

Stora Enso ESG investor presentation Q3 2023



THE RENEWABLE MATERIALS COMPANY

Disclaimer



It should be noted that certain statements herein which are not historical facts, including, without limitation those regarding expectations for market growth and developments; expectations for growth and profitability; and statements preceded by “believes”, “expects”, “anticipates”, “foresees”, or similar expressions, are forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995. Since these statements are based on current plans, estimates and projections, they involve risks and uncertainties which may cause actual results to materially differ from those expressed in such forward-looking statements. Such factors include, but are not limited to: (1) operating factors such as continued success of manufacturing activities and the achievement of efficiencies therein, continued success of product development, acceptance of new products or services by the Group’s targeted customers, success of the existing and future collaboration arrangements, changes in business strategy or development plans or targets, changes in the degree of protection created by the Group’s patents and other intellectual property rights, the availability of capital on acceptable terms; (2) industry conditions, such as strength of product demand, intensity of competition, prevailing and future global market prices for the Group’s products and the pricing pressures thereto, price fluctuations in raw materials, financial condition of the customers and the competitors of the Group, the potential introduction of competing products and technologies by competitors; and (3) general economic conditions, such as rates of economic growth in the Group’s principal geographic markets or fluctuations in exchange and interest rates.

Our purpose



Do good for
people and the
planet



Replace non-
renewable materials
with **renewable**
products



Our sustainability performance



Targets



-50%
reduction in absolute
emissions by 2030
(Scope 1, 2, 3)



Net positive

impact on biodiversity
by 2050
Target to reach
100% compliance
by indicator



100%
recyclable products
by 2030

Status



Scope 1+2
-41%
(Q3 2023 compared
to 2019 baseline)
-27%
(2022 compared to
2019 baseline)
Scope 3



High stumps
Ground deadwood
Soil and water
Habitats
Buffer Zones
Tree Retention



94%
(2022)

Advancing our sustainability agenda: key initiatives during Q3/2023



Climate

Our new mixed-use building concept enables to transform the original building design for new purposes. By upcycling the building structure multiple times, emissions and waste are reduced at different stages of the lifecycle. Moreover, wood products store carbon during their entire lifetime and support a low-carbon economy by replacing fossil-based alternatives.

Biodiversity

One of our recent actions is to reduce the planting density of spruce in Finland. This enables other natural tree species, such as pine and birch, to grow better among the planted spruce. Mixed forest cover is one of the objectives of our Biodiversity Leadership Programme, contributing to improved forest growth and resilience.

Circularity

Collaboration is an important part of improving the actual recycling of our products. We initiated a new project to enhance the circularity of fiber and polymer-coated barrier material by separating polymer from fiber. The collaboration consists of leading packaging value chain players and research institutes.



Climate



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We make a positive climate impact



Our value
chain emissions

8.0

million tonnes of CO₂

Our forests
remove carbon

-1.5

million tonnes of CO₂

Our products
store carbon

-2.5

million tonnes of CO₂

Our products
substitute
fossil-based products

-16.2

million tonnes of CO₂

Calculated by the Swedish University of Agricultural Sciences (SLU) based on Stora Enso's forest and production figures:
Climate effects of a forestry company – including biogenic carbon fluxes and substitution effects

Mitigating climate change with wood construction



CO₂ savings for every m³ built with wood

-1 tonne CO₂

vs. concrete

-2.5 tonnes CO₂

vs. steel

We can **significantly cut emissions in the construction sector** by using renewable materials that store carbon during their entire lifetime



Science-based target to reduce CO₂ emissions by 50%



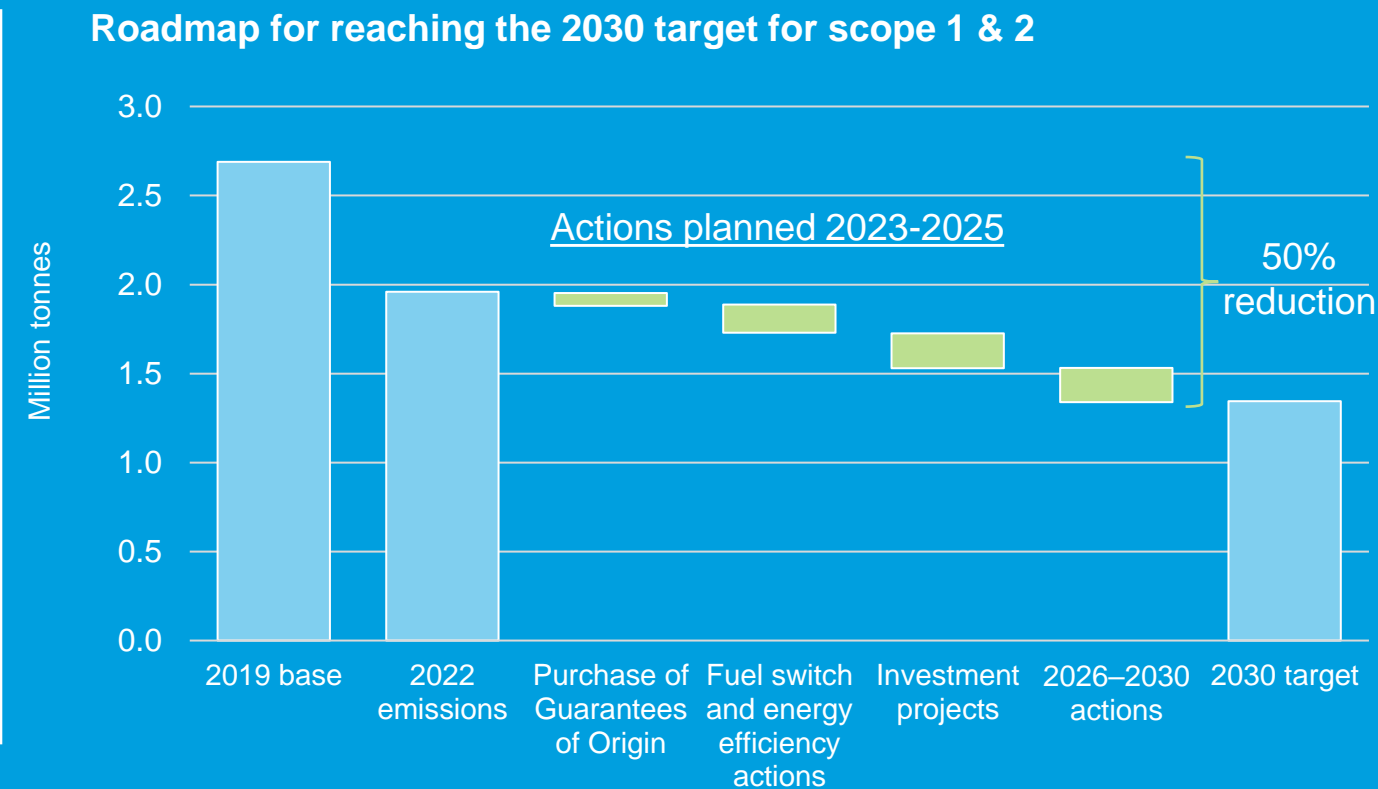
- We have set a science-based target (SBT), in line with the 1.5-degree scenario, to reduce our greenhouse gas (CO₂e) emissions
- Target is to reduce absolute scope 1 & 2 CO₂e emissions with 50% by 2030 from the 2019 baseline
- We are also committed to reducing scope 3 CO₂e emissions with 50% by 2030 from the 2019 baseline



Roadmap for reaching the 2030 target for scope 1 & 2



- During 2023–2025, we will continue to invest in projects which, in addition to business targets, aim at reaching the CO₂e targets
- Examples include investments in changing fuel types and energy efficiency improvements
- The CO₂e targets are always part of Stora Enso’s capital expenditure assessment

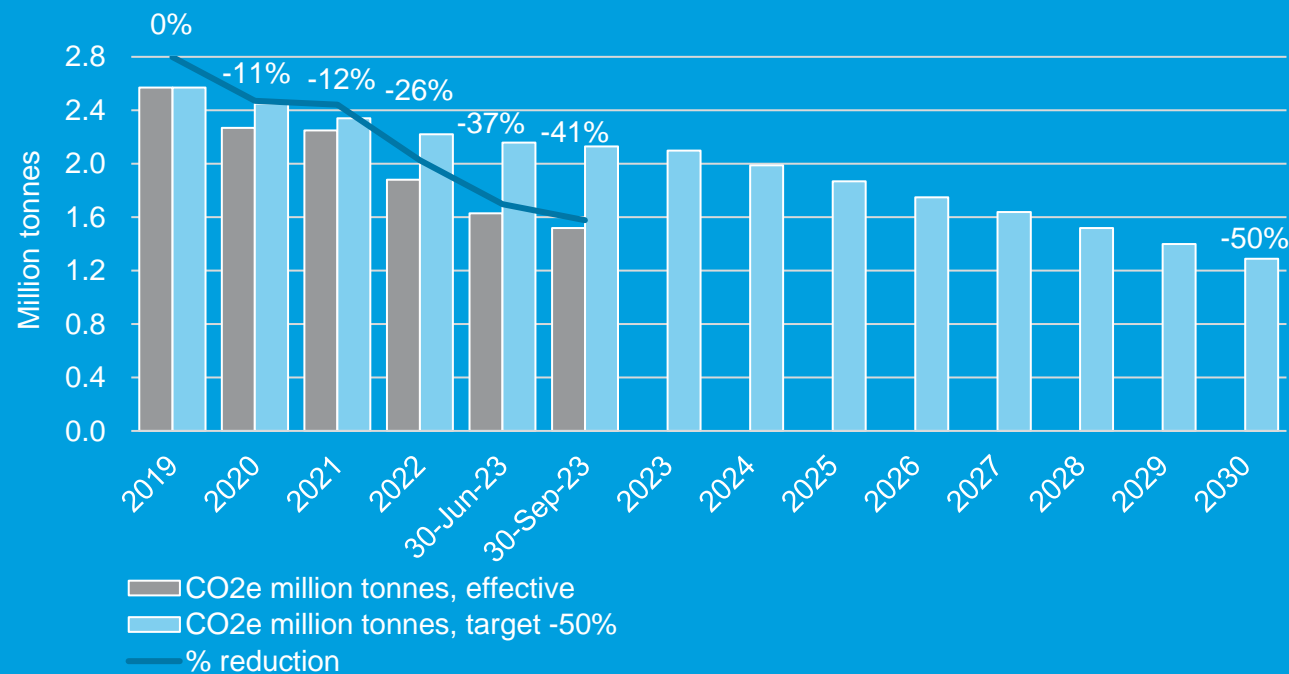


On track to reach the target for scope 1 & 2 emissions



- Scope 1 & 2 emissions amounted to 1.52 million tonnes at the end of Q3 2023
 - Emissions decreased mainly due to lower production volumes
- Main actions to reach the target
 - Improving energy efficiency of production processes
 - Reducing the use of fossil fuels
 - Increasing usage of wood-based biofuels from sustainable sources

Direct and indirect CO₂e emissions
(scope 1 & 2, rolling four quarters)

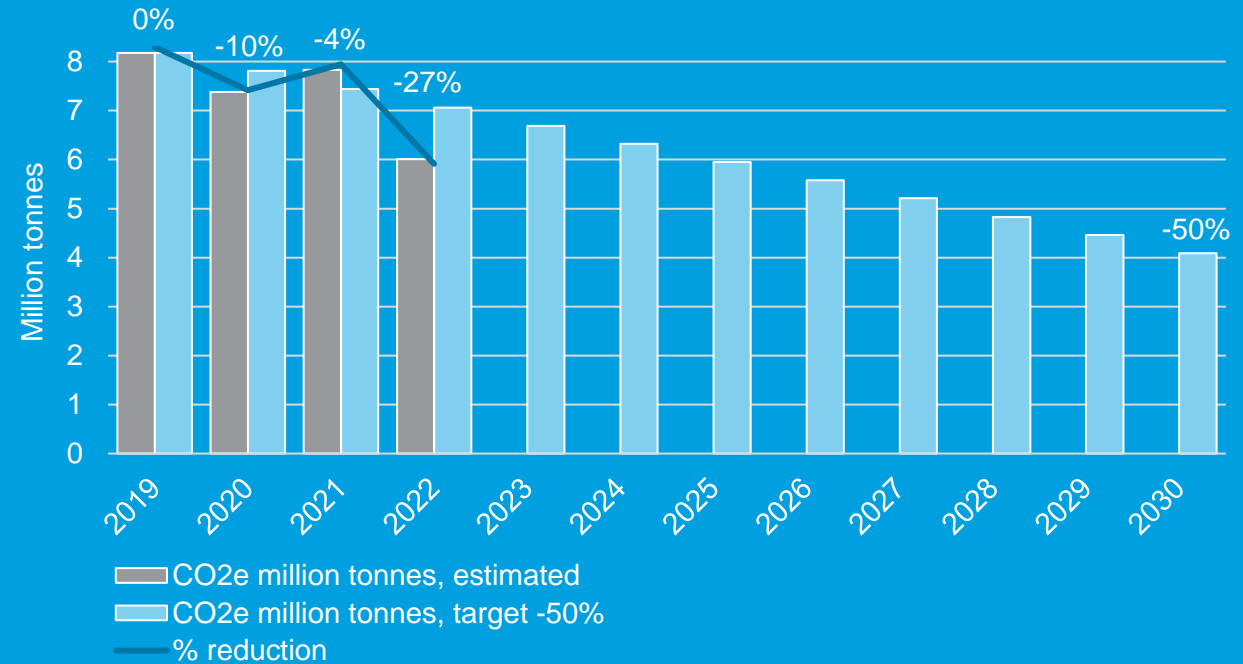


Collaborating with our value chain to reduce scope 3 emissions



- In 2022, the estimated scope 3 emissions were 6.0 million tonnes
 - 27% less than in the 2019 base year
 - The emissions decreased mainly due to mill closures and discontinued dissolving pulp production
- During 2023, Stora Enso continues to identify areas where scope 3 emissions could be further reduced
 - The focus is on supplier engagement and improving the accounting for scope 3 emissions
- Target to reduce scope 3 GHG emissions by 50% by 2030 from the 2019 baseline level

CO₂e emissions along the value chain (scope 3)





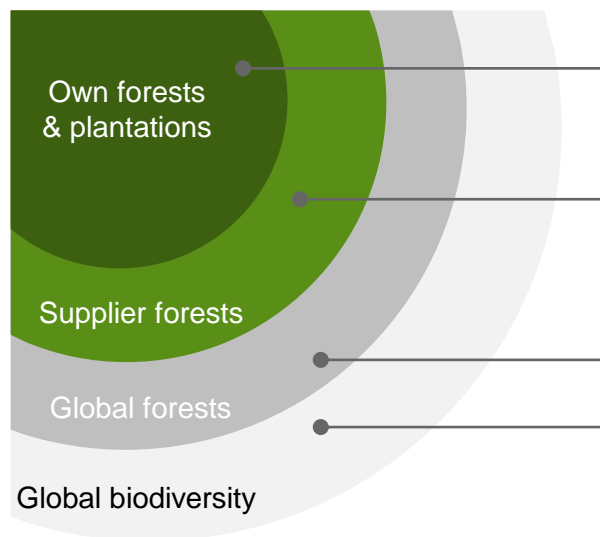
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Biodiversity

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Biodiversity target 2050

Net positive impact through active biodiversity management



As a forest owner and wood sourcing partner

Achieve **net positive impact on biodiversity within own forests and plantations.**

Building on this, achieve a net positive impact on biodiversity across forests where we source our fiber by incentivizing net positive biodiversity practices and sharing expertise.

As a global materials company

Actively improve biodiversity globally beyond forests, by providing input to policies, setting standards, and sharing capabilities, data, and technologies

Steering our actions through the Biodiversity Leadership Programme



- We steer our biodiversity actions through a Biodiversity Leadership Programme to improve biodiversity on the species, habitat and landscape levels
- Science-based indicators to monitor and adapt management practices
- Collaboration from local to global scales to innovate, share knowledge, and align actions

Four streams to drive biodiversity performance

1. Biodiversity actions
2. Data, modelling, and analytics
3. Global advocacy and alignment
4. Value innovation

Two main indicator categories for biodiversity



Impact (operational) indicators measure the quality of forestry operations.

Stora Enso's instructions for biodiversity considerations apply to all harvesting operations in our own forests in Sweden and private forest owners' forests in Finland, Sweden, and the Baltics. Operational indicators measure the quality of operations in regard to preservation of soil, water, and biodiversity.

Reported annually, measured throughout the year.

State indicators measure the conditions for biodiversity.

The state indicators apply to Stora Enso's own forests in Sweden and measure the state of biodiversity in the forests. The long-term biodiversity developments are monitored with science-based indicators for forests' structural variation.

Progress monitored based on long-term targets.



Impact indicator performance from 2022 shows how well we achieved our 90% target



65%

2021: 63%

High stump creation

High stumps are standing deadwood that is vital for birds and insects.

82%

2021: 94%

Ground deadwood protection

Ground deadwood is an important habitat for many species.

87%

2021: 88%

Prioritised habitat preservation

Ecologically and culturally valuable areas are preserved in harvesting

83%

2021: 89%

Tree retention

Living trees left in harvesting support biodiversity over forest regeneration.

96%

2021: 88%

Soil and water protection

Soil and water are vital and rich habitats for species on land and in water

93%

2021: -

Buffer zone preservation

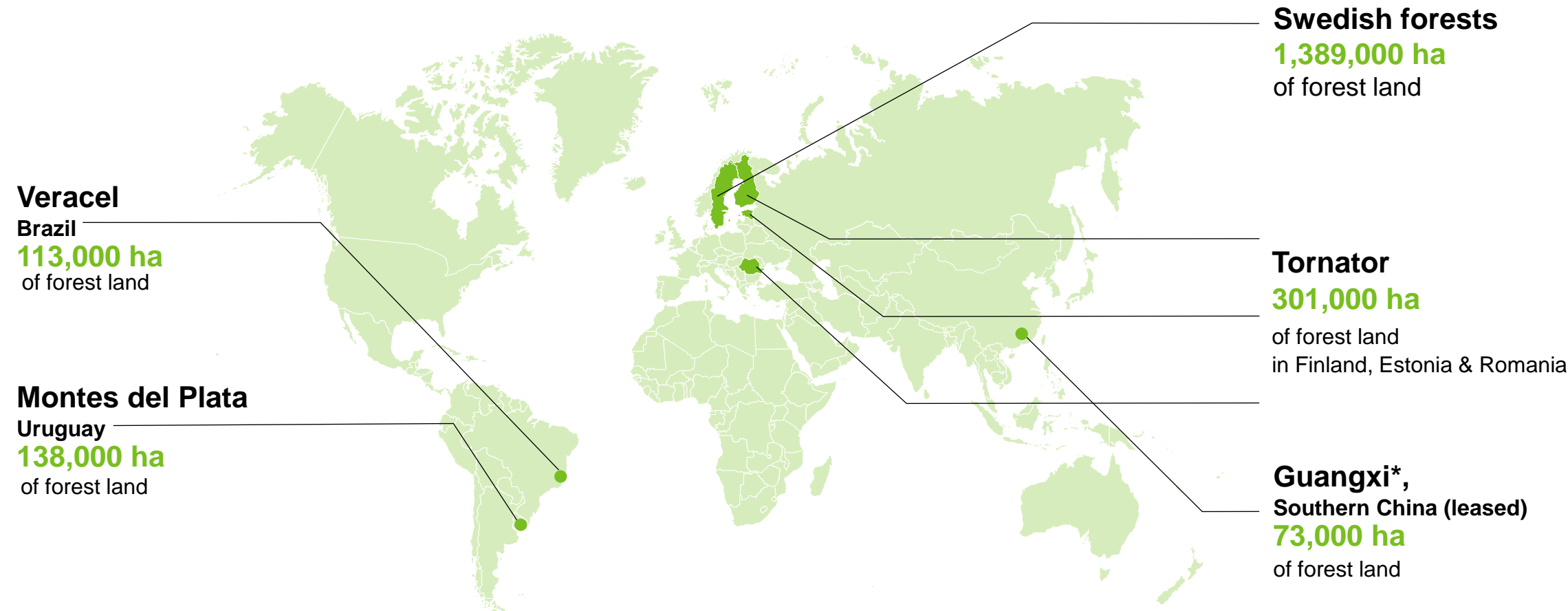
We preserve buffer zones around waters where they create abundant habitats.

The percentages refer to the number of harvesting sites that fulfilled Stora Enso's targets on safeguarding biodiversity values and avoiding negative impacts on biodiversity on harvesting sites in 2022. Weighted average of performance in Finland, Sweden, and the Baltics.

Leader in sustainable forest management across one of the world's largest private forest estates



~30% self-sufficiency of wood supply from own forest assets and long-term agreements



*Ongoing divestment process

Competitive wood supply operations securing fiber to our sites



100%

of our wood comes
from sustainable
sources

80%

proportion of
third-party
certified wood in
our wood supply

99%

of lands owned
and managed by
us are covered
by certification

13%

of our wood
comes from
certified tree
plantations



Forest certification for sustainable forest management



- Forest certification ensures that the raw material comes from responsibly managed forests
- Biodiversity is an integral part of forest certifications
- Stora Enso uses forest certification and third-party traceability systems such as:
 - Forest Stewardship Council's (FSC) Chain of Custody/Controlled Wood scheme
 - Chain of Custody/Due Diligence System of the Programme for the Endorsement of Forest Certification (PEFC)
 - ISO 14001 environmental management system

Target is to maintain the forest certification coverage level of at least 96% for own and leased forest lands



In 2022, the coverage amounted to 99%

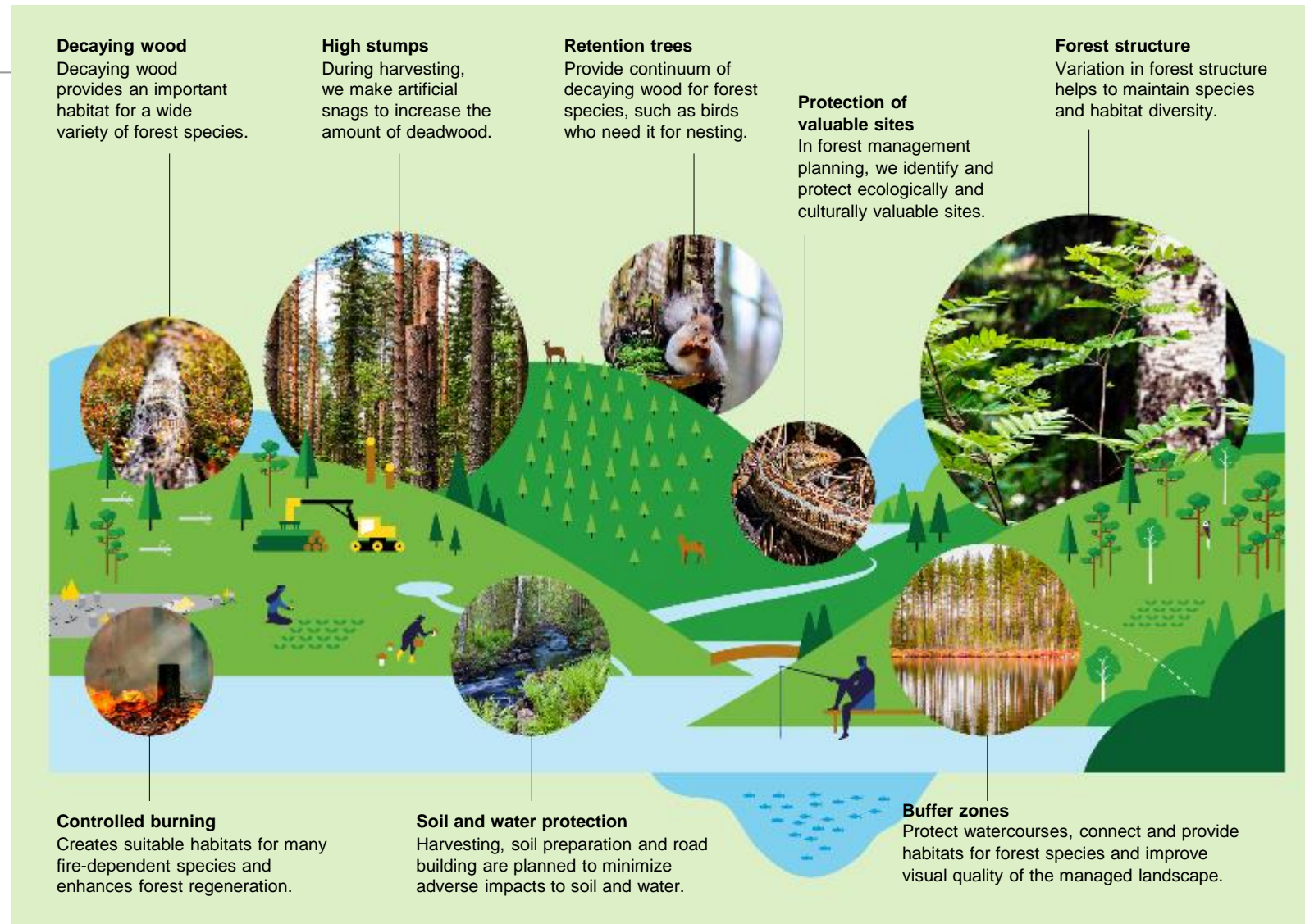
** Stora Enso Communications' FSC® trademark license number is FSC-N001919.*

Biodiversity management practices in Nordic forests

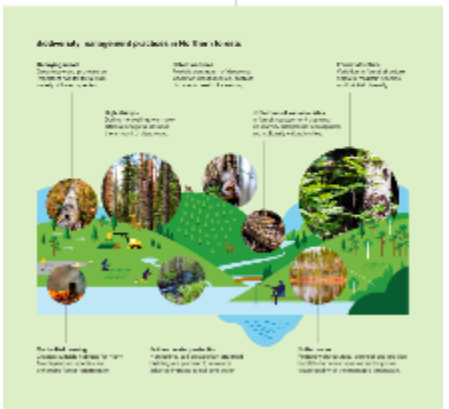


Protecting biodiversity

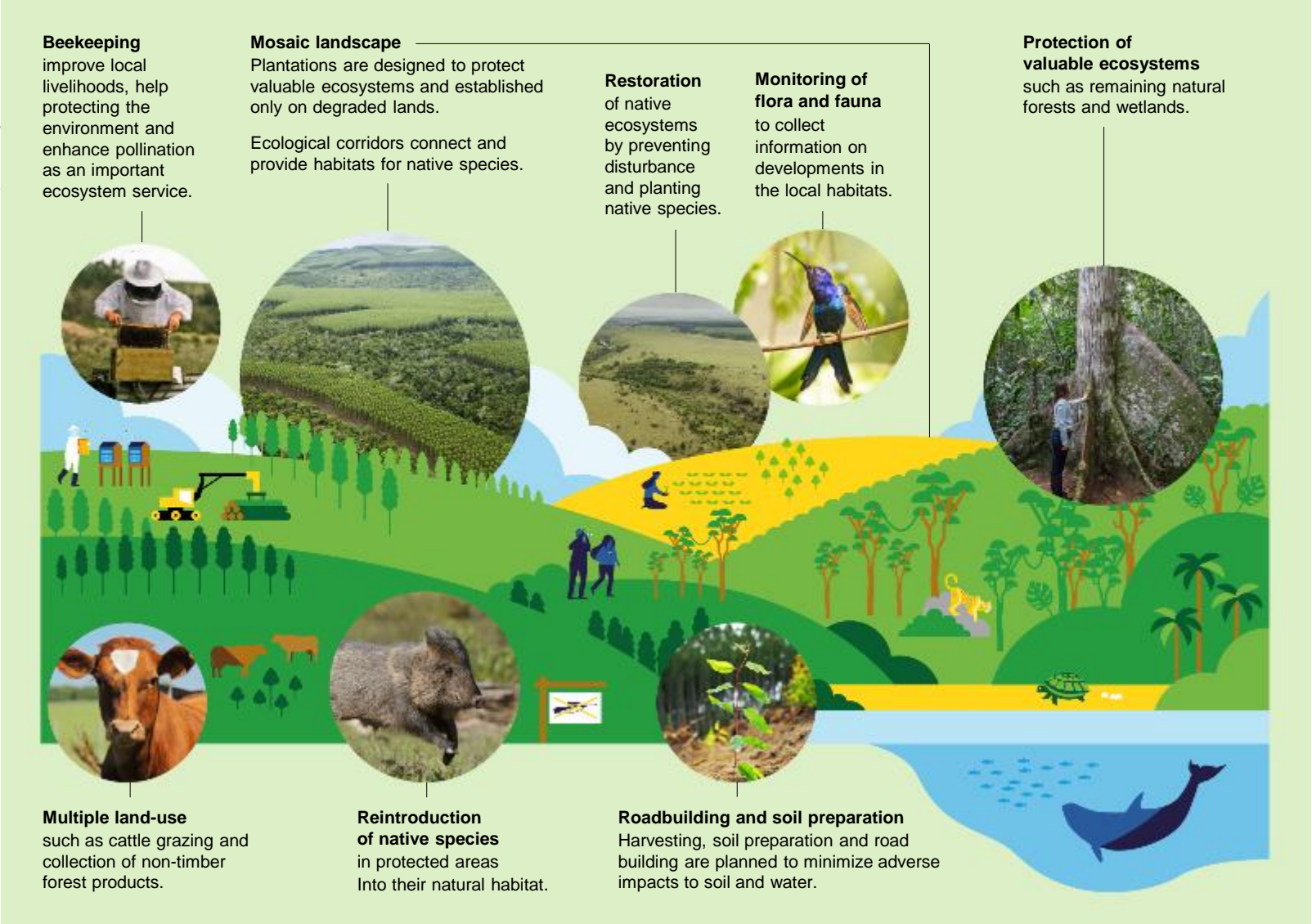
We ensure that forests grow more than they are harvested, and that biodiversity is an integral part of everyday forest management.



Biodiversity management practices in tree plantations



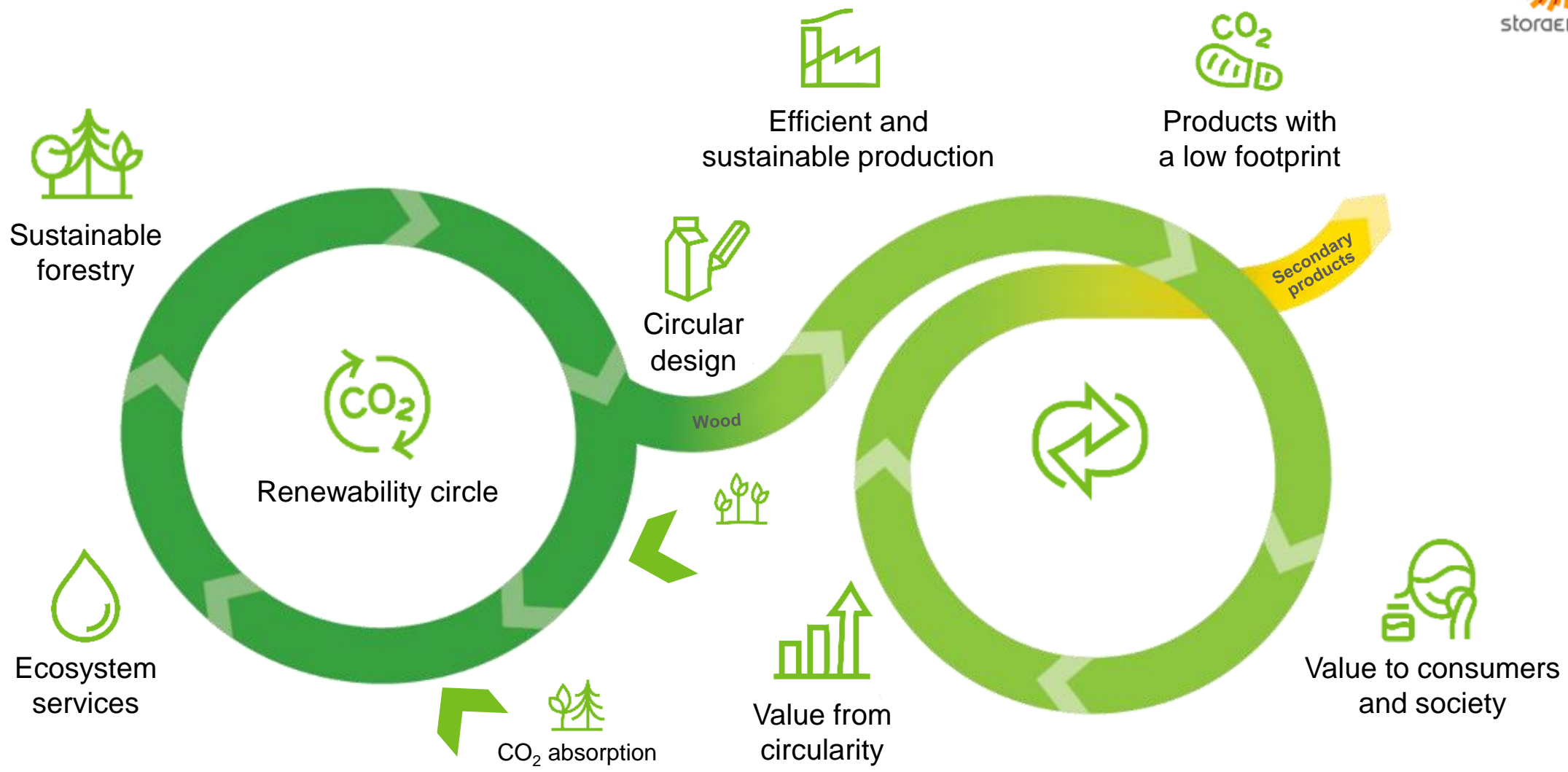
Protecting biodiversity
Plantations are designed and managed in local land-use context. Landscape typically consists of a mosaic of areas for both intensive wood production and biodiversity conservation.



Circularity



Offering renewable and circular products



The world seeks new alternatives to fossil-based materials



- Only **7.2% of materials are being recycled*** which emphasises the need for strong collaboration to advance circularity and strengthen the recycling infrastructure.
- **25% of all plastic packaging can already today be replaced** by paper-based solutions and for the first time, these solutions are growing faster than plastic packaging globally.
- Comprising 40% of the world's CO₂ emissions, the building and construction industry represents a key area for sustainability improvement.

* Circle Economy: The circularity GAP report 2023



Our target outlines our commitment to a circular economy



- Our target is to achieve **100% technically recyclable products** by 2030
- The target outlines our commitment to transparent and circular material flows that help minimise waste and combat climate change
- Flagship projects will help drive recycling at scale
 - This involves engagement along our value chain to help achieve additional recycling infrastructure and new circular business models

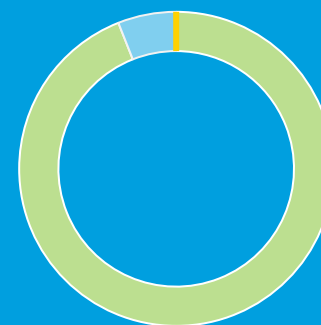


Innovating and collaborating for circularity



- By the end of 2022, 94% of our products were recyclable – target 100%
- We aim to ensure the recyclability of products through an increased focus on circularity in the innovation processes
- Collaborating with our partners:
 - Industrial-scale recycling programme with Huhtamäki for paper cups in Europe

Share of technically recyclable products
as of 31 Dec 2022



- Technically recyclable products, 94%
- Balance to 2030 target, 6%
- Target 2030, 100%

Responsible business practices



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Environmental



Materials, residuals and waste

Our process raw materials are largely renewable.

We aim to increase the value from our material streams to be beneficially used on the market.

Converting existing material side streams to new products, e.g., lignin, to generate circular revenue.

Target is to maintain process residuals utilisation rate level of at least 98%

In 2022, 99% of the waste was recycled and utilised either internally or externally



Energy

We continuously improve energy efficiency and strive towards energy self-sufficiency.

Long-term energy supply contracts to ensure reliable energy supply at a reasonable cost.

Central energy efficiency investment fund to implement energy savings effectively - in 2022, the fund amounted to EUR 10 million.

Target is to achieve at least -1.1%* annual energy savings by 2030

By the end of 2022, the projected energy savings were -1.1%



Water

The majority of our operations are located in areas of low water stress.

Almost 96% of process water is recycled back into the environment using the best available technologies.

New goal as of 2023 is to reduce process water discharges per saleable tonne by 17% from the 2019 base year by 2030

At the end of Q3/2023, total water withdrawal per saleable tonne was 59 m³/ton and process water discharges per saleable tonne 35 m³/ton*

Lower production volumes are currently impacting negatively the performance

*MWh saved/ MWh total energy used, electricity and heat

*Performance reported quarterly

Social



Employees

Diversity and inclusion

Zero tolerance for discrimination, harassment and bullying

Target is to increase the share of female managers among all managers to 25% by the end of 2024

By the end of Q3/2023, 25% of all managers were female. In the Group Leadership Team, the ratio was 42%*

Safety

The goal is to provide an accident free and inclusive workplace

Target is to achieve a total recordable injury (TRI) rate of 4.9 by the end of 2023

TRI rate at 4.8 at the end of Q3/2023*



Human rights

We take human rights into account across operations starting from investment decisions, paying special attention to vulnerable groups

We are committed to the UN Guiding Principles on Business and Human Rights

In the Human Rights Policy, we outline our ambition and objectives for respecting human rights

Target is to ensure efficient implementation of the Human Rights due diligence programme

In 2022, 3 pilots targeting key risk areas



Community

With a global presence, we engage with local communities around the world

We support and work with these communities to help them thrive economically, socially and environmentally

Our operations are often in rural communities that form an important stakeholder group

In total, the Group's voluntary community investments amounted to EUR 2 million in 2022

*Performance reported quarterly

Governance



Business ethics

Zero tolerance towards all forms of corruption, bribery and supporting fair competition

The Stora Enso Code outlines our approach to ethical business practices, human and labour rights, and the environment

We duly investigate all suspected non-compliance cases and take the right corrective measures

Target is to maintain a positive trend in the Ethics and Compliance Index which was reinitiated during 2022

8.7 in 2022 (scale 0-10)



Sustainable sourcing

Continuous work to maintain high coverage for Supplier Code of Conduct (SCoC)

As part of our tendering process, we require suppliers to provide data on their safety and CO₂ performance

We assess and manage impacts on biodiversity in the supply chain

Target is to maintain at least the coverage level of 95% of supplier spend covered by the SCoC

By the end of Q3/2023, the coverage was 96%*

*Performance reported quarterly

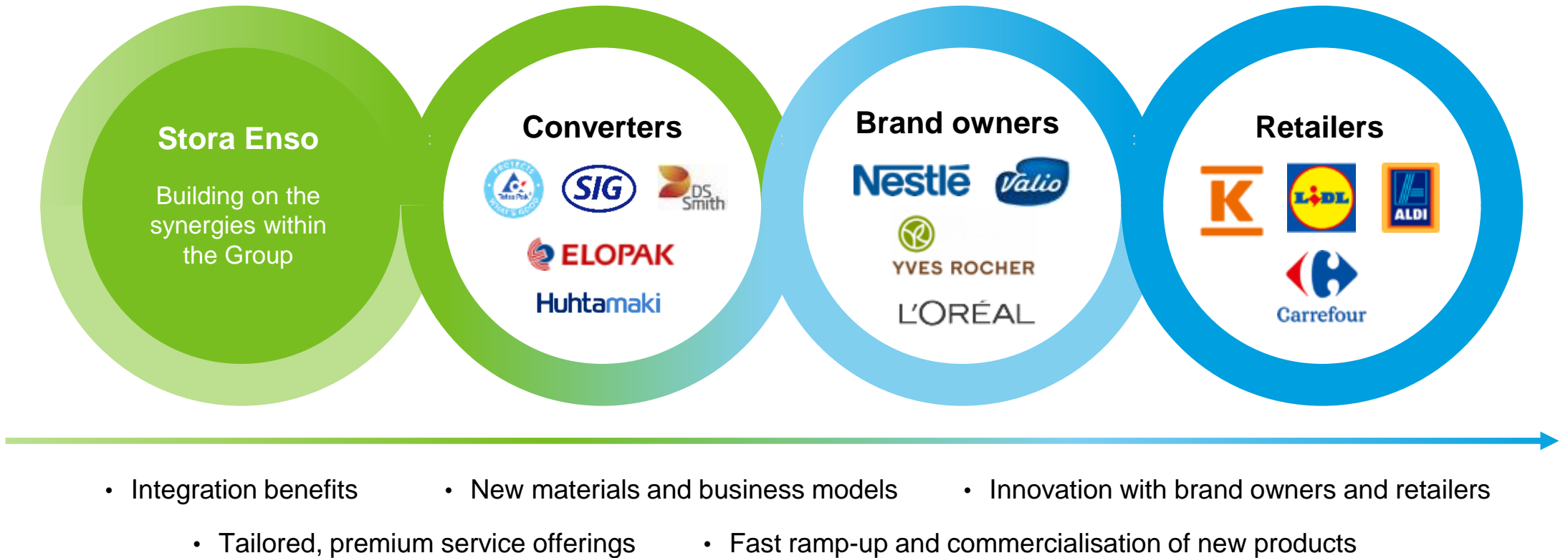


For a full overview of our sustainability performance, please see the [Annual Report](#).

Creating value in communities



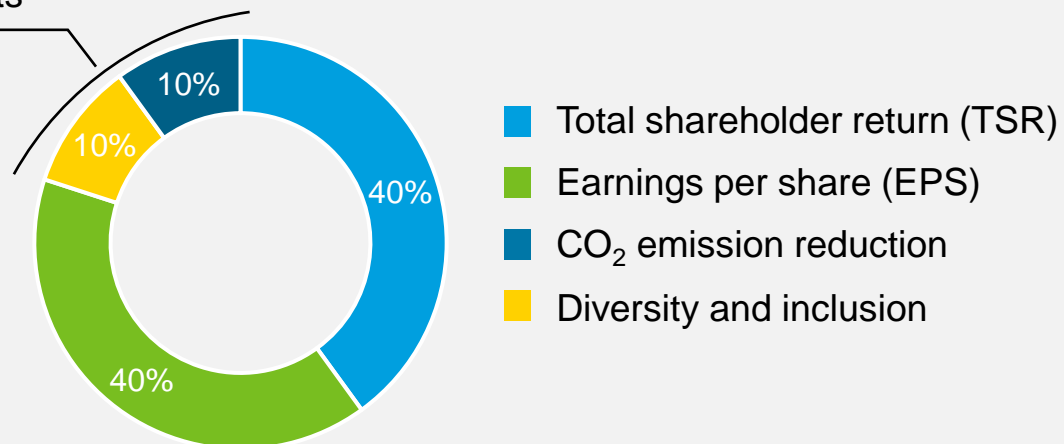
Value chain collaboration driven by sustainability



Lifting business performance by aligning ESG targets with remuneration



ESG targets



The purpose of the LTIP is to incentivise and align management with shareholder interests and the long-term strategy of the company.

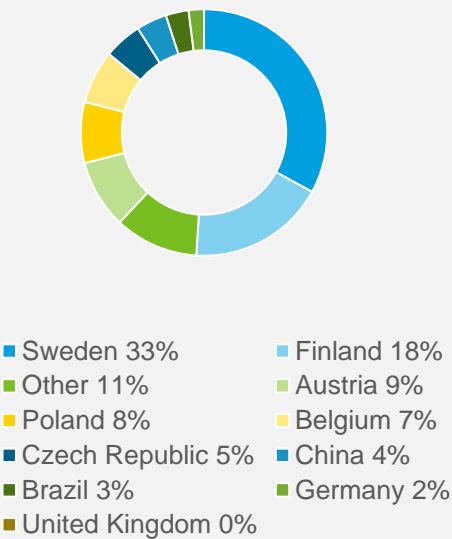


Stora Enso as a taxpayer

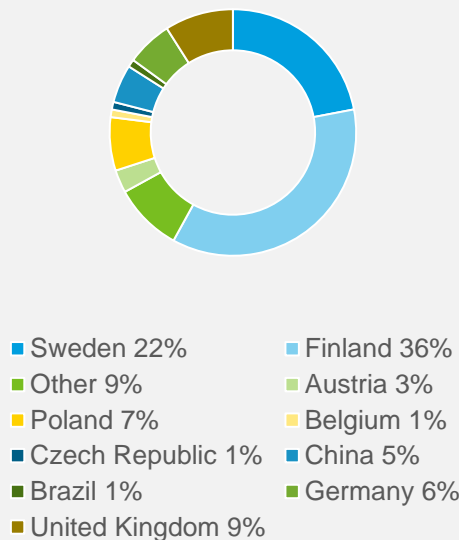


- In 2022, we paid a total of EUR ~1.3 billion in taxes
- We aim to be transparent with respect to economic value generation
- We make a voluntary commitment to openly provide details of the taxes paid by the Group to governments
- This commitment to our stakeholders is fully in line with Stora Enso's values to 'Do what's right' and 'Lead'

Taxes borne 2022



Taxes collected 2022



ESG reporting



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Sustainability in our funding and reporting



Sustainable finance strategy

The aim is to influence and develop the financial markets and to secure funding partners with a sustainability agenda



Framework for green and sustainability-linked financing

Integrates Stora Enso's climate, biodiversity and circularity goals into the Group's financing activities, supporting sustainability-focused fixed-income investors



Green and sustainability-linked financing instruments

Financing instruments to invest in the transition towards a low-carbon and environmentally sustainable society, using the Green and Sustainability-Linked Financing Framework



Revolving Credit Facility with a green aspect

Pricing includes a sustainability component based on ability to reduce greenhouse gas emissions



Climate-related financial disclosures

CFO support for better disclosure of climate risks and opportunities based on recommendations by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD)



Integrated reporting

One combined report covering strategy, financials, sustainability reporting, corporate governance and remuneration. Preparation ongoing to be compliant with the Corporate Sustainability Reporting Directive (CSRD)



The EU Taxonomy reporting is still in development phase



- Forest industry and its main products are largely out of the scope of the EU Taxonomy
- Therefore, only a few relevant economic activity categories to report on
 - The most relevant categories for Stora Enso are forest management in its own forests*, manufacturing of wooden-based materials and components for improving buildings' energy efficiency, and co-generation of heat/cool and power from bioenergy

Proportion of taxonomy aligned activities in 2022	
Turnover	6.5%
CAPEX	6.0%
OPEX	10.3%

*Forest management turnover includes the sale of externally sold roundwood and forest residuals



Our leading performance in ESG is recognised



Climate A-, Forest B and Water B



Highest recognition level, Platinum

**FTSE
Russell**

ESG rating 4.4 out of 5.0



ISS Corporate Rating Prime status (B)



ESG rating AAA (highest possible score)



ESG rating 14.4* out of 100

**Transition
Pathway
Initiative**

Top-ranked in both management quality and carbon

VigeoEiris

ESG rating 71 out of 100

*0 indicating the lowest risk



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