



storaenso

# Stora Enso ESG Investor presentation

Q3 2021

20 October 2021

# 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.



## A dual challenge

- Needed: a balancing act of global wellbeing of the planet and people
- Stora Enso can – and will – provide solutions that contribute to this balance
- We need to consider what the world needs and focus our resources and innovation on what makes the biggest difference

# We are a solution for consumers' new demands



Everything that's made with fossil-based materials today can be made from a tree tomorrow

Sustainable development is at the heart of our business strategy

# Our sustainability approach



## TRANSFORMATION TO THE REGENERATIVE MATERIALS SYSTEM



## OUR FOUNDATION IS IN RESPONSIBLE BUSINESS PRACTICES





# Stora Enso sets ambitious goal to offer 100% regenerative solutions by 2050



- Stora Enso fully supports the European Commission's climate goals - EU's Green Deal is an opportunity to transition to a low-carbon society
- Sustainably managed forests and renewable, circular products are part of the solution in reaching the EU's ambitious climate goals
- We develop regenerative, renewable and circular solutions which contribute positively to climate change and restore negative impacts on the environment
- Our renewable products can help our customers to become:
  - 100% circular
  - biodiversity net positive
  - carbon net positive



storaenso

# Climate change

# Stora Enso's annual estimated climate impact



Our forests remove carbon<sup>1</sup>

**-1.5**

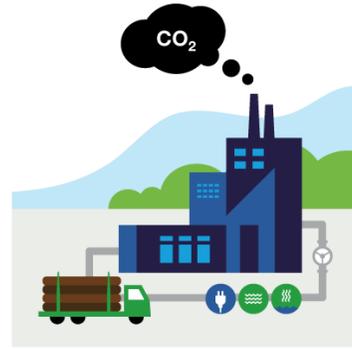
million tonnes of CO<sub>2</sub>



Our products store carbon

**-2.6**

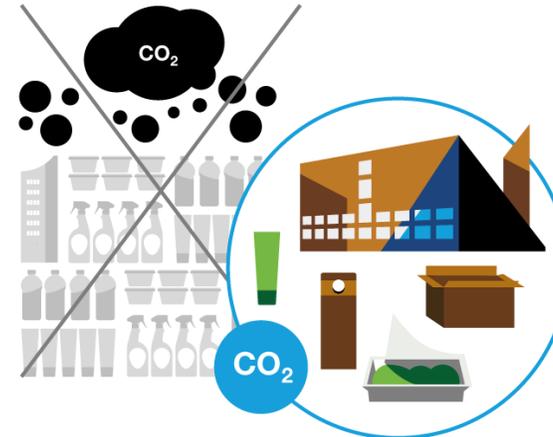
million tonnes of CO<sub>2</sub>e



Our value chain emissions<sup>2</sup>

**+10.5**

million tonnes of CO<sub>2</sub>e



Our products substitute fossil-based products, saving

**-17.9**

million tonnes of CO<sub>2</sub>e



Climate impact<sup>3</sup>

**-11.5**

million tonnes of CO<sub>2</sub>e

1) Estimated net annual carbon sequestration in own and managed forests and plantations, which provide about 30% of our wood use. Excludes purchased wood. Third-party owned forests that provide Stora Enso's purchased wood are estimated to have an additional net carbon sequestration of -5 million tonnes of CO<sub>2</sub> annually.  
 2) Fossil CO<sub>2</sub> emissions in 2019 including direct emissions from our operations, emissions from purchased energy as well as emissions from other sources along our value chain (Scope 1, 2, and 3). Calculated based on the guidance provided by the Greenhouse Gas Protocol.  
 3) Negative value indicates a net removal from atmosphere. Calculated by the Swedish University of Agricultural Sciences (SLU) in 2020 based on Stora Enso's production, forest and wood use, and emission figures in 2019: Climate effects of a forestry company – including biogenic carbon fluxes and substitution effects.

# Climate change – new targets to reduce CO<sub>2</sub> emissions by 50%



- Stora Enso has an ambitious **science-based targets** to reduce its greenhouse gas (GHG) emissions
- Our target is to reduce absolute scope 1 and 2\* greenhouse gas (GHG) emissions from operations by **50% by 2030** from the 2019 base-year, in line with the 1.5-degree scenario
- Stora Enso is also committed to an ambitious target to **reduce scope 3\* GHG emissions by 50%** by 2030 from the 2019 base-year

# Group CO<sub>2</sub> emissions down by 14% in Q3 2021 compared to the new 2019 base-year



SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

- New ambitious targets for our operations
- Targets in line with 1.5-degree scenario
- In Q3 2021, our greenhouse gas emissions (scope 1 and 2) were 14% lower compared to the 2019 base year

## Q3 2021 Interim Report

Science-based target (SBT) performance compared to 2019 base-year level

	30 Sep 2021	30 Jun 2021	31 Dec 2020	30 Sep 2020	Target	Target to be reached by
Reduction of fossil CO <sub>2</sub> e emissions (tonnes) <sup>1</sup> , %	-14%	-15%	-13%	-10%	-50%	end of 2030

<sup>1</sup> Direct fossil CO<sub>2</sub>e emissions from production and indirect fossil CO<sub>2</sub>e emissions related to purchased electricity and heat (Scope 1 and 2). Excluding joint operations. Rolling four quarters.

# Our products have a lower carbon footprint



Carbon footprint of lignin is around 80% lower than the carbon footprint of phenol

CO<sub>2</sub> emissions of a CLT-frame building are 75% lower compared to a concrete frame building

PureFiber™ has 75% lower CO<sub>2</sub> footprint compared to plastic or bagasse

Fibre-based beverage carton has 45% lower CO<sub>2</sub> emissions than a PET plastic bottle





storaenso

# Biodiversity

# Biodiversity – committed to achieve net-positive impact on biodiversity



- Stora Enso commits to achieving a **net-positive impact on biodiversity in its own forests and plantations by 2050** through **active biodiversity management**
- A set of actions towards 2030 has been developed and initiated to improve biodiversity on species, habitat and landscape levels
- To achieve this, we will focus on
  - **Active and adaptive** biodiversity management – own forest as development platform
  - **Indicators (15)** to holistically measure the state of biodiversity and the quality of our work
  - **Biodiversity knowledge sharing** with forest owners and other key stakeholders
  - **Online reporting** on Stora Enso website during 2022



# Sustainable forestry operations

**100%**

of our wood comes from sustainable sources

**87%**

comes from managed semi-natural forests

**98%**

of lands owned and managed by us are covered by certification

**78%**

proportion of third-party certified wood in wood supply

Sustainable forestry operations helps safeguard forest health and biodiversity



# Biodiversity management practices in Northern forests



**Decaying wood**  
Decaying wood provides an important habitat for a wide variety of forest species.



**High stumps**  
During harvesting, we make artificial snags to increase the amount of deadwood.



**Retention trees**  
Provide continuum of decaying wood for forest species, such as birds who need it for nesting.



**Forest structure**  
Variation in forest structure helps to maintain species and habitat diversity.



**Controlled burning**  
Creates suitable habitats for many fire-dependent species and enhances forest regeneration.



**Soil and water protection**  
Harvesting, soil preparation and road building are planned to minimize adverse impacts to soil and water.



**Protection of valuable sites**  
In forest management planning, we identify and protect ecologically and culturally valuable sites.

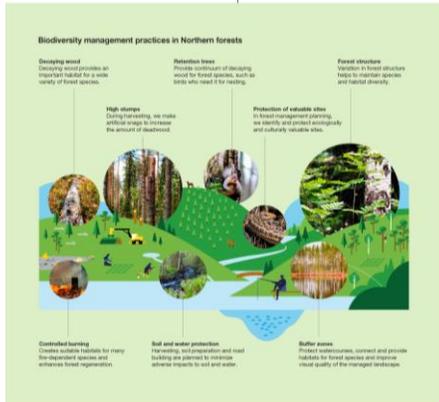


**Buffer zones**  
Protect watercourses, connect and provide habitats for forest species and improve visual quality of the managed landscape.



**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



## Beekeeping

improve local livelihoods, help protecting the environment and enhance pollination as an important ecosystem service.



## Mosaic landscape

Plantations are designed to protect valuable ecosystems and established only on degraded lands.

Ecological corridors connect and provide habitats for native species.



## Restoration

of native ecosystems by preventing disturbance and planting native species.



## Monitoring of flora and fauna

to collect information on developments in the local habitats.

## Protection of valuable ecosystems

such as remaining natural forests and wetlands.



## 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.



**Multiple land-use**  
such as cattle grazing and collection of non-timber forest products.



**Reintroduction of native species**  
in protected areas  
Into their natural habitat.



**Roadbuilding and soil preparation**  
Harvesting, soil preparation and road building are planned to minimize adverse impacts to soil and water.

# We use indicators at landscapes, habitats and species level



**Landscape level:** Cohesive green infrastructures are needed to support abundance and dispersal of many species.

## Indicators

- Area of old forest
- Forest age class distribution
- Protected set-aside areas
- Tree species composition (%)



**Habitat level:** A variation of different habitats with relevant structures are required for a thriving forest biodiversity.

## Indicators

- Deadwood volume in different stages of decomposition, standing and lying on the ground in both sun exposed and shadowed environments
- Large old trees, mainly deciduous but also coniferous species



**Species level:** The occurrence and abundance of species reflects biodiversity. Since it is difficult to monitor all species, we focus on those who can indicate or signal the presence of other ones.

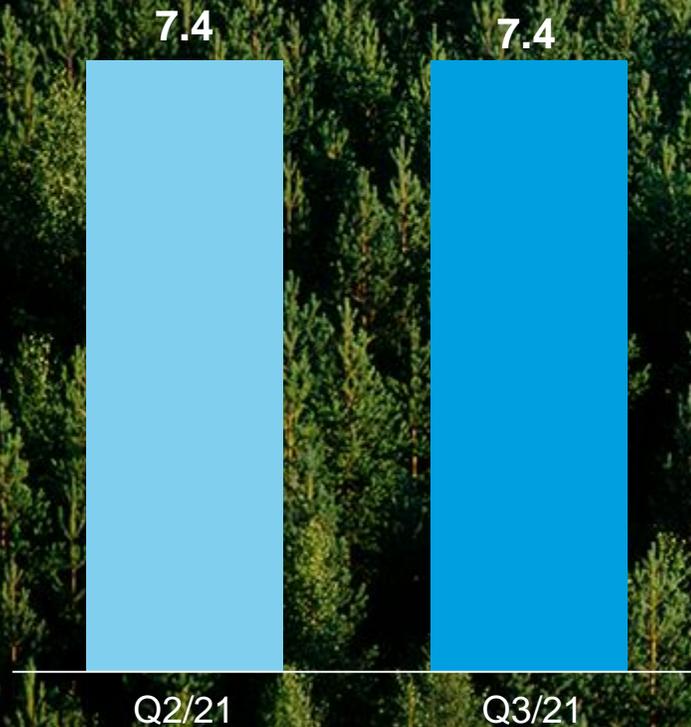
## Indicators

- Monitoring of selected species, both rare and endangered ones and more common ones

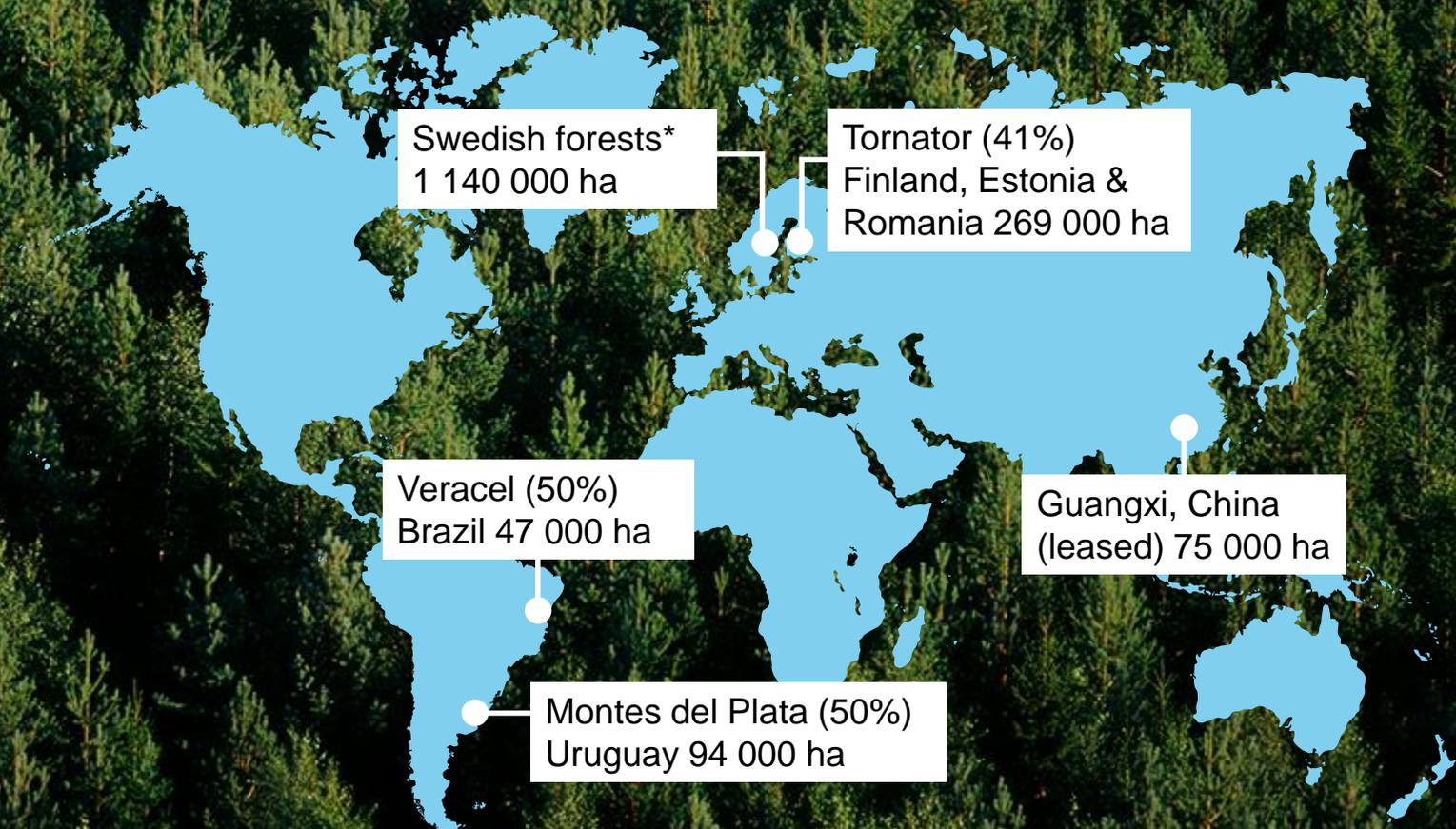
# Group forest assets fair value on par with the previous quarter at 7.4 BEUR



Group forest assets fair value  
BEUR



Stora Enso productive forest land areas at end of 2020



\*After divestment of 5200 hectares of forest land in Southern Sweden in Q1 2021



storaenso

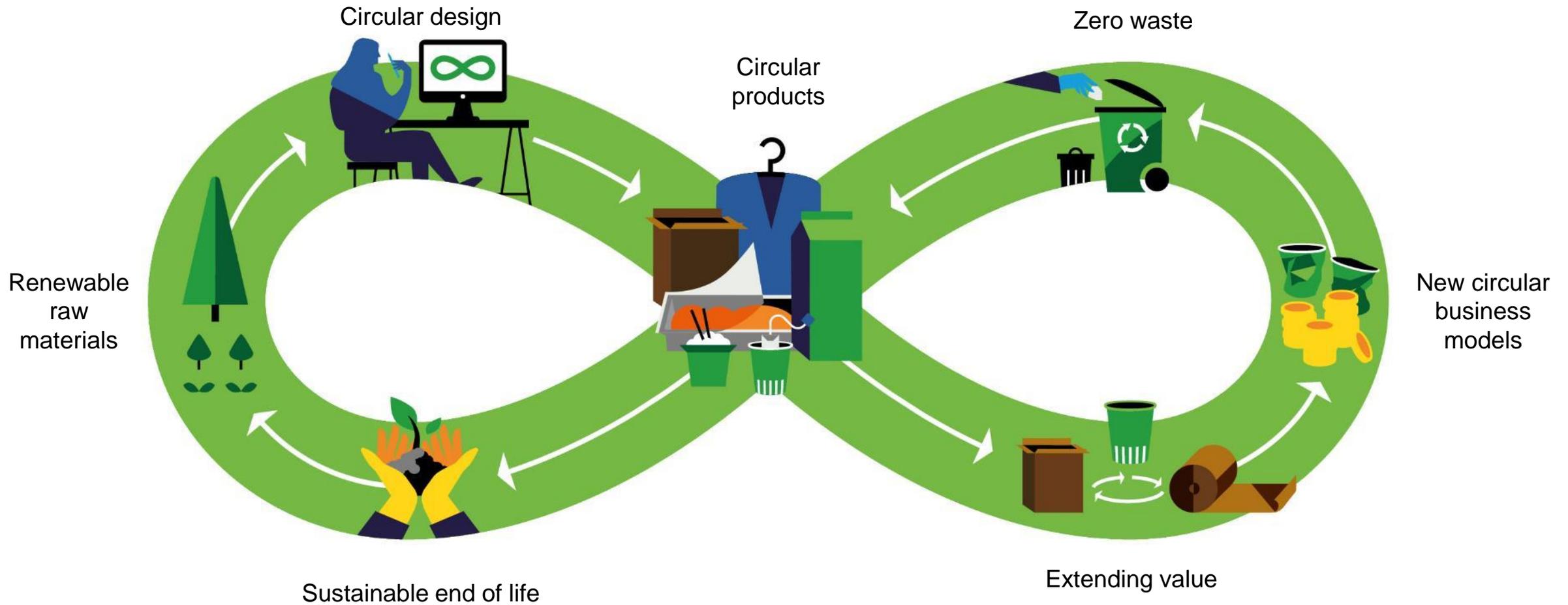
# Circularity

# New circularity target

- Our target is to achieve **100% recyclable products** by 2030
- 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.
- Our circularity target outlines the commitment to transparent and circular material flows that help minimise waste and combat climate change



# Significantly contributing to circular economy



# Stora Enso and Tetra Pak triple the beverage carton recycling capacity in Poland

Used beverage cartons are a **valuable raw material** and an attractive fiber source

- Stora Enso and Tetra Pak joined forces to increase recycling of used beverage carton (UBC) in Poland **from 25k to 75k tonnes per year** in July 2021
- We will be able to handle Poland's entire UBC capacity plus overflow from neighbouring countries
- Increased recycling capacity will be operational at the end of 2022
- Actively contributing to the development of a circular economy and supporting the ambitions with the European Green Deal



Used beverage cartons will be recycled in Ostrolęka and the fibers will be given a second life in packaging board production.



# Circular Solutions – constantly innovating with our partners and customers



20 October 2021

Stora Enso ESG investor presentation



storaenso

# Responsible business practices

# Our business impacts people



**>100 000**  
**forest owners**

**>20 000**  
**suppliers**

Supplier Code of Conduct  
Supplier assessments and audits



**communities**

**23 000**  
**employees**

**>10 000**  
**customers**

- Speak Up Hotline
- Community consultations
- FPIC
- Community investment

- Business Practice Policy
- Safety standards and safety reporting
- Minimum requirements for labour conditions
- Diversity and inclusion

# Committed to ensure healthy and safe workplace



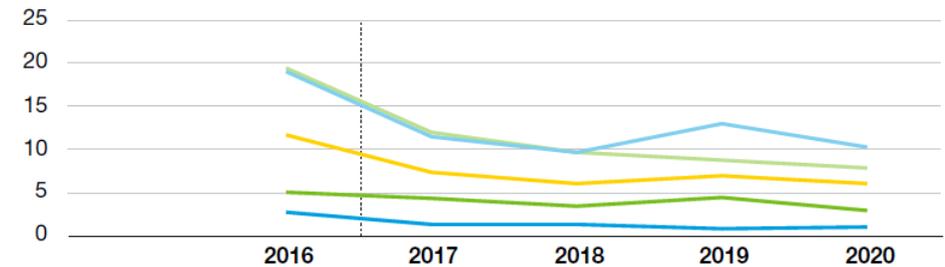
- The health and safety of Stora Enso’s employees is a key priority
- Goal is to provide an accident free and inclusive workplace
- TRI rate in Q3 2021 was 7.1 (6.3)
- Covid-19 did not cause any production disturbances on our units in Q3 2021



## Total recordable incident rates (TRI) 2016-2020

### Total recordable incident rates (TRI)<sup>1 2</sup>

Number of incidents among our own employees per one million hours worked



China	2.8	1.4	1.4	0.9	1.1
Finland	19.0	11.5	9.7	13.0	10.3
Poland	5.1	4.4	3.5	4.5	3.0
Sweden	19.4	12.0	9.7	8.8	7.9
Group	11.7	7.4	6.1	7.0	6.1

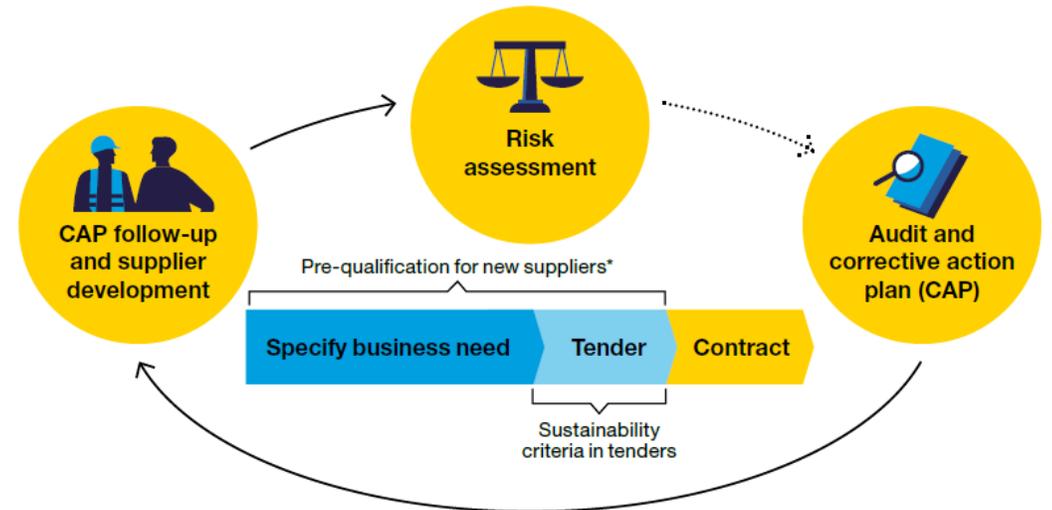
# Improved Supplier Code of Conduct ratio in Q3 2021



- We ensure that our suppliers are committed to high sustainability standards
- Stora Enso has a rigorous supplier approval process
  - 96% of our supplier spend is covered by signed Supplier code of conduct, SCoC (Q3 2021)
  - SCoC was updated in 2020 – applies to all sourcing categories globally
- We engage with suppliers and help them to address sustainability topics

## Our process for responsible sourcing

Risk assessments and audits can be conducted prior to pre-qualification and at any stage of the supplier contract.



\* Not all pre-qualified suppliers enter our sourcing process.

## Q3 2021 Interim Report

### Implementation of the Supplier Code of Conduct

	30 Sep 2021	30 Jun 2021	31 Dec 2020	31 Sep 2020	Target
% of supplier spend covered by the Supplier Code of Conduct <sup>1</sup>	96%	95%	96%	97%	95%

<sup>1</sup> Excluding joint operations, intellectual property rights, leasing fees, financial trading, government fees such as customs, and wood purchases from private individual forest owners.

# Community investment – engaging with numerous local communities around the world



- Our operations are often in rural communities that form an important stakeholder group
- We strive to maximise our positive contribution through investments in
  - Capacity building, local sourcing, nature conservation, agroforestry
- We manage our community impacts with
  - Due diligence and impact assessments
  - Responsible restructuring
- Total voluntary community investment 2.7 MEUR in 2020



<sup>1</sup>Total community investment including cash, working hours, and in-kind as defined in the B4SI framework. Including 50% of joint operations Veracel in Brazil and Montes del Plata in Uruguay. <sup>2</sup> Resilient local communities include B4SI framework areas of Economic development, Social welfare, Healthy lifestyle and Arts and Culture.

# Water – using natural resources with care

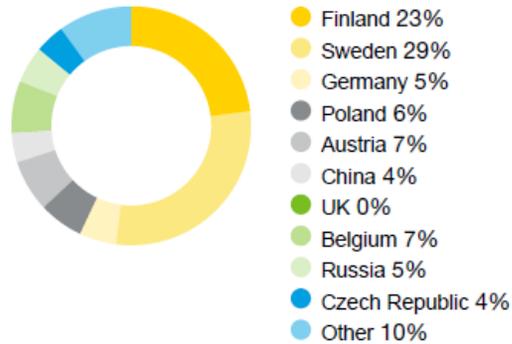


- Water availability is a global challenge and plays a central role in our production
  - We constantly strive to reduce its use
- Almost 97% of the water we withdraw from nature is released back to the environment
  - We ensure the water is purified and safe
  - Water is recycled within the mill where feasible, reducing the need for water intake
- Production at Stora Enso's mills requires large amounts of water
  - Only around 3% is consumed in our production processes
- Our objective is to drive down the total water withdrawal per saleable tonne at our board, pulp and paper mills

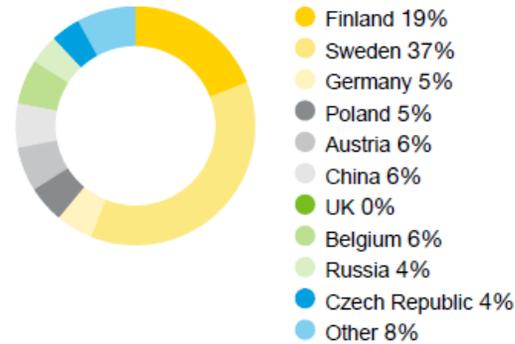
# Stora Enso as tax payer



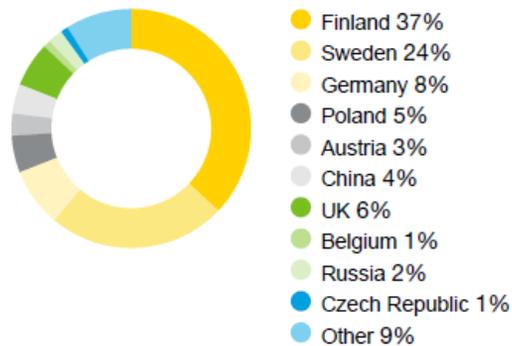
Total taxes borne 2020



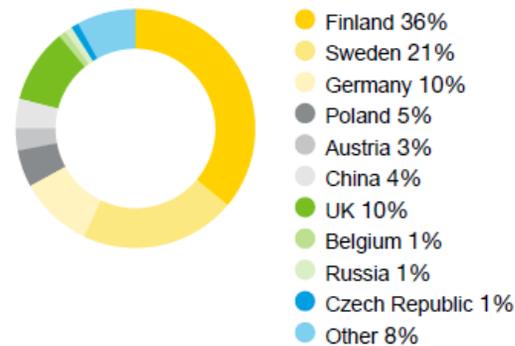
Total taxes borne 2019



Total taxes collected 2020



Total taxes collected 2019



- Stora Enso’s operations generate value through taxes for governments around the world
- In 2020, Stora Enso paid again app. EUR 1 billion into public sectors, including EUR 611 million in collected taxes
- Stora Enso aims to be transparent with respect to economic value generation
- Stora Enso makes a voluntary commitment to openly provide details of the taxes paid by the group to governments in its main countries of operation
  - This commitment to our stakeholders is fully in line with Stora Enso’s values to ‘Do what’s right’ and ‘Lead’

# Sustainability in our funding and reporting



## Revolving Credit Facility with a green aspect

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



## Green Bond Framework

A loan-format to support sustainability-focused fixed income investors and to report environmental impacts.



## Green Bonds

EUR 1 506 million total amount of Stora Enso's outstanding green bonds



## Sustainable Finance strategy

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



## Climate-related financial disclosure

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

The World Business Council for Sustainable Development (WBCSD) Redefining Value Board and programme: work on international reporting frameworks, materiality assessment standards, and data assurance methodologies.





# MSCI ESG rating upgrade



---

**MSCI**  
ESG RATINGS



CCC	B	BB	BBB	A	AA	AAA
-----	---	----	-----	---	----	-----

- Stora Enso was granted a AAA (AA) rating in the most recent MSCI ESG ratings assessment



## Invitation – learn more about biodiversity



***Biodiversity*** teach in for  
investors and analysts on  
Wednesday 3 November 2021  
at 15:00 (EEST)

Register:  
[storaenso.com/en/investors](https://storaenso.com/en/investors)

20 October 2021

Stora Enso ESG investor presentation

THE RENEWABLE MATERIALS COMPANY

**THE RENEWABLE MATERIALS COMPANY**

# More information in Stora Enso's Investor kit

<https://www.storaenso.com/en/investors>



- Strategy
- Businesses
- Capacities
- Markets
- Financial performance
- Cost structure
- Capex
- Dividend policy
- Ownership structure
- Management
- Most recent quarterly results

