer needs and fostering strong partnerships, Livonia Print looks forward to a future of mutual success with our valued clients.



