



Metsä Board

ESG Presentation

January–March 2023

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This is Metsä Board - Investment highlights



Focus on sustainable fresh fibre paperboards

- Premium paperboards from renewable materials
- All paperboards are fully recyclable providing an alternative to plastics



Strong position in a growing market

- #1 in folding boxboard and white kraftliners in Europe
- #1 in coated white kraftliners globally



Leader in sustainability

- World class resource efficiency in production
- Fossil free production and products by the end of 2030



Investing in sustainable and profitable growth

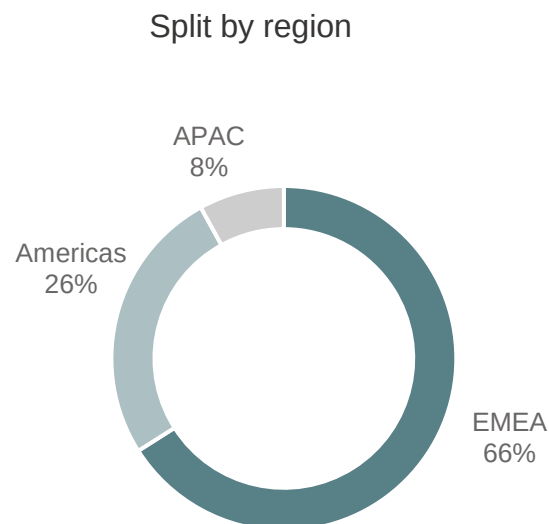
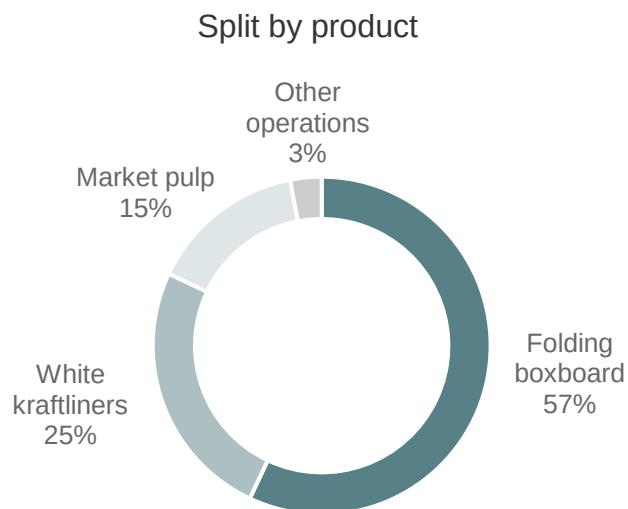
- Significant ongoing and planned investments to meet growing demand for sustainable and premium packaging materials

Metsä Board is part of profitable Metsä Group

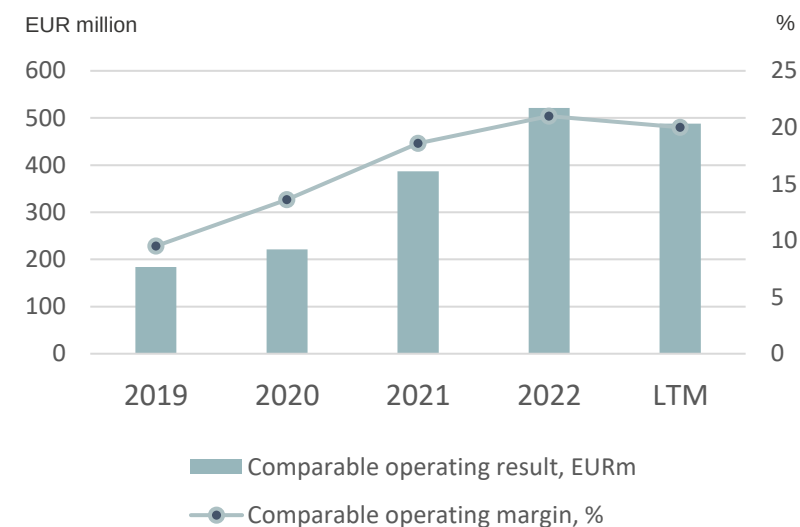
Ensures an uninterrupted production chain from sustainably managed forests to high-quality end products

Metsä Board in figures

Sales EUR 2,480 million



Comparable operating result FY2022: EUR 521 million or 21% of sales



Paperboard capacity

2.0million
tonnes/year

Pulp and BCTMP capacity

1.5million
tonnes/year

Ownership in Metsä Fibre*

24.9%
secures self-sufficiency in pulp

Long-term customerships



Diversified customer base in 100 countries including brand owners, converters, manufacturers of corrugated products and merchants

Strategy

VALUES

Reliability Cooperation Renewal Responsible profitability

STRATEGY

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

OUR STRATEGIC PROGRAMMES

Premium supplier

Effective innovation

Safe and efficient operations and organic growth

Leader in sustainability

Motivated people

MEGATRENDS

Population growth Urbanisation Biodiversity loss Climate change Digitalisation

PURPOSE:

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

VISION:

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

Group structure provides an unique value chain from forests to sustainable end products

METSÄ GROUP

FY2022: Sales EUR 7.0 billion | ROCE 19.5% | Personnel 9,500

Parent company: METSÄLIITTO COOPERATIVE

owned by more than 90,000 Finnish forest-owners

METSÄ FOREST

WOOD SUPPLY AND
FOREST SERVICES

Holding

Metsäliitto Cooperative 100%

METSÄ WOOD

WOOD PRODUCTS

Holding

Metsäliitto Cooperative 100%

METSÄ FIBRE

PULP AND
SAWN TIMBER

Holding

Metsäliitto Cooperative 50.1%
Metsä Board 24.9%
Itochu Corporation 25.0%

METSÄ BOARD

PAPERBOARD

Holding

Metsäliitto Cooperative 50.2%
Listed in Nasdaq Helsinki

METSÄ TISSUE

TISSUE AND
GREASEPROOF PAPERS

Holding

Metsäliitto Cooperative 100%

METSÄ SPRING INNOVATION COMPANY

Metsä Spring's role is to

- work to develop new businesses related to wood-based value chains
- invest worldwide in start-ups and implement Metsä Group's own selected pilot/demo projects
- lead Metsä Group's R&D with the aim of supporting and activating the development of Group's current businesses



We are committed to the UN Global Compact

HUMAN RIGHTS

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and

Principle 2: make sure that they are not complicit in human rights abuses.

LABOUR

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4: the elimination of all forms of forced and compulsory labour;

Principle 5: the effective abolition of child labour; and

Principle 6: the elimination of discrimination in respect of employment and occupation.

WE SUPPORT



ENVIRONMENT

Principle 7: Businesses should support a precautionary approach to environmental challenges;

Principle 8: undertake initiatives to promote greater environmental responsibility; and

Principle 9: encourage the development and diffusion of environmentally friendly technologies.

ANTI-CORRUPTION

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Strong evidence of sustainability leadership



Metsä Board is among the top companies to have received an **'A'** score in the **CDP's Climate, Water and Forest** assessments for the 2nd year. Metsä Board is also placed on the **Supplier Engagement Leaderboard**.



Metsä Board again scored **'Platinum'** in the **EcoVadis** sustainability rating in 2022 and is included in the **top 1%** of companies assessed in the manufacture of corrugated paper and paperboard, and of containers of paper and paperboard.



Metsä Board's GHG emission reduction targets are approved by the **Science Based Targets** initiative.



Metsä Board, as part of Metsä Group, is committed to the **UN Global Compact** corporate responsibility initiative and its principles in the areas of human rights, labour, the environment and anti-corruption. Metsä Board also supports the UN's Sustainable Development Goals, the **SDGs**.



[Link](#) to MSCI website



[Link](#) to Sustainalytics website



[Link](#) to Moody's ESG Solutions website



[Link](#) to ISS website

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Material topics are reported in line with common frameworks

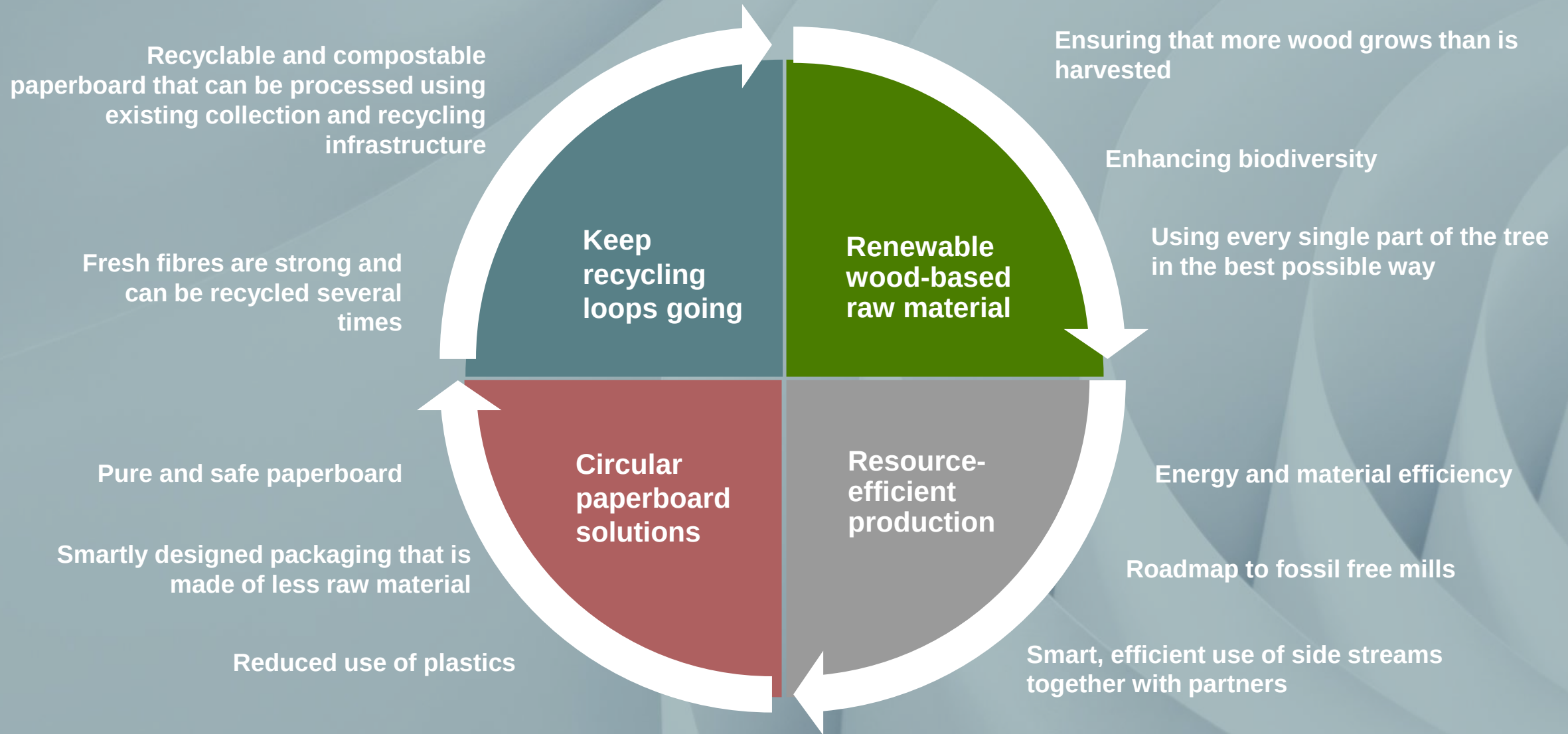
SASB

- Metsä Board reports in accordance with the SASB Standard for Pulp and Paper Products within SASB's Renewable Resources and Alternative Energy section
- In this standard, the financially material accounting metrics concern GHG emissions, air quality, energy management, water management and supply chain management
- The SASB reporting is included in our [Annual and Sustainability Report 2022](#)

TCFD

- Metsä Board's reporting on climate-related risks and opportunities complies with the TCFD's recommendations
- The disclosure describes governance, strategy, risk management as well as metrics and targets on climate-related topics
- The [TCFD table](#) includes references to relevant pages of the Annual and Sustainability Report, such as the table regarding [transition / physical risks and opportunities](#)

The circular economy at Metsä Board



Our 2030 sustainability targets



Environment



We safeguard biodiversity

We mitigate climate change and reduce emissions

We use natural resources efficiently and reduce waste



Social

We do the right thing
We promote safety and wellbeing at work



Governance

We know the origin of our raw materials
We favour responsible suppliers in our procurement

Sustainable products

We aim for fully fossil free production and products and use natural resources as efficiently as possible in accordance with the principles of the circular economy. This reduces the climate and environmental footprints of our products.

Our paperboards contribute to circular bioeconomy

- Packaging is needed to protect the product and to reduce wastage
- Packaging accounts for only few percent of the total environmental impact of a food product's entire life cycle
- Paperboard is widely collected for recycling and thus returned to the recycling loop
- Fresh fibres are needed to keep the recycling loop ongoing



Three principles of the Circular Economy, source Ellen MacArthur Foundation

Fresh and recycled fibres are equally good in terms of the circular economy

82%

of paper and board
packaging
is collected
for recycling

100%

recovery of wood fibres
is not possible because
part of the fibre is lost
during a cycle, or is
contaminated

Fresh fibre is needed in the recycling loop to maintain quality and strength,
and to keep the loop ongoing

Two major factors influencing CO₂ of packaging

1

Fossil or non-fossil-based energy

Nordic fresh fibre paperboard production uses mainly renewable energy

In many other regions, the main energy sources are still fossil-based

2

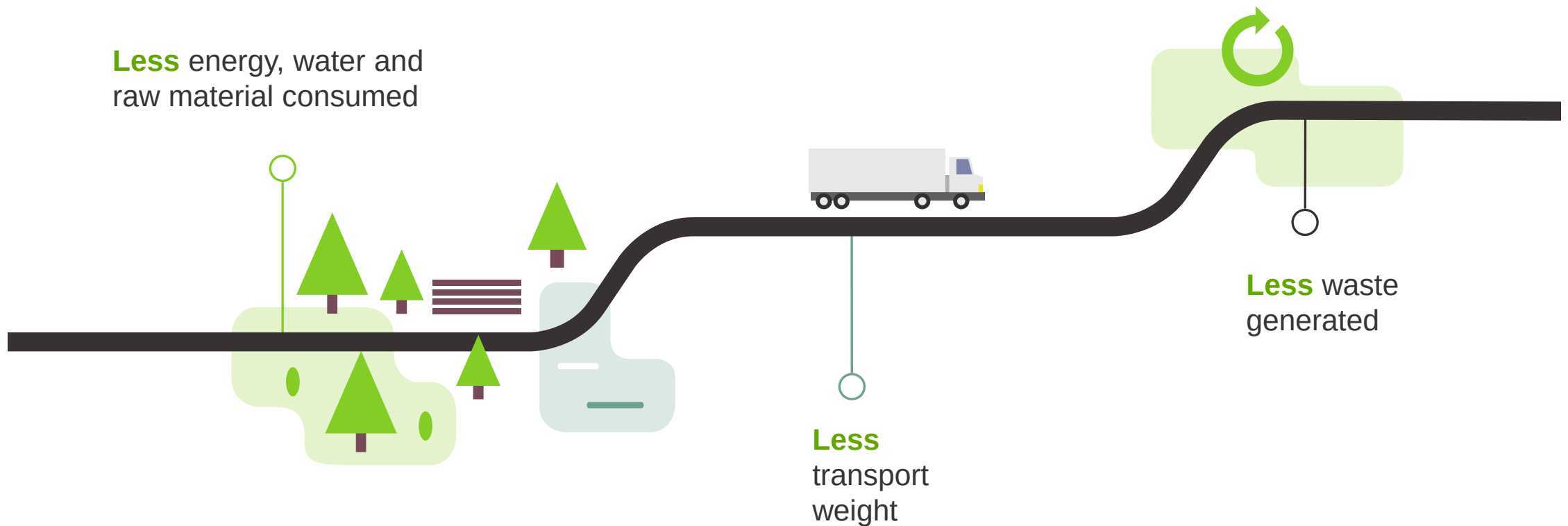
Efficient material use, light-weighting

Using less material to produce a required type of packaging

Less weight to be transported throughout the supply chain, with lower transportation emissions

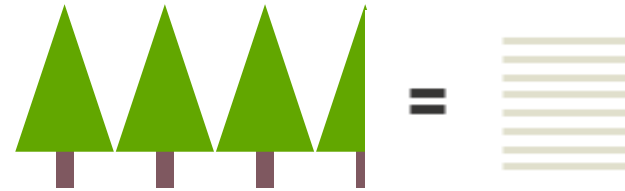
Less waste after the product use

Lightweight paperboards help reduce environmental footprint across the value chain



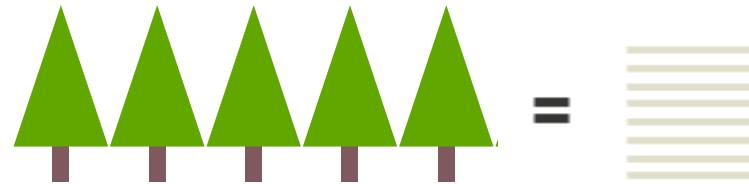
Production of folding boxboard needs less wood and leave more trees standing

Metsä Board folding boxboard
(70% BCTMP, 30% chemical pulp)



3.4 m³ of wood per tonne of pulp

Solid bleached board
(100% chemical pulp)



5 m³ of wood per tonne of pulp



Every day consumers use ~160 million packages made of Metsä Board's folding boxboard

By reducing paperboard weight by 1%, material savings equivalent to
1.6 million packages per day can be achieved



Switching from WLC to FBB reduces the carbon footprint by 53%

Carbon Footprint *
kg CO₂ eq./200 000 cartons

WLC

MetsäBoard
Pro FBB Bright

53%

Lower
carbon footprint

Thanks to
the strength and
bulk of fresh fibre
boards, lighter
basis weights can
be used.



GaBi is a Life Cycle Assessment (LCA) modelling and reporting software. It contains databases of various industrial processes such as material and energy production and transports. GaBi LCA follows the standard ISO 14040 and ISO14044.

Paperboard provides an alternative to plastics

PET

- Made of fossil oil-based materials with fossil-based energy
- Recycling rate of PET is low

(Eurostat: In the EU, recycling rate is 38% for plastic packaging and 82% for paper packaging)

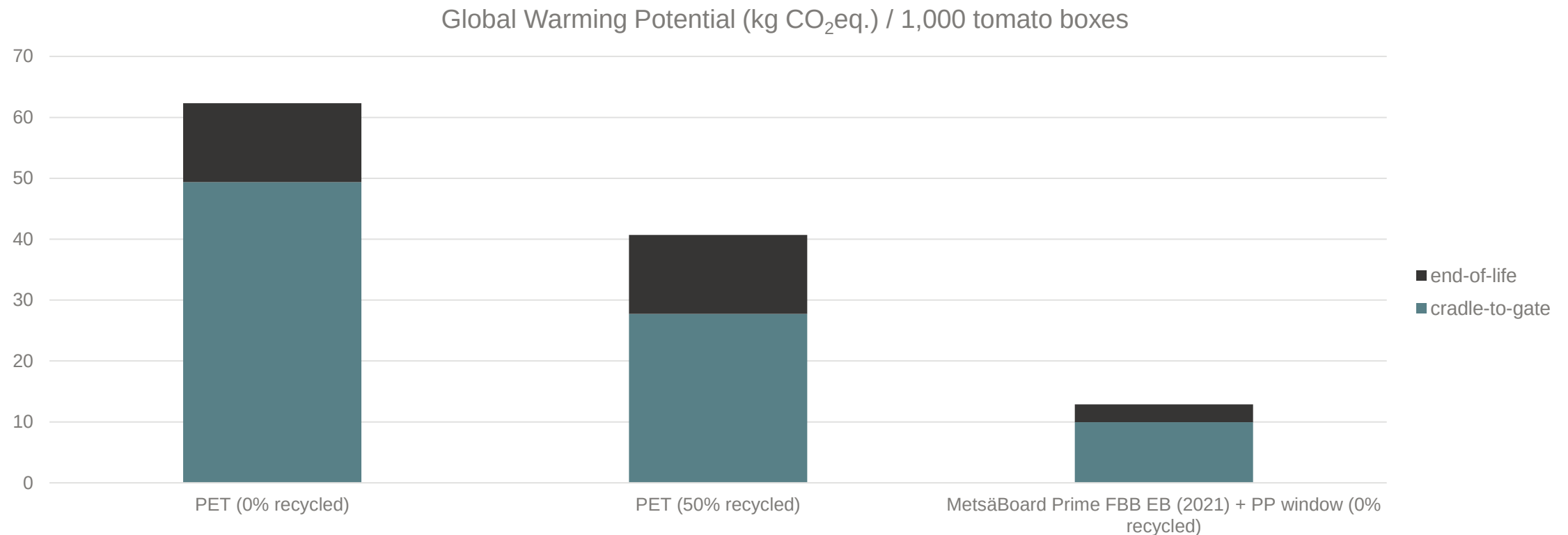


MetsäBoard Prime FBB EB

- Made from renewable fresh wood fibre with a high share of fossil free energy
- Easy to recycle
- Biodegradable and compostable



Switching from PET to dispersion coated barrier board reduces the carbon footprint by 70-80%*



* LCA comparison is based on different materials only, converting is excluded. EoL: European waste management conditions. Environmental impact methodology EF 3.0 Climate Change, [kg CO₂ eq.]

PET, EU-28, no compounding, film thermoformed, recycled content 0%-50%, GaBi packaging calculator 3.2

PP, EU-28, extrusion, recycled content 0%, GaBi packaging calculator 3.2.

MetsäBoard Prime FBB EB, primary data from own processes (2021), secondary data from GaBi and Ecoinvent databases

Brand owners' commitments and consumers' preferences favor fiber-based packaging

- Several **brand owners** have committed to get rid of unnecessary plastic and to have 100% reusable, recyclable and compostable (plastic) packaging by 2025
- Paper/cardboard is the preferred packaging material by **consumers**

Reduce



Recycle

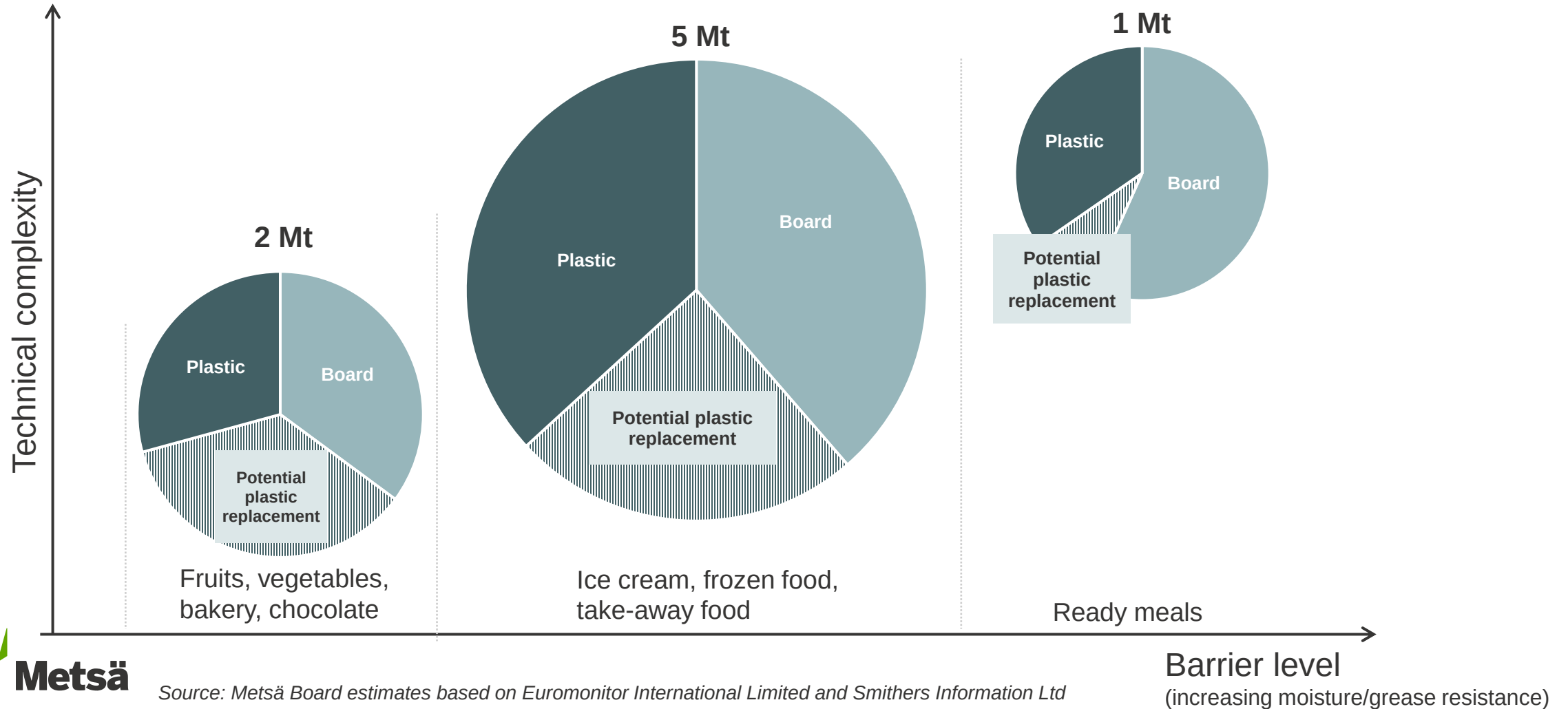


Compost



Plastic replacement potential roughly 2 million tonnes

Cartonboard and rigid plastic packaging market size in selected food categories, excluding cupstock and liquid packaging



Environment

We mitigate climate change.

We reduce fossil-based carbon dioxide emissions and the use of fossil-based raw materials and packaging materials. We ensure that carbon is stored in forests and wood products.

Measures for the 2030 targets

- We only use fossil free fuels and purchase fossil free electricity
- We only use fossil free raw materials and packaging materials
- We increase forest management
- We recommend continuous cover forestry in peatlands
- We increase the production of wood products that store carbon for a long time

Indicators

- **0 t** fossil-based carbon dioxide emissions, scope 1 and 2
- **100%** fossil free raw materials and packaging materials
- **+30%** forest regeneration and young stand management* (MG)
- **+50%** forest fertilisation* (MG)
- **+30%** share of continuous cover forestry in peatland forests (MG)
- **+30%** amount of carbon stored in wood products** (MG)

* hectares, compared to 2018

** CO₂ equivalent compared to 2018
(MG) target is set at Metsä Group level

Metsä Board's 1.5°C aligned Science Based target

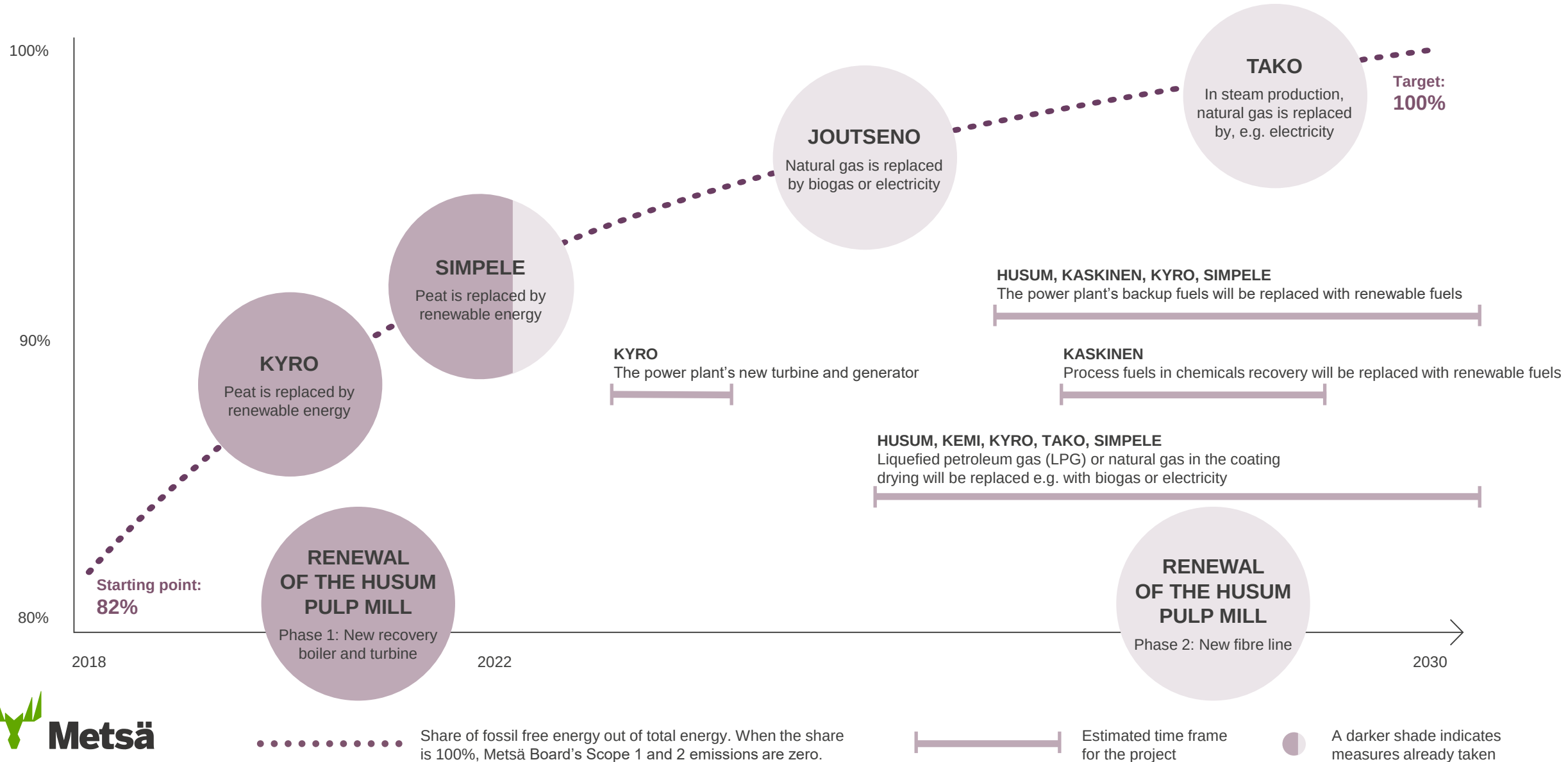
ZERO FOSSIL CO₂ EMISSIONS

Fossil free production* and products by the end of 2030

*including Scope 1 and Scope 2



Transition plan to fossil free mills by the end of 2030



Climate change creates risks

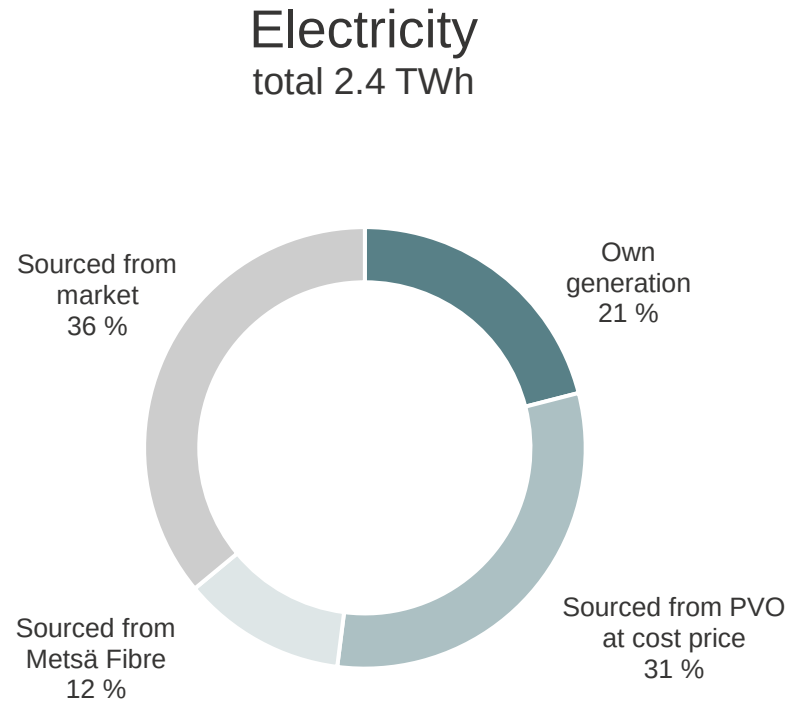
According to TCFD*	Risk	Impacts	Metsä Board's response
Transition risks arising from the transition into a low-carbon economy	- Increased regulation - Market and reputation risk	EU regulation may steer the future use of forests Energy regulation Emissions allowances Carbon pricing Requirements for new technology The supply and demand of products in a low-carbon economy may differ from what it is currently	Metsä Board sources wood from sustainably managed forests, where annual growth clearly exceeds the removal. For every harvested tree new seedlings are planted A transition to the use of 100% fossil free energy in production, replacing fossil oil-based raw materials and increasing the efficiency of energy and water use Developing new products that comply with the circular economy and have a lower carbon footprint
Physical risks such as changes in temperatures and precipitation, and they will materialise if climate change is not mitigated.	- Extreme weather phenomena (acute risk) - Rising average temperature and changes in precipitation (chronic risk)	Weakened availability of wood: - mild winters complicate harvesting - increase of insects - damage caused by storms Reduced availability of the process water needed by mills resulting to production breaks	Metsä Board has high availability of Northern European wood through its unique value chain and owner base Sustainable forest management supports the growth of forests Resource efficiency in the use of wood, water and energy All Metsä Board's mills are located in Finland or Sweden with ample water resources. The company has a target to reduce the use of process water and enhance the recycling of water within the process



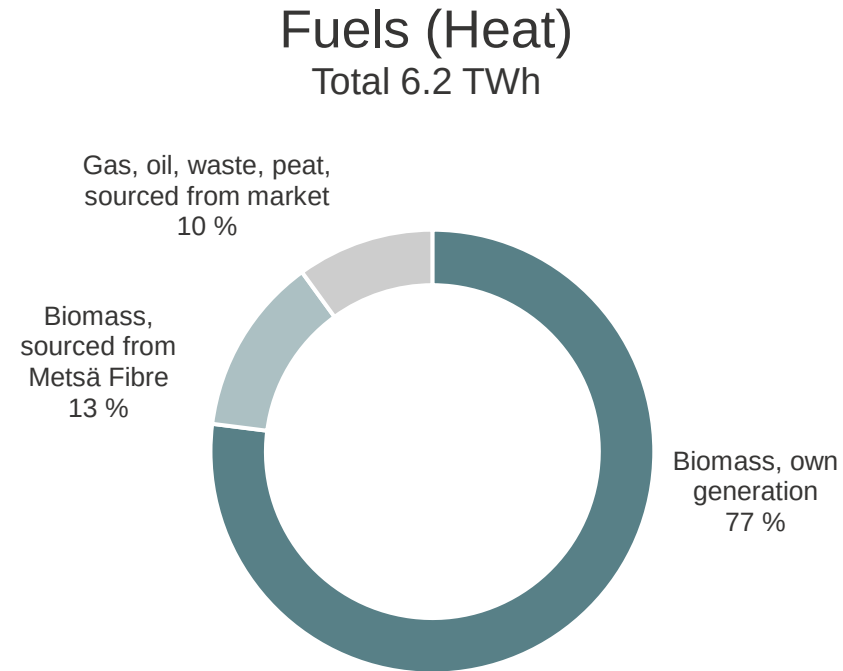
Metsä

*) The Task force on Climate-related Financial Disclosures. Read more in Metsä Board's [Annual and Sustainability Report 2022](#)

Energy consumption in 2022 by sourcing method



Based on GRI calculation



Based on primary energy calculation



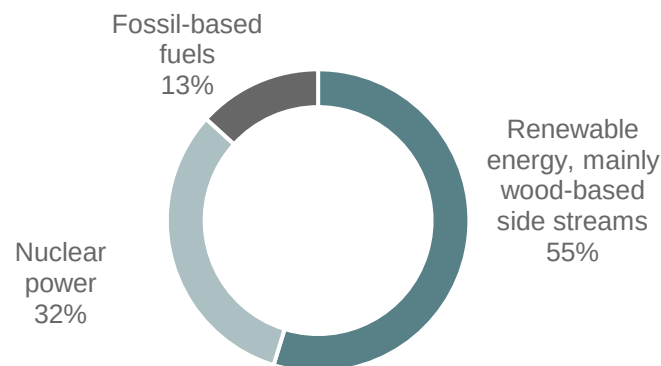
Metsä Board's self-sufficiency in electricity will improve during 2023–2024 after the full impacts of new recovery boiler and turbine in Husum and OL3, as well as the start up of Metsä Fibre's new bioproduct mill in Kemi. Electricity consumption will increase in connection with the capacity expansions of folding boxboard and white kraftliner in H2 2023.

Already a high use of fossil free energy

Based on primary energy calculation

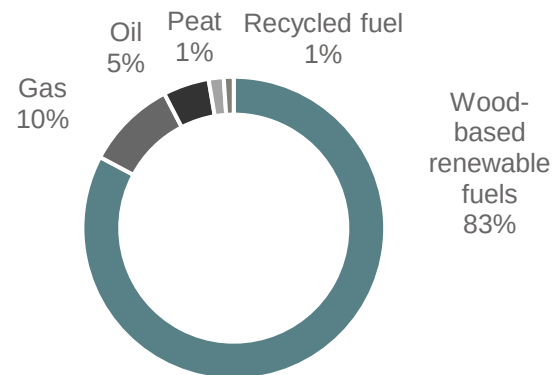
Total energy consumed in 2022

(total 12.0 TWh as primary energy)



Fuel consumption in own energy generation and process fuels

Total 6.0 TWh in 2022



- 87% of Metsä Board's total energy consumption is based on fossil free energy sources
- Target of 100% fossil free production by the end of 2030 (scope 1 and 2 emissions)
- A small share of the purchased electricity is based on coal through the residual mix of electricity generation in Metsä Board's production countries. Out of total energy consumption, calculated as primary energy, the share of coal as energy source is < 2%

Metsä Board has reduced its fossil-based CO₂ emissions per tonne by 33% since 2018

Target is to reduce fossil-based CO₂ emissions by 100% by the end of 2030

Fossil-based CO₂ emissions, Scope 1+2

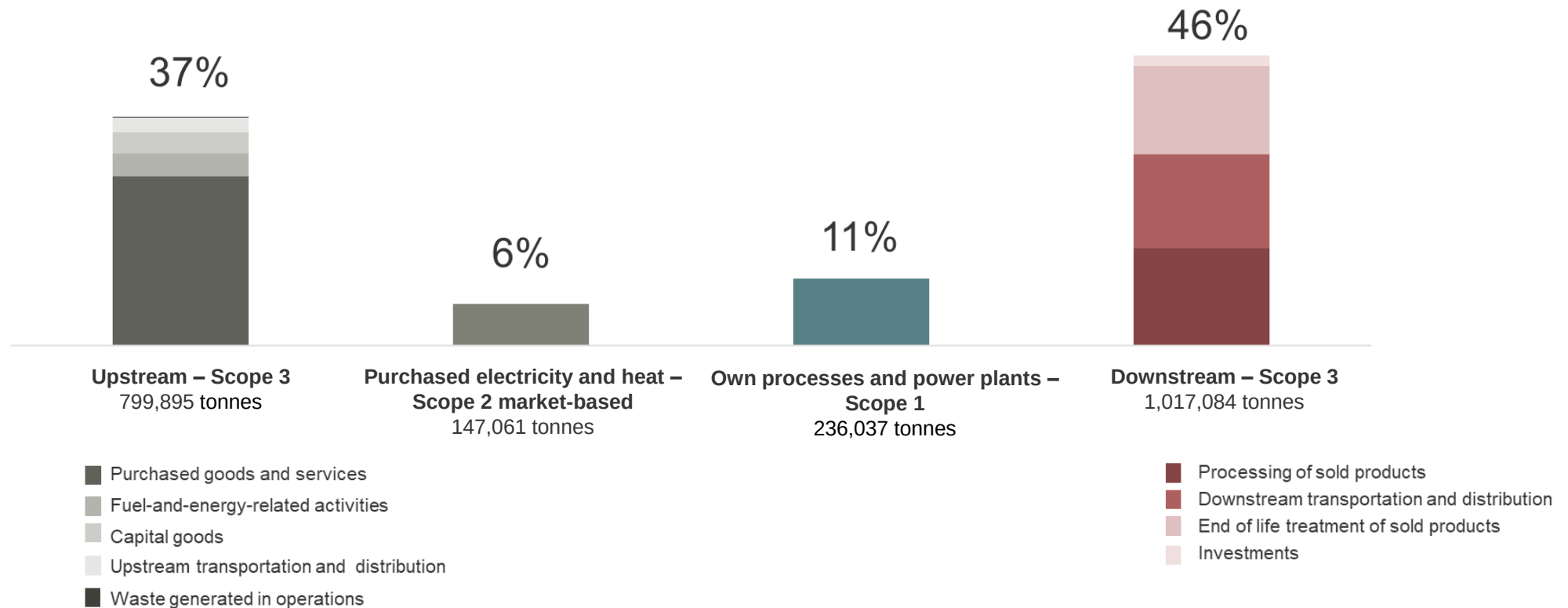


Emission allowances

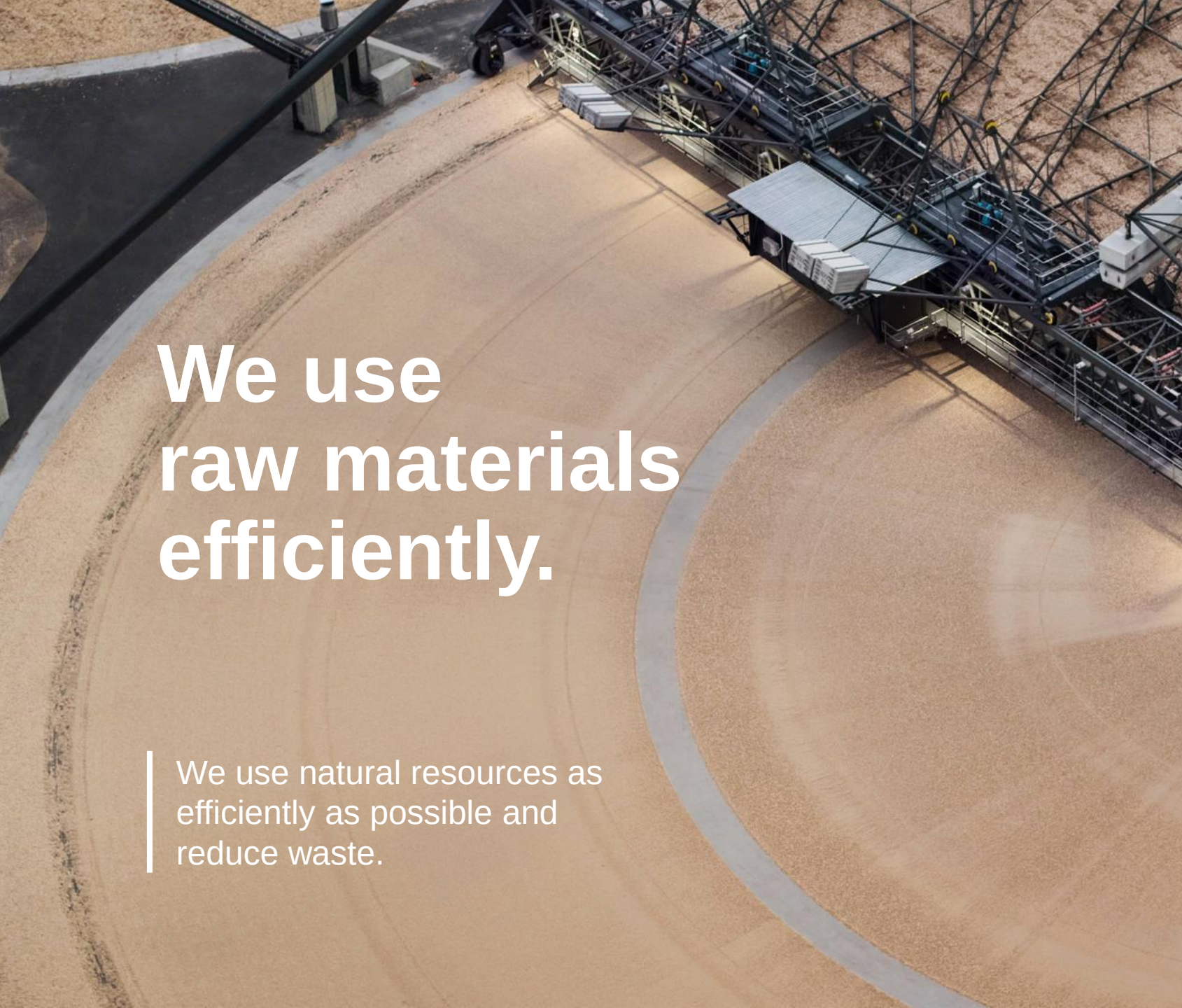
- Metsä Board has received emission allowances in accordance with the European Union Emissions Trading System
- During the past years, the number of free allowances received have exceeded the company's annual fossil-based CO₂ emissions. The surplus have been partly sold to the market
- Unused emission allowances do not have an impact on income statement or balance sheet. Metsä Board discloses the possible sales of emission allowances in its interim reports. More information in [Annual and Sustainability Report 2022](#).

Indirect emissions from value chain are included in our Science Based Targets to reduce GHG emissions

Total greenhouse gas emissions (CO_{2e}) ca. 2.2 million tonnes



Metsä Board has committed that 70% of its non-fibre suppliers and downstream transportation suppliers by spend will set science-based targets by 2024.



We use raw materials efficiently.

We use natural resources as efficiently as possible and reduce waste.

Measures for the 2030 targets

- We use less water at our mills
- We improve energy efficiency
- We utilise all our process waste

Indicators

- **35%** **reduction** of process water consumption per tonne of production*
- **10%** **improvement** in energy efficiency**
- **0 t** of process waste sent to landfills

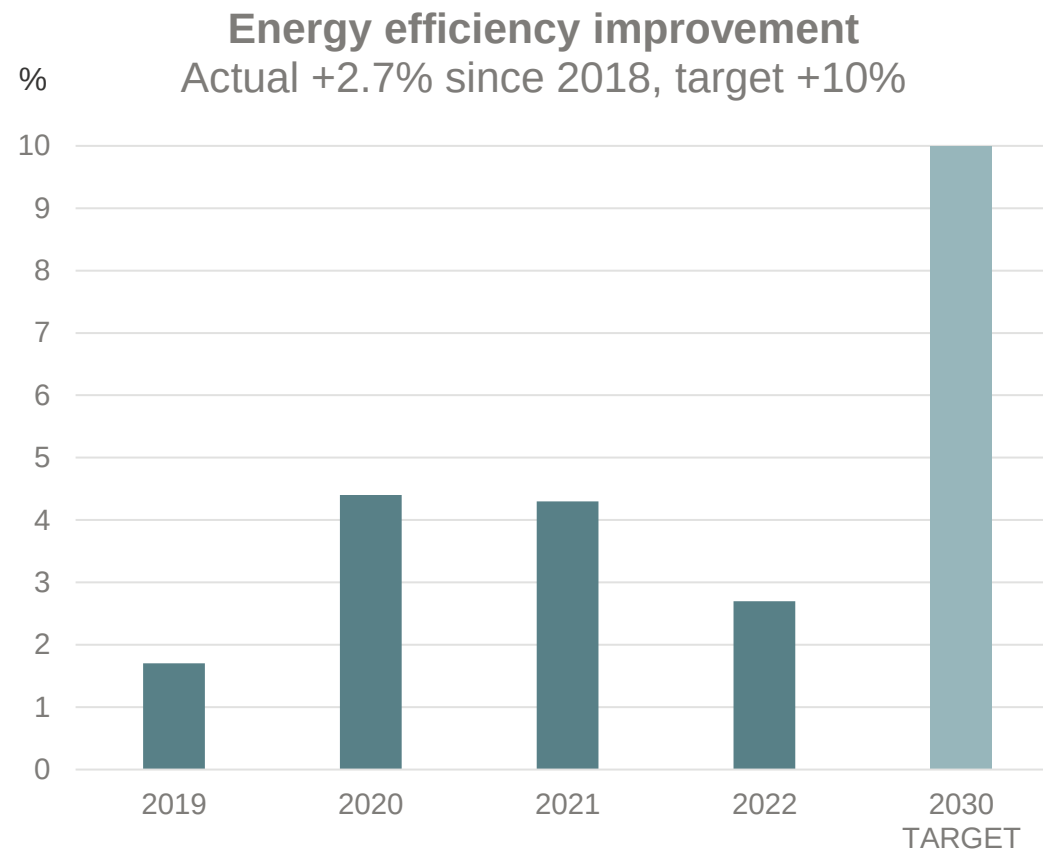
* m^3/t , compared to 2018

** compared to 2018

Improvement in energy efficiency supports the target towards fossil free production

Key actions in 2022

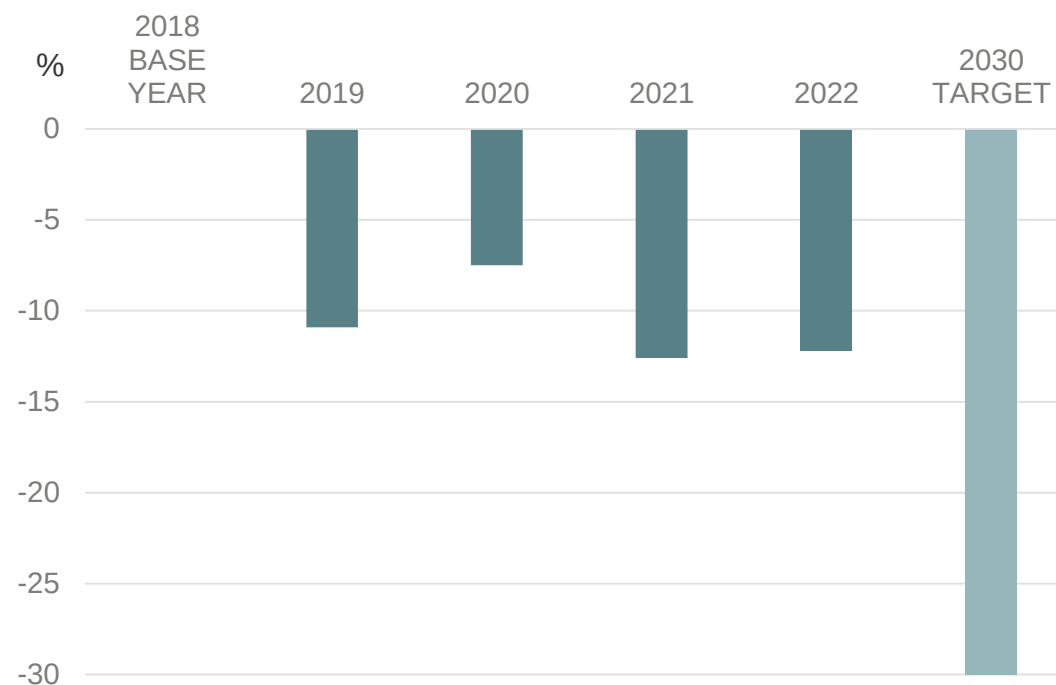
- **Kyro mill:** investment in a lamella clarifier for chemically treating water used as process water, and decision to invest in a new turbine and generator for the Kyro mill's biopower plant
- **Simpele mill:** introduction of a heat exchanger for cooling the debarking department, and the utilisation of waste heat at the Simpele mill
- These measures will reduce raw water intake and water heating needs, thereby reducing the use of water and energy



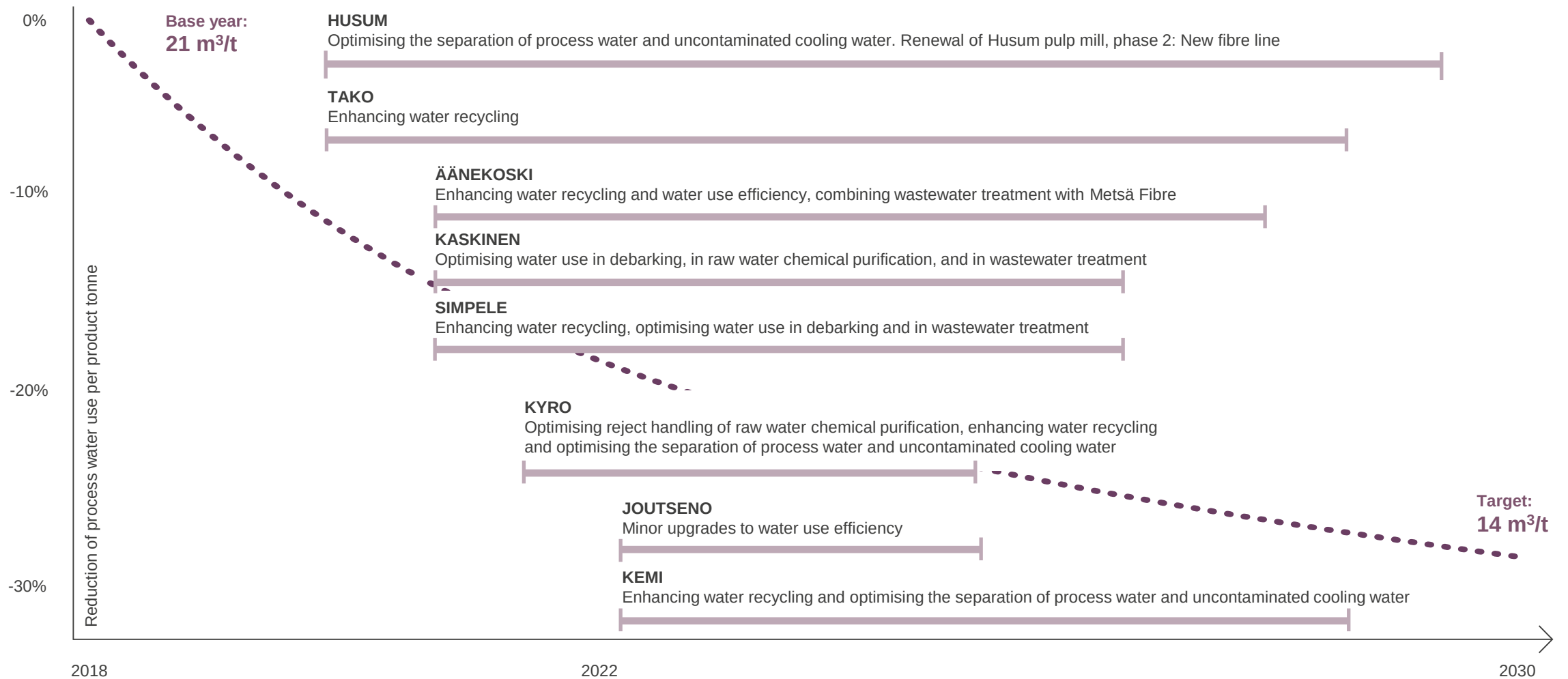
Our target is to reduce process water use per product tonne by 35% in 2018–2030

- Metsä Board's operations are located in areas with abundant water resources
 - We do not operate in high water stress areas
 - Nearly 100% of our process water is surface water
 - Our operations do not prevent or weaken any other parties' access to water
- All process waters are carefully purified before released back to nature
- Efficient use of water helps reduce energy use and, in turn, costs and CO₂ emissions
- The ongoing development programme in Kemi mill reduces water use by 40% and energy consumption by 5% per tonne of produced paperboard

Reduction of process water use per product tonne
-12% since 2018, target -30%

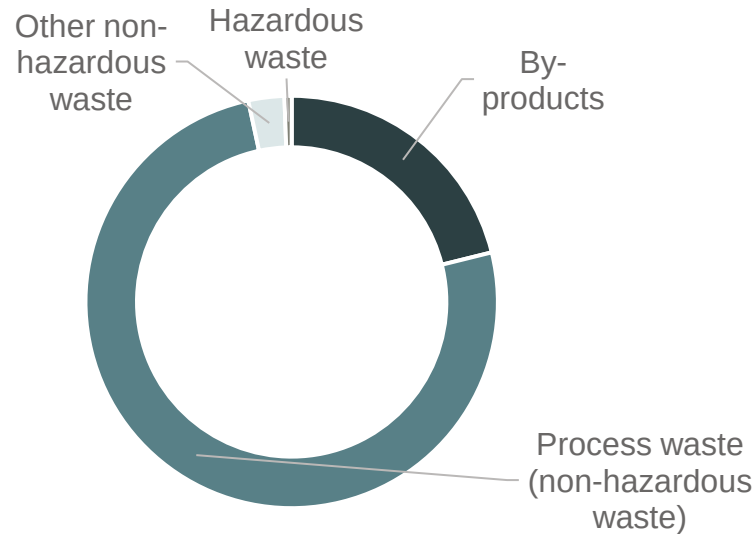


Transition plan to reduced process water use by the end of 2030



Our target is that zero tonnes of process waste will be sent to landfills by the end of 2030

Waste and by-products in 2022
total 171kt



- Our operations also generate municipal and construction waste as well as a small amount of hazardous waste

- In 2022, we utilised 99.9% of by-products and process waste created in our operations
- 55% were utilised as materials and 45% in energy generation



We safeguard forest biodiversity.

With biodiversity actions, we strengthen the living conditions needed by species and preserve valuable habitats.

Measures for the 2030 targets

- We add decaying wood to forests
- We diversify tree species in forests
- We protect valuable habitats for threatened species

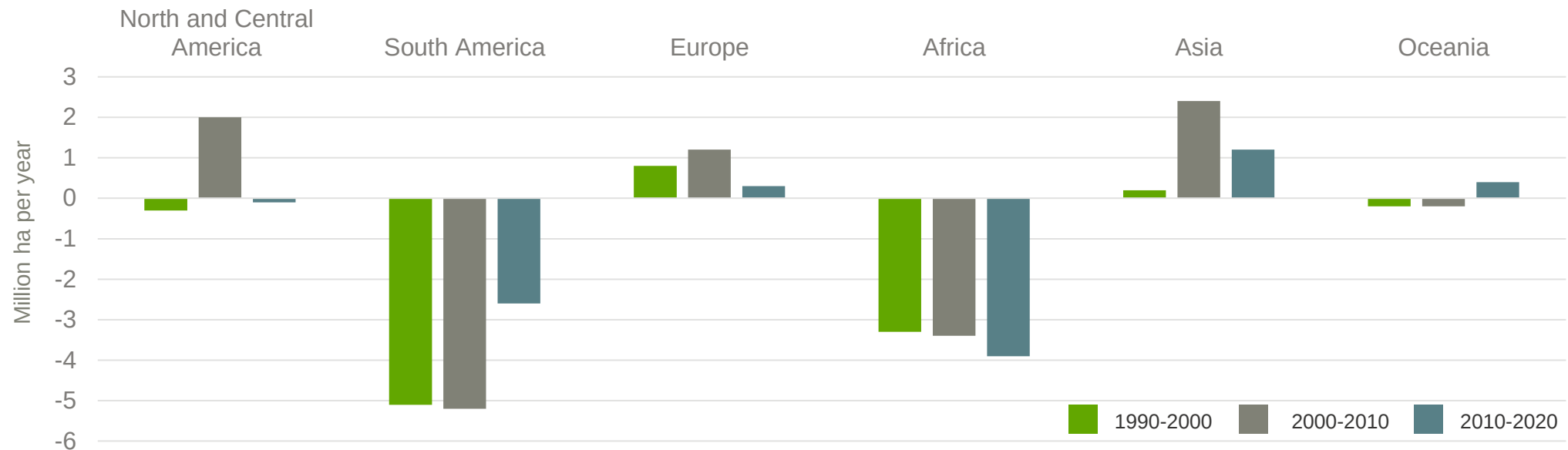
Indicators

- **100%** of regeneration felling sites have retention trees
- **100%** of harvesting sites have high biodiversity stumps
- **0%** of young stand management sites have only spruce remaining
- **10,000** measures to increase natural biodiversity
 - Nature management for herb-rich forests and ridges
 - Burned retention tree groups
 - Water protection
 - New Metso protection areas for our owner members
 - FSC nature site service contracts

All these targets are set at Metsä Group level

Development of world's forests differs regionally

Annual forest area net change by decade and region, 1990–2020



* According to the regional breakdown used in FRA 2020, Europe includes the Russian Federation

FAO Report 2020

Finland - Reforestation instead of deforestation

For every harvested tree we plant four new seedlings



Forests are a carbon sink

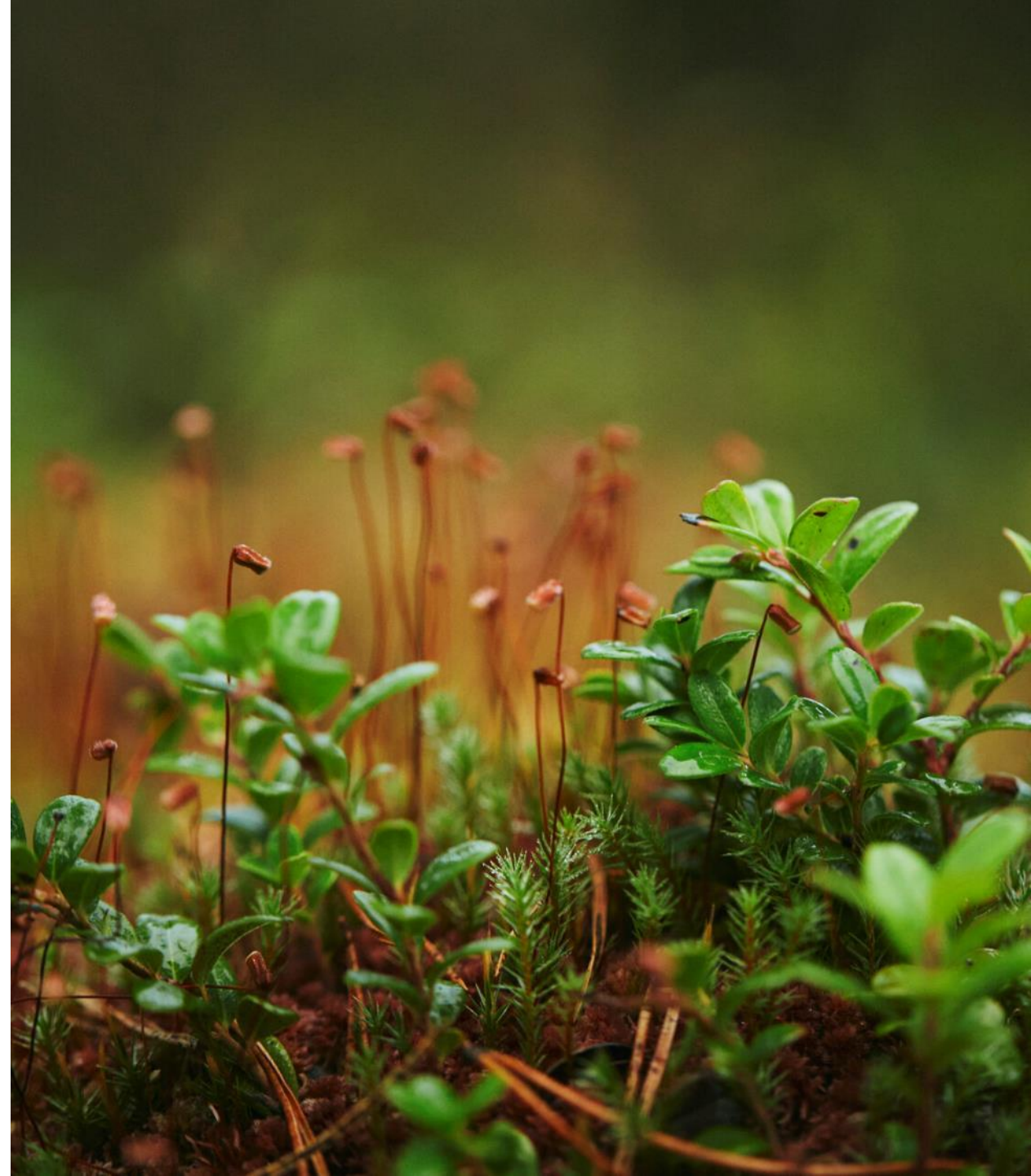
- Growing trees bind more carbon and help mitigate climate change
- Good forest management plays a key role for maintaining forests as carbon sinks
- It is important to get forests growing again as soon as possible after harvesting
- For every harvested tree new seedlings are planted

270 million
trees

planted in a decade by
Metsä Group and forest
owners

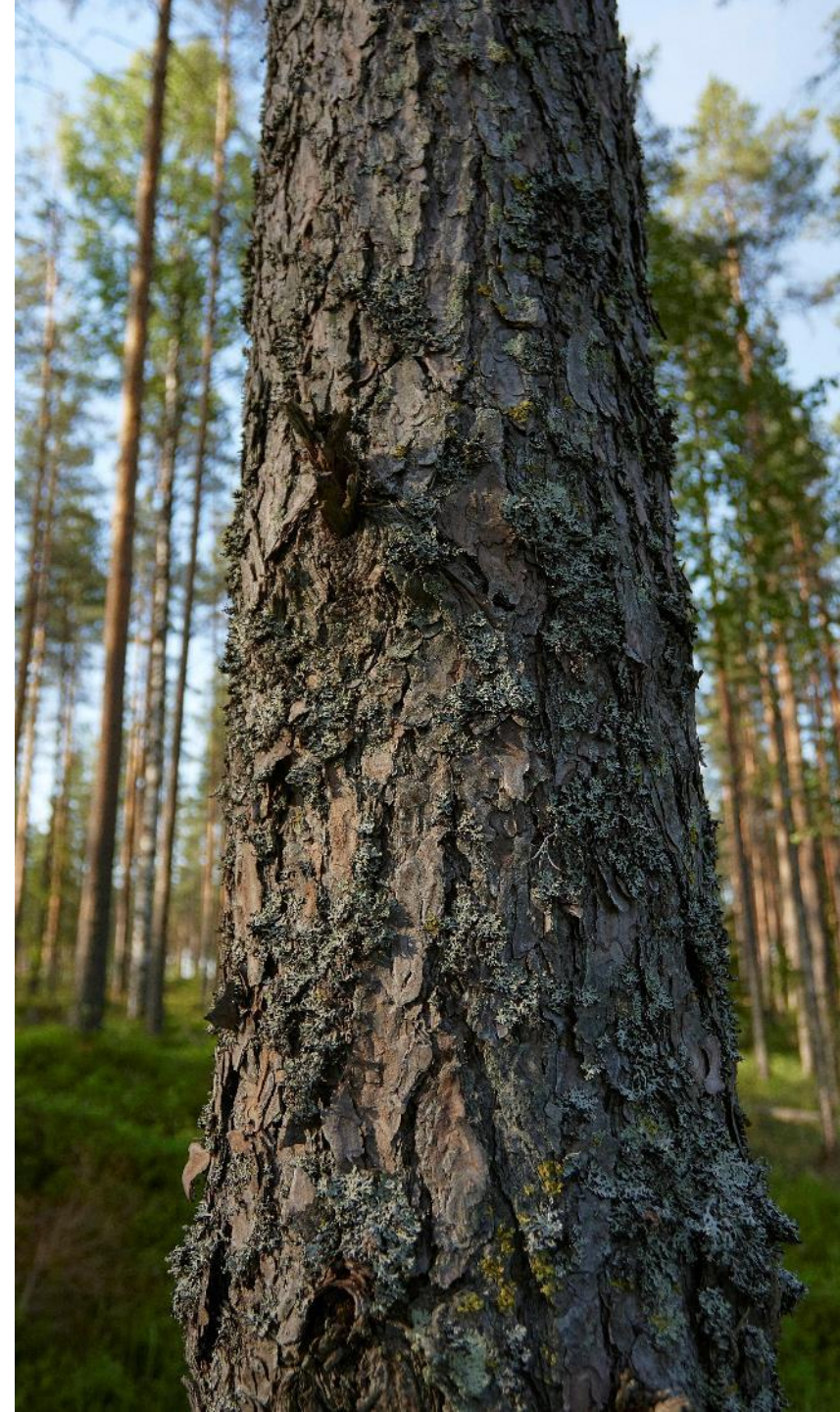
Protecting biodiversity

- Forests have an important role in providing habitats (living environments) to diverse animal species
- Taking care of biodiversity is part of forest management, i.e. retention trees, biodiversity stumps, buffer zones and preservation of standing and fallen decayed wood
- There are actions required by law, by forest certifications schemes as well as voluntary actions
- Finland has the highest share of strictly protected forests in Europe



Regenerative forestry

- **Regenerative forestry** means boosting natural assets and economic growth side by side
- The principles of regenerative forestry are a **continuation to Metsä Group's ecological sustainability programme** for safeguarding biodiversity
- They will help develop new measures for **mainstreaming best forest management practices**
- As a result, Finnish forests **combat climate change** and are more resilient to climate change, extreme weather phenomena and risks of damage
- Our goal is to ensure that Finnish forest assets continue/transfer in **a more vibrant, diverse and climate resilient condition** from one generation to the next



Forest management plan as a part of Metsä Group's regenerative forestry

AT TYPICAL FOREST STAND

①

More diverse tree species composition

- Increasing the proportion of broadleaved trees
- Mixed forests
- 80 % of tree species outside purchase

②

Increased dead wood volumes

- Retention trees and tree groups
- Buffer zones
- Biodiversity stumps

③

More diverse forest structure

- Continuous cover harvesting
- Retention tree groups
- Valuable habitats
- Protective thickets

Management plan for typical forest stands

AT BIODIVERSITY HOT SPOT

④

Protected valuable habitats e.g.

- Brooks
- Springs
- Fertile bogs
- Cliffs
- Flood habitats

⑤

Habitat restoration at threatened species hot spots

- Herb-rich forests
- Esker sunny slopes
- Fire habitats

Separate management plan at threatened species hot spots

Biodiversity hotspots are ecologically unique regions that are exceptionally rich in species, and are thus priority targets for nature conservation

**Social
responsibility**

We do the right thing.

We do the right thing and respect others.
We promote safety and wellbeing at work.



Measures for the 2030 targets

- We promote a culture of doing the right thing and job satisfaction
- We address shortcomings across our value chain
- We recruit anonymously
- We support the opportunities of women to advance to leader positions
- We promote safety at work

Indicators

- **100%** implementation of ethics barometer measures
- **AAA** job satisfaction at very good level
- **100%** anonymous recruitment for open positions
- **>30%** women in leader positions
- **0** accidents at work

Doing the right thing guides our work

- We require our personnel to comply with applicable legislation, and to act honestly and make ethically sound decisions
- 100% of our personnel have completed the training on the Code of Conduct
 - New e-learning course was launched in November 2022. By the end of 2022, 70% of our employees had completed the revised training
- Every other year we conduct an Ethics Barometer, aimed at the entire personnel
 - In 2022, the ethics index was 85% indicating that the personnel's awareness of the business ethics is at a high level



Metsä For All vision

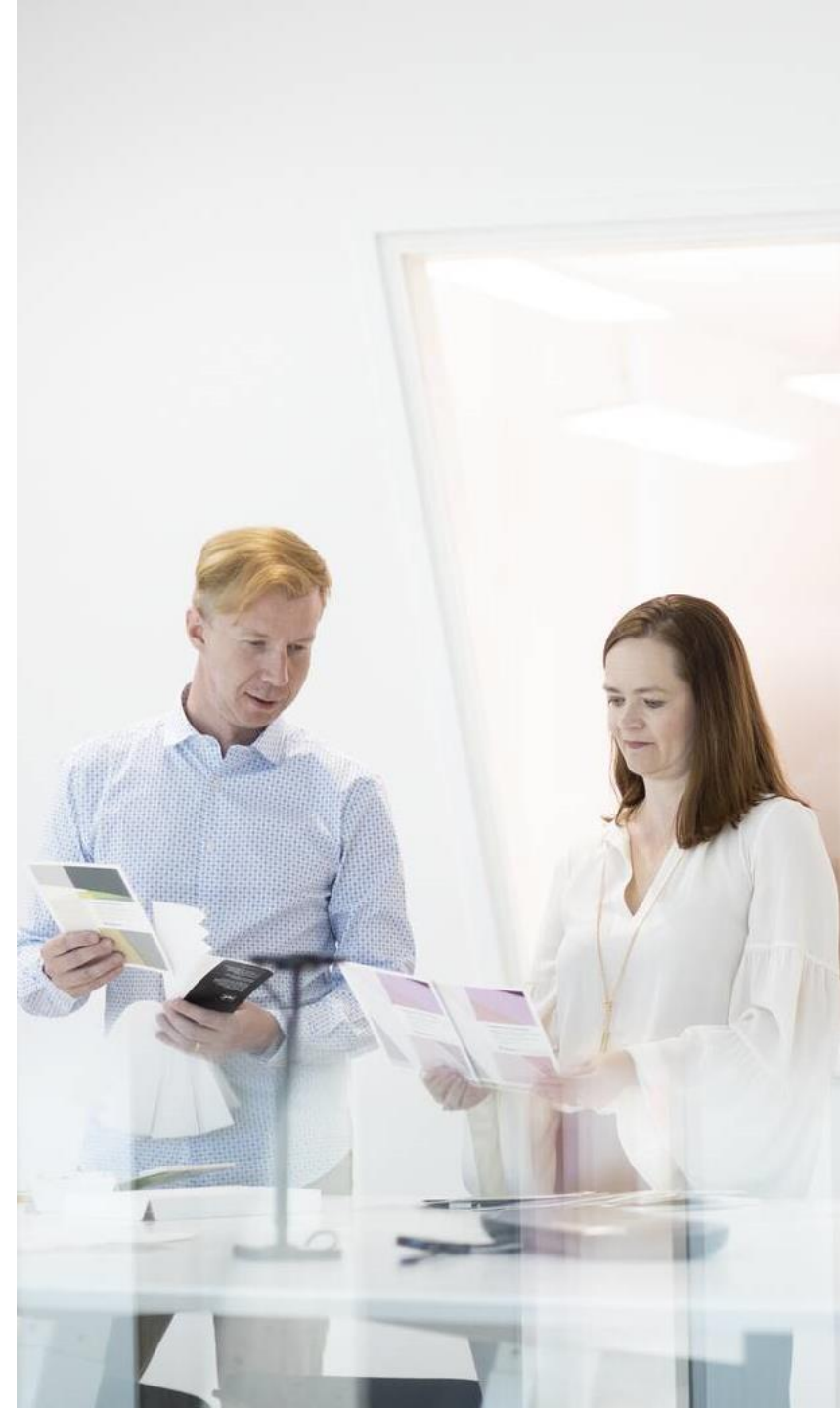
We are committed to ensuring that personal characteristics, such as gender, age, ethnic background, sexual orientation or disability do not influence anyone's chances of success at work. **Diversity, equality and inclusion are promoted and the progress is measured with set targets.**

Our focus areas include:

Equal opportunities for all and gender equality	Diversity	Inclusion and cultural change
• Increasing the number of women on different organisational levels • Ensuring pay equality • Introducing gender-neutral job titles	• Recruitment practices that promote diversity, e.g. anonymous recruitment • Ensuring international talent in the organisation	• Increasing the competence and awareness of personnel • Supporting cultural change via communication • Promoting work-life balance

We encourage women to advance to leader positions

- Our target is that at least 30% of executive positions (VP, SVP and CEO*) are held by women by the end of 2030
 - In 2022, the result was 25%
 - At the same time the share of women within all Metsä Board personnel was 22%
- We rectify unjustifiable pay gaps between women and men and promote equality through training programmes targeted at all personnel

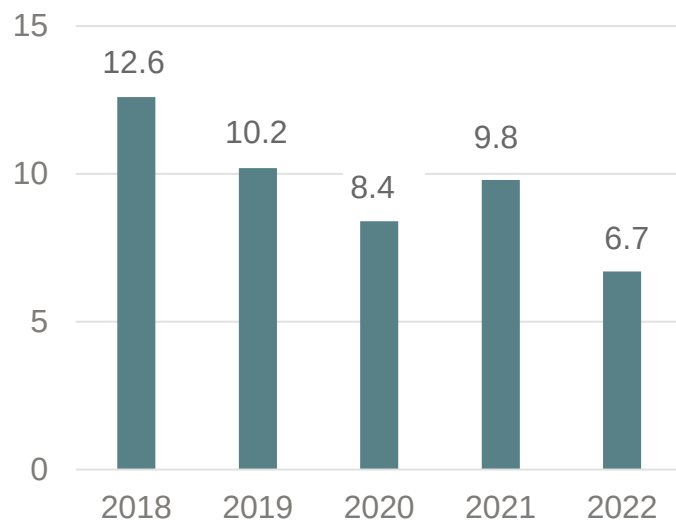


Safety continues to be our top priority

TARGET:
Zero accidents

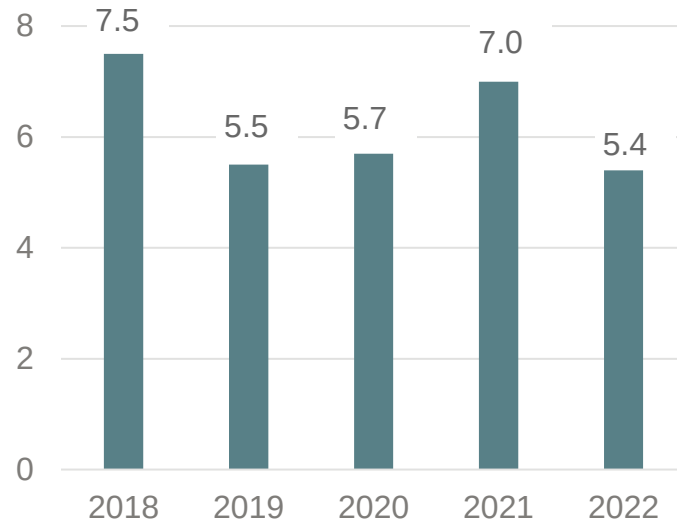
TRIF

total recordable injury frequency
per million hours worked



LTA1F

lost-time accident frequency
per million hours worked



Governance





Open-minded cooperation

We know the origin of our raw materials. We channel purchases to suppliers that are proven to act responsibly.

Measures for the 2030 targets

- We examine the origin of our raw materials
- We increase the share of certified wood in our operations
- We favour responsible suppliers
- Shared sustainability targets with our most important suppliers

Indicators

- **100%** traceable raw materials
- **>90%** share of certified wood
- **100%** suppliers' commitment to the Supplier Code of Conduct
- **100%** supplier surveys and audits with core suppliers
- **100%** shared sustainability targets with our partner suppliers



Our target is to have 100% traceable* raw materials and packaging materials by the end of 2030. The actual in 2022 was 97%

*Know the origin, at least the country of manufacture, of raw materials and packaging materials (by spend)



All wood used by Metsä Board is traceable and meet the requirements of the PEFC and FSC® chains of custody*

11%

of all the forests
in the world
are certified

83%

of all sourced wood
by Metsä Board
was certified in 2022

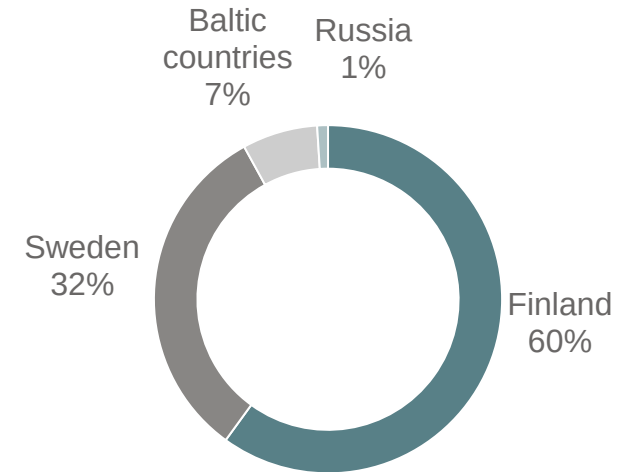
>90%

Metsä Board's target of
the share of certified
wood by 2030

Wood is Metsä Board's main raw material

- Wood represents 25% of Metsä Board's total costs¹⁾
- In 2022, Metsä Board used 8.3 million m³ wood¹⁾
- Metsä Group is responsible of Metsä Board's wood sourcing
 - Metsä Group's total annual wood sourcing is ~35 million m³
- Majority of wood sourced in Finland comes from the members of Metsäliitto Cooperative. In Sweden Metsä Board has a long-term wood supply agreement with Norra Skog
- All wood sourcing from Russia was discontinued in March 2022 and focused mainly in Finland and Sweden

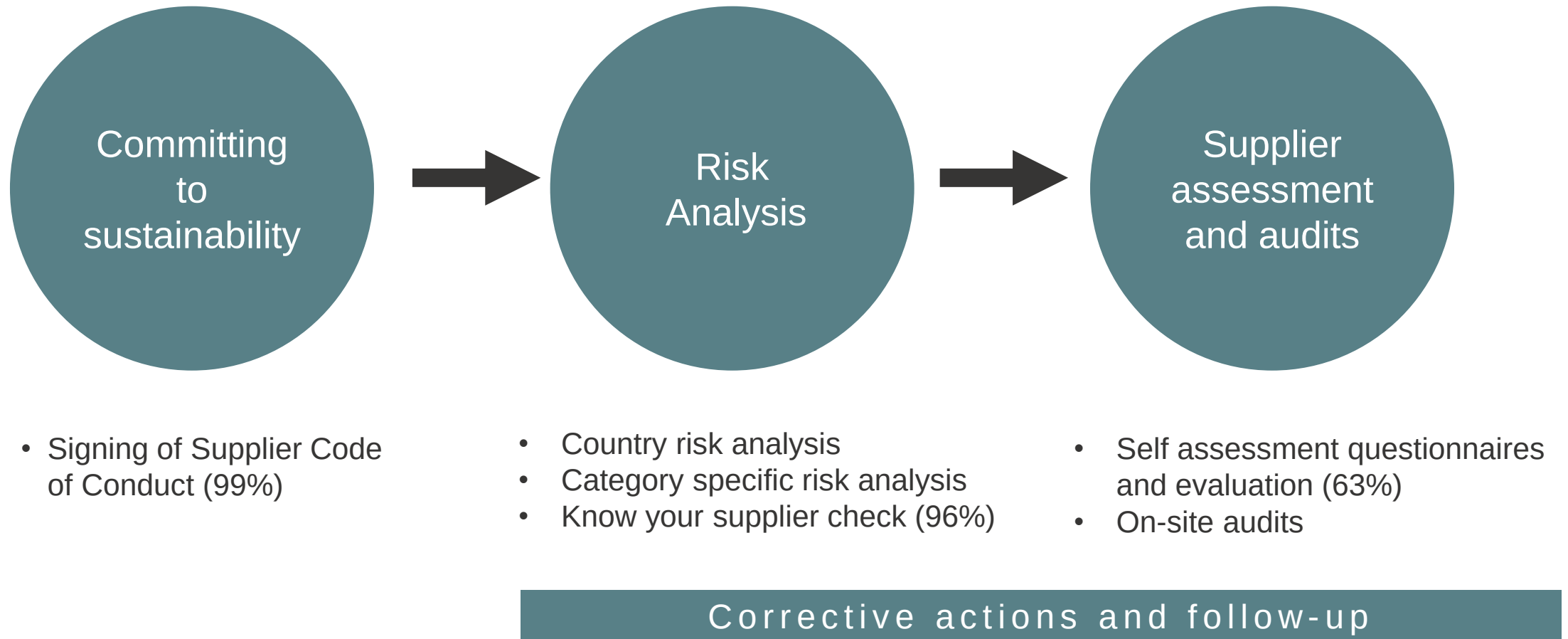
Wood sourcing areas in 2022



¹⁾ includes the wood used in pulp that Metsä Board buys from Metsä Fibre

Process for ensuring the responsibility of our suppliers

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



Sustainability data

Key sustainability figures

Updated quarterly in Metsä Board's Interim reports

	Q1 2023	Q1 2022	Q4 2022	Q1–Q4 2022	Target 2030
Total Recordable Incident Frequency TRIF ¹⁾	5.3	7.1	4.0	6.7	0
Lost-time accidents frequency LTA1F ¹⁾	3.2	5.1	3.0	5.4	0
Share of certified wood fibre, %	90	83	87	83	>90
Share of fossil free energy of total energy consumption ²⁾ , %	-	-	-	87	100
Direct fossil-based CO2 emissions (Scope 1), t	58,492	54,651	66,945	236,037	0
Indirect fossil-based CO2 emissions (Scope 2), t ³⁾	-	-	-	147,061	0
Energy efficiency improvement ⁴⁾ , %	+0.1	+4.8	+2.7	-	+10
Reduction in process water use ⁴⁾ , %	-9.1	-11.9	-12.2	-	-35



1) Per million hours worked. The former subsidiary Hangö Stevedoring is included in the figures until February 2022.

2) Reported annually.

3) Market-based, reported annually. Year 2022 figure has been revised from previously reported 139,746 tonnes to 147,061 tonnes

4) Change from base year 2018, per tonne produced, rolling 12 months

Source: Metsä Board's January–March 2023 Interim report

Sustainability targets for 2030 and actuals

Actuals are based on the 2030 sustainability targets employed in 2018–2022. The targets were renewed in early 2023.

Target	Target 2030	2022	2021	2020	2019	2018
ENVIRONMENT						
Direct and indirect fossil-based CO2 emissions (Scope 1 and 2 market-based), t	0 t	383,098*	439,494*	522,273*	512,701*	563,627
Share of fossil free energy (Scope 1 and 2), %	100%	87%	85%	83%	83%	82%
Share of fossil free raw materials and packaging materials, % of dry tonnes	100%	99.3%	99.2%	99.3%	99.4%	99.4%
Energy efficiency improvement, change from the 2018 level, %	>+10%	+2.7%	+4.3%*	+4.4%*	+1.7%*	-
Process water use per produced tonne, change from the 2018 level, %	-35%	-12.2%	-12.6%*	-7.5%*	-10.9%*	-
Utilisation of side streams, %	100%	99.9%	99.8%	99.3%	99.4%	99.4%

* Figures have been revised due to additional information.

Sustainability targets for 2030 and actuals

Actuals are based on the 2030 sustainability targets employed in 2018–2022. The targets were renewed in early 2023.

Target	Target 2030	2022	2021	2020	2019	2018
SOCIAL RESPONSIBILITY						
Ethics barometer	100%	85%	-	85%	-	-
Total Recordable Injury Frequency (TRIF) per million hours worked	0	6.7	9.8	8.4	10.2	12.6
SUSTAINABILITY GOVERNANCE						
Share of traceable raw materials, % of total purchasing (in euros), %	100%	97%	98%	97%	93%	-
Share certified wood fibre, %	>90%	83%	83%	80%	76%	79%
Suppliers' commitment to Supplier Code of Conduct, % of total purchases, %	100%	99%	98%	96%	95%	95%
Supplier background check passed, % of total purchases	100%	96%	92%	84%	65%	-
Supplier sustainability assessment passed, % of total purchases	100%	63%	54%	53%	48%	42%

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