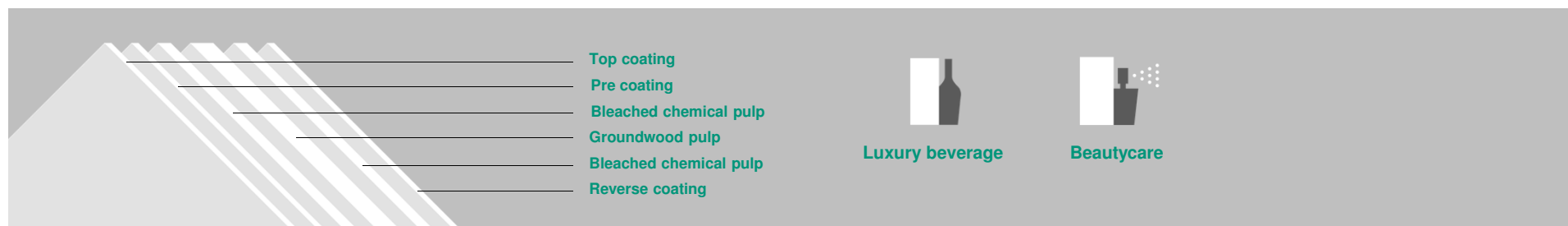


PankaLux Fully coated white back folding boxboard (GC1)

Technical specifications



Typical technical values for PankaLux

Property / Unit	Tolerance									Standards
Grammage, g/m ²	±4%	360	385	410	435	460	485	510	560	ISO 536
Thickness, µm	±5%	580	640	690	740	800	855	910	1000	ISO 534
Moisture, %	±1.5	8.5	9.0	9.0	9.0	9.0	9.5	9.5	9.5	ISO 287
Bending moment Taber 15° MD, mNm	-15%	39.9	46.8	55.7	65.3	74.9	85.8	97.6	123.8	ISO 2493
Bending moment Taber 15° CD, mNm	-15%	18.1	21.3	25.3	29.7	34.1	39.0	44.4	56.3	

Properties not related to grammage

Property / Unit	Tolerance	Values	Standards
ISO Brightness C/2°, %, top	±1.5	85	ISO 2470-1
ISO Brightness C/2°, %, reverse	±1.5	80	ISO 2470-1
Colour CIELAB L * C/2°, top		93.5	ISO 5631-1
Colour CIELAB a * C/2°, top		0.7	ISO 5631-1
Colour CIELAB b * C/2°, top		0.5	ISO 5631-1
Surface Smoothness, PPS 10, µm	±0.3	1.0	ISO 8791-4
Smoothness Bendtsen, top, ml/min		40	ISO 7891-2
Gloss 75°, %	>40	40	ISO 8254-1
Scott Bond, J/m ²	>110	110	TAPPI 569

➤ For more information contact your local sales representatives or

Pankakoski Mill Oy
Ruukintie 2
FI-81750 Pankakoski
Finland
Tel. +358 (0) 10 480 4600
Fax. +358 (0) 10 480 4701

www.pankaboard.com

All properties according to Pankakoski Mill measurements tested in manufacturing conditions
Test climate 23°C / 50%RH (according to ISO 187). Tolerances based upon 95% confidence limits, apply to reel average.
In order to verify, reel average shall be based on 5 single measurements randomly sampled within the reel. These averages will be for at least 19 of 20 reels within the specification limits.

Valid from 09/2017
Issued 07/2017
Cancels 09/2016



Sustainability at Pankaboard 2025

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CEO's foreword

At Pankaboard, sustainability guides our daily decisions and long-term direction. As a producer of fresh fibre-based specialty cartonboards certified for food contact applications, we are committed to delivering safe, high-quality products while contributing to a more sustainable packaging system.

We continuously develop our operations with a focus on resource efficiency, reduced fossil emissions, and sustainable product innovation. Sustainability is fully integrated into Pankaboard's strategy and daily work.

The European regulatory landscape continues to evolve rapidly. Following the EU Omnibus I directive, Pankaboard is no longer subject to the Corporate Sustainability Reporting Directive (CSRD). However, Pankaboard has completed a double materiality assessment (DMA), which we review regularly and which continues to guide our sustainability priorities. We also report according to the Voluntary Sustainability Reporting Standard for small and medium-sized enterprises (VSME), which we adopted last year.

A key driver for our industry is the upcoming EU Packaging and Packaging Waste Regulation

(PPWR). Its requirements on recyclability, waste reduction and the use of safe, renewable materials align well with Pankaboard product offering. Based on the latest EU guidance, we are well positioned to meet the material compliance requirements of PPWR. We see PPWR not only as a regulatory requirement, but as a driver for innovation and a clear direction for the future of packaging.

Collaboration is essential. We work closely with customers and partners across the value chain, providing support and expertise to meet current and future requirements for enabling more sustainable packaging solutions. This is our fifth voluntary sustainability report, presenting our progress and key developments. We remain committed to transparency and continuous improvement.

Together, we are building a more sustainable future.

Pasi Piiparinen, CEO

About this report

This is Pankaboard's fifth sustainability report, which covers the company's sustainability performance for the year 2025. This report has been reviewed and approved by our Board of Directors on May 21, 2026.

This sustainability report is available only in digital format and it is part of our annual reporting. If you have any questions regarding our sustainability report or its content, please contact us through reply@pankaboard.com.

The reporting of data points in this report are based on the VSME standard – a voluntary European reporting framework for sustainability performance. The selection of reported data-points are based on “if applicable” –method and is guided by our double materiality assessment to ensure relevance to our company's most significant impacts and stakeholder expectations.



Glossary

- CSRD** – Corporate Sustainability Reporting Directive: EU directive setting detailed sustainability reporting requirements for companies.
- CEPI** – Confederation of European Paper Industries: European industry association representing the paper and pulp sector; developing common environmental calculation frameworks.
- CSRD** – Corporate Sustainability Reporting Directive: EU directive setting detailed sustainability reporting requirements for companies.
- DMA** – Double Materiality Assessment: Process for identifying sustainability topics that are material from both impact and financial perspectives, as required under ESRS.
- ECHA** – European Chemicals Agency: EU agency responsible for implementing chemicals legislation, including REACH, and maintaining the SVHC Candidate List.
- EES+** – Energy Efficiency System: Finnish voluntary energy efficiency agreement promoting continuous improvement in industry.
- EFRA** – European Financial Reporting Advisory Group: Independent advisory body responsible for developing ESRS and VSME sustainability reporting standards.
- ESG** – Environmental, Social and Governance: Framework covering key environmental, social and governance aspects of corporate responsibility.
- ESRS** – European Sustainability Reporting Standards: EU sustainability reporting standards developed by EFRA, forming the basis for CSRD reporting.
- EUDR** – European Union Deforestation Regulation: EU regulation aiming to prevent products linked to deforestation from being placed on the EU market.
- FSC®** – Forest Stewardship Council: International certification system promoting responsible forest management through certified supply chains.
- GHG** – Greenhouse Gas: Gas that contributes to climate change by trapping heat in the atmosphere.
- GHG Protocol** – Greenhouse Gas Protocol: International standard for measuring and reporting greenhouse gas emissions at organizational and value-chain level.
- GMP** – Good Manufacturing Practices: System ensuring that products are consistently produced and controlled according to quality standards.
- LCA** – Life Cycle Assessment: Method for assessing environmental impacts throughout a product's entire life cycle.
- OBA** – Optical Brightening Agent: Additive used in paper and board to increase brightness and visual whiteness.
- PEFC** – Programme for the Endorsement of Forest Certification: International forest certification system promoting sustainable forest management.
- PFAS** – Per- and polyfluoroalkyl substances: Group of synthetic chemicals known for their persistence and potential environmental and health risks.
- PPWR** – Packaging and Packaging Waste Regulation: EU regulation governing packaging requirements and the management of packaging waste.
- REACH** – Registration, Evaluation, Authorisation and Restriction of Chemicals: EU regulation governing the safe use and control of chemical substances.
- REF** – Recovered Fuel: Solid or liquid fuel produced from non-hazardous waste, used as an alternative energy source to replace fossil fuels.
- SVHC** – Substances of Very High Concern: Chemicals identified under REACH that may pose serious risks to human health or the environment.
- VSME** – Voluntary Sustainability Reporting Standard for SMEs: Simplified sustainability reporting framework developed by EFRA, based on ESRS principles.

About Pankaboard

Company in a nutshell

**Founded
2006**

Cartonboard production
on same site since 1912

**Capacity
110,000 t/a**

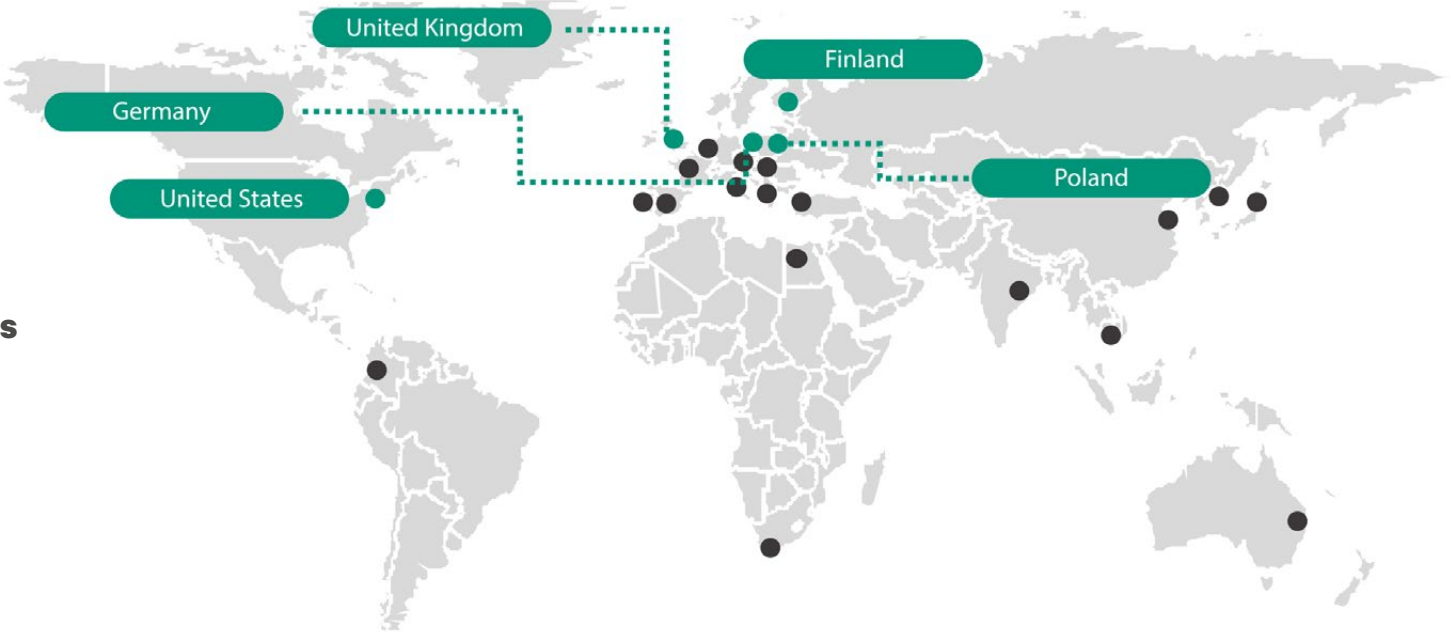
Board machine 2: 65,000 t/a
Board machine 3: 45,000 t/a

**Turnover
81.4 MEUR**

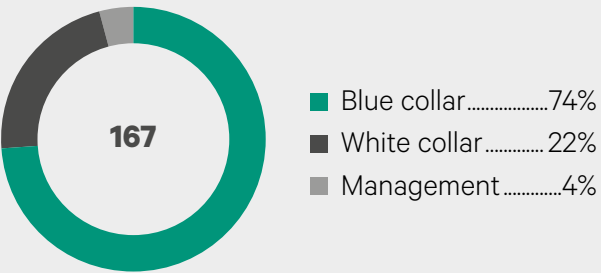
5
sales offices

70
delivery countries

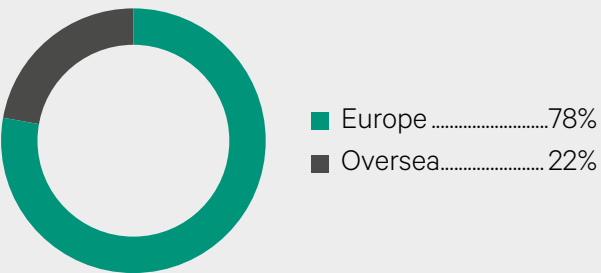
600
customers



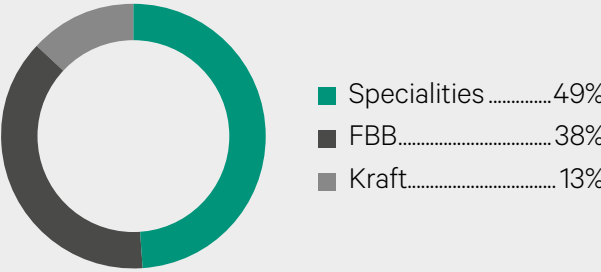
Personnel



Geographical split



Product split



Areas of activity



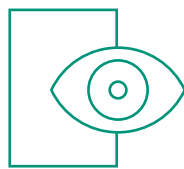
**Food
packaging**

Dry food
Bakery
Catering
Chilled and frozen food



**Functional
solutions**

Capseals
Trays
Skinpads
Board books
Games
Plates



**Visual
solutions**

Picture frames
Coasters
Display
Merchants
(specialties)



**Other
packaging**

General
Luxury
Healthcare
Cosmetics
Merchants
(packaging)

Company management

Pankaboard Board of Directors

Dan Karlsson
Chair of the board

Mikko Heinonen
Deputy chair of the board

Leif Frilund
Member of the board

Aarne Luukko
Member of the board

Jari Tikkanen
Member of the board

Lennart Simonsen - Member of the board until May 2025

Pankaboard Management Team

Pasi Piiparinen
CEO

Santiago Gimenez-Utiel*
VP Sales Western Europe

Sirpa Huopala
VP Compliance, HR & Legal Affairs

Veli-Pekka Kyllönen*
COO

Christer Nordman
VP Sales & Marketing Emerging Markets

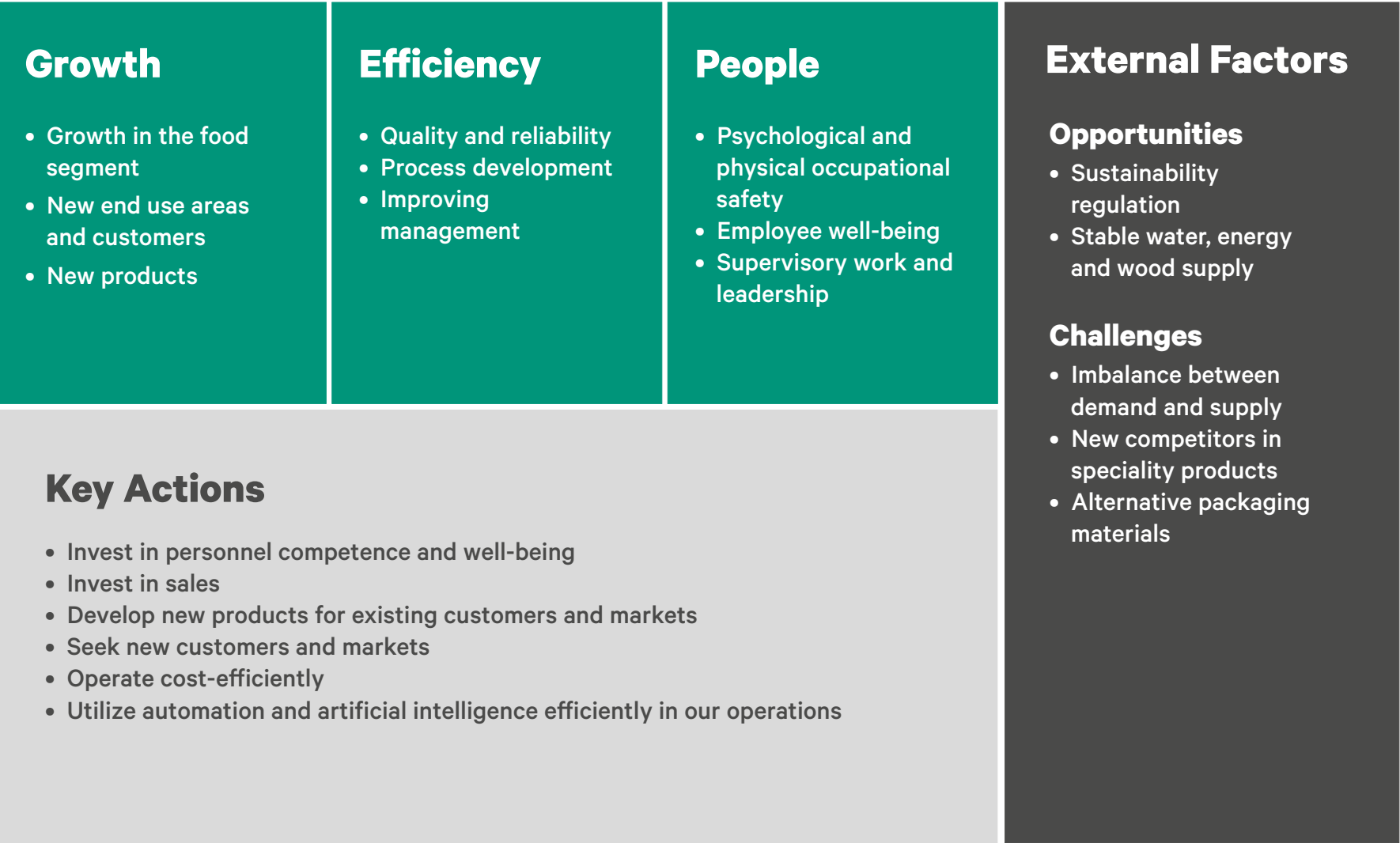
Arto Pekkarinen
VP Supply Chain & Customer Service

Tiina Staljon
CFO

Petri Saastamoinen – SVP Operations, Member of the management team until November 2025

**Members of the Management Team since November 2025*

Strategy – Tomorrow’s growth is built today



Pankaboard sustainability management

Sustainability approach

Packaging plays a key role in protecting products, extending food shelf life, and minimizing waste and environmental impact. Fibre-based packaging is recyclable, and smart, lightweight designs reduce transport emissions.

At Pankaboard, sustainability is embedded in all operations. We focus on reducing CO₂ emissions, applying circular economy principles, and producing recyclable, renewable virgin fibre

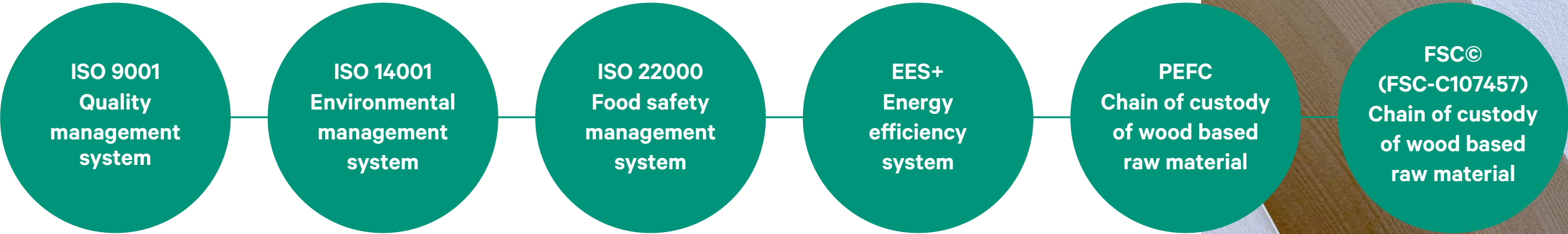
cartonboards that are responsibly sourced and fully traceable.

Pankaboard continuously invests in its production processes to ensure high efficiency, reliability and sustainability. These investments focus on improving resource efficiency, product quality and environmental performance.

Our in-house maintenance plays a key role in securing operational continuity through

systematic preventive maintenance and ongoing process optimization.

We comply with all applicable laws and maintain full material traceability, supported by external legal expertise to ensure alignment with evolving regulations. In 2025, we had no reported compliance issues.



Our certified management systems guide our continuous improvement, legal compliance, and responsible sourcing.

Double materiality assessment

At the beginning of 2025, Pankaboard reviewed and updated its Double Materiality Assessment (DMA) with an external expert to reflect evolving requirements of European Sustainability Reporting Standards (ESRS). Due to the EU Omnibus I Directive approved in December 2025, Pankaboard is no longer within the scope of the CSRD, where DMA is required. As a result, we continue sustainability reporting according to the VSME standard, as officially recommended by the European Commission in July 2025. Although DMA is not mandatory under the VSME standard, Pankaboard continues to use it as a valuable framework for our sustainability work and as a guide for our efforts and resource allocation. This report summarizes relevant data points based on material topics identified in DMA and in line with VSME. We will continue using DMA to focus our sustainability work.

Key themes

Building on the insights from the double materiality assessment (DMA), Pankaboard has identified key sustainability themes that reflect the most relevant environmental, social, and governance (ESG) impacts, risks, and opportunities in our operations and value chain. The selection of these themes is not only based on the DMA, but also on regulatory requirements and expectations of our stakeholders.

The key themes reflect the strategic direction set by our Board of Directors and management, who recognize sustainability as a driver of long-term value creation and resilience. At Pankaboard, we aim to lead by example in areas where sustainability can provide advantages in the market.

Theme	Description
Cooperation with customers	We enable our customers to achieve their sustainability targets by operating under certified systems and a culture of compliance and continuous improvement. Through responsible practices and close customer cooperation, we contribute to reaching their goals.
Operational excellence	We aim to be agile and responsive to customer needs. Our production is lean, minimizes resource loss, and incorporates circular economy principles. We are committed to minimizing our environmental impact through efficient operations.
Desired employer	We ensure a healthy and safe working environment. Engaged and satisfied employees are key to our success, and we continuously strive to improve their well-being.
Fossil carbon reductions	We actively reduce CO ₂ emissions from our operations and products, supporting climate change mitigation. We assess and manage environmental impacts throughout the entire product lifecycle.
Sustainable products	Our products are designed for a low carbon footprint and made from sustainable raw materials, ensuring resource efficiency and responsible sourcing.
Ethical business and governance	We are committed to ethical and sustainable business practices, guided by our Board-approved Code of Conduct and Supplier Code of Conduct. These outline clear standards for ethics, human rights, anti-corruption, and sustainability. Alongside our Operational Policy, they direct our daily operations and are regularly reviewed by senior management. A whistleblowing channel enables employees and partners to report misconduct confidentially or anonymously.
Fair business	We have zero tolerance for corruption and bribery. We ensure fair competition and full legal compliance in all agreements and reporting. Financial and non-financial data are accurate and transparent. We do not participate in political activities or donations.
Fair treatment of people	We respect human rights and promote fair treatment, diversity, and inclusion across our operations and value chain. Discrimination is not tolerated. We support an inclusive, respectful work environment and engage positively with local communities.
Data Intelligence	Data protection and information security are fundamental to our operations and form the foundation of our data intelligence approach. We invest in safeguarding privacy, ensuring cybersecurity and a data-driven culture supported by policies and governance. We actively develop our capabilities in data utilisation, analytics and the responsible use of artificial intelligence.



Stakeholder value creation

We engage actively with our stakeholders to understand their needs, assess our impacts, and improve our operations. Open dialogue is essential to building a sustainable and profitable business.

We regularly review stakeholder feedback and update our stakeholder analysis annually at the senior management level.

Stakeholder group	Stakeholder needs and expectations	Risks to the company	Opportunities for the company
Employees	A safe work environment, stable employment, clear leadership, and fair treatment.	Workplace accidents, job dissatisfaction, declining motivation, sick leaves. A negative image of the employer.	Committed staff, professional development, improved productivity and quality. Innovation and ideas for improvement. A positive employer image.
Owners	Profitability, risk management, responsible business practices, dividend income, and increasing asset value.	Financial losses, damage to reputation, investment risks.	Investments, strategic growth, responsible brand.
Customers	Quality, reliability, competitive pricing, excellent customer service, corporate responsibility. Clear communication.	Loss of customers, complaints, damage to reputation. Evolving customer needs that are not addressed in a timely manner.	Long-term customer relationships, co-development, value-added products. Using customer feedback to improve operations. A positive reputation.
Raw material suppliers	Clear and predictable demand, long-term partnership. Timely payments. Clear communication.	Availability and pricing risks. Over-reliance on individual suppliers. Quality fluctuations. Sustainability risks.	Long-term partnerships and collaborative development. Optimizing supply chain reliability, quality and cost-effectiveness. A responsible supply chain.
Energy providers	Consistent and predictable consumption, adherence to agreements. Timely payments. Clear communication.	Fluctuations in energy prices, supply disruptions and outages. Over-reliance on a single supplier. Sustainability risks.	Long-term partnerships and collaborative development. Energy efficiency, renewable solutions and sustainable development. Optimization of cost-effectiveness.

Stakeholder group	Stakeholder needs and expectations	Risks to the company	Opportunities for the company
ICT service providers	Cooperation, system continuity and clear requirements.	Data protection, data security and cybersecurity risks, system outages. Shortcomings in service and support. Technological obsolescence.	Digitalization, automation, data-driven management and the use of artificial intelligence. Improved data security and system reliability.
Other service providers	Predictable tasks and projects, clear responsibilities, a safe working environment. Clear communication.	Occupational safety, quality, and hygiene risks.	Flexibility and improving efficiency and fluency.
Financial and insurance companies	Financial stability, risk management, and accountability. Compliance with agreements and clear communication.	Availability of funding, rising costs.	Enabling long-term operations and investments, reducing risks.
Authorities	Compliance with laws and regulations, safety, responsibility and environmental protection. Clear reporting and communication.	Delays in licensing, sanctions, fines, restrictions on operations. Changes in legislation.	Proactive cooperation, operational compliance, smoother inspections and processes. Opportunities presented by evolving legislation.
Neighbours	A safe and peaceful living environment: management of noise, odors and traffic. Clear and open communication.	Conflicts, complaints, damage to reputation.	Good local connections, social acceptance. A positive reputation.
The city and the society	Jobs, tax revenue, corporate responsibility, business development.	Political risks, land-use planning, deterioration of services and reduced availability of labor.	Participation in regional development, collaborative projects, training services, infrastructure services, investment services and services related to employee well-being. A positive reputation.
The Finnish Forest Industries Federation	Joint statements, advocacy and cooperation. Adherence to the industry's common rules.	Risks associated with the industry's reputation. It is difficult to implement decisions made by large companies in a small business.	Advocacy, networking and information sharing. Support for developing operations and managing affairs.
Motiva	Promoting energy efficiency, committing to an Energy Efficiency Agreement.	Inappropriate procedures. Possible consequences of breaching the terms of the agreement.	Energy and cost savings, subsidies, training, best practices.
The Finnish Forest Research Institute / Natural Resources Institute Finland	Research collaboration, knowledge sharing. Commitment to the principles of sustainable forestry.	Poor usability and utilization of data.	High-quality information for developing innovation and sustainability, e.g., regarding origin of wood matters.
Research and educational institutions	Collaboration, internships, research data.	Failure of cooperation, risks of data breaches. Damage to reputation.	New talent, R&D projects, networking.

Sustainability roadmap

To guide and steer our sustainability work, we have developed a sustainability roadmap for the coming years. The purpose of the Pankaboard sustainability roadmap is to define clear action plans, measurable targets, and performance indicators for the material topics. This ensures that our planning is both based on the results of the DMA and practical and purpose-driven.

Environmental - Growing from a thriving forest

- We support sustainable forest management
- We reduce our carbon footprint
- We build sustainable circular economy

Social – We succeed together

- We take care of health and safety throughout the value chain
- We communicate, listen and come together

Governance – Sustainable and profitable business

- We have transparent corporate culture
- We lead with knowledge

Our sustainability roadmap has been grouped under seven main themes in Environmental (E), Social (S) and Governance (G) sections.



Operational excellence

Value chain

In 2025, Pankaboard focused on further enhancing agility and efficiency across our value chain, recognizing these as essential for sustainable and responsible operations. Our commitment to ethical sourcing and human rights applies equally to our own operations and to all suppliers, including tier 2.

Pankaboard is well-prepared for compliance and future traceability demands of the European Union Deforestation Regulation (EUDR) as the regulation’s enforcement was postponed to December 30, 2026. We actively monitor official announcements from the competent authority regarding the EUDR. In Finland, the competent authority is The Finnish Food Authority.

Human rights & labor standards	Responsible sourcing	Certified and traceable materials	Material Efficiency
• Commitment to key frameworks: ILO Declaration, International Bill of Human Rights, UN Global Compact, UN Guiding Principles on Business and Human Rights • Fair, safe, and inclusive working conditions and compliance with local labor laws on wages, hours, and minimum age • Promotion of equality, diversity, and equal pay for equal work	• All suppliers must follow our Supplier Code of Conduct; we do not engage with those who violate human rights or other core principles. • Supplier performance is monitored via audits, testing, surveys, and quality reviews • Environmental, social, and economic criteria are embedded in all purchasing decisions	• Chain of custody certifications under PEFC and FSC® (FSC-C107457), verified through regular third-party audits • All raw materials are 100% traceable and certified • Traceability systems are actively maintained and tested to ensure compliance and transparency	• Products consist of over 90% organic fibers and are fully biodegradable and recyclable • Efficient use of raw materials and water reduces environmental impact • Light-weight products support lean, cost-effective supply chain



Energy

Cartonboard production is energy-intensive, with drying as the biggest energy-consuming phase. At Pankaboard, thermal energy for drying is produced at an on-site biofuel plant operated by Adven Oy, using internal waste streams and locally sourced biofuels, e.g. wood bark and recovered fuel (REF).

Energy efficiency is central in Pankaboard's sourcing, investments and daily operations and our continuous improvement is guided by a structured energy management process. Pankaboard participates in the Voluntary Energy Efficiency Agreement coordinated by Motiva, a Finnish state-owned expert organization. The



Pankaboard continuous energy efficiency improvement process

previous agreement period ended in 2025, and during 2025 Pankaboard committed to the new period covering 2026–2035. Pankaboard's energy efficiency work earned the EES+ certificate in 2023 and in 2025 our systematic energy efficiency efforts continued.

Following organizational changes, the Energy Efficiency Team is now led by the COO. The

team is responsible for monitoring compliance with EES+ requirements, overseeing the energy planning process and its continuous improvement, setting and tracking energy efficiency targets, and ensuring effective energy-related training and communication for all personnel

Water

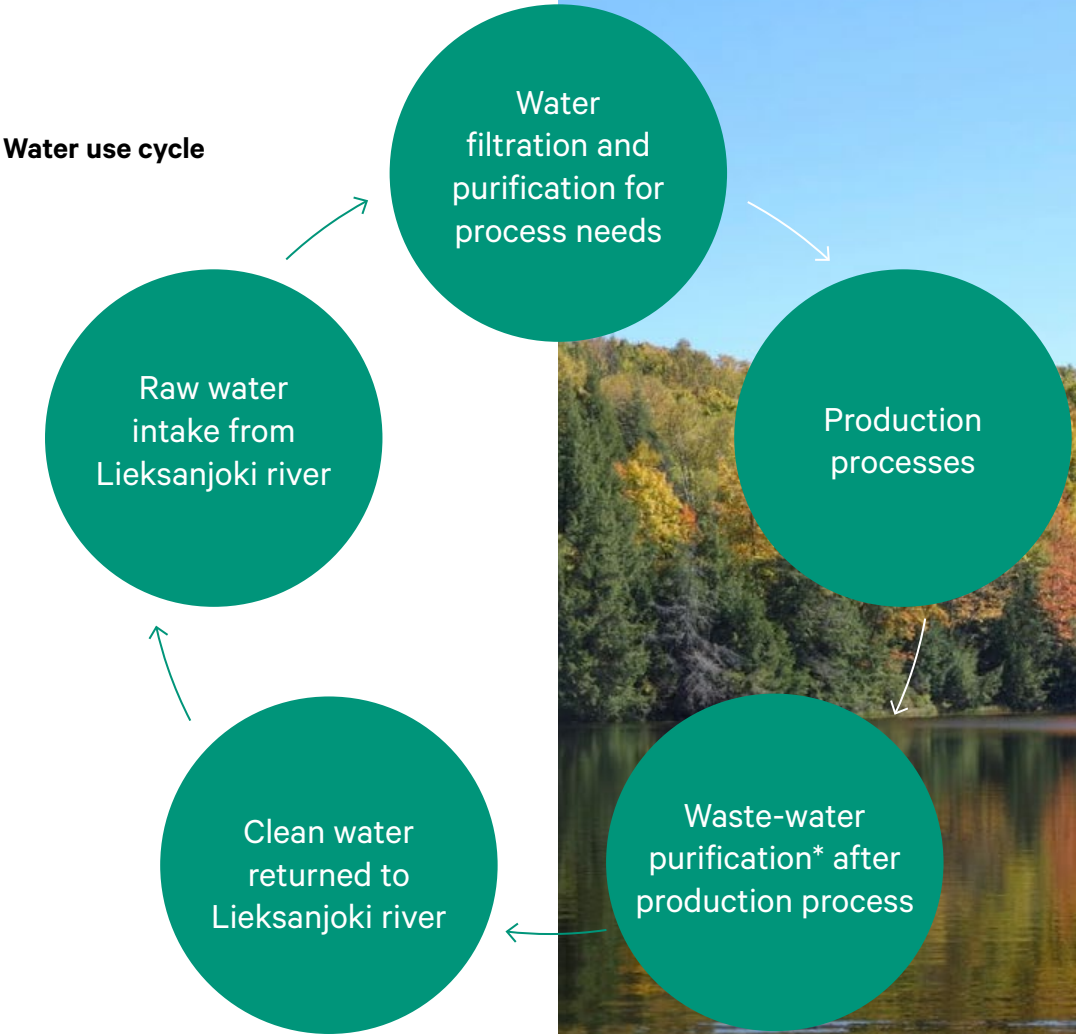
Cartonboard production is water-intensive, requiring substantial raw water input and generating wastewater. As such, water is a critical resource in Pankaboard’s operations and one of the most significant environmental aspects of our production.

We are committed to minimizing our raw water use and continuously improving our water efficiency in our processes. Our process water is primarily taken from the Lieksanjoki river, and it is filtered and purified to meet the production requirements.

Most of the water is used directly in production processes. After its use, the process water is carefully treated and purified before returning the clean water back to the Lieksanjoki river – to meet or exceed strict environmental standards.

Through responsible water management and close collaboration with environmental authorities and local stakeholders, we ensure transparency and the ongoing protection of local waterways. Pankaboard is constantly monitoring wastewater properties and reporting to authorities.

Water use cycle



**Pankaboard’s wastewater purification process is a multi-stage process including mechanical, biological, and chemical treatments to remove solids and nutrients, followed by thorough aeration and clarification.*

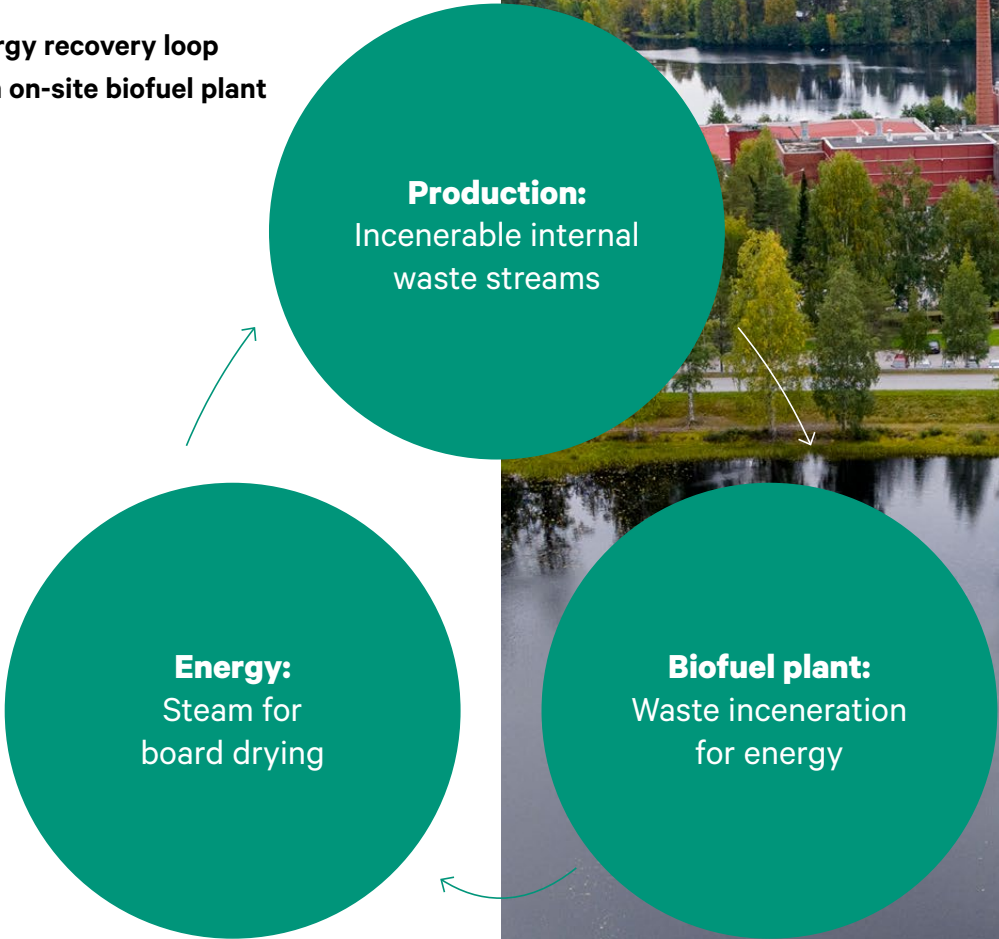
Waste

Circularity is a guiding principle in all Pankaboard’s operations. We aim for maximum material efficiency, ensuring that no waste from our production ends up in landfill. All sidestreams and production residues are carefully sorted, reused, recycled, or recovered for energy.

Through efficient resource use and circular practices, Pankaboard constantly aim to reduce its environmental impact while improving operational efficiency.

Every material is seen as a resource – not as waste.

**Energy recovery loop
with on-site biofuel plant**





Product responsibility

Regulatory compliance

Pankaboard complies with all applicable laws, regulations, and recognized standards related to its products, production processes, and raw materials. Regulatory compliance and product safety are integral parts of our operational excellence and daily operations. Standardized production processes are applied consistently, and delivery agreements are followed throughout the value chain.

We continuously monitor changes in legislation and upcoming regulatory requirements that may affect our business. We ensure that no substances listed on the REACH Substances of Very High Concern (SVHC) candidate list – published and maintained by the European Chemicals Agency (ECHA) – are used in our products. Our products undergo regular external specialist testing to comply with key EU and US food safety standards.

In addition, all materials comply with the EU Packaging and Packaging Waste Regulation (PPWR) and its restrictions on per- and polyfluoroalkyl substances (PFAS) and heavy metal content limits.

Product safety

Pankaboard is fully committed to product safety and continuous improvement. All our raw materials are approved for direct food contact and thoroughly assessed for any potential health risks. We take all complaints seriously, investigating each case thoroughly and using the findings and feedback to drive improvements.

Food safety is monitored through compliance testing, recall testing, customer feedback, and internal audits. All raw materials used in board production are approved for direct food contact, and potential health risks are assessed as part of the approval process.

We conduct risk assessments, maintain full traceability of all raw materials and additives, and follow up product safety regulations. In 2025, our food safety management system met all regulatory requirements.

Cleanliness

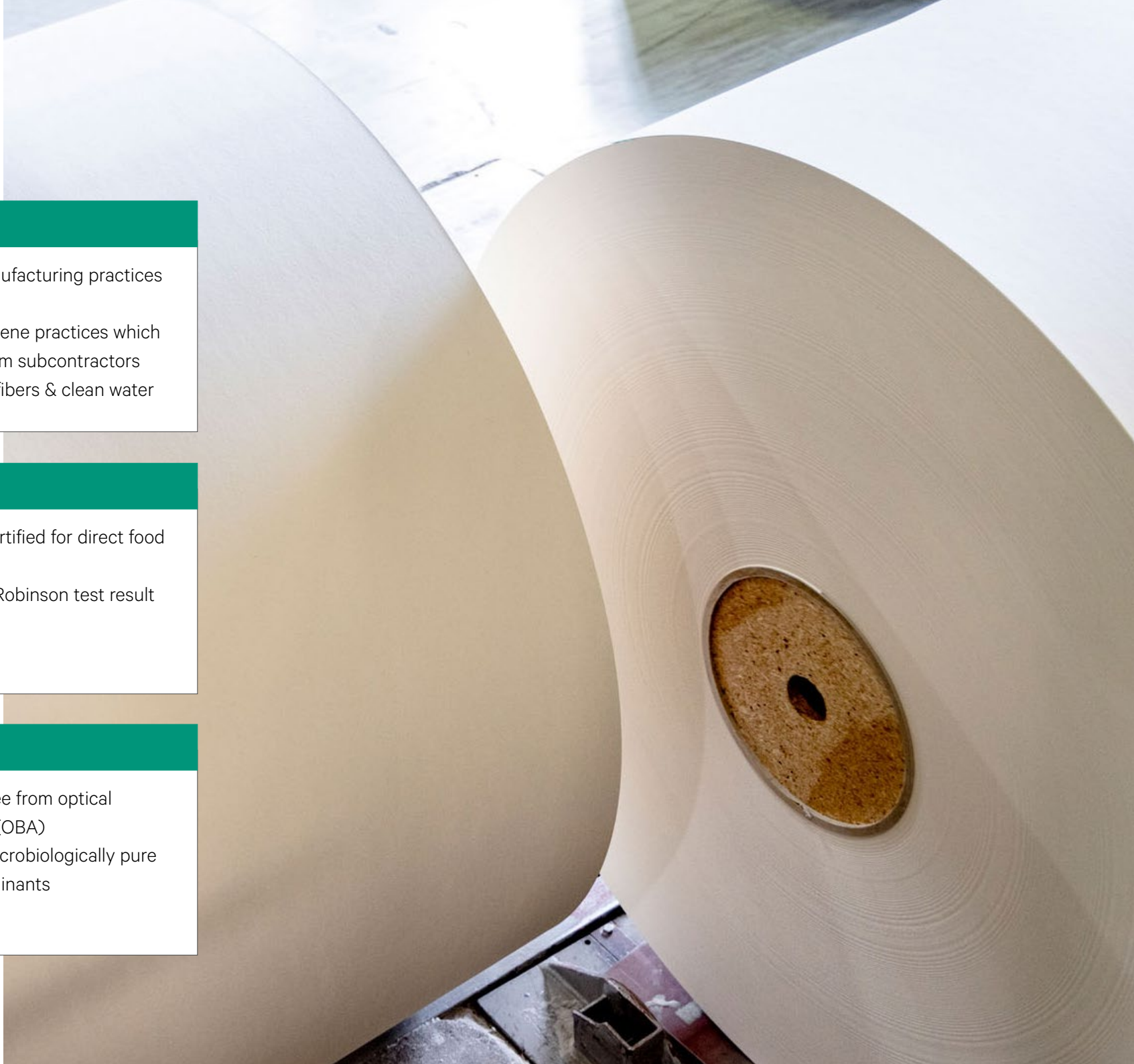
- We follow good manufacturing practices (GMP)
- We follow strict hygiene practices which are also required from subcontractors
- We use 100% fresh fibers & clean water

Odor and taint

- Our products are certified for direct food contact
- Our products have Robinson test result max 1.5 for one year

Purity

- Our products are free from optical brightening agents (OBA)
- Our products are microbiologically pure and have no contaminants



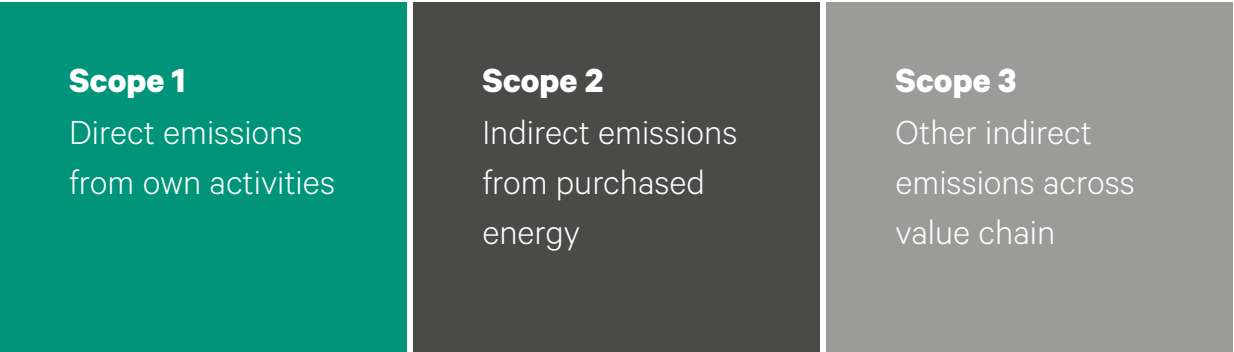
Greenhouse Gas Protocol

Climate change is a major global challenge, and at Pankaboard we are committed to reducing our carbon emissions by improving energy and material efficiency, using renewable, fossil-free energy, and producing low-carbon products.

Pankaboard has calculated its organization-level greenhouse gas emissions for 2025 in accordance with the Greenhouse Gas (GHG) Protocol, Scopes 1-3, based on actual performance data for the year.

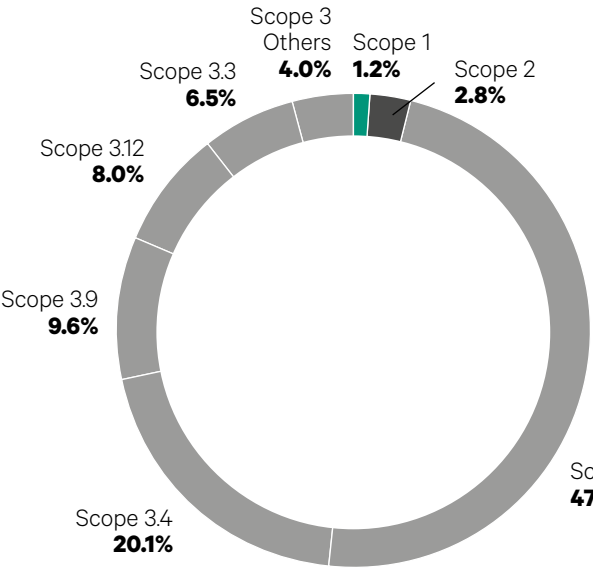
GHG Protocol is an international standard for measuring and reporting greenhouse gas emissions. It provides a standardized framework that helps organizations calculate, manage, and transparently disclose their emissions across operations and value chains.

Pankaboard GHG emissions report*

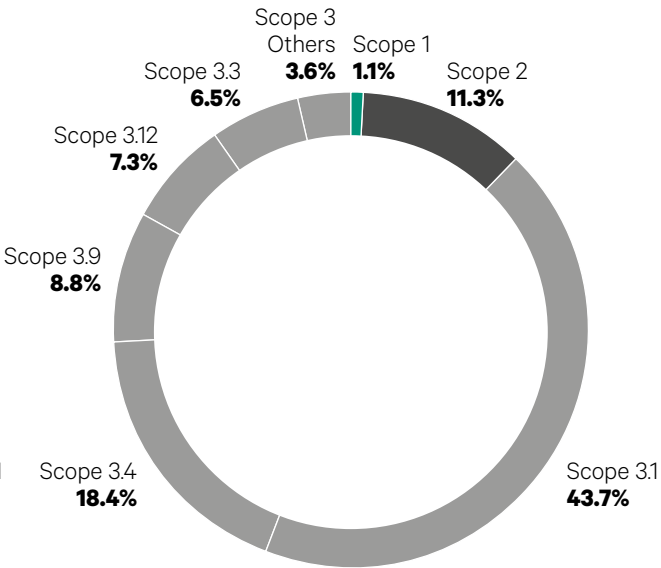


* Specific GHG emission report is available on request, please contact Pankaboard sales for more information

Market-based



Location-based



- Scope 1 - All
- Scope 2 - All
- Scope 3 - 3.1 Purchased goods and services
- 3.4 Upstream logistics
- 3.9 Downstream logistics
- 3.12 End-of-life treatment of sold products
- 3.3 Energy related activities
- Others

Results related to energy consumption are reported both as market-based and location-based:
Location-based: Emissions are calculated using the average emission factor of the local grid.
Market-based: Emissions are calculated based on the energy the company has chosen to purchase.

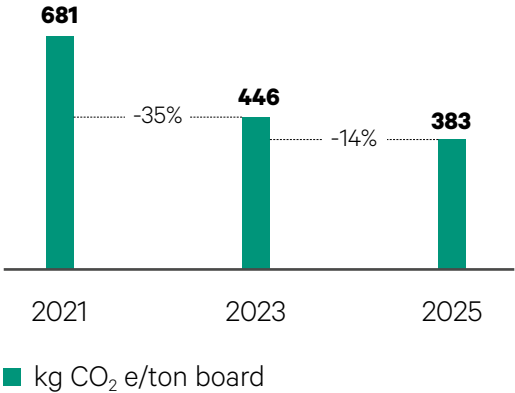


Life Cycle Assessment

Pankaboard has conducted its latest life cycle assessment (LCA) based on 2025 actual data, covering all products on either product or product group level. These reports are prepared in accordance with ISO 14040 and ISO 14044 to provide a scientifically robust evaluation of the environmental impacts of each product across its life cycle from raw material extraction to Pankakoski Mill gate. These standards define the principles, framework, and methodological requirements to ensure transparency, consistency, and comparability of results.

Pankaboard reports its LCA results in a standardized ISO 14025 format. To best serve the different information needs of our stakeholders, results are also available based on the CEPI Framework and as product-specific environmental profiles.

Development of carbon footprint per produced tonne of cartonboard, based on LCA calculations



Pankaboard LCA reports*

Product level assessments

- Folding boxboards (FBB):
 - PankaBrite
 - PankaLux
- Kraftboards:
 - PankaKraft Amber
 - PankaKraft Polar

Product group level assessments

- Woodpulp boards (WPB)
- Specialties
- Solid bleached boards (SBS)

* Specific LCA and other environmental performance reports are available on request, please contact Pankaboard sales for more information.

Material topics

Pankaboard has identified material environmental, social, and governance (ESG) topics in accordance with the European Sustainability Reporting Standards (ESRS), based on the double materiality assessment. This assessment considered both the impacts of our activities on people and the environment, and how sustainability-related risks and opportunities affect our business.

Environment

1. Climate change

- E1.1 Transition plan for climate change mitigation
- E1.2 Policies related to climate change mitigation and adaptation
- E1.3 Energy

- Pankaboard depends on the availability of wood raw materials, water and energy, which may be affected by climate change.
- Climate risks (transit risks and physical risks) can affect Pankaboard’s business in a number of ways. Costs can be caused, for example, by problems in the supply chain and increased regulation.
- Energy disruption will affect Pankaboard’s operations and Pankaboard value chain. The price and availability of energy will have a significant impact.

2. Pollution

- E2.1 Air pollution
- E2.2 Water pollution
- Based on the environmental permit

3. Water and marine resources

- E3.1 Water
- Pankaboard’s production is water intensive, but its location close to good water resources can be a competitive advantage.

4. Biodiversity and ecosystems

- E4.1 Direct drivers of biodiversity loss
- E4.2 Impacts on the status of species
- E4.3 Impacts on the extent and condition of ecosystems
- The main raw material for Pankaboard production is wood. Biodiversity and functioning forest ecosystems are a prerequisite for Pankaboard’s business. Changes in the availability and quality of wood can lead to cost, supply and quality problems.



Social

1. Own workforce

- S1.1** Working conditions
 - S1.2** Equal treatment and equal opportunities for all
- Pankaboard depends on a skilled and motivated workforce and on attracting the best talent. The location of Pankaboard poses challenges in attracting talent.
 - Failure to collaborate between employer and employees can hamper business in a number of ways. Maintaining a dialogue is important.
 - Employee wellbeing and skills ensure Pankaboard's competitiveness and improve the employer image. Legislation that imposes obligations on employers must be taken seriously and it must be ensured that the planned measures are put into practice.

2. Workers in the value chain

- S2.1** Working conditions
- Pankaboard's supply chains include operations that take place in so-called "risk countries", where human and labor rights are not always adequately implemented and monitored.
 - Transparency of Pankaboard's value chain is not complete. This makes it challenging to identify and prevent risks. Violations of human and labor rights can result in significant reputational damage.

Governance

1. Conducting a business

- G1.1** Business culture
- Corporate culture and management can affect operations and profitability. Changing corporate culture takes time and efforts.

VSME – Introduction

VSME is a simplified sustainability reporting standard developed by EFRAG for small and medium-sized enterprises, based on ESRS principles. It ensures that SMEs can contribute to the achievement of the EU’s sustainability goals. VSME is recommended by European Commission to serve as a response to information requests from large companies falling under the scope of CSRD. It also works as a framework for reporting and monitoring sustainability performance. Due to not falling under the scope of CSRD, Pankaboard will continue reporting based on the VSME framework.

The standard follows the “if applicable” principle and does not include a compulsory double materiality analysis. This principle means that a disclosure requirement in accordance with the standard is only relevant if it relates to the company’s operations, industry, or business environment.



VSME – Modules

Basic Module (B) provides basic information and is the minimum requirement for preparing a sustainability report • General information - B1 Basis for preparation - B2 Practices, policies and future initiatives for transitioning towards a more sustainable economy • Environmental - B3 Energy and greenhouse gas emissions - B4 Pollution of air, water and soil - B5 Biodiversity - B6 Water - B7 Resource use, circular economy and waste management • Social - B8 Workforce – General characteristics - B9 Workforce – Health and safety - B10 Workforce – Remuneration, collective bargaining and training • Governance - B11 Convictions and fines for corruption and bribery	Comprehensive Module (C) provides additional information and expands the information of the Basic Module • General information - C1 Strategy: Business Model and Sustainability – Related Initiatives - C2 Description of practices, policies and future initiatives for transitioning towards a more sustainable economy • Environmental - B3 Basic Module Extension - GHG reduction targets and climate transition - C4 Climate risks • Social - C5 Additional (general) workforce characteristics - C6 Additional own workforce information – human right policies and processes - C7 Severe negative human rights incidents • Governance - C8 Revenues from certain sectors and exclusion from EU reference benchmarks - C9 Gender diversity ratio in the governance board
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■ Relevant datapoints for Pankaboard based on double materiality assessment are highlighted (in green)

VSME – Reportable datapoints

General information – Basic Module

B1 Basis for preparation	
Scope of the report	Pankaboard’s sustainability report complies with the EU’s voluntary sustainability reporting framework for SMEs (VSME). The purpose of the report is to demonstrate Pankaboard’s commitment to sustainable business practices and to describe developments in key sustainability topics.The report has been prepared in accordance with the content of the basic and advanced modules of the VSME standard. According to the standard, the company is a medium-sized enterprise. Voluntary VSME reporting requirements have been excluded (e.g., sections where the phrase “The company may report...” appears). The reporting period is the financial year 2025. Currency of the monetary values in the report is EUR. Identifier of the reporting entity is EU ID 2048892-0.
Explanation for the omission of information classified as sensitive	-
Report prepared on an individual basis or on a consolidated basis	Consolidated basis
If consolidated sustainability report, the list of the subsidiaries including their registered address	Parent company: Pankaboard Oyj Ruukintie 2 81750 Pankakoski Finland 2048892-0 Subsidiaries: Pankakoski Mill Oy, Ruukintie 2 81750 Pankakoski Finland, 0920913-4 Pankaboard Deutchland GmbH, Stresemannallee 4B D-41460 Neuss Germany, DE 260 991 514 Pankaboard UK, The Old Cottage Hospital, Offices 6 and 7, Leicester Road, Ashby de la Zouch, LE65 1DB, United Kingdom, GB- 629361526 Pankaboard North American Corporation, 98 Fieldstone Rd Stamford CT 06902 USA, 81-3944805 Pankaboard Polska Sp. z o.o., City Space ul.Dziekońskiego 1 00-728 Warszawa Poland, PL5213690623
Financial statemenet data	The financial year is the year 2025
	Company form: Unlisted public limited company
	Industry: NACE 17.12 - Manufacture of paper and paperboard
	Balance sheet (€): 39.2 million €
	Revenue (€): 81.4 million €
	Number of employees: 167
	Location and offices: Main operations Ruukintie 2, 81750 Pankakoski, Finland and sales office Bulevardi 7 A 4th floor, 00120 Helsinki, Finland
Information of sustainability-related certification or label	ISO 14001, ISO 9001, ISO 22000, EES+, PEFC CoC, FSC CW & FSC CoC

B2 Practices, policies and future initiatives for transitioning towards a more sustainable economy			
Practises, policies on sustainability issues, future initiatives or forward-looking plans, targets	Do you have existing sustainability practices / policies / future initiatives that address any of the following sustainability issues? Yes/No	Are they publicly available? Yes/No	Do the policies have any targets? Yes/No
Climate change	Yes	Yes	Yes
Pollution	Yes	Yes	Yes
Water and marine resources	Yes	Yes	Yes
Biodiversity and Ecosystems	No	No	No
Circular Economy	Yes	Yes	Yes
Own Workforce	Yes	Yes	Yes
Workers in the Value Chain	Yes	Yes	Yes
Affected Communities	Yes	Yes	No
Consumers and endusers	Yes	Yes	Yes
Business conduct	Yes	Yes	Yes

General information - Comprehensive Module

C1 Strategy: Business Model and Sustainability – Related Initiatives

Description of key products and services	Cartonboard production for various packaging, graphic and industrial applications, and food-related end uses. The primary focus end-use products include food packaging and trays, capseals, coasters, and other demanding end uses requiring high-quality cartonboard.
Description of the operating environment and markets	Pankaboard operates internationally in numerous markets, and its main market areas are Europe, Asia, and North America.
Description of stakeholders	Pankaboard's key stakeholders include its own personnel, value chain suppliers, and customers who purchase cardboard. In addition, Pankaboard works with various authorities, service providers, local communities, and organizations.
Taking sustainability into account in strategy	Sustainability is considered in daily work, management, and procurement. Pankaboard's strategy is to manufacture sustainable cartonboard products, operate efficiently, and ensure a safe and healthy work environment for its employees.

C2 Description of practices, policies and future initiatives for transitioning towards a more sustainable economy

Description of sustainability measures, targets and initiatives		If you answered YES to existing practices/ policies/ future initiatives in disclosure B2, please briefly describe them along with their consequent actions. (In case the practice / policy/ future initiative covers suppliers or clients, the undertaking shall mention it)	If you answered YES to future initiatives/ targets in disclosure B2, please specify them
	Climate change	Pankaboard reduces its environmental footprint through continuous improvement of energy efficiency, use of renewable energy and optimization of production processes. The company aims to reduce greenhouse gas emissions from its operations and product value chain. Product-specific LCA calculations are used to support emission reduction efforts and to guide continuous development.	
	Pollution	Pankaboard complies with environmental legislation and its permit requirements and continuously monitors emissions to air and water. Production processes are operated in a controlled manner, and preventive measures are implemented to minimize pollutant emissions and environmental impacts.	
	Water and marine resources	Water use is continuously monitored and optimized as part of operational management. All process water discharged from production is treated through a multi-stage purification system before being returned to the local water system in compliance with regulatory requirements.	
	Biodiversity and Ecosystems		
	Circular Economy	Pankaboard promotes resource efficiency by optimizing the use of raw materials and energy. All production side streams are utilized through reuse, recycling or energy recovery. Products are designed to be fully recyclable and to support existing collection and recycling infrastructure.	
	Own Workforce	Pankaboard ensures fair working conditions, continuous competence development and safe working environments for all employees. Occupational safety is an integral part of daily management, and preventive actions are continuously implemented with the long-term goal of zero accidents. The company's internal Code of Conduct defines the key principles for responsible behaviour and ethical decision-making for all employees.	
	Workers in the Value Chain	Pankaboard expects its suppliers and partners to operate in accordance with applicable legislation and responsible business principles. The company's Supplier Code of Conduct sets clear requirements for suppliers regarding environmental, social and ethical standards. These requirements are communicated to suppliers to ensure alignment with Pankaboard's sustainability principles and expectations.	
	Affected Communities	Pankaboard operates in compliance with environmental and regulatory requirements and aims to minimize its negative impact on the surrounding community. The company monitors its environmental performance and maintains good cooperation and open communication with relevant stakeholders where applicable.	
	Consumers and endusers	Pankaboard ensures a high level of product safety in accordance with food safety standards (ISO 22000). Continuous monitoring and quality control processes ensure that products meet regulatory requirements and are safe for their intended use.	
	Business conduct	Pankaboard operates in accordance with its certified management systems (ISO 9001, ISO 14001, ISO 22000 and EES+) and FSC® and PEFC traceability principles. The company complies with applicable laws and regulations and continuously monitors regulatory developments. Responsible business conduct, supported by the company's Code of Conduct, is integrated into all operations.	

Environmental – Basic Module

B3 Breakdown of energy consumption (in MWh)

	Renewable	Non-renewable	Total consumption
Electricity	93,027.8	4,896.2	97924
Self-generated electricity	0	0	0
Fuels	7,7048	3,542	80590

B3 Estimated Greenhouse Gas Emissions considering the GHG Protocol Version 2004 (in tCO₂e)

Has the undertaking established GHG emission reduction targets?	Yes
Year (date)	2025
Scope 1 emissions	1,610.6 tCO ₂ e
Scope 2 emissions	Market-based 3,773.5 tCO ₂ e, location-based 16,381.4 tCO ₂ e
Scope 3 emissions	127,311.1 tCO ₂ e (includes categories 3.1-3.7, 3.9, 3.10, 3.12)
Total emissions	Market-based 132,695.3 tCO ₂ e, location-based 145,303.1 tCO ₂ e

B3 Greenhouse gas emission intensity per turnover (in tCO₂)

Scope 1-3	Market-based 1.505 kg CO ₂ e/€, location-based 1.660 kg CO ₂ e/€
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B4 Pollution of air, water and soil

If the undertaking is already required by law or other national regulations to report to competent authorities its emissions of pollutants, or if it voluntarily reports on them according to an Environmental Management System, it shall disclose the pollutants it emits to air, water and soil in its own operations, with the respective amount for each pollutant.	The company reports polluting emissions into water and air to the authorities in accordance with its environmental permit. The operations do not have impacts to soil.
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B5 Biodiversity

The number and area (in hectares) of sites that are owned, leased, or managed in or near a biodiversity sensitive area.	The company has no holdings or management interests in areas sensitive to biodiversity or nature conservation areas.
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B6 Water Withdrawal

Total amount of water withdrawn from all sites (cubic meter m³)	River water 2,534,097 m³, municipality water 34,933 m³
Amount of water withdrawn at sites located in areas of high water-stress (cubic meter m³)	0

B6 Water Consumption	
Does undertaking have production processes in place which significantly consume water (e.g. thermal energy processes like drying or power production of goods agricultural irrigation etc.)?	Producing carton board is water intensive.
Water discharge from undertaking production processes (m³)	2,119,175
Total water consumption (m³)	449,855
B7 Description of circular economy principles	
Undertaking applies circular economy principles (Yes/No). If yes, description of how it applies these principles.	Yes. Pankaboard's operating policy commits to applying the principles of the circular economy to operations.
B7 Waste generated	
The total annual generation of waste broken down by type (non-hazardous and hazardous) and the total annual waste diverted to recycling or reuse.	Non-hazardous waste 99,61 %, hazardous waste 0.39%. Total waste in 2025 diverted to recycling or reuse 100%.
B7 Annual mass-flow of relevant materials used	
Does the undertaking operate in a sector using significant material flows (for example manufacturing construction packaging or others)?	Not relevant

Environmental - Comprehensive Module

C3 GHG reduction targets (in t CO ₂ e)			
	Base Year (2023)	Target Year (2026)	Reduction from base year (in %)
Scope 1 Emissions	136.67	129.83	-5%
Scope 2 Emissions (location-based)	136.67	129.83	-5%
Scope 2 Emissions (market-based)	0	0	-5%
Scope 3 emissions			-5%
Total			-5%

C3 Disclosure of list of main actions the entity seeks in order to achieve its targets	
Is the undertaking operating in high impact sectors?	Yes (NACE C - 17.12 Manufacture of paper and paperboard)
Status of implementation of a transition plan in relation to climate change mitigation	Adoption of a transition plan is planned in the future
Description of a transition plan for climate change mitigation including an explanation of how it is contributing to reduce GHG emissions	-
Date of foreseen adoption of transition plan for undertaking not having adopted transition plan yet	31.12.2027

B3 Basic Module Extension – Greenhouse gas emission intensity per turnover (in t CO ₂ e)	
Scope 1 and Scope 2 emissions intensity (location-based)	1.438 kg CO ₂ e / €
Scope 1 and Scope 2 emissions intensity (market-based)	0.0661 kg CO ₂ e / €
Total of Scope 1-3 emissions intensity (location-based)	1.660 kg CO ₂ e / €
Total of Scope 1-3 emissions intensity (market-based)	1.505 kg CO ₂ e / €

C4 Climate risks	
Has the undertaking identified climate-related hazards and climate-related transition events creating gross climate-related risks for the undertaking?	Climate-related hazards and transition-related risks have been analyzed, but no gross risks have been identified. Climate related risks are considered to be medium to long term events.
Description of climate-related hazards and climate-related transition events	Climate-related hazards for Pankaboard include potential changes in the availability and quality of wood, constraints on water and energy supply, and supply chain disruptions from extreme weather events . Transition-related risks include stricter regulation, rising energy prices, and impacts from the ongoing energy transition across the value chain.
Disclosure of how it has assessed the exposure and sensitivity of its assets activities and value chain to these	Pankaboard's assets, operations and value chain face risks from wood, water and energy availability, extreme weather, regulatory changes, and energy transition impacts such as price volatility and supply chain disruptions.
Disclosure of whether it has undertaken climate change adaptation actions for any climate-related hazards and transition events	Pankaboard has created a sustainability roadmap including concrete action plans, which has been actively applied.
Potential adverse effects of climate risks that may affect its financial performance or business operations in the short-medium- or long-term indicating whether it assesses the risks to be high medium or low	Climate change poses risks to Pankaboard's business through changes in the availability, quality and price of wood, potential constraints on water and energy supply, supply chain disruptions, increased regulation, and the effects of the energy transition, particularly energy prices and security of supply. While these risks are not expected to materialize in the short term, their likelihood increases in the medium to long term.

Social – Basic Module

B8 Workforce – General characteristics – Type of contract

Type of contract	Number of employees
Permanent contract	148
Temporary contract	19
Total employees	167

B8 Workforce – General characteristics – Gender

Gender	Number of employees
Male	142
Female	25
Other	0
Not reported	0
Total employees	167

B8 Workforce – General characteristics – Country of employment

Does the undertaking operate in more than one country?	Yes
Country of employment contract	
Finland	155
Germany	4
Poland	3
United Kingdom of Great Britain	2
Austria	1
Switzerland	1
United States of America	1
Total employees	167

B8 Workforce – General characteristics – Turnover rate

Number of employees who left during the reporting period	8
Number of employees at the beginning of the reporting period	167
Number of employees at the end of the reporting period	160
Employee turnover rate (%) in the reporting period	4.89%

B9 Workforce – Health and safety	
Number of recordable work-related accidents in the reporting period	8
Number of hours worked by one full-time employee in the reporting period	1,409.5
Total number of hours worked in a year by all employees in the reporting period	235,812.9
Rate of recordable work-related accidents in the reporting period	6.80
Number of fatalities as a result of work-related injuries and work-related ill health	4 LTA
B10 Workforce – Remuneration collective bargaining and training	
Employees receive pay that is equal or above applicable minimum wage determined directly by the national minimum wage law or through a collective bargaining agreement	Yes
Average gross hourly pay level of male employees (amount in EUR)	38.88
Average gross hourly pay level of female employees (amount in EUR)	32.30
Percentage gap in pay between the undertaking's female and male employees (%)	16.92%
Number of employees covered by collective bargaining agreements	167
Percentage of employees covered by collective bargaining agreements (%)	100%
Number of annual training hours per employee during the reporting period	
Gender	Number of annual training hours per employee during the reporting period
Male	5.39 h (external)
Female	7.62 h (external)
Other	0
Not reported	Internal trainings
Average number of annual training hours per employee	External trainings leading to qualifications: 4,34 h/employee

Social - Comprehensive Module

C5 Additional (general) workforce characteristics	
Number of male employees at management level	7
Number of female employees at management level	2
Female-to-male ratio at management level for the reporting period	0,29
Total self-employed workers without personnel that are working exclusively for the undertaking	0
Total temporary workers provided by undertakings primarily engaged in employment activities	0
C6 Additional own workforce information – human right policies and processes	
Does the undertaking have a code of conduct or human rights policy for its own workforce?	Pankaboard has code of conduct for its suppliers. Suppliers are required to comply with the company’s supplier code of conduct. The supplier code of conduct covers the following topics: occupational safety, corruption and bribery, the environment, security, data protection, zero tolerance standard, forced labour and free movement, disciplinary measures, child labour and young workers, and discrimination.
Coverage of human rights policy or similar guidelines (Yes/No)	i.child labour (Yes) ii. forced labour (Yes) iii. human trafficking (Yes) iv. Discrimination (Yes) v. Accident prevention (Yes) vi. Other? (No)
Does the undertaking have a complaints-handling mechanism for its own workforce? (Yes/No)	(Yes). The company has an anonymous reporting channel (whistleblowing channel) through which all our stakeholders can report suspected misconduct. Our company also has a complaint handling mechanism in place for company personnel.
C7 Severe negative human rights incidents	
Does the undertaking have confirmed incidents in its own workforce related to: (Yes/No)	Our company has not observed any human rights violations among its own personnel in relation to child labour, forced labour, human trafficking, discrimination or accident prevention. Our company has also not observed any human rights violations concerning employees in the value chain, affected communities, consumers or end users. i. child labour (No) ii. forced labour (No) iii. human trafficking (No) iv. Discrimination (No) v. Other? (No)
If yes, the undertaking may describe the actions being taken to address the incidents described above	-
Is the undertaking aware of any confirmed incidents involving workers in the value chain, affected communities, consumers and end-users? If yes, specify.	No

Governance – Basic and Comprehensive Module

B11 Convictions and fines for corruption and bribery		
Has the undertaking incurred in convictions and fines in the reporting period	No	
Total number of convictions for the violation of anti-corruption and anti-bribery laws	-	
Total amount of fines for the violation of anti-corruption and anti-bribery laws (amount in EUR)	-	
C8 Revenues from certain activities		
Is the undertaking deriving revenues from one of the activities below?	No	
Revenue derived from controversial weapons (anti-personnel mines cluster munitions chemical weapons and biological weapons)	-	
Revenue derived from cultivation and production of tobacco	-	
Revenue derived from coal	-	
Revenue derived from oil	-	
Revenue derived from gas	-	
C8 Exclusion from EU reference benchmarks		
Undertakings are excluded from the EU Paris-aligned Benchmarks if they derive:		
1% or more of their revenues from exploration mining extraction distribution or refining of hard coal and lignite	-	
10% or more of their revenues from the exploration extraction distribution or refining of oil fuels	-	
50% or more of their revenues from the exploration extraction manufacturing or distribution of gaseous fuels	-	
50% or more of their revenues from electricity generation with a GHG intensity of more than 100kg CO ₂ e kWh	-	
None of the above	Yes	
Undertakings are excluded from any EU reference benchmarks that are aligned with the Paris Agreement	No	
C9 Gender diversity ratio in the governance body		
Does the undertaking have a governance body in place?	Yes. On board and management team levels.	
Gender diversity ratio of the governance board	The Board	Pankaboard Board of Directors has five members. The Board is elected for one year at a time, and members take turns stepping down. Women account for 0% of the Board.
	The Management Team	Pankaboard management team has seven members. Women account for 29% of the management team.

Sustainability monitoring, metrics and targets

Key performance indicators

Aspect	Target 2025	Progress 2025
Water consumption	10% reduction from baseline in surface water intake per production ton by 2025 (baseline: 2017)	2025: 9% increase from baseline
Energy consumption	5% reduction from baseline in energy consumption in MWh per production ton by 2025 (baseline: 2015)	2025: 11,1% reduction from baseline
Carbon emissions	95% of total energy use to come from renewable energy sources	2025: 95% from renewable energy sources
Safe working environment	Zero lost time accidents annually (LTA)	2025: 4 LTA
Customer satisfaction	Net Promoter Score (NPS) above 50 in annual customer survey	2025: NPS 53
Supplier commitment to sustainability	Supplier Code of Conduct approved by >80% of suppliers and service providers	2025: 68%



Circular economy summary



Energy management

- Total specific **energy consumption decreased by 7% in past 10 years**, demonstrating Pankaboard's long-term commitment to improving energy efficiency .
- Continued **energy efficiency development** guided by the **certified Energy Efficiency System (EES+)**.
- Systematic planning and continuous improvement through **targeted investments, process optimization and heat recovery**.
- On-site generated **bioenergy and recovered fuel (REF)** use reduced reliance on external fossil energy sources.
- **95% of total electricity consumption from sustainable and fossil-free sources** in 2025 .



Material management

- Pankaboard maintained **100% certified virgin fibre** sourcing (FSC® or PEFC)
- **100% raw material traceability** across all products .
- All Pankaboard products are **fully recyclable** and designed to align with existing collection and recycling infrastructure, supporting the high recycling rate in Europe .
- **Material efficiency is continuously improved** by minimizing production losses and ensuring that all material streams retain their highest possible value within the circular economy .



Sidestream management

- Over past years, **waste generated per produced tonne has been steadily reduced** at Pankaboard, providing a strong and stable baseline for continued performance in 2025 .
- Side stream management follows circular economy principles, where **all production residues are reused, recycled or recovered** for energy .
- **100% of production side streams continued to be utilized**, enabling Pankaboard's target of zero waste to landfill .
- Approximately **9 500 tonnes of side streams were recovered and repurposed** in 2025, supporting efficient resource use .



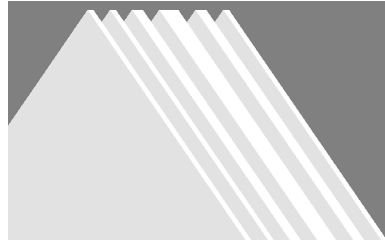
Water stewardship

- Water use and process water flows are **continuously monitored**
- All water discharged from the production process is treated through a **multi-stage purification system** before being returned to the local river
- In 2025, specific water consumption at Pankakoski Mill was 6 .34 m³ per produced tonne, based on monitored water intake .
- Compared to 2017 baseline, production-specific **water consumption has decreased by approximately 24%** by 2025, demonstrating a clear commitment to long-term water use efficiency improvements .



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Technical specifications



Top coating
Pre coating
Bleached chemical pulp
Groundwood pulp
Bleached chemical pulp
Reverse coating



Typical technical values for PankaLux

Property / Unit	Tolerance											Standards
Grammage, g/m ²	±4%	310	335	360	385	410	435	460	485	510	535 ¹	ISO 536
Thickness, µm	±5%	520	570	610	670	720	770	830	885	940	1000	ISO 534
Moisture, %	±1.5	8.5	8.5	8.5	9.0	9.0	9.0	9.0	9.5	9.5	9.5	ISO 287
Bending moment Taber 15° MD, mNm	-15%	26.8	33.0	39.9	46.8	55.7	65.3	74.9	85.8	97.6	123.8	ISO 2493
Bending moment Taber 15° CD, mNm	-15%	12.2	15.0	18.1	21.3	25.3	29.7	34.1	39.0	44.4	56.3	

¹Minimum production volume 10 tonnes

Properties not related to grammage

Property / Unit	Tolerance	Values	Standards
ISO Brightness C/2°, %, top	±1.5	85	ISO 2470-1
ISO Brightness C/2°, %, reverse	±1.5	80	ISO 2470-1
Colour CIELAB L * C/2°, top		93.5	ISO 5631-1
Colour CIELAB a * C/2°, top		0.7	ISO 5631-1
Colour CIELAB b * C/2°, top		0.5	ISO 5631-1
Surface Smoothness, PPS 10, µm	±0.3	1.0	ISO 8791-4
Smoothness Bendtsen, top, ml/min	< 60	40	ISO 8791-2
Gloss 75°, %	> 40	40	ISO 8254-1
Scott Bond, J/m ²	>100	110	TAPPI 569



For more information contact your
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Scan to find your local
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