

Metsä Board  
Sustainability Review 2024





Our ambitious sustainability targets and progress also advance our customers' goals.







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## Sustainability reporting in 2024



**This Sustainability Review 2024** summarises Metsä Board's key sustainability topics and achievements in 2024, drawing on primarily information from the Sustainability Statement 2024 and presenting it in a more concise and stakeholder-oriented format.



Metsä Board's full **Sustainability Statement 2024** complies with the reporting requirements of the EU Corporate Sustainability Reporting Directive (CSRD). The Sustainability Statement 2024 has been assured (limited assurance) by an independent third party according to the international assurance standard ISAE 3000 (Revised) and has been published as part of the Report of the Board of Directors.

Metsä Board's **SASB Content Index**, **Climate-related Financial Disclosures TCFD** and **Nature-related Financial Disclosures TNFD** are primarily based on information from the Sustainability Statement 2024 and are available separately on Metsä Board's website [metsagroup.com/metsaboard](https://metsagroup.com/metsaboard).



Read more in the Sustainability Statement 2024

# This is Metsä Board



Metsä Board, a leading European producer of premium fresh fibre paperboards, focuses on lightweight and high-quality folding boxboards, food service boards and white kraftliners.

Together with our customers we develop innovative packaging solutions to create better consumer experiences. We are committed to ambitious sustainability targets. As part of Metsä Group, a Finnish forest industry group, Metsä Board benefits from a unique value chain from Northern European wood fibre to high-quality end products.

## In 2024:

1.9 Sales in billion euros	2.3 Annual paperboard capacity in million tonnes	8 Production units	2,290 Personnel at year end	89% Share of fossil-free energy in production	92% Share of certified wood fibre
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## Metsä Board actively participates in the following ESG ratings

ESG rating provider and rating	Score	Previous score <sup>1)</sup>	Scale <sup>2)</sup>	Updated
CDP, Climate Change	A	A	D–A	02/2025
CDP, Water Security	A	A	D–A	
CDP, Forests	A	A-	D–A	
ISS, ESG Corporate Rating <sup>3)</sup>	B-Prime	B-Prime	D- – A+ Not Prime – Prime	11/2024
ISS, QualityScore, Environment	1	2	10–1	12/2024
ISS, QualityScore, Social	1	3	10–1	
ISS, QualityScore, Governance	7	3	10–1	
EcoVadis, Sustainability Rating <sup>4)</sup>	91 Platinum	87 Platinum	0–100 No medal – Platinum	06/2024
Moody’s Analytics, ESG Overall Score <sup>5)</sup>	70	68	0–100	12/2023
MSCI, ESG Rating	AA	AA	CCC–AAA	05/2024
Sustainalytics, ESG Risk Rating <sup>6)</sup>	17.6	14.1	100–0	10/2024

<sup>1)</sup> Score reported in Metsä Board’s Sustainability Review 2023.

<sup>2)</sup> Scale from the weakest score to the highest possible score.

<sup>3)</sup> Metsä Board’s rating is in the first decile within its industry.

<sup>4)</sup> Metsä Board is among the top 1% of companies assessed in the manufacture of corrugated paper and paperboard and containers of paper and paperboard industries

<sup>5)</sup> In Metsä Board’s sector, Forest Products & Paper Europe, the sector average was 58.

<sup>6)</sup> Metsä Board is considered to be at low risk of experiencing material financial impacts from ESG factors.



## Our production units

1. Kemi board mill
2. Husum board and pulp mill
3. Äänekoski board mill
4. Kaskinen BCTMP mill
5. Kyro board mill
6. Tako board mill<sup>1)</sup>
7. Simpele board mill
8. Joutseno BCTMP mill



### Purpose

Advancing the bioeconomy and circular economy by efficiently processing northern wood into first-class products.

### Vision

Preferred supplier of innovative and sustainable fibre-based packaging solutions, creating value for customers globally.

### Strategy

We grow in fibre-based packaging materials and renew our industrial operations.

### Values



Reliability



Cooperation



Responsible profitability



Renewal

<sup>1)</sup> In March 2025, Metsä Board made a decision to close Tako mill by the end of the second quarter of 2025 at the latest.



# We need to change, not the climate



**We've seen the operating environment evolve at an unprecedented pace, shaped by regulatory changes, climate change, biodiversity loss, and an increasing focus on sustainability commitments. Proactively preparing for these changes not only benefits the environment but also secures the long-term viability of businesses.**

It all starts with ambitious target setting. Our 2030 sustainability targets keep us committed to safeguarding biodiversity, mitigating climate change and promoting the sustainable use of natural resources, healthy workplace communities, and ethical operations. Our target of fossil-free production and products is certainly ambitious, but we are well on the way. In 2024, 89% of the energy used by Metsä Board was fossil-free, and some 99% of our raw materials originated from fossil-free sources. As part of Metsä Group, we've also adopted regenerative forestry principles and our ambition is to go beyond what current forest certifications require. Additionally, we want to be able to verify the positive effects of our actions on forest biodiversity.

While we've made significant progress, there's more to be done. To plan ahead, we've created roadmaps with mill-specific actions and necessary investments. For example, the ongoing investment at our Simpele mill will enable us to replace fossil

fuels with renewable fuels in board production, and the recent investment at the Kyro mill has increased the share of fossil-free electricity generated by the mill's biopower plant to 50% of the mill's electricity consumption.

And finally, it's about value chain collaboration. By successfully reducing our greenhouse gas emissions, we can also decrease the carbon footprint of our paperboards. This benefits our customers, many of whom have ambitious climate targets. Through close collaboration with our customers, suppliers and partners, we can jointly develop and implement meaningful and impactful carbon reduction initiatives. Leveraging expertise, life cycle analyses and design collaborations are some examples of the support we can provide.

Transparency and trust are the cornerstones of all sustainability work. By openly sharing our targets, actions and progress, our sustainability reporting helps set clear expectations for what our customers can anticipate from our ongoing efforts.

In addition to this Sustainability Review, we have published our Sustainability Statement 2024 which was prepared in line with the CSRD directive and the ESRS requirements. Both aim to help our customers and other stakeholders understand our environmental and social impact. I hope they also inspire a shared vision we can achieve together.

**Mika Joukio**  
CEO  
Metsä Board



# Paperboard is well-positioned for the future

**Increasing legislation, commitments from brand owners and retailers, and rising consumer expectations are placing higher sustainability requirements on packaging.**

In an inflationary environment and with access to online global marketplaces, consumers have become less loyal to brands, and they do careful research before making major purchases. They strive to reduce their climate impact and consider packaging an important action area.

- More than 60% of consumers aim to have a positive environmental impact.
- 52% of consumers reduce plastic use to lead a more sustainable life.
- 49% of consumers consider "recyclable" the most sustainable packaging feature.<sup>1)</sup>

With a recycling rate of 83%, fibre-based packaging is already the most widely recycled packaging material in the EU.<sup>2)</sup>

Regulation enforces the change towards more sustainable packaging, for example:

- The proposed EU Green Claims Directive aims to provide consumers with clearer corporate environmental claims.
- The EU Packaging and Packaging Waste Regulation calls for minimising packaging weight and designing for recyclability.

Paperboard accounts for 32% of the global USD 1.2 trillion packaging market and is expected to grow 4.2% annually by 2028, outpacing average packaging growth rates.<sup>3)</sup>

Brand owners and retailers have set ambitious goals to:

- Reduce their environmental footprint.
- Adopt recyclable packaging materials.
- Achieve net zero emissions, which requires cooperation across the value chain.

## Investments drive competitiveness and accelerate fossil-free production

In 2024, Metsä Board launched programmes focused on developing new product options, enhancing product quality and advancing existing technologies. The initiatives support the company's strategy to grow in fibre-based packaging materials and renew its industrial operations. Each programme also aligns with long-term market trends and demand drivers, accelerating the transition to fossil-free production and advancing packaging solutions that reduce plastic usage and carbon footprints.

The total investment at the Simpele and Kyro board mills is estimated at EUR 250 million over the next 10 years. Investment decisions for the Husum pulp and board mills are still pending.



### Simpele board mill

- In 2024, a decision was made to renew the paperboard machine
- The EUR 60 million investment will improve folding boxboard quality, production efficiency, and enable the replacement of fossil fuels in production
- Upgrades to the mechanical pulp production and paperboard finishing area are also planned, as well as a new power plant



### Kyro board mill

- Pre-engineering to improve the performance of dispersion barrier boards and expand their end-use applications



### Husum pulp mill

- Pre-engineering of a new, more energy-efficient pulp drying machine



### Husum board mill

- Pre-engineering to introduce new products on the existing white kraftliner production line

<sup>1)</sup> Source: Euromonitor International

<sup>2)</sup> Source: Eurostat

<sup>3)</sup> Source: Smithers Information Ltd



# Our sustainability highlights in 2024

In 2024, we made progress towards our goals in many areas: forest biodiversity, human rights, investments enhancing our transition to fossil-free production and collaboration with our customers to develop recyclable, low-carbon packaging solutions.

Here are a few examples of our sustainability highlights.



## Further actions and investments towards fossil-free production

Metsä Board's targets include that its mills will phase out the use of any fossil fuels and any fossil-based purchased energy by 2030, meaning that production will no longer generate any fossil-based carbon dioxide emissions. One specific example is the significant investment project launched at the Simpele board mill, which will enable fossil-free production. **See our roadmap on page 27.**

## The use of fossil-free energy reduces the carbon footprint of packaging

MetsäBoard Pro FBB Bright, a fully coated paperboard produced at the Äänekoski board mill, is a good example of the impact our fossil-free measures have had on the carbon footprint of our products. The carbon footprint of MetsäBoard Pro FBB Bright has reduced by 45% from 2019 to 2023. Overall, we expect the product's carbon footprint to decrease by 60% from 2019 to 2030. **Read more on page 26.**

## Over 50% lower carbon footprint based on LCAs

Metsä Board has conducted new life cycle assessments (LCA) for cosmetics and food packaging to complement the earlier healthcare packaging LCA study. The results show that switching from conventionally used grades to Metsä Board's folding boxboard can reduce the carbon footprint of cosmetics or food packaging by over 50%. The results were verified by the IVL Swedish Environmental Research Institute. **Read more on page 28.**



## Strengthening the state of forest nature by regenerative forestry

Metsä Board, as part of Metsä Group, promotes regenerative forestry principles. The Metsä Group Plus model offered to Finnish forest owners is a forest management model that includes measures to safeguard and improve the state of forests more comprehensively than is required by current standard practices and certifications. **Read more on page 18.**

## Improving the recycling of packaging materials

New QR codes placed on the pallet and reel labels of all Metsä Board products provide detailed information on the packaging materials used to protect the paperboard during the logistics chain. The aim is to assist our customers in effectively recycling the packaging materials. **Read more on page 33.**



## Customer collaboration for lighter-weight packaging innovations

Metsä Board developed space-saving promotional packaging for HejBuddy, a Finnish cosmetics brand. The new packaging, made of micro-flute corrugated board using Metsä Board's white kraftliner, is 50% lighter than a traditional rigid box made of recycled fibres. **Read more [metsagroup.com/metsaboard](https://metsagroup.com/metsaboard).**



## Spotlight on human rights

As part of Metsä Group, Metsä Board conducted a human rights impact assessment during 2024 in collaboration with an external partner. The results confirmed that our most crucial human rights impacts concern health, safety, diversity, equality and inclusion of own personnel, health, safety and labour rights of value chain workers, as well as the rights of the Sámi people in the northernmost wood procurement areas of Finland and Sweden. **Read more on page 37.**



# Creating value for customers and consumers worldwide

Metsä Board is part of Metsä Group, and benefits from its unique value chain, from Northern European wood fibre to end products – premium recyclable fresh fibre paperboards, used mainly in consumer product packaging.

All the wood we use is fully traceable and originates from Northern European forests. As part of Metsä Group we are committed to the principles of regenerative forestry.



Our eight production units in Finland and Sweden produce paperboard, chemical pulp, and bleached chemi-thermo mechanical pulp (BCTMP).

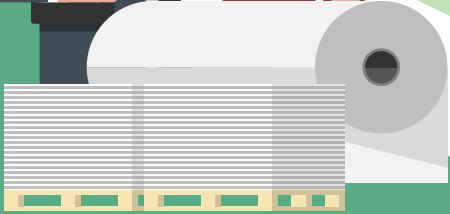


An ethical corporate culture and safe operations form the foundation of our work.

Through our global sales network, we deliver paperboard to around 90 countries. Our customers include brand owners, converters, corrugators, merchants and retailers.

Our paperboards are used for consumer and retail packaging, including food and food service, healthcare, beauty care, electronics and graphical applications.

We cooperate with our customers to innovate new packaging solutions and to help advance their targets.



Our products help reduce the use of plastic and they are recyclable and/or compostable depending on the local recycling infrastructure.





# The circular economy is at the core of resource-efficient packaging solutions

A bio-based circular economy is not only waste management. It is a holistic view that uses renewable resources, ensures efficient and fossil-free operations and keeps materials in circulation for as long as possible. Our customers and the environment benefit from circular economy measures in many ways.



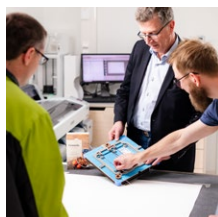
## Keeping packaging materials in circulation

Strong fresh wood fibres improve the quality of fibres in circulation and can be recycled multiple times. This makes fresh fibre paperboard an excellent material for the circular economy. In addition, they compensate for the materials that are not returned to circulation. Through joint design guidelines and cross-industry collaboration, such as the 4evergreen alliance, Metsä Board further supports the improvement of paperboard recycling.



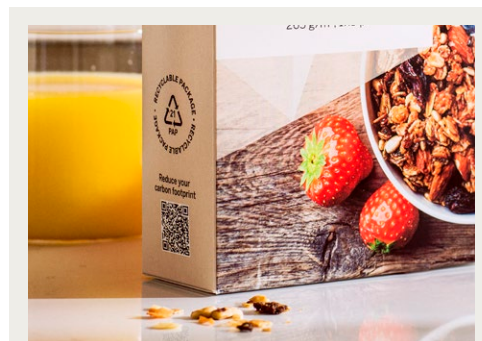
## Paperboard is superior for recycling

All Metsä Board's paperboards are recyclable based on tests which were conducted according to the Cefi methodology<sup>1)</sup>. However, recyclability ultimately depends on the local recycling infrastructure. All Metsä Board paperboards, except for the PE coated grades, are certified as industrially compostable according to the DIN EN 13432 and/or ASTM D6400 standards and home compostable according to the NF T 51-800 standard.

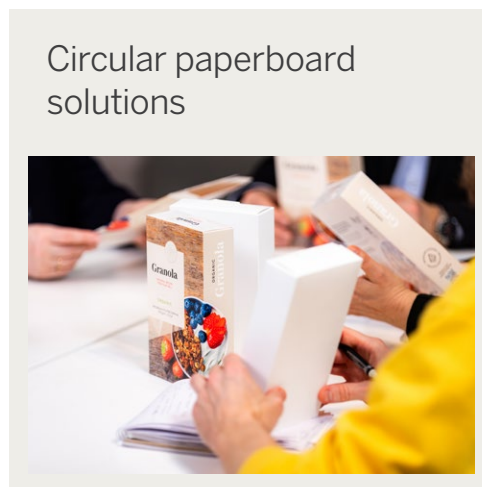


## Developing resource-efficient solutions through cooperation

Together with our customers, we can improve the functionality and recyclability of packaging through Metsä Board 360 Services. Metsä Board's 360 Services experts and the Excellence Centre in Äänekoski, provide an excellent co-creation platform for our customers and partners worldwide. By working closely, we can help them decrease the use of plastics, reduce the amount of raw materials used, and lower the environmental impact of a customer's packaging solution.



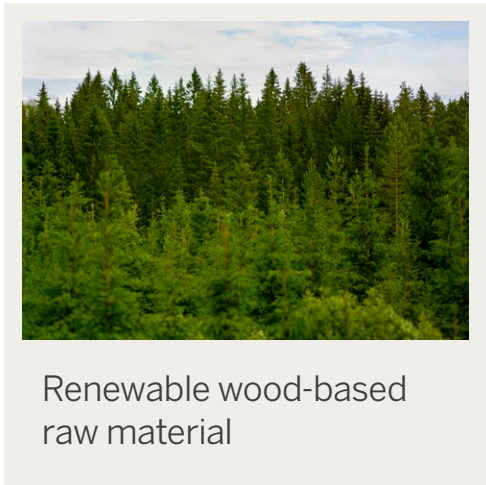
Keep recycling loops going



Circular paperboard solutions

<sup>1)</sup> Cefi Recyclability Laboratory Test Method (Version 2, Oct 2022) and Fibre-based packaging recyclability evaluation protocol, beta version (Dec 2022)  
<sup>2)</sup> (EPD International PCR 2010:14 Processed paper and paperboard, 3.1)





### Ensuring diverse and vibrant forests

Regenerative forestry enhances biodiversity and strengthens the state of nature. Metsä Board only uses traceable wood of certified or controlled origin and our forestry operations do not cause deforestation in our wood supply areas. When forests grow more than is harvested, the forests can continue to act as a carbon sink.



### Reducing the use of plastics

Renewable fresh fibre is Metsä Board's main raw material. Our customers can reduce the use of plastics in their packaging by using paperboard, such as our dispersion-coated barrier paperboard. We also have development programmes to replace the remaining fossil-oil-based raw materials still being used.



### Efficient production minimises environmental impact

We focus on efficiently using raw materials, water and energy. The light weight of Metsä Board's paperboards and the high share of fossil-free energy used during production can reduce the environmental impact of a paperboard packaging. We follow the environmental impact of all our paperboards with life cycle assessments based on requirements set out in specific product category rules<sup>2)</sup> and in accordance with the ISO 14040 and ISO 14044 standards.



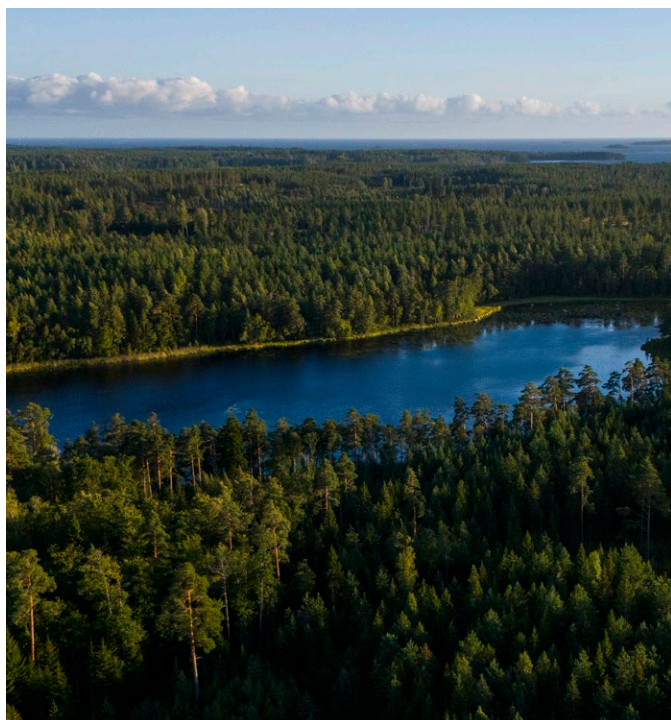
### Aiming for zero process waste in landfills

Metsä Board benefits from Metsä Group's internal value chain, where all of the sourced wood raw material is used for the most valuable end-uses. We are also seeking new ways to reuse production side streams. For example, Soilfood, a Finnish circular economy company, produces wood-based soil improvement fibres from fractions produced in the side streams at Metsä Board's mills.



# 2030 sustainability targets

The sustainability targets align with our strategy to grow in fibre-based packaging materials and renew our industrial operations. Advancing these targets helps our customers meet their sustainability objectives.



## E Environment

- Biodiversity and forests
- Climate change
- Resource efficiency

## S Social

- Diversity, equality and inclusion
- Safety and wellbeing





## Why it matters

Sustainability is not only about meeting tightening regulations. Sustainable businesses are more resilient in facing the challenges of the future. At their best, companies can be regenerative, focusing on improving the natural and social environment instead of merely minimising harm.

# G Governance

- Ethical corporate culture
- Traceability of raw materials
- Responsible suppliers

The progress towards our 2030 targets is summarised on **pages 14–15** and in each thematic section of this review.

Read more in the **Sustainability Statement 2024**, published in line with the Corporate Sustainability Reporting Directive as part of Metsä Board's Annual Review.

# Sustainability targets and progress in 2024

Our sustainability targets cover the environment, social responsibility, good governance and ethical business practices, and address the most significant impacts in our own operations and the value chain. In 2024, we worked towards the current targets and renewed some of the metrics as of 2025.

In 2024, we improved the efficiency of energy and water use, although we fell short of our targets, primarily due to relatively low production rates. For certified wood fibre, we already surpassed the over 90% target in 2023 and made further progress in 2024. On the social front, occupational safety improved, and the introduction of anonymous recruitment practices was a success. However, we will continue our efforts to increase the representation of women in management positions.

At Metsä Board, we track the progress towards our 2030 targets mainly at the company level. As forest management services, wood procurement, and other raw material and service procurement are handled by Metsä Group, the targets related to forest management, biodiversity, and joint targets with partner suppliers have been set at the Metsä Group level, indicated as MG in the table below.

## Progress in the 2030 targets

THEME AND TARGET	2030 TARGET	2024 ACTUAL	2024 PROGRESS	UN SDG
<b>E – ENVIRONMENT</b>				
<b>1. Safeguarding biodiversity and the ecological sustainability of forest use</b>				
MG: Retention trees on regeneration felling sites, %	100	97	●	13, 15
MG: High biodiversity stumps on harvesting sites, %	100	98	●	13, 15
MG: Spruce as the only tree species after young stand management, %	0	26	●	13, 15
MG: Measures promoting biodiversity, number	10,000	6,586	●	13, 15
<b>2. Mitigating climate change and reducing emissions</b>				
Improvement in energy efficiency from the 2018 level, %	+10	0.9	●	7, 12, 13
Fossil-based carbon dioxide emissions (Scope 1 and Scope 2 market-based), t	0	251,708	●	12, 13
Share of target group suppliers with targets set according to the SBTi by 2024 (Scope 3) <sup>1)</sup> , %	70	24	●	13
Fossil-free raw materials and packaging materials, share of dry tonnes, %	100	98.9	●	9, 12
MG: Amount of forest regeneration and young stand management from the 2018 level, %	+30	18	●	13, 15
MG: Amount of forest fertilisation from the 2018 level, %	+50	-22	●	13, 15
MG: Share of continuous cover forestry in peatland forest regeneration, %	30	15	●	13, 15
MG: Amount of carbon stored in wood products from the 2018 level, %	+30	-25	●	12, 13
<b>3. Resource efficiency and sustainable production</b>				
Reduction in process water use per produced tonne from the 2018 level, %	-35	-11	●	6, 12
Process waste delivered to landfills, t	0	267	●	12





## Updated targets from 2025 onwards

In January 2025, Metsä Board's Board of Directors approved an update to the 2030 sustainability targets, effective from 2025. The targets are based on Metsä Board's strategy and Metsä Group's sustainability targets and reflect the outcome of a thorough double materiality analysis carried out with Metsä Group in 2024. The main updates focused on social

responsibility, including a new target aiming for zero accidents among contractor employees and broader targets to promote wellbeing, diversity, equality, and inclusion. In addition, the target for certified wood fibre was raised to 100% and a logistics emissions reduction target was introduced.

Learn more about the updated 2030 targets on **page 44** and on our website [metsagroup.com/metsaboard](https://metsagroup.com/metsaboard).

THEME AND TARGET	2030 TARGET	2024 ACTUAL	2024 PROGRESS	UN SDG
<b>S – SOCIAL</b>				
<b>4. Respecting everyone and doing the right thing</b>				
Anonymous recruitment for vacancies open to all, %	100	99.2	●	5, 8
Women in management positions, %	>30	23	●	5, 8
<b>5. Promoting safety and wellbeing at work</b>				
Total recordable incident frequency, own employees (TRIF)	0	3.4	●	8
Employee commitment	AAA	A+	●	5, 8
<b>G – GOVERNANCE</b>				
<b>6. Ethical corporate culture, innovation and open-minded cooperation</b>				
<b>7. The significance of forest-based bioeconomy to society</b>				
Ethics index	100	79	●	5, 8
Traceability of raw materials, share of total purchases, %	100	97	●	9, 12
Share of certified wood fibre, %	>90	92	●	15
Suppliers' commitment to the Supplier Code of Conduct, share of total purchases, %	100	99.0	●	8, 12
Supplier assessments and audits of core suppliers, %	100	79	●	8, 12
MG: Joint sustainability targets with partner suppliers, %	100	100	●	12, 13

MG: The target is set at Metsä Group level.  
<sup>1)</sup> The Scope 3 target year was 2024.

Progress in 2024 is compared with the previous year.

- Exceeds target (significant progress)
- On target (progress as planned)
- Short of target (no progress or weaker progress)



A close-up photograph of a pine cone with a beetle on it. The pine cone is in the foreground, showing its yellowish-green scales and brown, fibrous base. A small, dark beetle with long antennae is perched on the top of the cone. The background is a soft-focus green, suggesting a forest setting.

# E

## Environment

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We are committed to forest management practices that help to mitigate climate change and enhance biodiversity.





## Our key themes

- Promoting regenerative forest management
- Strengthening the living conditions needed by species in the forest
- Protecting valuable habitats for threatened species

2030 targets		Actual 2024
+30	Amount of forest regeneration and young stand management from the 2018 level, % (MG)	<b>18%</b>
+50	Amount of forest fertilisation from the 2018 level, % (MG)	<b>-22%</b>
30	Share of continuous cover forestry in peatland forest regeneration, % (MG)	<b>15%</b>
100	Retention trees on regeneration felling sites, % (MG)	<b>97%</b>
100	High biodiversity stumps on harvesting sites, % (MG)	<b>98%</b>
0	Spruce as the only tree species after young stand management, % (MG)	<b>26%</b>
10,000	Measures promoting high biodiversity, number (MG)	<b>6,586</b>

(MG) The target is set at Metsä Group level

# Enhancing forest nature and biodiversity

**E** | The climate is warming, and up north, it is warming much more than the global average. This makes it important to consider the choices made in forest management.

## Why it matters

In forests, the best way to counter climate change is to pursue forestry that supports the vitality and resilience of forests, promoting mixed forests and forest biodiversity.

## Regenerative forestry

In recent years, increased research data and better understanding have broadened the range of good forest management practices. Metsä Group, whose Wood Supply and Forest Services is responsible for all wood used by Metsä Board, launched its regenerative forestry strategy in 2023. The goal is to verifiably enhance the state of forests and increase forest diversity as well as forests' ability to adjust to climate change. Although forests grow slowly, the goal is to be able to show positive results in the Finnish forests already by 2030. Metsä Group's planned forest actions are based on the most recent forest management and biodiversity research studies conducted by the scientific community.

The objective of regenerative forest management is to use and manage commercial forests in ways that will increase their vitality, biodiversity and climate resilience. This approach aims to increase both the growing stock and the number of species in forests managed according to regenerative forestry principles.

These principles are implemented through the Metsä Group Plus forest management model, a new service available to all cooperative members. Under this service model, for example, more retention trees and high biodiversity stumps are left in the forest than usual, and buffer zones for waterways are wider.

The planned regenerative forestry measures will be carried out in the forest areas belonging to members of Metsäliitto Cooperative, Metsä Group's parent company, who own over half of Finland's privately-owned forests. Therefore, the measures



## Biodiversity and forestry

Forestry in Finland and Sweden is semi-natural forestry in which wood production is integrated into the natural ecosystem and native tree species serve as commercial tree species. Compared to plantation forestry, this means no land-use conversion and a higher level of biodiversity. Thanks to regeneration obligations and good forest management practices in Finland and Sweden, forestry operations do not cause deforestation in these areas.

carried out in these forests are essential for the entire Finnish forest environment.

Monitoring the achievements of regenerative forestry measures needs to be verified with measurements. This entails a significant investment in developing forest biodiversity indicators and monitoring methods. The impacts of the measures on various species are also investigated in separate monitoring projects.



## Examples of Metsä Group's regenerative forestry principles



Utilising native tree species



Diversification of tree species



Increasing the number of old trees



Increasing varied decayed wood



Diversification of structural features



Protection of valuable habitats



Improving the management of peatlands and water protection



Special measures for herb-rich forests, ridge areas and burned forest areas



Species-specific measures



Improving the biodiversity network

### Habitats for native species

Our use of wood will continue to be based on naturally occurring tree species such as spruce, pine, silver birch, white birch and aspen, which all spread to Finland after the Ice Age. Other native tree species are grown alongside commercial trees, although they are not industrially exploited. Naturally occurring trees also provide living conditions for native species such as tree root fungi, mosses and lichens growing on tree trunks, insect larvae, and decaying forest litter.

### Decaying wood: a building block of forest biodiversity

Decaying wood is important, as up to 5,000 forest species depend on it in Finland (Source: Metsähallitus 2023). These species include enemies of pest insects. Decaying sturdy trunk wood is relatively rare in commercial forests. However, it can be increased by ensuring high biodiversity stumps and retention trees that decay over time and by retaining trees that have died earlier. Unmanaged protective thickets can also be left in forests, producing decayed wood in the long term.

## Supporting biodiversity in the built environment

In 2023, Metsä Group also launched a regenerative land use initiative in built environments. The goal is to enhance biodiversity in built areas, create a multi-year systematic action plan and roadmap with a biodiversity plan for each production unit, and embed the enhancement of biodiversity at mill sites as part of their environmental performance. The Kemi mill site serves as the first pilot for this initiative, which covers more than 600 hectares of land, partly in the closed mill area and partly in the surrounding land areas owned by the mill. The principles for the biodiversity development plan in Kemi were created together with a Finnish NGO, and the plan is to implement the same principles at all of Metsä Group's mill sites in the future.



Read more in the Sustainability Statement 2024, E4 – Biodiversity and ecosystems

## European Regulation for Deforestation-free Products – EUDR

The Regulation on Deforestation-free Products (EUDR) will require any operator or trader to prove that their commodities do not originate from recently deforested land areas nor have contributed to forest degradation. This applies to those placing products on the EU market or exporting from it. These commodities include cattle, wood, cocoa, soy, palm oil, coffee and rubber, which are linked to the expansion of agricultural land, the main driver of deforestation. The EUDR entered into force on 29 June 2023 and will become operational on 30 December 2025, replacing the current EU Timber regulation.

The Terek Sandpiper (*Xenus cinereus*) is one of Europe's most endangered nesting birds. There are less than 10 pairs living in Europe, and about half of these nest in the Kemi mill site. In the Kemi pilot project, special features of local nature in the built environment will be considered, and the living conditions for endangered species will be improved.





The goal of the EUDR is to ensure that products consumed in the EU do not cause deforestation or deterioration of the state of forests worldwide. At the same time, the goal is to reduce greenhouse gas emissions and the deterioration of biodiversity. For packaging material producers and brand owners, EUDR compliance of their suppliers is further proof of responsibility in the wood value chain.

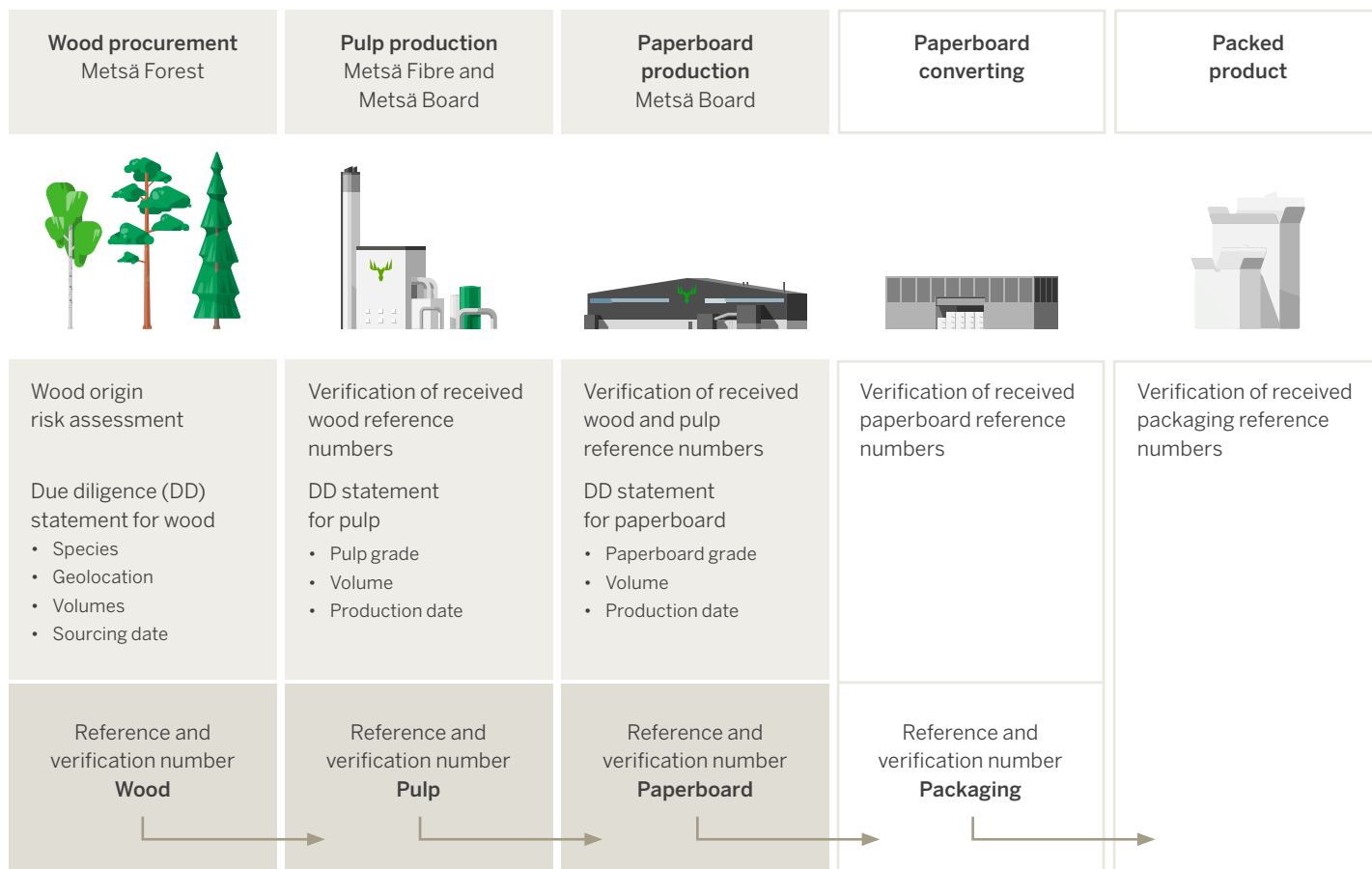
There are two major requirements for EUDR compliance for an operator of wood-based materials: a) operators are required to have a due diligence (DD) system in place for sourcing materials to ensure that the products comply with the EUDR requirements and b) operators are required to submit a DD statement regarding their product in the EU's TRACES online platform.

Metsä Board's wood sourcing always complies with existing legislation, and traceability of the wood used is ensured by practices which meet the requirements of the PEFC Chain of Custody and FSC® Chain of Custody (PEFC/02-31-92 and FSC-C001580). Therefore, the wood used can be traced back to the Northern European forests.

Metsä Board's whole wood value chain is within Metsä Group, from wood supply to ready-made paperboard. This simplifies both the traceability of the wood we use and the process of inputting wood value chain information into the EU information system. Metsä Board will comply with the EUDR and will share the compliance information of our paperboard products to customers as required by the regulation.

## Ensuring traceability in wood value chain

**At Metsä Board, our entire wood value chain exists within Metsä Group, from wood procurement to our ready-made paperboards.**



An aerial photograph showing a large, calm lake in the upper half of the frame, with several small islands and peninsulas. The lower half of the frame is dominated by a dense, green forest. The sky is blue with light, wispy clouds. The overall scene is serene and natural.

# E

# Environment

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We are committed to mitigating climate change by moving away from fossil-based fuels, raw materials and packaging materials and reducing value chain greenhouse gas emissions.





## Our key themes

- Improving energy efficiency
- Using only fossil-free fuels and purchased electricity and heat as energy sources
- Using only fossil-free raw materials and packaging materials for our products
- Engaging suppliers to reduce emissions

### 2030 targets

### Actual 2024

+10%	Improvement in energy efficiency from the 2018 level	<b>0.9%</b>
0 t	Fossil-based carbon dioxide emissions, Scope 1 and 2	<b>251,708 t</b>
70%	Of target group suppliers have set SBTi targets by 2024, Scope 3 <sup>1)</sup>	<b>24%</b>
100%	Fossil-free raw materials and packaging materials	<b>99%</b>

<sup>1)</sup> Non-fibre suppliers and the logistics operators related to our customer deliveries, measured as a share of our total purchases

# Towards fossil-free production and products

**E** | Improving energy efficiency and transitioning towards fossil-free energy, raw materials, and packaging materials play key roles in Metsä Board's actions to mitigate climate change.

## Why it matters

Climate change causes a wide range of negative impacts on nature and living conditions globally. Human activity, such as the use of fossil fuels, is one of the main reasons for this. Reducing the use of fossil-based materials and fuels helps mitigate climate change and enhances the resilience of companies in line with the requirements of a low-carbon economy.

## Environmental responsibility

Metsä Board's environmental operations are guided by Metsä Group's environmental policy, the certified ISO 9001 quality management system, the ISO 14001 environmental management system, the ISO 50001 energy efficiency management system and an energy efficiency system (EES). All our production units are certified according to these management systems.

## Working towards fossil-free production

Metsä Board's strategy to strive towards fossil-free production includes action plans on the climate impacts of our production, supply chain and products. Our climate change mitigation plan for production units and their power plants includes investments and development measures to replace fossil-based energy sources with renewable fuels and fossil-free electricity. The measures apply to the fuels and backup fuels used at power plants and to the process fuels used in the production process. The plan also includes a shift to fossil-free alternatives for purchased energy and measures to improve energy efficiency.

In 2024, 89% of all the energy used by Metsä Board was fossil-free. Investments and energy efficiency measures along with a moderate production level slightly reduced Scope 1 emissions. Scope 2 emissions increased clearly from the previous year due to higher energy consumption. Nevertheless, the emissions level complied with the 2030 target plans.

The key measures of this plan are presented in the roadmap on **page 27**.

## GREENHOUSE GAS EMISSIONS 2022–2024 COMPARED TO 2018

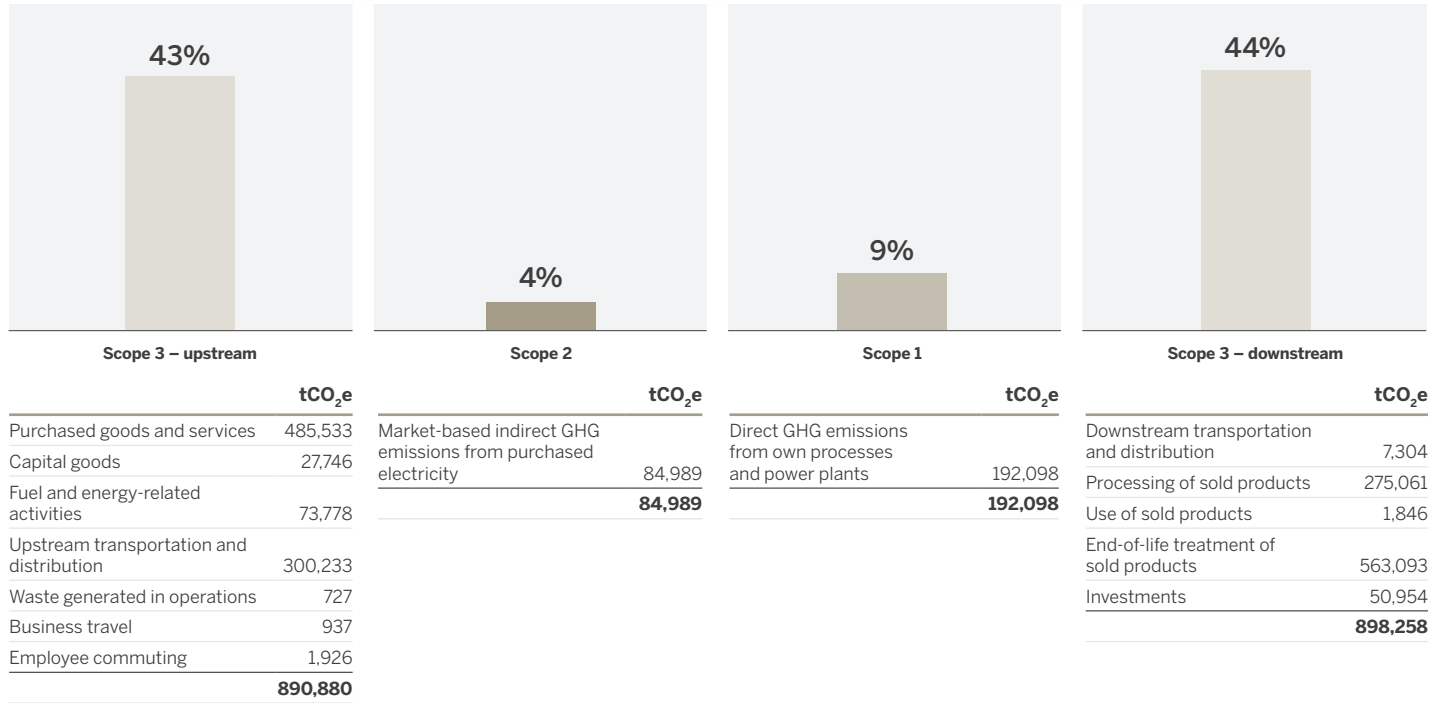
	2024	2023	2022	2018
Direct fossil-based carbon dioxide emissions (Scope 1), tCO <sub>2</sub>	169,429	181,339	244,139	288,579
Indirect fossil-based carbon dioxide emissions (Scope 2 market-based), tCO <sub>2</sub>	82,279	2,261	147,081	289,296
Direct GHG emissions (Scope 1), tCO <sub>2</sub> e	192,098	202,227	264,961	310,232
Indirect GHG emissions (Scope 2 market-based), tCO <sub>2</sub> e	84,989	3,747	155,287	296,282
Indirect GHG emissions (Scope 2 location-based), tCO <sub>2</sub> e	259,495	299,365	300,491	441,065
Indirect GHG emissions in the value chain (Scope 3), tCO <sub>2</sub> e	1,789,138	1,792,006	2,274,825	1,058,455 <sup>1)</sup>
Biogenic carbon dioxide emissions, tCO <sub>2</sub>	2,154,777	1,984,088	1,937,318	1,812,793

Some of the figures have been retroactively adjusted from previous reporting, due to additional information. The reporting principles for metrics are presented in the **Sustainability Statement**.

<sup>1)</sup> The spend-based Scope 3 accounting methodology used in 2018 is not fully comparable with the activity-based and supplier-specific inventory accounting in 2022–2024.



**TOTAL GREENHOUSE GAS EMISSIONS 2,066,225 TONNES CO<sub>2</sub>e (SCOPES 1, 2, 3)**



Metsä Board’s greenhouse gas emission reduction targets (Scope 1 and 2) are approved by the Science Based Targets initiative (SBTi) and meet the Paris Climate Agreement requirements, which aim to limit global warming to 1.5 degrees. In addition, Metsä Board set a target in 2019 that 70% of the company’s target group suppliers would set greenhouse gas emission reduction targets in accordance with SBTi by the end of 2024. By the end of 2024, 24% of the targeted suppliers had set their own greenhouse gas reduction targets in line with SBTi. In accordance with the EU Corporate Sustainability Due Diligence Directive, Metsä Board is preparing to set an absolute Scope 3 emission reduction target and a total emission reduction target (Scope 1, 2 and 3) in line with the Paris Agreement no later than 2027.

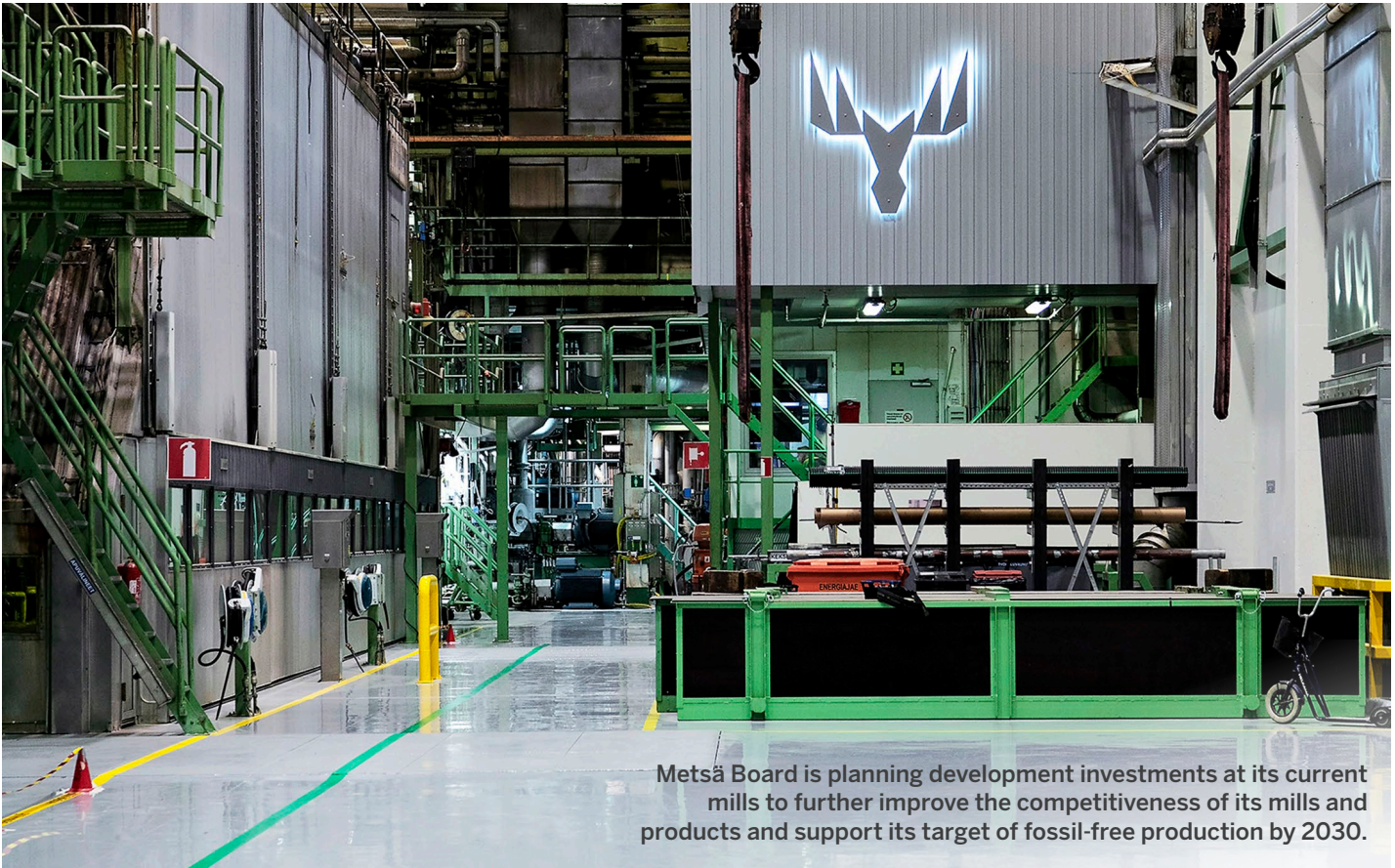
To reduce value chain emissions, we encourage our suppliers to set emissions reduction targets. The recommendation is part of Metsä Group’s Supplier Code of Conduct and is monitored in supplier assessments and audits. Metsä Board’s value chain emissions are also curbed by Metsä Group’s joint emissions reduction targets with partner suppliers and the target of reducing GHG emissions from logistics purchased by Metsä Board by 30% per tonne-kilometre from the 2022 level.

In 2024, Metsä Board announced an investment programme to renew the folding boxboard machine at its Simpele mill. The investment aims to improve the quality of our folding boxboards, increase production efficiency and enable the replacement of fossil fuels in paperboard production. The investment programme will support Metsä Board’s target of fossil-free production by 2030. The investment is expected to be completed in the second half of 2025.

**Climate transition plan**

Metsä Board’s climate risks were assessed in 2024 as part of Metsä Group’s climate risk analysis, which covered physical risks, transition risks and opportunities in its own operations and value chain. The ability of Metsä Board’s strategy to respond to climate change was assessed in a climate resilience analysis, which was used to prepare the company’s climate transition plan.

The climate transition plan presents our strategic ambition and governance on climate matters, as well as our investments and climate actions related to our production, products and value chain. The plan is available on our website [metsagroup.com/metsaboard](https://metsagroup.com/metsaboard).



Metsä Board is planning development investments at its current mills to further improve the competitiveness of its mills and products and support its target of fossil-free production by 2030.

## Reducing carbon footprint of MetsäBoard Pro FBB Bright

Our fully-coated paperboard, MetsäBoard Pro FBB Bright, is a good example of the positive impact our measures are having towards fossil-free production, raw materials and packaging materials. Produced in Metsä Board's Äänekoski board mill, MetsäBoard Pro FBB Bright's carbon footprint has been reduced by 43% from 2019 to 2023. Overall, we expect its carbon footprint to decrease by 60% from 2019 to 2030. The Äänekoski board mill and its products benefit from the fossil-free chemical pulp and energy provided by Metsä Fibre's bioproduct mill located at the same site. Our fossil-free roadmap towards 2030 will enable a further carbon footprint reduction for MetsäBoard Pro FBB Bright once the BCTMP production has fully transitioned to fossil-free sources.

### Energy efficiency

Metsä Board's production volume increased in 2024 compared to the previous year, improving energy efficiency, but we still remained behind our energy efficiency target. We aim to improve energy efficiency through continuous development and investments, primarily in drying and heat recovery. One of the actions to improve energy efficiency in 2024 was commissioning a new turbine and generator for the biopower plant at our Kyro mill. The new turbine's improved efficiency will increase the biopower plant's electricity self-sufficiency from 30% to 50%. The investment will also increase the share of fossil-free electricity generated at the Kyro mill.

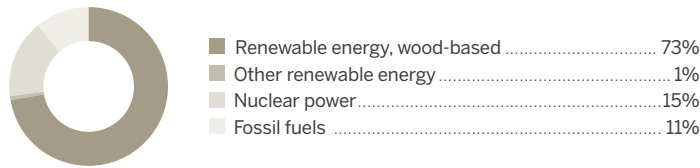
Continuous and stable production is essential for energy-efficient operations. Production interruptions and lower production rates can reduce the energy efficiency of production plants. In 2024, Metsä Board's paperboard and pulp production was limited by political strikes in Finland, production restrictions to meet demand, and a gas explosion at Metsä Fibre's Kemi bioproduct mill, which also halted production at Metsä Board's Kemi board mill. Due to the explosion, the goals for improving water and energy efficiency specified in Kemi board mill's development programme were not fully met in 2024.



Read more in the Sustainability Statement 2024, E1 – Climate change



**89% OF OUR ENERGY USE IS FOSSIL-FREE**

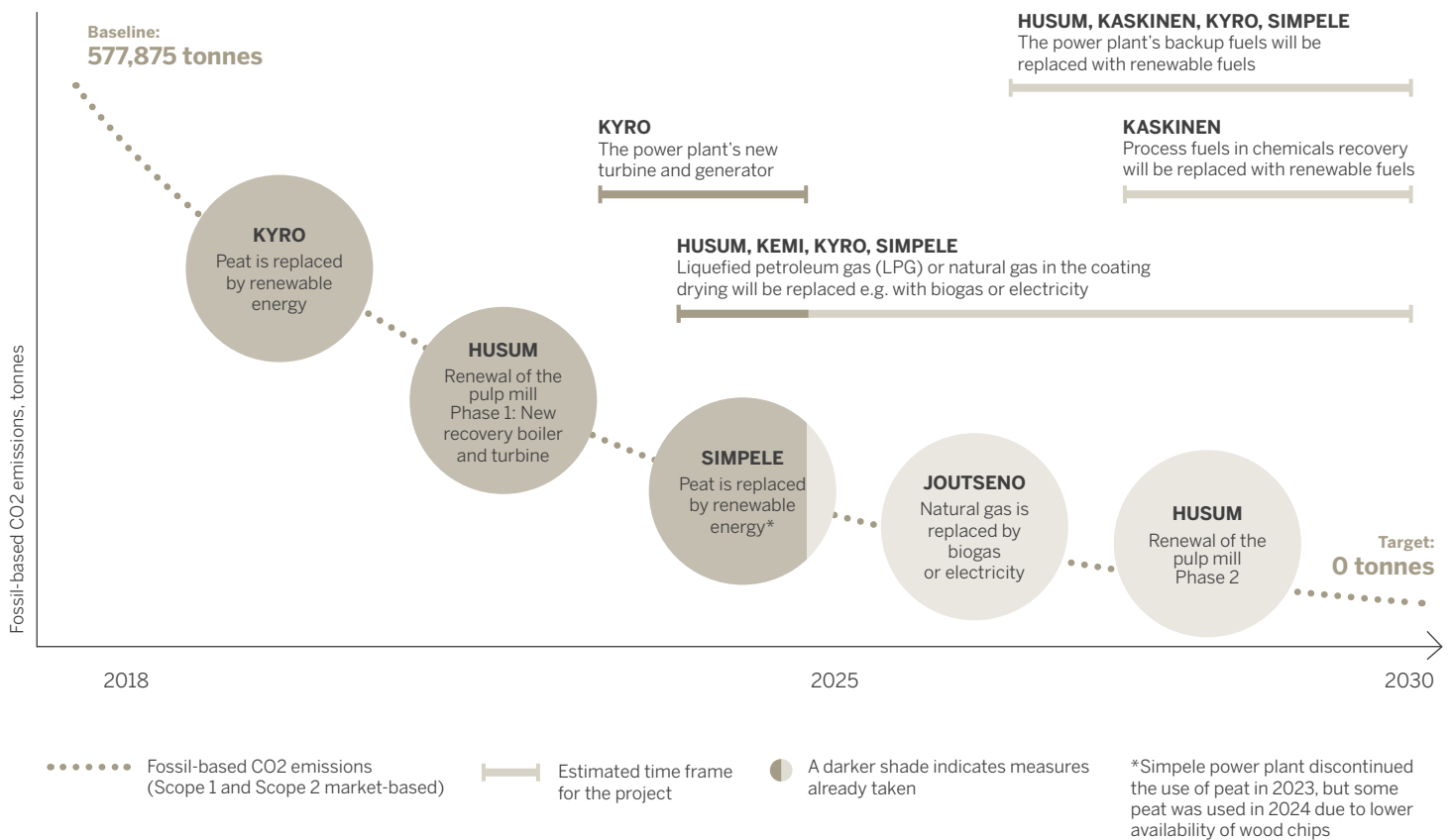


**56%**

reduction of fossil-based CO<sub>2</sub> emissions in 2018–2024 (Scope 1 and 2 market-based)

**Roadmap to fossil-free mills by 2030**

Key measures, according to plan, for reducing fossil-based carbon dioxide emissions to zero. A final investment decision for some of the projects is still pending, and the times shown are indicative. The purchasing of electricity and heat will shift to fossil-free energy sources. See also our interactive roadmaps on our website [metsagroup.com/metsaboard](https://metsagroup.com/metsaboard).



In March 2025, Metsä Board made a decision to close Tako mill by the end of the second quarter of 2025 at the latest.

# Optimised packaging for today and the future

**E** | As a producer of premium, lightweight, fresh fibre paperboards, we have the ambition to further develop packaging solutions to meet our customers' needs. We strive for resource efficiency and help our customers in reducing the use of plastic and minimising the carbon footprint of packaging.

Metsä Board's product range covers lightweight folding boxboards, foodservice boards and white kraftliners. Folding boxboards are mainly used to package a wide range of consumer goods like food and pharmaceutical products, and they are also used in graphical applications. Our foodservice boards can be formed into cups, trays, and other packaging for takeaway. White kraftliners provide options from lightweight microflute to heavy-duty corrugated solutions for various packaging needs in the retail sector, including point-of-sale applications, as well as retail-ready and shelf-ready packaging. In addition to paperboards, we produce chemical pulps and bleached chemi-thermo mechanical pulp (BCTMP), which are used as raw materials in our own paperboard production and sold as market pulp.

## **A lower carbon footprint through lightweighting and fossil-free energy**

Lightweighting is one of the key areas of Metsä Board's product development. Lightweight paperboards provide the same strength, stiffness, and performance as conventional heavier grades but with lower basis weights and less raw materials. A lighter weight, together with a high share of fossil-free energy used in production, has a key role in reducing the carbon footprint of packaging.

We calculate the carbon footprint of all our paperboards by following specific product category rules (EPD International PCR 2010:14 Processed paper and paperboard, 3.1). These product category rules are in accordance with the ISO 14040 and ISO 14044 standards. We have conducted several studies demonstrating our paperboard's carbon footprint reduction potential for different packaging solutions.

## **Helping our customers reduce their use of plastic**

Developing bio-based barrier coating for end-use products like food packaging is another key product development area for Metsä Board. In the biobarrier program, we are studying

## Verified assessments of carbon footprint of packaging

In 2024 we conducted a study on cosmetics and food packaging. According to the life cycle assessment performed on cosmetics packaging, switching from a solid bleached board (SBB) to Metsä Board's folding boxboard can reduce the carbon footprint of packaging over 50%, while replacing folding boxboard can result in a 40% reduction or even higher. In case of food packaging the original packaging used in the comparison was made of recycled fibre-based white lined chipboard (WLC). According to the performed life cycle assessment switching from WLC to Metsä Board's folding boxboard can reduce carbon footprint of the packaging by more than 60%. The compared grades represented board grades available in European markets. Metsä Board's paperboards involved in the study were MetsäBoard Pro FBB Bright, MetsäBoard Prime FBB Bright and MetsäBoard Classic FBB. The IVL Swedish Environmental Research Institute verified the LCA report with comparative assertions. Read more on our website [metsagroup.com/metsaboard](https://metsagroup.com/metsaboard).

new, alternative barrier solutions that can potentially help reduce plastics in packaging. The most promising products in the development pipeline undergo pilot testing and commercialisation.

Our dispersion barrier-coated paperboard, MetsäBoard Prime FBB EB, provides a medium barrier against grease and moisture and offers an alternative to PE coated paperboards and plastic packaging, such as for foodservice end uses.





Verified assessments show Metsä Board paperboards can reduce the carbon footprint of beauty care packaging by over 50%.

We also offer PE coated paperboards, and to support plastic reduction and recycling, we work actively to reduce the amount of plastic in our PE coated paperboards.

As part of our sustainability targets, we aim to replace all fossil-based raw materials and packaging materials with fossil-free alternatives by 2030. A raw material is considered fossil-free if none of its main raw materials contain fossil-based oil. In 2024, the share of fossil-free raw materials and packaging materials (in dry tonnes) was almost 99%. Replacing the remaining fossil-based raw materials, such as binders used in the pigment coating, with bio-based alternatives requires active collaboration and testing with raw material suppliers. This was one of the focus areas of product development in 2024.

At the Kyro board mill, a pre-engineering study was launched in 2024 to investigate the possibility of improving the performance of the current barrier board product and expanding its end-use areas. A possible investment decision will be made at the earliest in the first half of 2025.

### Ensuring recyclability

All our paperboards are recyclable, depending on the local recycling systems. In 2024, the recyclability of all our paperboard products was tested using the Capi Recyclability Laboratory Test Method. Based on the test results, all tested products were defined to be suitable for standard mill recycling. If packaging material is stained with food, for example,

composting with biowaste is an option to dispose of the packaging. All our paperboards, except for the PE-coated grades, are certified as industrially compostable in accordance with the DIN EN 13432 and/or ASTM D6400 standards and home compostable in accordance with the NF T 51-800 standard.

### 360 Services complement our product portfolio

Through Metsä Board's 360 Services, we offer our customers expertise and support beyond paperboard for topics such as packaging design, sustainability and supply chain efficiency. We provide data-based carbon footprint assessments and compare the environmental impacts of different packaging materials and solutions. We can help our customers with fit-for-purpose packaging solutions when the goal is to lighten the packaging, reduce its carbon footprint or improve recyclability. In 2024, we added extended product safety evaluations to the 360 Services portfolio. This service is designed to study more unusual product safety and regulatory cases where information is not readily available in our standard compliance documentation. Metsä Board's Excellence Centre, located at our Äänekoski mill, offers an active and state-of-the-art collaboration platform for researching, innovating, and testing packaging materials and solutions.

→ Read more in the Sustainability Statement 2024, E5 – Resource use and circular economy





# E

# Environment

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We are committed to use natural resources as efficiently as possible and to minimise waste from our operations.





## Our key themes

- Using less water at our mills
- Utilising all our process waste

### 2030 targets

### Actual 2024

-35%	Process water use per produced tonne from the 2028 level	<b>-11%</b>
0 t	Process waste delivered to landfills	<b>267 t</b>

# Further improving the efficient use of natural resources

**E** | Improving energy efficiency, reducing process water use, and eliminating waste are Metsä Board's focus areas to achieve more resource-efficient operations.

## Why it matters

Using resources efficiently and finding new alternatives for waste reduces pressure on the planet's finite natural resources and can improve both the environment and living conditions globally.

### Reducing process water use

Reducing process water use requires investments and developments to increase the internal recycling rate of process water in pulp and paperboard production. By improving the recycling of water, it is possible to reduce the amount of freshwater removed from water bodies. For example, at the Simpele mill, clean fresh water used for sludge press showers was replaced with filtered process water in 2024. Other measures taken to improve water efficiency were implemented through changes in operating methods and the training of personnel. Reducing process water also contributes to climate change mitigation, as water usage and wastewater treatment use energy, generating greenhouse gas emissions.

Metsä Board's key measures in all production units are presented in the road map on [page 33](#).

### Close to abundant freshwater reserves

Metsä Board's production units are located in Finland and Sweden in areas with large freshwater reserves. None of the units are located in areas of high water stress or high overall water risk (WRI Aqueduct Water Risk Atlas).

Surface water accounts for nearly 100% of Metsä Board's water withdrawals. A small amount of groundwater is used for hygiene and laboratory purposes. Production accounts for roughly half of Metsä Board's water use, and cooling processes account for the other half. Process water is carefully treated in wastewater treatment plants before it is returned to water bodies. Cooling water circulates in its separate system and does not require treatment. When cooling water is returned to water bodies, it can have a local heating impact on water.

Metsä Board's water consumption is very low in proportion to its total water use. Around 95% of the water is returned to water bodies after use, and the remaining 5% either evaporates or is bound to the product.

### Minimising waste

Minimising waste starts with optimising all raw materials and developing recovery methods to avoid waste generation in pulp and paperboard production. Finding ways to use all the production side streams is key to reaching our target of no

## WATER USE 2022–2024 COMPARED TO 2018

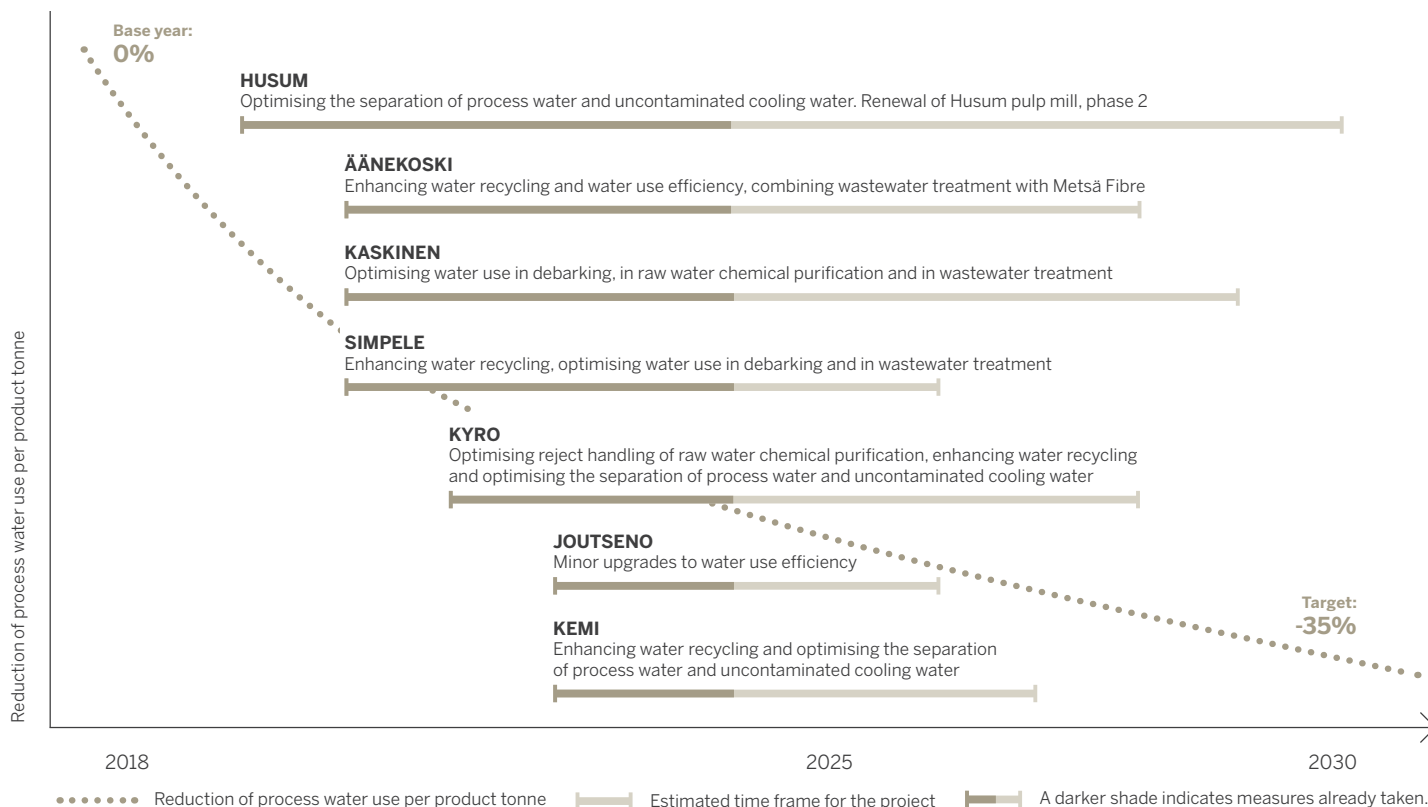
	2024	2023	2022	2018
Water withdrawals, 1,000 m <sup>3</sup>	105,829	101,943	114,465	105,921
Surface water, 1,000 m <sup>3</sup>	105,796	101,884	114,401	105,867
Groundwater, 1,000 m <sup>3</sup>	33	58	65	55
Of water withdrawal used as cooling water, 1,000 m <sup>3</sup>	59,395	54,441	56,629	54,804
Of water withdrawal used as process water, 1,000 m <sup>3</sup>	48,501	49,079	60,186	66,515
Wastewater discharges generated from process water, 1,000 m <sup>3</sup>	48,540	45,380	58,740	67,133
Water consumption, 1,000 m <sup>3</sup>	5,189	3,874	4,579	-

Some of the figures have been retroactively adjusted from previous reporting, due to additional information. The reporting principles for metrics are presented in the Sustainability Statement. Water consumption was not reported in 2018.



# Roadmap for reduced process water use by 2030

Key measures, according to plan, for reducing process water use. A final investment decision for some of the projects is still pending, and the times shown are indicative. See also our interactive roadmaps on our website [metsagroup.com/metsaboard](https://metsagroup.com/metsaboard).



In March 2025, Metsä Board made a decision to close Tako mill by the end of the second quarter of 2025 at the latest.

process waste to landfills by 2030. In 2024, 267 tonnes, which represents only 0.2% of total process waste, were delivered to landfills. Production side streams are reused and recycled whenever possible. Wood-based waste and by-products, including sludge, ask and lime, are used for soil improvement, landscaping, fertilisers, chemicals, and energy generation. The

biggest challenge is to find an alternative use for green liquor dregs from the chemical pulp process.

Metsä Board's operations generate small volumes of other non-hazardous waste, such as municipal and construction waste, and some hazardous waste. These fractions are disposed of according to local waste management guidelines.

## QR codes with recycling info for all Metsä Board deliveries

In 2024, Metsä Board introduced QR codes on all pallet and reel labels of its products to enhance and simplify the recycling process for packaging materials customers receive as part of their product deliveries. The QR code directs customers to an intuitive app that provides detailed information on the various packaging materials used to protect the paperboard during transport. With this initiative, Metsä Board aims to make it easy for customers to sort and recycle all the materials they receive with the product deliveries. In addition, customers can reduce the amount of waste sent to landfills and ensure the materials are recycled as part of the local circular economy loop.

“Recycling can sometimes be complex, and our goal is to make it as seamless and straightforward as possible for our customers.”

**Isto Hongisto**  
Product Safety Specialist  
at Metsä Board.

➔ [Read more in the Sustainability Statement 2024, E3 – Water and marine resources](#)



# S

## Social

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We are committed to respecting human rights, fostering an equal and safe workplace and ensuring consumer safety.





## Our key themes

- Advancing diversity, equality and inclusion
- Promoting safety and wellbeing at work

### 2030 targets

### Actual 2024

100%	Anonymous recruitment for vacancies open to all	<b>99%</b>
>30%	Women in management positions	<b>23%</b>
0	Accidents at work (TRIF)	<b>3.4</b>
AAA	Employee commitment	<b>A+</b>

# Social responsibility in our operations and beyond

**S** | **Anonymous recruitment, increasing the share of women in management positions and aiming for zero accidents are examples of actions to promote an equal and safe workplace. In addition, our responsibility extends beyond our operations.**

## Why it matters

The company's location in the Nordic countries creates a strong foundation for high-level working conditions. Robust processes are essential to ensure human and labour rights are upheld globally in all operations and affected communities.

### Respect for human rights

Metsä Board's social responsibility is guided by applicable legislation, Metsä Group's Code of Conduct and policies, the "Metsä for all" vision and the company's management systems. As part of our Code of Conduct, we are committed to acting according to the UN Guiding Principles on Business and Human Rights and to respecting internationally recognised human rights in accordance with the UN's Universal Declaration of Human Rights and the ILO's Declaration on Fundamental Principles and Rights at Work. Metsä Board also supports the UN Global Compact initiative and its human rights and labour principles.

We are committed to ensuring that no child or forced labour, human trafficking or other forms of modern slavery occur in our business operations and supply chain. If any negative human rights impacts would occur, we are committed to correcting those. Read more about our procurement and supply chain on **pages 42–45**.

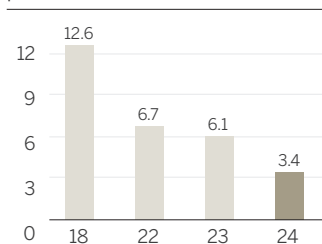
### Promoting diversity, equality and inclusion

The focal points of the "Metsä for all" vision are diversity, equality – especially gender equality – and inclusion (DEI), as well as cultural change. The vision is supported by equality targets, which concern increasing the share of women in management positions, eliminating unexplained pay differences by gender, and a training program for the entire staff.

In 2024, the share of women in management positions was 23% and did not increase as planned according to our target of over 30% by 2030. To promote gender equality and equal pay, a survey is conducted annually, personnel receive regular training, and measures are implemented to ensure that the gender distribution in supervisor and leadership training corresponds to our DEI targets.

The share of anonymous recruitment for open vacancies increased to 99% in 2024. This initiative supports personnel diversity by encouraging people from different backgrounds to apply for jobs at Metsä Board. Our recruitment partners have also shown their commitment to our DEI targets.

**TOTAL RECORDABLE INJURY FREQUENCY (TRIF)**  
per million hours worked



**EMPLOYEES BY COUNTRY**

Finland.....	56%
Sweden .....	32%
Poland .....	5%
United States .....	3%
Other countries .....	4%

### Safety is a priority

Work-related accidents of our own personnel, measured as the Total Recordable Injury Frequency per million hours worked (TRIF), continued to decrease in 2024. However, the number of accidents among service providers working at our production sites remained at the same level compared to the previous year.

At Metsä Board, all our production units comply with the ISO 45001 safety management system requirements and





The focal points of the “Metsä for all” vision are diversity, equality – especially gender equality – and inclusion (DEI), as well as cultural change.

safety management is based on preventing hazards and risks. Risks are assessed regularly, and the company’s own workforce completes a safety induction on the potential risks of the work environment. Accidents are prevented with common safety standards and proactive measures such as risk assessments, safety observations, safety walks and safety training, along with safety-related investments.

The zero accidents target is supported by long-term safety priorities, including the deployment of common safety standards, personal risk assessments and the development of hand safety. Annual focus areas and actions, such as the safety management training program launched in 2024, further reinforce our commitment to safety.

Our service providers also receive a general and work-specific safety induction and work permits before starting to work at our sites. They are required to assess the risks in their work, prepare a safety plan and submit it to the respective mill. Service providers also participate in safety walks and risk assessments organised by Metsä Board. Metsä Board’s Supplier Code of Conduct requires suppliers to provide a safe and healthy working environment, and they must have an occupational health and safety management system according to ISO 45001 or an equivalent standard.



Read more in the Sustainability Statement 2024, S1 – Own workforce

## Human rights impacts were assessed

As part of Metsä Group, Metsä Board conducted a human rights impact assessment in 2024 with an external partner. The assessment covered direct and indirect human rights impacts across the value chain and in the affected communities, following the UN Guiding Principles on Business and Human Rights. The assessment was based on interviews with internal and external stakeholders, including our experts, suppliers, a trade union and a Sámi Parliament representative, as well as internal documents and publicly available literature.

The results confirmed that our most significant human rights impacts relate to the health, safety, diversity, equality and inclusion of our own personnel, the health, safety and labour rights of value chain workers, as well as the rights of the Sámi people in the northernmost wood procurement areas in Finland and in Sweden. In addition, procurement and trading with high-risk countries may be associated with heightened human rights impacts.

The identified impacts were validated through internal workshops, and the results were presented to Metsä Board’s and Metsä Group’s management teams. We will continue to develop our processes to mitigate and manage any negative human rights impacts and related risks.

# Ensuring safe products for consumers

**S** | Metsä Board helps its customers navigate the complex regulatory landscape of packaging materials to ensure product safety.

## Why it matters?

The most important goal of all product safety work is to ensure that the packaging materials are safe and don't cause concerns for consumers. Trust in product safety is also a crucial part of maintaining a company's reputation.

These can include company-specific standards, lists of banned substances, and requests for detailed product data. Metsä Board receives many similar requirements from its customers, which are regularly reviewed by the product safety team to ensure they meet the needs of the value chain. As part of our 360 Services, we collaborate closely with customers, for example, by offering additional data for specific end-uses when needed. We also provide our customers with advice, guidance, and training on product safety.

## The foundations for safety: Legal compliance and management systems

The regulatory landscape for packaging materials is vast, rapidly evolving and often complicated. Meeting legislative requirements for sensitive end uses, such as food contact applications, and complying with chemical regulations for raw materials require expertise and resources. Metsä Board verifies how its paperboards comply with widely accepted legislation and recommendations in its key market areas with a well-defined product safety process. The process can be divided into three parts: detailed raw material evaluation, strict hygiene and safety standards in production, and an extensive compliance evaluation of the final material.

At Metsä Board mills, product safety and hygiene are ensured by following the ISO 22000 international food safety standard. Mills producing paperboards for direct food contact also operate under certified FSSC 22000 food safety systems. Product safety is an integral part of the daily work carried out by our professionals at our mills.

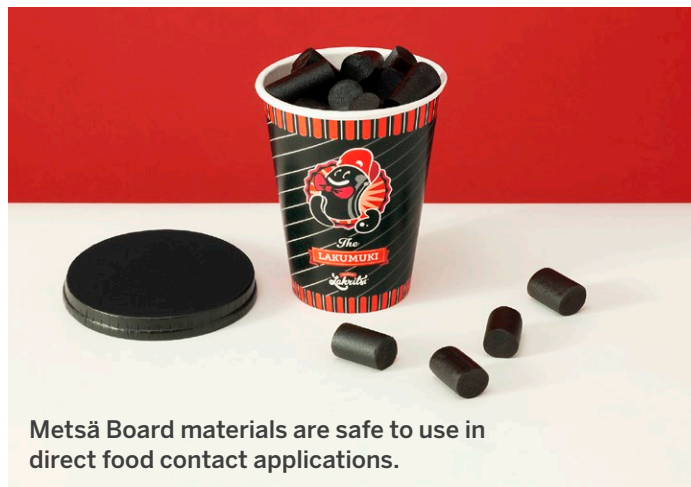
Legal compliance and strict management systems are the foundation for ensuring the safety of our products and effectively communicating about safety to our customers.

## Meeting customer needs

In addition to legal compliance, many companies have increasing requirements for their value chain partners to fulfil.

## Product safety requires teamwork in the value chain

Metsä Board continuously seeks to develop and further improve its product safety processes and compliance efforts. In the value chain, each actor performs their own safety evaluation using information provided by their suppliers. Setting ambitious standards for our work creates a trusted foundation where our customers can perform compliance evaluations for their products. Effective communication in the supply chain is essential, which is why we publish compliance information for all our products in the *Metsä Board Product Safety Statement*. This comprehensive statement is available for all our customers to facilitate their regulatory work.



**Metsä Board materials are safe to use in direct food contact applications.**



# Integrating product safety into our 360 Services portfolio

In 2024, extended product safety evaluations were added to Metsä Board's 360 Services portfolio to respond to its increasing importance for our customers. The service is designed to tackle uncommon product safety and regulatory cases where information is not readily available in our standard compliance documentation.

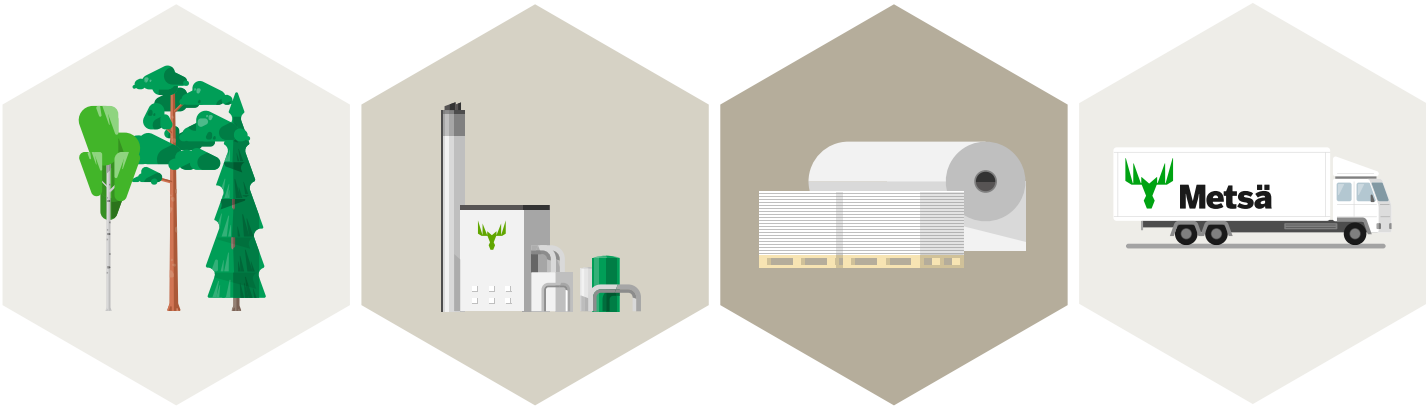
For example, the service can include support and guidance from Metsä Board's product safety team in cases where customers require materials to meet specific demands for sensitive end uses. It can also address requests for information about individual substances in

paperboard packaging or broader questions related to regulatory limitations. Our goal is to provide our expertise and detailed information to ensure that our customers can manufacture safe and compliant products.

As consumer demands increase and the regulatory landscape requires more from producers, we expect the demand for this new service to grow. Therefore, we will continue working closely with our customers to develop this important part of our offering moving forward.

## Metsä Board Product Safety Process

➔ Read more in the Sustainability Statement 2024, S4 – Consumers and end-users



### Raw materials

- Traceable wood raw material from controlled or certified forests
- Carefully selected and safe chemicals
- Annual product safety questionnaires for suppliers

### Production

- Operations according to good manufacturing practices (GMP)
- Certified ISO/FSSC 22000 food safety systems, audited annually both externally and internally

### Products

- Regular testing in accredited laboratories
- Risk assessments and detailed compliance evaluations
- Communication of extensive product safety data and compliance with the Product Safety Statement

### Downstream supply chain

- Reducing product safety risks downstream in the supply chain:
- Careful packaging used for transportation
  - Supply chain requirements with regular audits
  - Consistent product quality reduces disruptions in converting and processing, reducing product safety risks

A woman wearing an orange jacket, a dark blue cap, and safety glasses is smiling and talking to a man whose back is to the camera. They are in a forest setting. The woman is holding a black smartphone. The man is wearing a brown shirt and a light-colored cap. The background is a dense forest of tall trees with green foliage.

# G

## Governance

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We are committed to promoting responsible practices in our own operations and value chain and confirming the origin of our raw materials.





## Our key themes

- Confirming the traceability of all raw materials
- Increasing the share of certified wood fibre
- Ensuring an ethical corporate culture and the responsibility of our suppliers

2030 targets		Actual 2024
100%	Ethics index	<b>79%</b>
100%	Traceable raw materials	<b>97%</b>
>90%	Share of certified wood fibre	<b>92%</b>
100%	Suppliers' commitment to the Supplier Code of Conduct	<b>99%</b>
100%	Assessments and audits of core suppliers	<b>79%</b>
100%	Joint sustainability targets with partner suppliers (MG)	<b>100%</b>

(MG) The target is set at Metsä Group level

# Fostering responsibility across the operations

**G** | Continuous development of policies, processes, actions and measurable targets helps us ensure the sustainability and responsibility of our raw materials, operations and products.

## Why it matters?

Sustainability governance and good business conduct aim to ensure that environmental and social responsibility, along with financial profitability, are taken into account and guide decision-making both in the company and its value chain.

## Responsibility in our own operations and the value chain

The sustainability of Metsä Board's business conduct is guided by applicable legislation, the company's values, Metsä Group's Code of Conduct and various policies approved by Metsä Board's Board of Directors. To complement its Code of Conduct, Metsä Group published new anti-corruption principles in 2024. According to the Code of Conduct, we are committed to complying with the UN Guiding Principles of Business and

## All the wood fibre we use is traceable

All parties involved in processing wood and pulp in our value chain comply with the requirements of the PEFC and FSC® chains of custody. Therefore, all the wood fibre we use is fully traceable. In 2024, the due diligence system of Metsä Group's wood procurement was reviewed to meet the requirements of the EU Regulation on Deforestation-free Products (EUDR).

In addition to the chain of custody, forest management must also be certified to ensure that our customers can purchase certified paperboard or pulp and use globally recognised forest certification labels on their packaging. In 2024, 92% of the wood used by Metsä



Promoting Sustainable Forest Management  
www.pefc.org



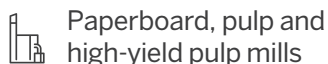
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Board originated from certified forests and the remaining 8% were from forests covered by the requirements of FSC Controlled Wood and PEFC Controlled Sources.

In addition to forest sites, we choose all our partners in the wood value chain responsibly. Wood procurement practices are annually assessed by external third-party audits as well as Metsä Group's internal audits. The audits focus on environmental and social responsibility matters in the operations of wood suppliers and harvesting contractors. Ensuring the traceability of wood origin is an essential part of these audits.



Customer



Paperboard, pulp and high-yield pulp mills



Wood supply and forest services



Forest owners

Forest certification and our Chain of Custody system allow our customers to tell their clients about a product's sustainability. Certification and traceability ensure that the wood used in a product comes from sustainably managed forests.

The pulp used in paperboard production is manufactured at Metsä Board's high-yield pulp and pulp mills or pulp mills operated by one of our associated company Metsä Fibre. These mills purchase all their wood from Metsä Group's wood supply. The mills record the volume, origin and certification of the wood they purchase and ensure through calculations that the volume of certified products they sell corresponds with the volume of inbound certified wood. The certification details are included in the orders and the related documents.

All wood can be traced with the help of maps, the details entered in our data systems, and various documents. Metsä Group's wood supply calculates the share of certified wood and sells a corresponding volume of certified wood to the mills. We also require a sustainable origin from non-certified wood, which always meets at least the requirements of PEFC Controlled Sources and FSC Controlled Wood.

Most of the wood we use comes from PEFC or FSC-certified Northern European forests. The forest owners have agreed to the forest certification requirements. Metsä Group and external auditors also verify sustainable forest management, for example, by auditing harvesting sites.



Human Rights and respecting internationally recognised human rights, as declared in the UN Universal Declaration of Human Rights and the International Labour Organisation (ILO)'s Labour Standards. As part of Metsä Group, Metsä Board has supported the UN Global Compact and its principles on human rights, labour, the environment and anti-corruption since 2003.

Metsä Board's wood supply is ensured by Metsä Group's Wood Supply and Forest Services, Metsä Forest. At the same time, the procurement of other raw materials and services is centrally handled by Metsä Group's Procurement and Logistics organisation. These procurement processes seek to ensure that all our partners operate sustainably and responsibly to minimise any risks in the supply chain related to matters such as the environment, safety, corruption, the use of child labour and human rights violations.

### Ensuring the origin of wood

Wood from Northern European forests is the main raw material in Metsä Board's products. Wood and purchased pulp account for 93% of the weight of our raw material consumption. Metsä Group has wood supply organisations in Finland, Sweden and Latvia and closely cooperates with local contract entrepreneurs in harvesting, transport and forestry work. All the countries from which wood is procured have legislation in place to ensure the renewal of forests after regeneration felling.

WOOD PROCUREMENT BY COUNTRY, %	2024
Finland	55
Sweden	35
Baltic countries	9,0
Others	1,5

### Procurement of other raw materials

All Metsä Board's suppliers are expected to commit to the Supplier Code of Conduct, and they also need to pass background checks to be selected as our suppliers. In the "Know Your Business Partner" process, the supplier's background is checked for any risks related to trade sanctions, corruption, money laundering, human rights violations and other misconduct before a binding agreement is concluded. The same checks are also done regularly during the ongoing business relationship.

More detailed supplier assessments focus on core suppliers and other suppliers operating in areas and industries with potential risks identified related to human rights, corruption, or the environment. The sustainability of suppliers and their associated risks are assessed through questionnaires, audits and the Ecovadis tool. Metsä Group, an external HSEQ cluster, and another external party if required, conduct annual supplier audits focusing on ethics, environmental responsibility, occupational safety and quality. Supplier assessments and audits are used to make development proposals and monitor agreed corrective actions.

Metsä Group's target is to agree on joint sustainability targets and measures to achieve them with all its partner suppliers by 2030. Metsä Group achieved its 2030 target to agree on joint sustainability targets with all eight partner suppliers already in 2023. In 2024, the cooperation continued with more detailed planning to achieve the targets, along with the implementation of the set targets with certain suppliers.

→ Read more in the Sustainability Statement 2024, G1 – Business conduct

## Process for ensuring the sustainability of suppliers

The process for suppliers of services and raw materials other than wood



→ Cooperation, corrective actions and follow-up  
 → Joint sustainability targets with eight partner suppliers

# Updated 2030 sustainability targets

Metsä Board updated its sustainability targets in January 2025. The update includes changes to existing targets and new targets focusing on logistics emissions, occupational safety, and personnel diversity. The targets support the UN Sustainable Development Goals (SDG). Reporting according to the updated targets will begin in 2025.

TARGET AND METRICS	2030 TARGET	UN SDG	NEW OR MODIFIED TARGET
<b>E – ENVIRONMENT</b>			
<b>1. Mitigating climate change and adapting to it in own operation and value chains</b>			
Improvement in energy efficiency from the 2018 level, %	+10	7, 12, 13	
Fossil-based carbon dioxide emissions (Scope 1 + Scope 2 market-based), t	0	12, 13	
Greenhouse gas emissions from logistics purchased by Metsä Board from the 2022 level (Scope 3, category 4), %/tkm	-30	13	●
Fossil-free raw materials and packaging materials excluding wood and purchased pulp, share of dry tons, % <sup>1)</sup>	100	9, 12	●
Metsä Group level targets:			
Amount of forest regeneration and young stand management from the 2018 level, %	+30	13, 15	
Amount of forest fertilization from the 2018 level, %	+50	13, 15	
Share of continuous cover forestry in peatland forest regeneration, %	30	13, 15	
<b>2. Continuous improvement in resource-efficiency in production</b>			
Reduction in process water use per produced tonne from the 2018 level, %	-35	6, 12	
Process waste delivered to landfills, t	0	12	
<b>3. Enhancing the state of forest nature</b>			
Metsä Group level targets:			
Retention trees on regeneration felling sites, %	100	13, 15	
High biodiversity stumps on harvesting sites, %	100	13, 15	
Spruce as the only tree species after young stand management, %	0	13, 15	
Measures promoting biodiversity, number	10	13, 15	
<b>S – SOCIAL</b>			
<b>4. Accident-free work environment</b>			
Total recordable incident frequency, own employees (TRIF)	0	8	
Total recordable incident frequency, contractor employees (TRIF)	0	8	●
<b>5. Continuous improvement in engagement and well-being of employees</b>			
Employee engagement, index (scale 0–100)	AAA	5, 8	
The implementation of the measures defined based on the employee survey, %	100	5, 8	●
<b>6. Promoting diversity, equality and inclusion (DEI)</b>			
Women in leadership roles, %	35	5, 8	●
Employee experience on diversity, equality and inclusion (DEI) implementation, "Metsä for all" index (scale 0–100)	100	5, 8	●
Anonymous recruitment for vacancies open to all, %	100	5, 8	
<b>G – GOVERNANCE</b>			
<b>7. Promoting ethical corporate culture</b>			
Employee experience on ethical corporate culture implementation, Ethics index (scale 0–100)	100	5, 8	●
<b>8. Promoting sustainable and ethical practices in our supply chain</b>			
Share of certified wood fibre, %	100	15	●
Traceability of raw materials, share of total purchases, %	100	9, 12	
Suppliers' commitment to the Supplier Code of Conduct, share of total purchases, %	100	8, 12	
Supplier assessments and audits of core suppliers, %	100	8, 12	
Metsä Group level targets:			
Joint sustainability target with partner suppliers, %	100	12, 13	

<sup>1)</sup> Recycled content in packaging materials also accounts as fossil-free due to the EU Packaging and Packaging Waste Regulation's requirement for recycled content in packaging materials.



**Metsä Board** is a leading European producer of premium fresh fibre paperboards. Our paperboards made from renewable wood fibre are used for consumer and retail packaging solutions.

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Metsä Board's annual reporting for 2024 includes the Annual Review and the Sustainability Review.  
[metsagroup.com/metsaboard](https://metsagroup.com/metsaboard)



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# Growth, with a future

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