



storaenso

# Stora Enso Full year financial results

January–December 2022

## Q4

Our purpose:

Do good for people and the planet.  
Replace non-renewable materials  
with renewable products.



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**President and CEO Annica Bresky:**

**"Our performance in 2022 demonstrates the strength of our leading market positions and our ability to be proactive and agile in making necessary adjustments for a new reality both short and long term."**

## Highlights



### **Growth in renewable packaging**

€1 billion investment to convert a machine at Oulu into a high-volume consumer board production line.



### **Strengthened presence in European packaging markets**

The De Jong Packaging Group acquisition was completed in early January.



### **Divestment of paper assets**

Nymölla site is divested, Stora Enso has entered into agreements to divest the Hylte and Maxau sites, Langerbrugge and Anjala sites to be retained in Stora Enso.

# Delivering the best full year financial performance in 22 years despite Q4 market challenges

## Quarterly financial highlights

- Sales increased by 5% to EUR 2,864 (2,719) million. Sales excluding Paper increased by 5%.
- Operational EBIT decreased by -17% to EUR 355 (426) million. Operational EBIT excluding Paper decreased to EUR 306 (436) million.
- Operational EBIT margin decreased to 12.4% (15.7%).
- Operating profit (IFRS) decreased to EUR 705 (839) million.
- EPS was EUR 0.74 (0.78) and EPS excl. fair valuations (FV) was EUR 0.32 (0.32).
- The value of the forest assets increased to EUR 8.3 (8.0) billion, equivalent to EUR 10.57 per share.
- Cash flow from operations amounted to EUR 429 (619) million. Cash flow after investing activities was EUR 202 (424) million.
- Net debt decreased by EUR 456 million to EUR 1,853 (2,309) million.
- The net debt to operational EBITDA ratio improved to 0.7 (1.1). The target is to keep the ratio below 2.0.
- Operational ROCE excluding the Forest division decreased to 13.2% (20.4%), the target being >13%.

## Year 2022 result

- Sales increased by 15% to EUR 11,680 (10,164) million. Sales excluding Paper increased by 17%.
- Operational EBIT was EUR 1,891 (1,528) million. Operational EBIT excluding Paper increased to EUR 1,706 (1,653) million.
- Cash flow from operations amounted to EUR 1,873 (1,752) million. Cash flow after investing activities was EUR 1,162 (1,101) million.
- Operational ROCE excluding the Forest division increased to 20.9% (17.8%).

## Key highlights

- The acquisition of the Dutch De Jong Packaging Group was completed in January 2023.
- The Paper division was discontinued as of 1 January 2023, and the divestments of the Hylte and Maxau paper sites are expected to be completed in H1/2023. The divestment of the Nymölla site was completed in January 2023. The divestment process of the Anjala paper site was discontinued, and the site will be retained in the Group.
- Stora Enso is investing approximately EUR 1 billion in cost-leading high-volume consumer board line at the Oulu site in Finland.
- Stora Enso announced plans to divest its consumer packaging site and forestry operations in Beihai, China.

## Dividend proposal

The Board of Directors will propose an all-time high dividend of EUR 0.60 (EUR 0.55) per share at the Annual General Meeting on 16 March 2023.

## Guidance

Stora Enso's full-year 2023 operational EBIT is expected to be lower than for the full-year 2022 (EUR 1,891 million).

**Sales**  
**EUR 2,864 million**  
(Q4/2021: 2,719)

**Operational EBIT margin**  
**12.4%**  
(Q4/2021: 15.7%)

**Operational ROCE excl.  
the Forest division**  
**13.2%**  
(Q4/2021: 20.4%)

**Net debt to  
operational EBITDA**  
**0.7**  
(Q4/2021: 1.1)

**EPS (basic)**  
**0.74**  
(Q4/2021: 0.78)

**Cash flow from operations**  
**EUR 429 million**  
(Q4/2021: 619)

## Outlook

Stora Enso remains vigilant against persisting market disruptions and uncertainties, macroeconomic environment and inflationary pressures. Stora Enso enters the new year with market softness and variable cost pressures which are expected to be more challenging in 2023 than in 2022 weighing on our results this year. The high macroeconomic uncertainty and continued weak consumer confidence resulting in lower private consumption will continue to impact negatively, especially on containerboard demand. Lower demand in the construction sector remains challenging and is expected to especially impact on the demand for traditional sawn wood. Compared to 2022, Group margins are expected to be squeezed by increasing costs, particularly in relation to energy, wood, chemicals and logistics.

To manage volatility, variable costs are continually reviewed, and preparatory actions are taken to be prepared to respond to fluctuations in demand with reinforced cost control. Other measures such as pricing, flexibility in

product mix, capacity and inventory management, and sourcing and logistics are in place. Stora Enso in Finland has completed negotiations on potential furloughs at its Wood Products division, and this year started negotiations on potential furloughs at its Packaging Materials division's production sites. Activities on adjusting capacity to respond to fluctuations in demand have also been put in place for the Wood Products division's sites in other countries. Stora Enso also benefits from its high self-sufficiency in energy of 72% as well as hedging, and from its ~30% self-sufficiency of wood.

The Group has made extensive changes to reshape the business over the past three years under its new leadership and disciplined capital allocation is firmly integrated to the Group's day to day operations. Stora Enso is now financially, operationally and strategically in better shape to handle market fluctuations and at the same time, invest for growth in renewable packaging, sustainable building solutions and biomaterials innovations.

### Market development by division

Q1/2023 market demand outlook y-o-y	
<b>Packaging Materials</b>	The overall demand for consumer board is estimated to remain stable while the overall containerboard demand is expected to remain weak.
<b>Packaging Solutions</b>	Demand for corrugated packaging is expected to weaken in Europe.
<b>Biomaterials</b>	Pulp demand is expected to be on par with the previous year.
<b>Wood Products</b>	The demand for sawn wood is expected to be significantly weaker especially in Europe with the overseas markets remaining stable.
<b>Forest</b>	Pulpwood demand is expected to remain stable, while demand for sawlogs is estimated to decrease.

## Key figures

EUR million	Q4/22	Q4/21	Change % Q4/22– Q4/21	Q3/22	Change % Q4/22– Q3/22	2022	2021	Change % 2022–2021
Sales	2,864	2,719	5.3%	2,963	-3.3%	11,680	10,164	14.9%
Operational EBITDA	515	602	-14.4%	689	-25.2%	2,529	2,184	15.8%
Operational EBITDA margin	18.0%	22.1%		23.2%		21.7%	21.5%	
Operational EBIT	355	426	-16.7%	527	-32.6%	1,891	1,528	23.7%
Operational EBIT margin	12.4%	15.7%		17.8%		16.2%	15.0%	
Operating profit (IFRS)	705	839	-16.0%	511	38.1%	2,009	1,568	28.1%
Profit before tax (IFRS)	666	793	-16.1%	448	48.7%	1,858	1,419	30.9%
Net profit for the period (IFRS)	584	616	-5.3%	367	59.1%	1,536	1,268	21.2%
Cash flow from operations	429	619	-30.7%	639	-32.9%	1,873	1,752	6.9%
Cash flow after investing activities	202	424	-52.3%	489	-58.6%	1,162	1,101	5.5%
Capital expenditure	368	288	27.8%	164	124.9%	778	666	16.8%
Capital expenditure excluding investments in biological assets	346	273	26.9%	145	137.9%	701	609	15.3%
Depreciation and impairment charges excl. IAC	130	145	-10.5%	131	-0.7%	527	555	-5.0%
Net interest-bearing liabilities	1,853	2,309	-19.7%	2,125	-12.8%	1,853	2,309	-19.7%
Forest assets <sup>1</sup>	8,338	7,966	4.7%	8,135	2.5%	8,338	7,966	4.7%
Operational return on capital employed (ROCE), %	9.8%	13.4%		14.9%		13.8%	12.4%	
Operational ROCE excl. Forest division	13.2%	20.4%		22.2%		20.9%	17.8%	
Earnings per share (EPS) excl. FV, EUR	0.32	0.32	0.5%	0.47	-31.6%	1.55	1.19	30.9%
EPS (basic), EUR	0.74	0.78	-4.7%	0.47	57.5%	1.97	1.61	22.4%
Return on equity (ROE)	18.7%	24.1%		12.3%		13.3%	13.0%	
Net debt/equity ratio	0.15	0.22		0.17		0.15	0.22	
Net debt to last 12 months' operational EBITDA ratio	0.7	1.1		0.8		0.7	1.1	
Equity per share, EUR	15.89	13.55	17.3%	15.84	0.3%	15.89	13.55	17.3%
Average number of employees (FTE)	21,004	22,369	-6.1%	21,804	-3.7%	21,790	23,071	-5.6%

**Operational key figures, items affecting comparability and other non-IFRS measures:** The list of Stora Enso's non-IFRS measures, and the calculation and definitions of the key figures are presented at the end of this report. See also the section *Non-IFRS measures* at the beginning of the Financials section.

<sup>1</sup> Total forest assets value, including leased land and Stora Enso's share of Tornator.

## Production and external deliveries

	Q4/22	Q4/21	Change % Q4/22– Q4/21	Q3/22	Change % Q4/22– Q3/22	2022	2021	Change % 2022–2021
Board deliveries <sup>1</sup> , 1,000 tonnes	1,010	1,081	-6.6%	1,090	-7.3%	4,294	4,258	0.9%
Board production <sup>1</sup> , 1,000 tonnes	1,094	1,188	-7.9%	1,139	-3.9%	4,682	4,685	-0.1%
Corrugated packaging European deliveries, million m <sup>2</sup>	166	241	-31.4%	158	5.1%	741	949	-21.9%
Corrugated packaging European production, million m <sup>2</sup>	171	262	-34.7%	160	6.8%	771	1,049	-26.5%
Market pulp deliveries, 1,000 tonnes	632	660	-4.2%	569	11.0%	2,374	2,495	-4.9%
Wood products deliveries, 1,000 m <sup>3</sup>	1,043	1,157	-9.8%	971	7.4%	4,397	4,803	-8.5%
Wood deliveries, 1,000 m <sup>3</sup>	3,335	3,158	5.6%	2,901	14.9%	13,304	12,091	10.0%
Paper deliveries, 1,000 tonnes	396	615	-35.6%	476	-16.8%	1,924	2,872	-33.0%
Paper production, 1,000 tonnes	407	529	-23.2%	461	-11.7%	1,926	2,776	-30.6%

<sup>1</sup> Includes consumer board and containerboard volumes

## Total maintenance impact

Expected and historical impact as lost value of sales and maintenance costs

EUR million	Q1/2023 <sup>1</sup>	Q4/2022 <sup>2</sup>	Q3/2022	Q2/2022	Q1/2022	Q4/2021
Total maintenance impact	109	180	150	120	107	146

<sup>1</sup> Estimated

<sup>2</sup> The estimate for Q4/2022 was EUR 125 million.

## CEO comment



### Delivering the best full-year financial performance in 22 years despite Q4 market challenges

After what has been an exceptional year in many ways, I am proud that we have delivered against our financial guidance for 2022 despite a disruptive, highly inflationary, and challenging environment. We have completed significant strategic projects, while making good progress to invest in strategic assets and innovation for growth in renewable packaging, sustainable building solutions and biomaterials innovations. Our performance in 2022 demonstrates the strength of our leading market positions and our ability to be proactive and agile in making necessary adjustments for a new reality both short and long term.

We have delivered exceptional performance in 2022, with sales of 11,680 million euro and, as in 2021, we have once again achieved a historically high operational EBIT for the full year 2022 of 1,891 million euro, a year-on-year increase of 24% and the highest since 2000. The fourth quarter delivered a sales increase of 5% to 2,864 million euro. The quarter has been characterised by the gloomy general macro-economic outlook along with accelerated market weakness in certain segments such as sawn wood and containerboard. Despite this backdrop, we delivered an operational EBIT of 355 million euro. This was mainly a result of the strong performance of the Biomaterials division, a stable result in the Forest division and a good result in the remaining paper business.

We have taken a number of steps throughout the quarter such as pricing actions, flexibility in capacity management and inventories, and reinforced cost control to mitigate the sharp increase in variable costs and the margin squeeze across the Group. We will continue on this path also going forward until we recover the profitability as we see that 2023 will be a weaker year than in 2022. The relatively high energy self-sufficiency and wood supply, along with strong sourcing operations support us in market fluctuations.

In the Packaging Materials division, we experienced stable demand and market share with a strong order book for consumer board, while market demand and prices weakened in containerboard. Overall, profitability in this division weakened due to margin squeeze from escalated variable costs and lower volumes. The temporarily elevated costs for scheduled annual maintenance shutdowns at some of our largest sites, represented the majority of the maintenance costs for the Group. Renegotiated sales contracts for consumer board during the quarter will gradually compensate inflationary pressures through price increases. In the Packaging Solutions division, demand for corrugated packaging was relatively stable quarter-on-quarter, but lower than in Q4/2021, with a weaker ending to the seasonally strong fourth quarter primarily due to lower consumer confidence.

The whole construction market has been heavily impacted by

high inflation and supply chain constraints which impacted the performance of our Wood Products division. Demand for traditional sawn products in our European markets eased in the second half of the year and was followed by our overseas markets showing a similar and accelerated trend in the last quarter of the year. The weakness in this division was further evident in the lower demand for building permits and initiation of fewer building projects and the resulting impact of this rapid market-related slow-down, led to a quarterly loss. One of our focus areas for growth however, Building Solutions, showed a more stable development during the quarter. And as this segment grows as a percentage of our total business, earnings in this division will gradually become less volatile over time.

### Delivering on our strategic roadmap

During the year, particularly the last three months, we have executed on many strategic initiatives on our agenda to build resilience, accelerate our growth agenda and reshape the focus of the business.

During the fourth quarter, we also started a process to divest our consumer board and forestry operations in Beihai in China. This divestment will enable us to increase resource allocation to sites with economies of scale which serve a global and growing packaging market including China.

To further our growth strategy, we have exited the majority of our paper business and allocated resources to key strategic areas. We invested in cost-leading cartonboard production at Oulu in Finland and expanded our presence in renewable packaging through the large acquisition of De Jong Packaging Group in The Netherlands with the aim of building market share in Western Europe.

We have entered several new collaborations, partnerships, and joint developments to accelerate innovation, knowledge sharing and market access including monitoring the development of battery technologies within wood-based materials. This month, we are delighted to have signed a partnership with the EV automotive brand Polestar to contribute to their Polestar 0 project of climate neutral car for 2030 with our Lignode material for batteries.

### The green transition is expediting our strategy

There is long-term, growing demand for Stora Enso's products globally and we are confident that our strategy will continue to deliver market share gains and sustainable growth from a more resilient and powerful business platform during market downturns.

Innovation and a sustainable business strategy that are closely integrated with our capital allocation, business conduct and design guidelines are key for our long-term success. There are countless national policies around the world being implemented to secure the much-needed green transition. For example, European regulations such as the Single-Use Plastics Directive, the Waste Framework Directive, Construction Products Regulation, the EU Batteries regulation as well as policies like the New European Bauhaus support our innovation initiatives towards the creation of new renewable products. This is reinforced by our ambition of offering 100% regenerative solutions, 100% circular and carbon positive products and achieving net positive biodiversity by 2050.

I am very grateful for the commitment of our teams to deliver innovative products, financial performance, and to meaningfully contribute to a better environment and value for all stakeholders. With our values to "lead" and "do what is right", we will future proof our business for tomorrow and beyond. The renewable future grows in the forest.

**Annica Bresky**  
President and CEO

## Market dynamics

Global megatrends such as urbanisation, digitalisation, global warming and eco and brand awareness all underpin Stora Enso's growth opportunities. Regulation promoting a circular economy further supports growth. Stora Enso creates renewable, sustainable and circular products which respond to its customers' need to substitute fossil-based materials, helping combat climate change. The global increased focus on sustainability provides us with several long-term growth opportunities and enables us to lead the green materials transition. There is strong drive to maximise the efficient use of raw materials and to make the value chains circular. This is supported by lifecycle thinking, hand in hand with rising consumer demand for eco-friendly products that enable a reduced carbon footprint. Stora Enso foresees strong, long-term, and accelerating demand for renewable, recyclable and 'net positive' products. The Company sees significant prospects to expand its total addressable market and aim to grow by >5% per year over the cycle.

## Stora Enso's strategy

Sustainability is driving Stora Enso's strategy and is a natural part of its business conduct. The Company's forest holding is a real asset which both initiates the integrated value chain and sustainability credentials throughout the whole product line. Stora Enso's products store CO<sub>2</sub>, and substitute and displace fossil-based products. The Company creates value by focusing on growing its leading positions in: renewable packaging, building solutions and biomaterials innovations. It also ensures maximising value creation in the foundation businesses: forest, biomaterials and wood products. Stora Enso helps drive the green revolution by investing in innovation, helping its customers reach their sustainability targets regarding climate impact and circular solutions. Stora Enso drives a performance culture through its business-specific processes to grow profitability long term. Responsible leadership based on a diverse and inclusive culture is a top priority and the strongest driver for performance, company culture and personal well-being.

## Events and product update

### Investing in increasing capacity for renewable packaging

Stora Enso is investing approx. EUR 1 billion to convert the remaining idle paper machine at the Oulu site in Finland into a high-volume consumer board line. The line will be the most cost competitive folding box board machine in Europe. Targeted end-use segments are food and beverage packaging, mainly in Europe and North America. Production is estimated to start in early 2025 with expected annual sales of approximately EUR 800 million.

### Initiated divestment plan for operations in China

Stora Enso has initiated a possible divestment of its consumer board site in Beihai, China and the forestry operations in the surrounding region. Stora Enso's strategy is to focus on long-term profitable growth where economies of scale can be achieved. Capital and resources will be allocated for growth in other existing sites such as the Oulu site in Finland. Stora Enso has not committed to a timeline for the completion of the process.

### Reducing water consumption through a modernised wood handling process

The EUR 80 million investment started in Q1/2021 to centralise and modernise wood handling at the Imatra site in Finland was completed. The investment enhances the production capabilities for premium packaging board and reduces the water use in wood handling by 85% compared to the old debarking line.

### Easier handling with granulation of lignin

Stora Enso's new lignin granulation and packing plant started operations at the Sunila site in Finland. Lignin granulation will help customers handle lignin in a more efficient and safe way compared to dry powder or wet lignin.

### Improving competitiveness in specialised pulp grades

Stora Enso invests EUR 38 million in unbleached kraft pulp (UKP) production at its Enocell site in Finland and EUR 42 million in fluff pulp production improvement at its Skutskär site in Sweden. These investments will support the growing consumer demand for non-bleached renewable packaging materials and hygiene products respectively. The investments are expected to be completed during 2024 and 2025, respectively.

### Launching building solution for low carbon construction

The launch of Sylva™ by Stora Enso promotes sustainable and innovation construction solutions. Sylva is a massive wood building kit, premanufactured and custom-made delivered just-in-time to a building site. The solution enables faster construction, reduced cost, more efficient use of raw material and less emissions than concrete or steel.

### Partnering to develop wind turbine blades from wood

Stora Enso and Voodin Blade Technology GmbH have signed a partnership agreement to develop wind turbine blades from wood (Laminated Veneer Lumber). The partnership aims to develop alternatives to energy intensive and non-renewable materials such as fiber-glass and carbon fiber. The blades made of wood are lighter and environmentally friendly, and create a competitive and reliable supply chain.

## Events after the quarter

### Strengthening European market presence in packaging

In January, Stora Enso finalised the acquisition of the Dutch De Jong Packaging Group for an enterprise value of approx. EUR 1,020 million. The acquisition will advance Stora Enso's strategic direction, accelerate revenue growth and build market share in renewable packaging in Europe, and provide an entry into the corrugated packaging market in the Netherlands, Belgium, Germany and the UK. De Jong Group's product portfolio complements and enhances Stora Enso's offering, especially in fresh produce, e-commerce and industrial packaging.

### Divestment of paper production sites

The divestment of the Nymölla paper site in Sweden to Sylvamo was completed in early January. The divestments of the Maxau site in Germany to Schwarz Produktion and the Hylte site in Sweden to Sweden Timber are expected to be completed during H1/2023. The divestment process for the Anjala paper site was discontinued and the site will be retained in Stora Enso.

## Key sustainability targets and performance

Stora Enso focuses its efforts towards a sustainable future concentrating on the three areas in which it has the biggest impact and opportunities: climate change, biodiversity and circularity.

### Climate change

Stora Enso's science-based target is to reduce absolute scope 1, 2 and 3 greenhouse gas (GHG) emissions by 50% by 2030 from the 2019 base year, in line with the 1.5-degree scenario.

By the end of the year, the scope 1 and 2 GHG emissions were 1.96 million tonnes or 27% less than in the baseline year. During 2022, the emissions decreased mainly due to less use of fossil fuels in multiple production sites as well as the ceasing operations at the Veitsiluoto mill in Finland.

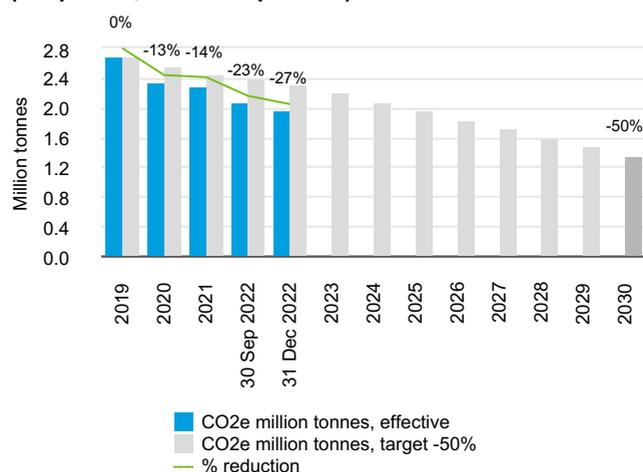
Stora Enso will reduce scope 1 and 2 emissions from operations by investing in energy efficiency, and by further

increasing the share of clean energy sources, including wood-based biofuels from sustainable sources.

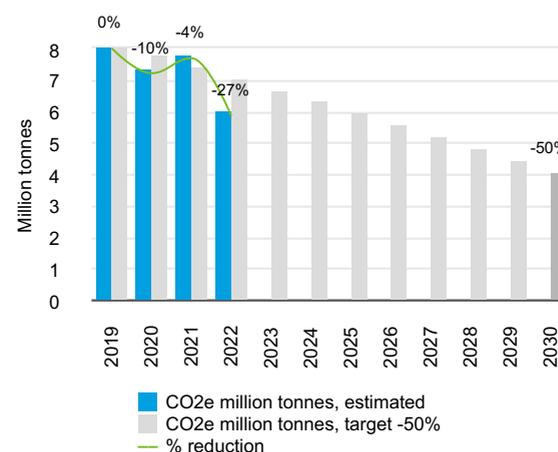
In 2022, Stora Enso's estimated scope 3 GHG emissions along the value chain were 6.01 million tonnes or 27% less than in the baseline year (2021: 7.83 million tonnes or 4% less). The emissions decreased year-on-year due to mill closures and the end of dissolving pulp production.

During 2022, Stora Enso continued to identify areas where scope 3 emissions could be further reduced. The focus was on supplier engagement and internal work to improve the accounting for scope 3 emissions.

#### Direct and indirect GHG emissions (scope 1+2, last four quarters)<sup>12</sup>



#### GHG emissions along the value chain (scope 3)<sup>12</sup>



<sup>1</sup> For definitions, see the section [Calculation of key figures](#).

<sup>2</sup> Historical figures recalculated due to divestments or additional data after the previous Interim Reports.

### Biodiversity

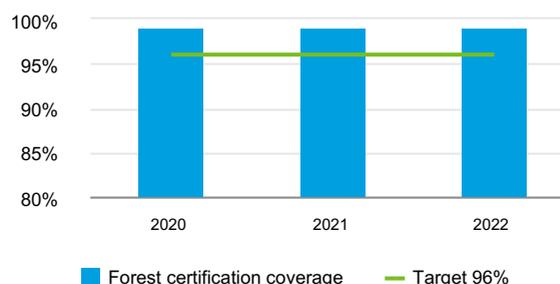
Biodiversity is an integral part of forest certifications including protection of valuable ecosystems. Stora Enso is committed to achieving a net-positive impact on biodiversity in its own forests and plantations by 2050 through active biodiversity management.

During the quarter, Stora Enso signed Business for Nature's [Make it Mandatory](#) statement calling for regulatory action to make it mandatory for business and finance to assess and disclose their impacts and dependencies on nature. Stora Enso continued to implement its biodiversity action programmes for its own forests in Sweden and wood supply in Finland. A similar programme is being planned for Stora Enso's wood supply in the Baltics. The Group steers its biodiversity actions through a Biodiversity Leadership Programme that covers a number of measures and projects concerning its own forests, suppliers' forests, global forests, and biodiversity beyond the forest sector.

Forest certification ensures that the raw material used in wood-based products comes from responsibly managed forests. Stora Enso's target is to maintain the forest certification coverage level of at least 96% for the company's own and leased forest lands.

The forest certification coverage for Stora Enso's owned and leased lands has remained stable. In 2022, the coverage amounted to 99% (2021: 99%). Certain purchased areas in Stora Enso's joint operations in Brazil and Uruguay were in the certification process but not yet certified by the end of 2022.

#### Biodiversity: forest certification coverage<sup>1</sup>



<sup>1</sup> For definitions, see the section [Calculation of key figures](#).

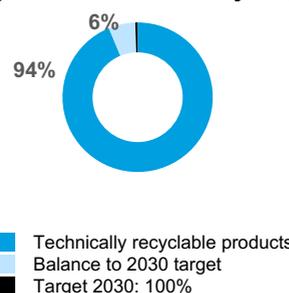
## Circularity

By the end of 2022, 94% (2021: 94%<sup>1</sup>) of Stora Enso's products, such as paper and packaging products, were recyclable, and the target is to reach 100% by 2030. Stora Enso aims to ensure the recyclability of products through an increased focus on circularity in the innovation processes. Stora Enso collaborates actively with customers and partners to set up the infrastructure to enable 100% circularity in its markets.

During the quarter, Stora Enso and Dizzie, a circular solution for home delivery of dry food products, announced a partnership to eliminate food packaging waste in home deliveries in the United Kingdom. Through the collaboration fossil-based food containers are replaced with reusable biocomposite pots that are designed to last 200 cycles of reuse.

<sup>1</sup> Historical figures recalculated due to additional data after the previous Interim Reports.

### Circularity: share of technically recyclable products<sup>1 2</sup>



<sup>1</sup> As of 31 December 2022

<sup>2</sup> For definitions, see the section [Calculation of key figures](#).

## Responsible business practices

	31 Dec 2022	30 Sep 2022	31 Dec 2021	Target
<b>Occupational safety:</b> TRI rate, year-to-date	5.9	5.9	6.2	5.3 by the end of 2022
<b>Gender balance:</b> % of female managers among all managers	23%	23%	23%	25% by the end of 2024
<b>Water:</b> total water withdrawal per saleable tonne (m <sup>3</sup> /tonne) <sup>1</sup>	61	60	60	Decreasing trend
<b>Water:</b> process water discharges per saleable tonne, (m <sup>3</sup> /tonne) <sup>1</sup>	31	31	31	Decreasing trend
<b>Sustainable sourcing:</b> % of supplier spend covered by the Supplier Code of Conduct (SCoC)	96%	95%	96%	95%

For definitions, see the section [Calculation of key figures](#).

<sup>1</sup> Historical figures recalculated due to divestments or additional data after the previous Interim Reports.

Stora Enso's safety performance remained stable, but the target for 2022 was not achieved. The areas of improvement are being addressed within the divisions.

Water performance remained stable during the quarter. Stora Enso strives constantly to improve its water performance through targeted investments. From 2023, the target for process water discharge is to reduce specific process water discharges per saleable tonne (m<sup>3</sup>/tonne) by 17%, from the 2019 baseline year, by 2030.

The KPI for sustainable sourcing measures the proportion of total supplier spend covered by the SCoC. By the end of the quarter, 96% of the spend on materials, goods, and services was covered by the SCoC.

The KPI for diversity and inclusion measures the proportion of female managers among all managers. At the end of the quarter, the proportion was 23%. The target is 25% by the end of 2024. Among all employees, the proportion of female employees was 25%. In the Group Leadership Team (GLT), 36% of the members were women at the end of Q4/2022. Following the latest appointment in the Group Leadership Team, 42% of the members are women as of 1 January 2023.

## ESG assessments and external recognition

Stora Enso actively participates in the following ESG assessment schemes:

ESG rating	Stora Enso score	Change vs previous score	Rating compared to peers	Last update
<b>CDP</b>	Climate A- Forest B Water B	Climate and Water unchanged, declined in Forest from A- to B	Clearly above the industry average level	Q4/2022
<b>FTSE Russell</b>	4.5 out of 5.0	Improved from 4.4 to 4.5	Among highest rank in the industry	Q4/2022
<b>ISS Corporate Rating</b>	B- / A+	Unchanged	Among highest decile rank in the industry	Q2/2022
<b>ISS QualityScore</b>	Governance 2* Social 1 Environment 1	Improved in Governance from 4 to 2*	Clearly above the industry average level	Q4/2022
<b>MSCI</b>	AAA / AAA	Unchanged	Clearly above the industry average level	Q3/2022
<b>Sustainalytics</b>	15.9 out of 100**	Improved from 18.0 to 15.9	Clearly above the industry average level	Q1/2022
<b>VigeoEiris***</b>	73 out of 100	Improved from 68 to 73	Highest ranked company in the industry	Q3/2021

\* 1 indicating the lowest risk \*\* 0 indicating the lowest risk \*\*\* V.E. part of Moody's ESG solutions

## Other

For the fifth consecutive year, Stora Enso's Sustainability report was included in the top ten sustainability reports globally, according to the World Business Council for Sustainable Development (WBCSD). In addition, Stora

Enso's Sustainability Report 2021 was awarded as best in Finland in an established competition organised by an independent group of expert organisations.

## Fourth quarter 2022 results (compared with Q4/2021)

Sales YoY  
**+5%**

Operational EBIT YoY  
**-17%**

Earnings per share  
**EUR 0.74**  
(Q4/2021: 0.78)

Group sales increased by 5%, or EUR 145 million, to EUR 2,864 (2,719) million. This was the highest fourth quarter level since 2007. Group sales excluding the Paper division increased by 5%. Higher sales prices in all divisions except Wood products, supported by active mix management, improved the topline. Other sales increased driven by higher energy sales. Foreign exchange rates improved sales, especially due to a stronger US dollar. This was only partly offset by lower volumes and negative effect of structural changes, mainly related to the paper site closures at Veitsiluoto in Finland and Kvarnsveden in Sweden, the paper site disposal at Sachsen in Germany, as well as the exit from the Russian operations.

Group operational EBIT decreased by 17%, or EUR 71 million to EUR 355 (426) million and the operational EBIT margin decreased to 12.4% (15.7%). Exit from Russian operations reduced the fourth quarter profitability by EUR 20 million compared to a year ago. Higher sales prices in all divisions except Wood Products improved profitability by EUR 302 million. Net foreign exchange rates had a positive EUR 73 million impact on operational EBIT. Increased variable costs had a negative impact of EUR 267 million. Lower volumes reduced operational EBIT by EUR 72 million, negatively impacted by exit from Russia. Fixed costs increased by EUR 85 million, negatively impacted by higher maintenance shutdown costs. The impact from the closed units, depreciations and equity accounted investments was negative EUR 21 million on operational EBIT.

Fair valuations and non-operational items had a positive net impact on the operating profit of EUR 381 (437) million. The impact came mainly from non-operational fair valuation changes of biological assets.

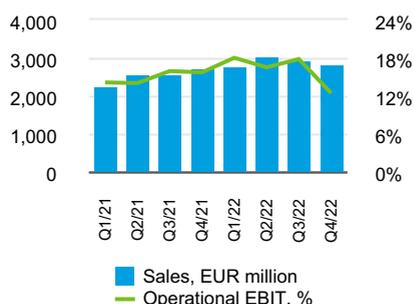
The Group recorded items affecting comparability (IAC) with a negative impact of EUR -31 (-25) million on its operating profit. The related tax impact was positive EUR 3 (2) million. The IACs relate mainly to the disposals and restructurings of Paper units.

Net financial expenses of EUR 39 million were EUR 6 million lower than a year ago. Net interest expenses of EUR 21 million decreased by EUR 8 million, mainly because of higher interest income on deposits and cash. Other net financial expenses of EUR 9 million were EUR 2 million lower than a year ago. Other financial items include EUR 7 million impairment from Russia related financial receivables. The net foreign exchange impact in respect of cash equivalents, interest-bearing assets and liabilities and related foreign-currency hedges amounted to a loss of EUR -9 (-5) million.

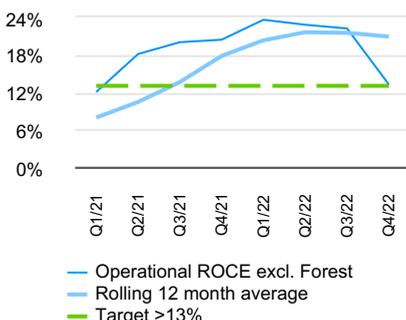
Earnings per share decreased by 5% to EUR 0.74 (0.78), and earnings per share excluding fair valuations were EUR 0.32 (0.32).

The operational return on capital employed (ROCE) was 9.8% (13.4%). Operational ROCE excluding the Forest division was 13.2% (20.4%).

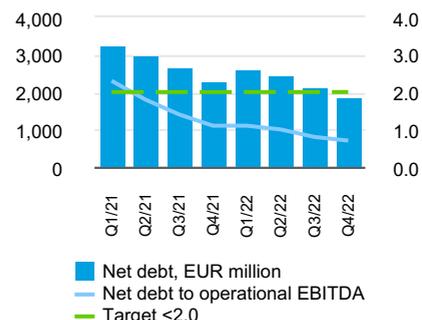
Sales and operational EBIT



Operational ROCE excluding Forest



Net debt to operational EBITDA



**Breakdown of change in sales**

Sales Q4/2021, EUR million	2,719
Price and mix	15%
Currency	2%
Volume	-15%
Other sales <sup>1</sup>	9%
Total before structural changes	10%
Structural changes <sup>2</sup>	-5%
Total	5%
Sales Q4/2022, EUR million	2,864

<sup>1</sup> Energy, paper for recycling (PFR), by-products etc.

<sup>2</sup> Asset closures, major investments, divestments and acquisitions

**Breakdown of change in capital employed**

Capital employed 31 December 2021, EUR million	12,976
Capital expenditure excl. investments in biological assets less depreciation	168
Investments in biological assets less depletion of capitalised silviculture costs	7
Impairments and reversal of impairments	-107
Fair valuation of forest assets	529
Unlisted securities (mainly PVO)	533
Equity accounted investments	254
Net liabilities in defined benefit plans	152
Operative working capital and other interest-free items, net	399
Emission rights	13
Net tax liabilities	-236
Translation difference	-314
Other changes	-18
Capital employed 31 December 2022	14,356

**Results full year 2022 (compared with 2021)**

Group sales increased by 15%, or EUR 1,516 million to EUR 11,680 (10,164) million. This was the highest annual sales since 2007. Sales excluding the Paper division increased by 17%. Significantly higher sales prices and active mix management was only partly offset by the negative impact from the structural changes, mainly related to the paper site closures at Veitsiluoto in Finland and Kvarnsveden in Sweden as well as exit from Russian operations. Lower deliveries decreased sales, negatively impacted by the exit from Russian operations.

Operational EBIT grew by 24% or EUR 363 million to EUR 1,891 (1,528) million and the operational EBIT margin increased to 16.2% (15.0%). This was the highest annual operational EBIT since 2000 and all-time high operational EBIT margin. Significantly higher sales prices in all divisions and positive net foreign exchange rate impact were only partly offset by EUR 1,207 million higher variable costs and EUR 184 million higher fixed costs. Volumes were EUR 93 million lower, negatively impacted by exit from Russian operations. The positive impact from the closed units was EUR 62 million.

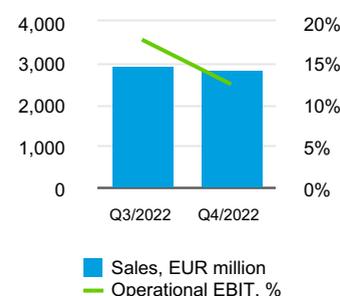
**Sales**  
**EUR 11,680**  
**million**  
(2021: 10,164)

**Operational EBIT**  
**16.2%**  
(2021: 15.0%)

**Fourth quarter 2022 results (compared with Q3/2022)**

Group sales decreased by 3%, or EUR 99 million, to EUR 2,864 (2,963) million. Sales excluding the Paper division decreased by 2%. Sales prices were negatively impacted by lower sawn wood prices. Higher deliveries in Biomaterials was offset by lower deliveries in Packaging materials and Paper, negatively impacted by annual maintenance shutdowns.

Operational EBIT decreased by EUR 172 million to EUR 355 (527) million and the margin to 12.4% (17.8%). The sales prices were EUR 38 million lower mainly due to lower sawn wood prices. Variable cost were EUR 33 million higher, and fixed costs increased EUR 100 million, driven by seasonality and timing of annual maintenance shutdowns. Positive impact from net foreign exchange rates was offset by lower volumes.

**Sales and operational EBIT**

## Packaging Materials

- Consumer board demand remained stable with price increases being implemented to mitigate variable cost escalation
- The market demand for containerboard deteriorated further continuing the trend of lower volumes and decreasing prices
- All variable costs except OCC (Old Corrugated Containers) and logistics were higher q-on-q and year-on-year were only partly mitigated by price increases in consumer board
- Inflationary pressures are gradually compensated through price increases as sales contracts are renegotiated for consumer board
- Increased short-term operating costs due to scheduled major annual maintenance shutdowns completed in the quarter impacted on the result and represented the majority of the total maintenance costs for the Group



### Operational ROOC

**3.6%**  
(Target: >20%)

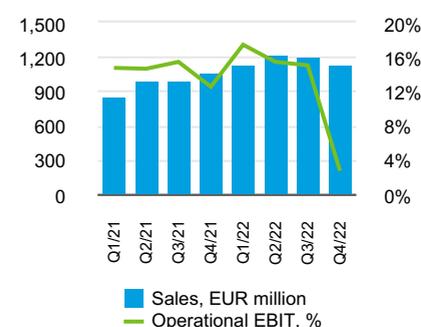
### Maintenance shutdowns (including Paper sites)

	2022	2023
Q1	—	Anjala
Q2	Beihai, Ostrołęka	Beihai, Ostrołęka
Q3	Skoghall, Ingerois, Heinola, Oulu, Anjala, Nymölla	Heinola, Ostrołęka, Oulu, Varkaus
Q4	Fors, Imatra, Skoghall, Varkaus	Fors, Imatra, Ingerois, Skoghall, Anjala

- Sales increased by 6%, or EUR 65 million, to EUR 1,127 million. The topline increase was driven by higher board prices.
- Operational EBIT decreased by EUR 102 million to EUR 31 million, impacted by increased operating costs, high costs associated with annual maintenance shutdowns, and a weak containerboard market.

- Operational ROOC was 3.6% (16.8%), below the long-term target of >20%.
- The De Hoop containerboard site (part of De Jong Packaging Group) will be included in the Packaging Materials division from January 2023.

### Sales and operational EBIT



EUR million	Q4/22	Q4/21	Change % Q4/22– Q4/21	Q3/22	Change % Q4/22– Q3/22	2022	2021	Change % 2022–2021
Sales	1,127	1,062	6.1%	1,210	-6.8%	4,690	3,898	20.3%
Operational EBITDA	104	210	-50.2%	258	-59.5%	900	846	6.4%
Operational EBITDA margin	9.3%	19.8%		21.3%		19.2%	21.7%	
Operational EBIT	31	133	-77.0%	181	-83.1%	596	556	7.2%
Operational EBIT margin	2.7%	12.5%		15.0%		12.7%	14.3%	
Operational ROOC	3.6%	16.8%		21.3%		18.2%	18.0%	
Cash flow from operations	154	226	-31.8%	278	-44.6%	756	807	-6.3%
Cash flow after investing activities	51	128	-60.0%	212	-76.0%	440	459	-4.0%
Deliveries, 1,000 tonnes	1,086	1,169	-7.1%	1,160	-6.4%	4,599	4,616	-0.4%
Production, 1,000 tonnes	1,094	1,188	-7.9%	1,139	-3.9%	4,682	4,685	-0.1%

### Market development during Q4

Product	Market	Demand Q4/22 compared with Q4/21	Demand Q4/22 compared with Q3/22	Price Q4/22 compared with Q4/21	Price Q4/22 compared with Q3/22
Consumer board (FBB)	Europe	Weaker	Weaker	Significantly higher	Slightly higher
Virgin fiber-based containerboard	Global	Slightly weaker	Stable	Slightly higher	Slightly lower
Recycled fiber based (RCP) containerboard	Europe	Significantly weaker	Slightly stronger	Significantly higher	Slightly lower

Source: Fastmarket RISI, Fastmarket FOEX, CEPI, Numera Analytics

## Packaging Solutions

- Sales and profitability were mainly impacted by the exit from Russian operations, a soft market, high inflationary pressure and continued investments in new businesses
- The acquisition of De Jong Packaging Group was completed on 6 January 2023
- The acquisition will accelerate growth in renewable corrugated packaging and sales for the division will nearly double



### Operational ROOC

**-1.4%**

(Target: >15%)

### Sales YoY

**-16%**

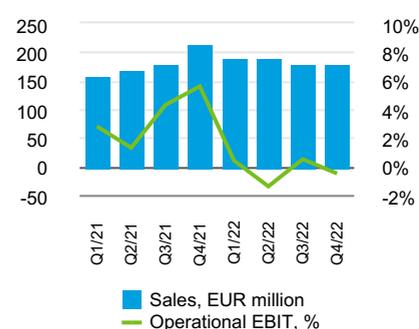
### Operational EBIT margin

**-0.5%**

(Q4/2021: 5.6%)

- Sales decreased by 16% or EUR 35 million to EUR 179 million mainly due to the divestment of the Russian units. Remaining businesses improved slightly due to higher sales prices in corrugated packaging, and higher sales from innovation and service-led businesses which compensated for the soft market situation.
- Operational EBIT decreased by EUR 13 million to EUR -1 million, due to divestment of the Russian units in the second quarter of 2022, weaker market, increasing cost pressure and higher costs relating to investments in growing the new businesses.
- Operational ROOC was -1.4%, below the long-term target of >15%.

### Sales and operational EBIT



EUR million	Q4/22	Q4/21	Change % Q4/22- Q4/21	Q3/22	Change % Q4/22- Q3/22	2022	2021	Change % 2022-2021
Sales	179	214	-16.3%	179	0.1%	737	723	1.9%
Operational EBITDA	6	20	-68.8%	8	-22.1%	27	56	-52.6%
Operational EBITDA margin	3.5%	9.3%		4.5%		3.6%	7.8%	
Operational EBIT	-1	12	-107.0%	1	-188.3%	-2	26	-106.6%
Operational EBIT margin	-0.5%	5.6%		0.5%		-0.2%	3.6%	
Operational ROOC	-1.4%	19.4%		1.7%		-0.7%	10.8%	
Cash flow from operations	11	27	-60.1%	-7	257.0%	-5	56	-108.2%
Cash flow after investing activities	-2	17	-109.7%	-15	89.1%	-40	26	-250.0%
Corrugated packaging European deliveries, million m <sup>2</sup>	171	264	-35.3%	167	2.2%	772	1,046	-26.2%
Corrugated packaging European production, million m <sup>2</sup>	171	262	-34.7%	160	6.8%	771	1,049	-26.5%

### Market development during Q4

Product	Market	Demand Q4/22 compared with Q4/21	Demand Q4/22 compared with Q3/22	Price Q4/22 compared with Q4/21	Price Q4/22 compared with Q3/22
Corrugated packaging	Europe	Significantly weaker	Slightly stronger	Significantly higher	Slightly lower

Source: Fastmarket RISI

## Biomaterials

- All-time high quarterly sales and profitability delivered through record high pricing and effective operational performance
- Strong deliveries and operations, and positive impacts from a strong USD



### Operational ROOC

# 35.0%

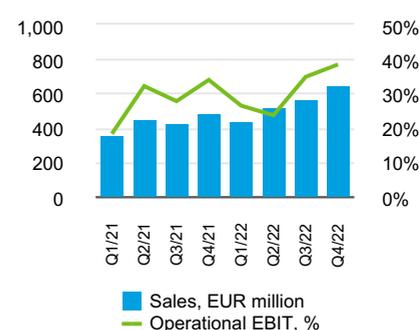
(Target: >15%)

### Maintenance shutdowns

	2022	2023
<b>Q1</b>	Montes del Plata	Veracel
<b>Q2</b>	Enocell	Montes del Plata, Skutskär
<b>Q3</b>	Sunila	Sunila
<b>Q4</b>	—	Enocell

- Sales increased by 32%, or EUR 155 million, to an all-time high of EUR 649 million, driven by strong prices and deliveries, supported by good performance in by-products sales.
- Operational EBIT increased by EUR 82 million to EUR 249 million, an all-time high. Higher sales prices and favourable currency exchange rates fully offset the higher variable costs.
- Operational ROOC was 35.0%, above the long-term target of 15%.

### Sales and operational EBIT



EUR million	Q4/22	Q4/21	Change % Q4/22– Q4/21	Q3/22	Change % Q4/22– Q3/22	2022	2021	Change % 2022– 2021
Sales	649	494	31.5%	567	14.5%	2,180	1,728	26.2%
Operational EBITDA	284	204	39.1%	234	21.5%	822	618	33.1%
Operational EBITDA margin	43.8%	41.4%		41.2%		37.7%	35.7%	
Operational EBIT	249	167	49.2%	197	26.3%	687	495	38.7%
Operational EBIT margin	38.4%	33.9%		34.8%		31.5%	28.7%	
Operational ROOC	35.0%	27.1%		28.0%		25.8%	20.8%	
Cash flow from operations	213	152	40.1%	188	13.3%	682	490	39.1%
Cash flow after investing activities	168	119	40.7%	156	7.4%	536	391	37.1%
Pulp deliveries, 1,000 tonnes	693	678	2.3%	611	13.5%	2,554	2,576	-0.9%

### Market development during Q4

Product	Market	Demand Q4/22 compared with Q4/21	Demand Q4/22 compared with Q3/22	Price Q4/22 compared with Q4/21	Price Q4/22 compared with Q3/22
Softwood pulp	Europe	Slightly weaker	Slightly weaker	Significantly higher	Slightly lower
Hardwood pulp	Europe	Slightly weaker	Slightly weaker	Significantly higher	Stable
Hardwood pulp	China	Slightly stronger	Slightly stronger	Significantly higher	Stable

Source: PPPC, Fastmarket FOEX, Fastmarket RISI, Stora Enso

## Wood Products

- Sales and profit were impacted by both the rapid market decline in sawn wood from historically high levels, and the exit from the Russian operations
- Lower prices and higher variable costs were only partly offset by higher by-product sales
- The construction market was heavily impacted by the macro environment, resulting in fewer building permits and projects
- Stable demand in the less cyclical Building Solutions, one of Stora Enso's key growth segments



### Operational ROOC

**-7.5%**  
(Target: >20%)

### Sales YoY

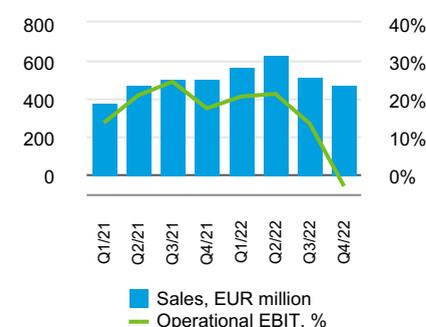
**-7%**

### Operational EBIT margin

**-2.9%**  
(Q4/2021: 17.5%)

- Sales decreased by 7%, or EUR 39 million, to EUR 471 million, mainly impacted by lower sales prices, especially for sawn wood.
- Operational EBIT decreased by EUR 103 million to EUR -14 million, affected by lower prices and volumes, and increased costs mainly for logistics, electricity and raw materials.
- Operational ROOC was below the long-term target of >20% at -7.5% (53.1%).

### Sales and operational EBIT



EUR million	Q4/22	Q4/21	Change % Q4/22– Q4/21	Q3/22	Change % Q4/22– Q3/22	2022	2021	Change % 2022–2021
Sales	471	510	-7.5%	520	-9.4%	2,195	1,872	17.3%
Operational EBITDA	-1	101	-100.7%	82	-100.8%	356	410	-13.2%
Operational EBITDA margin	-0.1%	19.8%		15.7%		16.2%	21.9%	
Operational EBIT	-14	89	-115.3%	70	-119.4%	309	364	-15.3%
Operational EBIT margin	-2.9%	17.5%		13.5%		14.1%	19.5%	
Operational ROOC	-7.5%	53.1%		38.4%		44.2%	59.4%	
Cash flow from operations	54	105	-48.8%	74	-27.0%	346	313	10.6%
Cash flow after investing activities	28	83	-66.5%	57	-51.6%	264	252	4.9%
Wood products deliveries, 1,000 m <sup>3</sup>	999	1,105	-9.5%	935	6.9%	4,235	4,508	-6.1%

### Market development during Q4

Product	Market	Demand Q4/22 compared with Q4/21	Demand Q4/22 compared with Q3/22	Price Q4/22 compared with Q4/21	Price Q4/22 compared with Q3/22
Wood products	Europe	Significantly weaker	Significantly stronger	Significantly lower	Significantly lower

Source: Stora Enso

## Forest

- Wood demand and prices remained on a high level
- Robust financial result and continuous increase in forest assets fair value
- Market transaction-based fair valuation applied to Tornator, resulted in a €265m positive q-on-q impact on the Group's forest asset valuation
- Tighter wood markets in Finland and Sweden
- Flexible use of own forest assets and efficient wood sourcing from Stora Enso's network around the Baltic Sea, secured reliable wood deliveries to Stora Enso's sites



### Operational ROCE

## 4.4%

(Target: >3.5%)

### Total value of forest assets

## EUR 8.3 billion

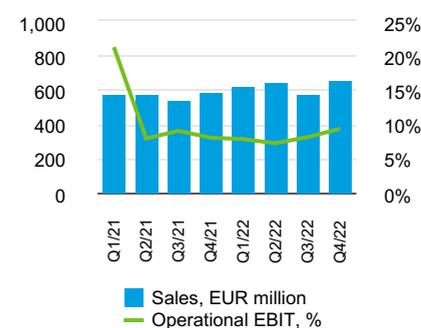
(Q4/2021: EUR 8.0 billion)

### Sales YoY

## +11%

- Sales increased by 11%, or EUR 67 million, to EUR 664 million, due to higher wood prices, driven by increased wood demand.
- Operational EBIT of EUR 62 million, a quarterly record high as a result of efficient operational performance and land sales of EUR 10 million.
- Operational ROCE, at 4.4% (3.6%), was above the 3.5% long-term target, showing good performance despite the increasing fair value of Stora Enso's forest assets in the Nordics.
- Stora Enso's forest assets fair value increased by EUR 371 million year-on-year to EUR 8.3 billion. The increase was mainly derived from the 41% holding in Tornator in Finland, which applied a market transaction-based method in Q4/2022.

### Sales and operational EBIT



EUR million	Q4/22	Q4/21	Change % Q4/22– Q4/21	Q3/22	Change % Q4/22– Q3/22	2022	2021	Change % 2022–2021
Sales <sup>1</sup>	664	597	11.1%	581	14.3%	2,519	2,311	9.0%
Operational EBITDA	79	60	31.9%	60	32.3%	256	318	-19.3%
Operational EBITDA margin	11.9%	10.1%		10.3%		10.2%	13.7%	
Operational EBIT	62	48	29.5%	47	32.0%	204	267	-23.4%
Operational EBIT margin	9.3%	8.0%		8.1%		8.1%	11.5%	
Operational ROCE	4.4%	3.6%		3.4%		3.7%	5.1%	
Cash flow from operations	20	74	-72.7%	59	-65.8%	146	158	-7.6%
Cash flow after investing activities	-3	61	-104.2%	48	-105.3%	91	112	-18.9%
Wood deliveries, 1,000 m <sup>3</sup>	9,136	9,713	-5.9%	8,366	9.2%	38,217	39,652	-3.6%
Operational fair value change of biological assets	22	20	10.4%	23	-5.6%	87	82	6.0%

<sup>1</sup> In 2022, internal wood sales to Stora Enso's divisions represented 65% and external sales to other forest companies 35% of net sales.

## Paper

- Delivered significantly improved profitability
- Sales price increases mitigated substantial cost increases
- Market conditions remained favourable for Stora Enso's products



### Cash flow after investing activities to sales ratio

**-0.7%**

(Target: >7%)

### Sales YoY (retained businesses\*)

**+31%**

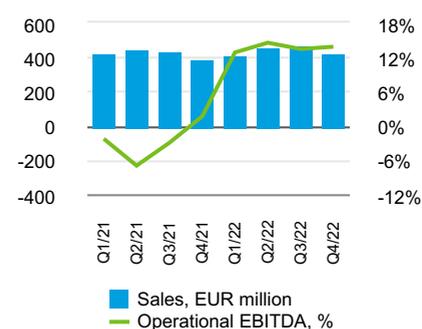
### Operational EBITDA margin

**13.8%**

(Q4/2021: 1.6%)

- Sales increased by 9% or EUR 35 million, to EUR 424 million, supported by higher sales prices in all grades. Sales volumes were impacted by scheduled maintenance shutdowns during the quarter.
- Operational EBIT increased by EUR 59 million to EUR 49 million, resulting in an EBIT margin of 11.6% (-2.6%). The profitability improvement was driven by the higher paper prices more than offsetting the higher variable costs.
- The cash flow after investing activities to sales ratio remained stable at -0.7% (-2.9%), impacted by prior year's restructuring provision payouts and transactions related to the announced divestments. The cash flow to sales ratio for retained business is 1.2% (7.5%).

### Sales and operational EBITDA



\* Retained businesses include the Langerbrugge and Anjala sites and the Hylte, Maxau and Nymölla sites under a divestment process.

EUR million	Q4/22	Q4/21	Change % Q4/22– Q4/21	Q3/22	Change % Q4/22– Q3/22	2022	2021	Change % 2022– 2021
Sales	424	389	9.0%	471	-10.1%	1,772	1,703	4.1%
Operational EBITDA	59	6	n/m	63	-7.4%	242	-48	n/m
Operational EBITDA margin	13.8%	1.6%		13.4%		13.7%	-2.8%	
Operational EBIT	49	-10	n/m	49	-0.2%	185	-124	249.0%
Operational EBIT margin	11.6%	-2.6%		10.5%		10.5%	-7.3%	
Operational ROOC	61.1%	-29.9%		66.6%		81.3%	-40.3%	
Cash flow from operations	11	3	255.9%	44	-74.6%	77	-25	n/m
Cash flow after investing activities	-3	-11	75.0%	28	-110.0%	16	-77	121.4%
Cash flow after investing activities to sales, %	-0.7%	-2.9%		6.0%		0.9%	-4.5%	
Paper deliveries, 1,000 tonnes	396	615	-35.6%	476	-16.8%	1,924	2,872	-33.0%
Paper production, 1,000 tonnes	407	529	-23.2%	461	-11.7%	1,926	2,776	-30.6%

### Market development during Q4

Product	Market	Demand Q4/22 compared with Q4/21	Demand Q4/22 compared with Q3/22	Price Q4/22 compared with Q4/21	Price Q4/22 compared with Q3/22
Paper	Europe	Significantly weaker	Significantly weaker	Significantly higher	Higher

Source: PPPC

## Segment Other

The segment Other includes Stora Enso's shareholding in the energy company Pohjolan Voima (PVO), and the Group's shared services and administration.

EUR million	Q4/22	Q4/21	Change % Q4/22– Q4/21	Q3/22	Change % Q4/22– Q3/22	2022	2021	Change % 2022–2021
Sales	289	285	1.4%	282	2.5%	1,097	1,092	0.5%
Operational EBITDA	4	-4	183.7%	-10	137.9%	-33	-9	-275.0%
Operational EBITDA margin	1.3%	-1.5%		-3.4%		-3.0%	-0.8%	
Operational EBIT	-1	-17	96.0%	-12	94.3%	-47	-48	1.7%
Operational EBIT margin	-0.2%	-6.1%		-4.4%		-4.3%	-4.4%	
Cash flow from operations	-34	32	-207.2%	3	n/m	-130	-48	-170.9%
Cash flow after investing activities	-37	27	-236.8%	1	n/m	-146	-62	-135.6%

- Sales increased to EUR 289 million and operational EBIT improved by EUR 17 million to EUR -1 million.
- A higher result from energy sales, driven by increased electricity prices, together with lower costs improved profitability.
- The divisions are charged for electricity at market prices. Through its 15.6% shareholding in the Finnish energy company Pohjolan Voima (PVO), Stora Enso is entitled to receive, at cost, 8.9% of the electricity produced by the Olkiluoto nuclear reactors, and 20.6% of the electricity from the hydropower plants.

## Capital structure in the fourth quarter of 2022 (compared with Q3/2022)

EUR million	31 Dec 2022	30 Sep 2022	30 Jun 2022	31 Mar 2022	31 Dec 2021
Operative fixed assets <sup>1</sup>	14,368	14,608	13,891	13,800	13,696
Equity accounted investments	832	624	608	578	580
Operative working capital, net	862	968	936	617	448
Non-current interest-free items, net	-255	-167	-243	-331	-417
<b>Operating Capital Total</b>	<b>15,806</b>	<b>16,033</b>	<b>15,192</b>	<b>14,664</b>	<b>14,307</b>
Net tax liabilities	-1,451	-1,450	-1,433	-1,364	-1,331
<b>Capital Employed<sup>2</sup></b>	<b>14,356</b>	<b>14,584</b>	<b>13,759</b>	<b>13,300</b>	<b>12,976</b>
Equity attributable to owners of the Parent	12,532	12,489	11,350	10,726	10,683
Non-controlling interests	-30	-30	-25	-19	-16
Net interest-bearing liabilities	1,853	2,125	2,434	2,593	2,309
<b>Financing Total<sup>2</sup></b>	<b>14,356</b>	<b>14,584</b>	<b>13,759</b>	<b>13,300</b>	<b>12,976</b>

<sup>1</sup> Operative fixed assets include goodwill, other intangible assets, property, plant and equipment, right-of-use assets, forest assets, emission rights, and unlisted securities.

<sup>2</sup> Including assets held for sale and related liabilities.

Cash and cash equivalents net of overdrafts increased by EUR 297 million to EUR 1,917 million.

Net debt decreased by EUR 272 million to EUR 1,853 (2,125) million during the fourth quarter. The ratio of net debt to the last 12 months' operational EBITDA was at slightly lower level at 0.7 (0.8). The net debt/equity ratio on 31 December 2022 decreased to 0.15 (0.17). The average interest expense rate on borrowings was at reporting date 3.3% (3.3%).

During the fourth quarter Stora Enso arranged additional bilateral loans of EUR 300 million with three-year maturity and extension options. EUR 200 million of these loans were undrawn at the end of 2022.

Stora Enso had in total EUR 1,100 million committed fully undrawn credit facilities as per 31 December 2022. Additionally, the Company has access to EUR 1,050 million statutory pension premium loans in Finland.

### Credit ratings

Rating agency	Long/short-term rating	Valid from
Fitch Ratings	BBB- (stable)	8 August 2018
Moody's	Baa3 (stable) / P-3	1 November 2018

### Valuation of forest assets

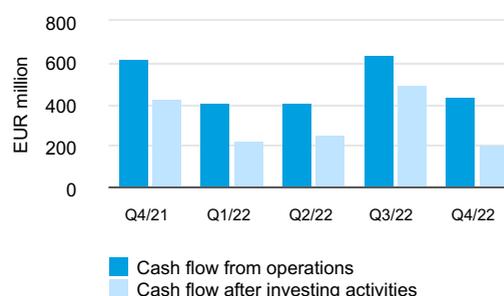
The value of total forest assets, including leased land and Stora Enso's share of Tornator's forest assets, increased by EUR 203 million to EUR 8,338 (8,135) million. The increase is mainly a due to Tornator, which moved to market transaction-based valuation method in Q4/2022. Swedish forest market price increases were netted with negative currency impact. The fair value of biological assets, including Stora Enso's share of Tornator, increased by EUR 357 million to EUR 5,653 (5,296) million. The value of forest land, including leased land and Stora Enso's share of Tornator, decreased by EUR 154 million to EUR 2,685 (2,839) million.

## Cash flow in the fourth quarter of 2022 (compared with Q3/2022)

### Operative cash flow

EUR million	Q4/22	Q4/21	Change % Q4/22- Q4/21	Q3/22	Change % Q4/22- Q3/22	2022	2021	Change % 2022-2021
Operational EBITDA	515	602	-14.4%	689	-25.2%	2,529	2,184	15.8%
IAC on operational EBITDA	8	-13	163.8%	-20	142.1%	-133	-213	37.6%
Other adjustments	-77	-60	-29.0%	-25	-207.4%	-62	-194	67.9%
Change in working capital	-18	90	-119.6%	-5	-225.6%	-461	-25	n/m
<b>Cash flow from operations</b>	<b>429</b>	<b>619</b>	<b>-30.7%</b>	<b>639</b>	<b>-32.9%</b>	<b>1,873</b>	<b>1,752</b>	<b>6.9%</b>
Cash spent on fixed and biological assets	-225	-193	-16.6%	-150	-49.9%	-705	-645	-9.3%
Acquisitions of equity accounted investments	-2	-2	31.0%	0	n/m	-7	-6	-7.9%
<b>Cash flow after investing activities</b>	<b>202</b>	<b>424</b>	<b>-52.3%</b>	<b>489</b>	<b>-58.6%</b>	<b>1,162</b>	<b>1,101</b>	<b>5.5%</b>

Cash flow after investing activities was EUR 202 (489) million. Working capital increased by EUR 18 million, mainly due to increased inventories, and was offset by lower trade receivables and increased payables. Cash spent on fixed and biological assets was EUR 225 million. Payments related to the previously announced provisions amounted to EUR 35 million.



## Capital expenditure in the fourth quarter of 2022 (compared with Q4/2021)

Additions to fixed and biological assets totalled EUR 368 (288) million, of which EUR 346 (273) million were fixed assets and EUR 22 (16) million biological assets.

Depreciations and impairment charges excluding IACs totalled EUR 130 (145) million. Additions in fixed and biological assets had a cash outflow impact of EUR 225 (193) million.

### Capital expenditure by division

EUR million	Q4/22	2022	Investment to be finalised
Packaging Materials	185	373	Oulu consumer board investment Board machine 8 capacity increase at Skoghall in Sweden 2025 2024
Packaging Solutions	29	46	n/a
Biomaterials	65	158	Skutskär bleach plant upgrade in Sweden Lignin related investments at Sunila, Finland 2024 Q1/2023
Wood Products	32	87	Cross laminated timber (CLT) investment at Ždírec, Czech Republic Q3/2022
Forest	26	42	n/a
Paper	29	60	n/a
<b>Total</b>	<b>368</b>	<b>778</b>	

### Capital expenditure and depreciation forecast 2023

EUR million	Forecast 2023
Capital expenditure	1,200–1,300
Depreciation and depletion of capitalised silviculture costs	640–680

The capital expenditure forecast for 2023 was increased to EUR 1,200–1,300 million, mainly due to the consumer board investment at the Oulu site in Finland.

Stora Enso's capital expenditure forecast includes approximately EUR 70 million for the Group's forest assets. The depletion of capitalised silviculture costs is forecast to be EUR 75–90 million.

## Short-term risks

Risk is characterised by both threats and opportunities, which may have an impact on future performance and the financial results of Stora Enso, as well as on its ability to meet certain social and environmental objectives.

The rapidly changing macroeconomic and geopolitical disruption is increasing complexity. The sanctions on Russia, retaliatory measures as well as conflict-related risks to people, operations, trade credit, cyber security, supply, and demand, could all have an adverse impact on the Group.

There is a risk of continued higher cost inflation in general and in components such as chemicals, and increased price volatility for raw materials such as wood, components and energy in Europe, as well as continued logistical disruptions across the markets. The high market demand for wood could cause disruptions such as delays and/or lack of wood supply to the Group's production sites. The increased risk of a global economic downturn and recession, as well as sudden interest rate increases and currency fluctuations, could all affect the Group's profits, cash flow and financial position negatively.

Other risks and uncertainties include, but are not limited to; general industry conditions, unanticipated expenditures

related to the cost of compliance with existing and new environmental and other governmental regulations, and related to actual or potential litigation; material process disruption at one of Stora Enso's manufacturing facilities with operational or environmental impacts; risks inherent in conducting business through joint ventures; and other factors that can be found in Stora Enso's press releases and disclosures.

Stora Enso has been granted various investment subsidies and has given certain investment commitments in several countries e.g. Finland, China and Sweden. If commitments to planning conditions are not met, local officials may pursue administrative measures to reclaim some of the formerly granted investment subsidies or to impose penalties on Stora Enso, and the outcome of such a process could result in adverse financial impact on Stora Enso.

A more detailed description of risks will be included in Stora Enso's Annual Report 2022 to be published on 14 February 2023 at [storaenso.com/annualreport](https://storaenso.com/annualreport).

## Sensitivity analysis

Energy sensitivity analysis: the direct effect of a 10% change in electricity and fossil fuel market prices would have an impact of approximately EUR 40 million on operational EBIT for the next 12 months.

Wood sensitivity analysis: the direct effect of a 10% change in wood prices would have an impact of approximately EUR 236 million on operational EBIT for the next 12 months.

Pulp sensitivity analysis: the direct effect of a 10% change in pulp market prices would have an impact of approximately EUR 165 million on operational EBIT for the next 12 months.

Chemical and filler sensitivity analysis: the direct effect of a 10% change in chemical and filler prices would have an impact of approximately EUR 64 million on operational EBIT for the next 12 months.

Foreign exchange rates transaction risk sensitivity analysis for the next twelve months: the direct effect on operational EBIT of a 10% strengthening in the value of the US dollar, Swedish krona and British pound would be approximately positive EUR 114 million, negative EUR 12 million and positive EUR 18 million annual impact, respectively. Weakening of the currencies would have the opposite impact. These numbers are net of hedges and assuming no changes occur other than a single currency exchange rate movement in an exposure currency.

The Group's consolidated income statement on operational EBIT level is exposed to a foreign-currency translation risk worth approximately EUR 164 million expense exposure in Brazilian real (BRL) and approximately EUR 77 million income exposure in Chinese Renminbi (CNY). These exposures arise from the foreign subsidiaries and joint-operations located in Brazil and China, respectively. For these exposures a 10% strengthening in the value of a foreign currency would have a negative EUR 16 million and a positive EUR 8 million impact on operational EBIT, respectively.

## Legal proceedings

### Contingent liabilities

Stora Enso has undertaken significant restructuring actions in recent years which have included the divestment of companies, sale of assets and mill closures. These transactions include a risk of possible environmental or other obligations the existence of which would be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group. A provision has been recognised for obligations for which the related amount can be estimated reliably and for which the related future cost is considered to be at least probable.

Stora Enso is party to legal proceedings that arise in the ordinary course of business and which primarily involve claims arising out of commercial law. The management does not consider that liabilities related to such proceedings before insurance recoveries, if any, are likely to be material to the Group's financial condition or results of operations.

### European Commission inspection

As announced in Stora Enso's stock exchange release on 12 October 2021, the European Commission has conducted unannounced inspections in locations at several member states at the premises of companies active in the wood pulp sector. Stora Enso was included in the European Commission's inspection at its headquarters in Helsinki, Finland.

Stora Enso is cooperating fully with the authorities. As stated by the Commission, the fact that they carry out such inspections does not mean that the companies are guilty of anti-competitive behaviour nor does it prejudice the outcome of the investigation itself.

Stora Enso is under strict confidentiality rules regarding the details of the ongoing European Commission investigation and cannot pre-empt or speculate regarding the next steps or eventual outcome of the investigation.

### Veracel

On 11 July 2008, Stora Enso announced that a federal judge in Brazil had issued a decision claiming that the permits issued by the State of Bahia for the operations of Stora Enso's joint operations company Veracel were not valid. The judge also ordered Veracel to take certain actions, including reforestation with native trees on part of Veracel's plantations and a possible fine of, at the time of the decision, BRL 20 (EUR 4) million. Veracel disputes the decision and has filed an appeal against it. Veracel operates in full compliance with all Brazilian laws and has obtained all the necessary environmental and operating licences for its industrial and forestry activities from the relevant authorities. In November 2008, a Federal Court suspended the effects of the decision. No provisions have been recorded in Veracel's or Stora Enso's accounts for the reforestation or the possible fine.

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## Changes in the Group structure

### Changes in segment reporting

Stora Enso's segment reporting changed as of 1 January 2023. The Paper division was discontinued as of 1 January 2023, and it is not reported as a separate segment going forward. From 1 January 2023 onwards, the Maxau and Hylte paper sites are reported in Segment Other until the completion of the divestments. The Langerbrugge and Anjala sites, which are retained in Stora Enso are reported as part of the Packaging Materials division.

From 1 January 2023, the reporting of emerging businesses, including Formed Fiber, Circular Solutions (biocomposites), and Selfly Stores, was transferred from the Packaging Solutions division to Segment Other.

Restated comparative figures will be published prior to the publication of the Q1/2023 Interim Report.

### Exiting Russian operations

In Stora Enso's Q3/2022 interim report it was stated that minor formalities remained to complete the transaction for certain Russian legal entities. These remaining smaller transactions are expected to be concluded in 2023. The transactions will have no significant impact on Stora Enso's annual sales and Operational EBIT.

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## Changes in Group management

**Jari Suominen**, EVP Forest division and a member of the Group Leadership Team, left his position at Stora Enso in December.

**Per Lyrvall**, previously EVP Legal, was appointed EVP Forest division, he continues as a member of the Group Leadership Team (GLT) and as Stora Enso's country head for Sweden. The search for a new General Counsel is ongoing. In the interim period, **Christian Swartling**, SVP Group Legal, assumes the acting role in the position.

**Minna Björkman** was appointed, EVP Sourcing and Logistics and a member of the Group Leadership Team as of January 2023. Minna Björkman joined Stora Enso in 2019 as SVP Supply Chain and Operational Excellence for Packaging Solutions. Prior to joining Stora Enso, she held several senior level positions at Finnish companies such as Nokia, Fazer and Kemira.

## Annual General Meeting in 2022

Stora Enso's Annual General Meeting (AGM) was held on 15 March 2022 at the Company's Head Office in Helsinki, Finland. In order to prevent the spread of the Covid-19 pandemic, a shareholder or his/her proxy representative could not be present at the venue of the meeting.

The AGM approved the proposal by the Board of Directors that the Company distribute a dividend of EUR 0.55 per share for the year 2021. The dividend was paid on 24 March 2022.

**Kari Jordan** was elected as a new member of the Board of Directors. **Mikko Helander** had announced that he was not available for re-election to the Board of Directors.

More information about the AGM in 2022 is available in the release [Stora Enso's Annual General Meeting and decisions by the Board of Directors](#).

## Shareholders' Nomination Board

Stora Enso's Shareholders' Nomination Board was established in September. The Shareholders' Nomination Board consists of the following members: Antti Mäkinen (Chair of Stora Enso's Board of Directors), Håkan Buskhe (Vice Chair of Stora Enso's Board of Directors), Reima Rytsölä (Solidium Oy), and Marcus Wallenberg (FAM AB). Until 3 November 2022 Solidium was represented by Harri Sailas. The Shareholders' Nomination Board elected Marcus Wallenberg as its Chair.

The Shareholders' Nomination Board proposes to the AGM to be held on 16 March 2023 that the Company's Board of Directors shall have nine (9) members.

The Shareholders' Nomination Board proposes that of the current members of the Board of Directors, Håkan Buskhe, Elisabeth Fleuriot, Helena Hedblom, Kari Jordan, Christiane Kuehne, Antti Mäkinen, Richard Nilsson and Hans Sohlström be re-elected members of the Board of Directors until the end of the following AGM and that Astrid Hermann be elected new member of the Board of Directors for the same term of office.

The Shareholders' Nomination Board proposes that Kari Jordan be elected Chair and Håkan Buskhe be elected Vice Chair of the Board of Directors. Hock Goh announced that he is not available for re-election to the Board of Directors.

## Annual General Meeting 2023

Stora Enso Oyj's Annual General Meeting (AGM) will be held on Thursday 16 March 2023 at 4:00 p.m. EET at the Marina Congress Center, Katajanokanlaituri 6, Helsinki, Finland.

The proposals for decisions relating to the agenda of the AGM and the AGM notice are available on Stora Enso Oyj's website at [storaenso.com/agm](https://storaenso.com/agm). Stora Enso Oyj's annual accounts, the report of the Board of Directors and the auditor's report for 2022 will be published on Stora Enso Oyj's website [storaenso.com/annualreport](https://storaenso.com/annualreport) on 14 February 2023. The proposals for decisions and the other meeting documents will also be available at the AGM.

## The Board of Directors' dividend proposal

The Board of Directors proposes to the AGM that a dividend of EUR 0.60 per share be distributed on the basis of the balance sheet adopted for the year 2022. The Board of Directors has assessed the Company's financial situation and liquidity before making the proposal. There have been no material changes in the parent company's financial position since 31 December 2022, the liquidity of the parent company remains good and the proposed dividend does not risk the solvency of the company. Stora Enso's policy is to distribute 50% of earnings per share (EPS) excluding fair valuations over the cycle. In 2022, EPS excluding fair valuations was EUR 1.55.

The dividend would be paid to shareholders who on the record date of the dividend payment, 20 March 2023, are recorded in the shareholders' register maintained by Euroclear Finland Oy or in the separate register of shareholders maintained by Euroclear Sweden AB for Euroclear Sweden registered shares. Dividends payable to Euroclear Sweden registered shares will be forwarded by Euroclear Sweden AB and paid in Swedish crowns. Dividends payable to ADR holders will be forwarded by Citibank N.A. and paid in US dollars.

The Board of Directors proposes to the AGM that the dividend be paid on or about 27 March 2023.

*This report has been prepared in English, Finnish, and Swedish. If there are any variations in the content between the versions, the English version shall govern. This report is unaudited.*

Helsinki, 31 January 2023  
Stora Enso Oyj  
Board of Directors

# Financials

## Basis of Preparation

This unaudited interim financial report has been prepared in accordance with the accounting policies set out in International Accounting Standard 34 on Interim Financial Reporting and in the Group's Financial Report for 2021 with the exception of new and amended standards applied to the annual periods beginning on 1 January 2022 and changes in accounting principles described below.

All figures in this Interim Report have been rounded to the nearest million, unless otherwise stated. Therefore, percentages and figures in this report may not add up precisely to the totals presented and may vary from previously published financial information.

## Accounting considerations relating to Russian operations

Stora Enso had three corrugated packaging plants, two wood products sawmills and forest operations in Russia, employing around 1,100 people. In 2021, sales in Russia represented about 3% of total Group revenues. As announced in March 2022, all import and export activities from and to Russia were halted, and the sawmills and wood supply in Russia stopped. As a result of the worsened business outlook, in Q1/2022 the Group recognised fixed asset impairments and write-downs in inventories and trade receivables of EUR 112 million related to its Russian operations and customers. Write-downs in full year 2022 amounted to EUR 122 million.

During Q2/2022 Stora Enso disposed of its corrugated packaging plants in Russia to local management for an undisclosed sale consideration, receivable in instalments at future dates.

The final loss on disposal was approximately EUR 49 million, consisting mainly of cumulative translation adjustments (CTA) being released from equity to income statement at closing.

During Q3/2022 Stora Enso disposed of its two wood products sawmills and most of the forest operations in Russia to local management for an undisclosed sale consideration, receivable in instalments. Minor formalities remain to complete the transaction for certain Russian legal entities.

The final loss on disposal was approximately EUR 24 million, including cumulative translation adjustments (CTA) being released from equity to income statement at closing. In addition there was impairments of loan receivables of EUR 23 million related to the transaction

## Disposal of Group companies

The following table is reflecting the net assets of companies sold, including disposal consideration.

EUR million	Q1-Q4/22	Q1-Q4/21
<b>Net Assets Sold</b>		
Cash and cash equivalents	90	12
Property, plant and equipment	8	32
Intangible assets	0	1
Working capital	-1	10
Tax assets and liabilities	6	9
Interest-bearing assets and liabilities	-19	-1
<b>Net assets in disposed companies</b>	<b>85</b>	<b>62</b>
<b>Total disposal consideration</b>	<b>70</b>	<b>67</b>

## Assets held for sale

As announced in September 2022, Stora Enso has signed agreements to dispose of the Maxau paper production site in Germany and the Nymölla paper site in Sweden. In addition, there is ongoing disposal process for Stora Enso's Hylte paper site in Sweden. All of these units are 100% owned by and belong to the Paper division. Nymölla site disposal was completed in the beginning of 2023.

Assets are classified as held for sale, if their carrying amounts will be recovered mainly through a sale transaction rather than through continuing use. The assets must be available for immediate sale in their present condition subject only to terms that are usual and customary for sale of such assets. Also, the sale must be highly probable and expected to be completed within one year from the date of classification.

These assets and related liabilities are presented separately in the consolidated statement of financial position and measured at the lower of the carrying amount and fair value less costs to sell. Comparative information is not restated. Assets classified as held for sale are not depreciated.

Accordingly, assets held for sale at the end of Q4/2022 include the Nymölla, Maxau and Hylte sites. Assets held for sale include mainly fixed assets, inventories and operative receivables, whereas related liabilities consist mainly of current and non-current operative liabilities.

## Non-IFRS measures

The Group's key non-IFRS performance metric is operational EBIT, which is used to evaluate the performance of its operating segments and to steer allocation of resources to them.

Operational EBIT comprises the operating profit excluding items affecting comparability (IAC) and fair valuations from the segments and Stora Enso's share of the operating profit of equity accounted investments (EAI), also excluding items affecting comparability and fair valuations.

Items affecting comparability are exceptional transactions that are not related to recurring business operations. The most common IAC are capital gains and losses, impairments or impairment reversals, disposal gains and losses relating to Group companies, provisions for planned restructurings, environmental provisions, changes in depreciation due to restructuring and penalties. Items affecting comparability are normally disclosed individually if they exceed one cent per share.

Fair valuations and non-operational items include CO<sub>2</sub> emission rights, non-operational fair valuation changes of biological assets, adjustments for differences between fair value and acquisition cost of forest assets upon disposal and the Group's share of income tax and net financial items of EAI. Non-operational fair value changes of biological assets reflect changes made to valuation assumptions and parameters. Operational fair value changes of biological assets contain all other fair value changes, mainly due to inflation and differences in actual harvesting levels compared to the harvesting plan. The adjustments for differences between fair value and acquisition cost of forest assets upon disposal are a result of the fact that the cumulative non-operational fair valuation changes of disposed forest assets were included in previous periods in IFRS operating profit (biological assets) and other comprehensive income (forest land) and are included in operational EBIT only at the disposal date.

Cash flow after investing activities (non-IFRS) is calculated as follows: cash flow from operations (non-IFRS) excluding cash spent on intangible assets, property, plant and equipment, and biological assets and acquisitions of EAIs.

Capital expenditure on fixed assets includes investments in and acquisitions of tangible and intangible assets as well as internally generated assets and capitalised borrowing costs, net of any related subsidies. Capital expenditure on leased assets includes new capitalised leasing contracts. Capital expenditure on biological assets consists of acquisitions of biological assets and capitalisation of costs directly linked to growing trees in plantation forests. The cash flow impact of capital expenditure is presented in cash flow from investing activities, excluding lease capex, where the cash flow impact is based on paid lease liabilities and presented in cash flow from financing and operating activities.

The full list of the non-IFRS measures is presented at the end of this report.

## The following new and amended standards are applied to the annual periods beginning on 1 January 2022

- Amended standards and interpretations did not have material effect on the Group.

## Future standard changes endorsed by the EU but not yet effective in 2022

- No future standard changes endorsed by the EU which would have material effect on the Group.

## Condensed consolidated income statement

EUR million	Q4/22	Q4/21	Q3/22	2022	2021
<b>Sales</b>	<b>2,864</b>	<b>2,719</b>	<b>2,963</b>	<b>11,680</b>	<b>10,164</b>
Other operating income	89	144	68	326	345
Change in inventories of finished goods and WIP	1	-10	76	258	122
Materials and services	-1,757	-1,567	-1,709	-6,979	-5,936
Freight and sales commissions	-288	-240	-317	-1,148	-939
Personnel expenses	-330	-332	-307	-1,315	-1,351
Other operating expenses	-134	-170	-150	-594	-610
Share of results of equity accounted investments	156	114	17	221	143
Change in net value of biological assets	268	338	2	195	328
Depreciation, amortisation and impairment charges	-165	-157	-134	-635	-697
<b>Operating profit</b>	<b>705</b>	<b>839</b>	<b>511</b>	<b>2,009</b>	<b>1,568</b>
Net financial items	-39	-46	-63	-151	-149
<b>Profit before tax</b>	<b>666</b>	<b>793</b>	<b>448</b>	<b>1,858</b>	<b>1,419</b>
Income tax	-82	-177	-81	-322	-151
<b>Net profit for the period</b>	<b>584</b>	<b>616</b>	<b>367</b>	<b>1,536</b>	<b>1,268</b>
<b>Attributable to</b>					
Owners of the Parent	586	615	372	1,550	1,266
Non-controlling interests	-2	1	-5	-13	3
<b>Net profit for the period</b>	<b>584</b>	<b>616</b>	<b>367</b>	<b>1,536</b>	<b>1,268</b>
<b>Earnings per share</b>					
Basic earnings per share, EUR	0.74	0.78	0.47	1.97	1.61
Diluted earnings per share, EUR	0.74	0.78	0.47	1.96	1.60

## Consolidated statement of comprehensive income

EUR million	Q4/22	Q4/21	Q3/22	2022	2021
<b>Net profit for the period</b>	<b>584</b>	<b>616</b>	<b>367</b>	<b>1,536</b>	<b>1,268</b>
<b>Other comprehensive income (OCI)</b>					
<b>Items that will not be reclassified to profit and loss</b>					
Equity instruments at fair value through OCI	-175	195	725	519	501
Actuarial gains and losses on defined benefit plans	-101	-16	64	147	126
Revaluation of forest land	-149	86	-6	259	225
Share of OCI of Equity accounted investments (EAI)	58	18	0	58	16
Income tax relating to items that will not be reclassified	41	-16	-11	-77	-68
	<b>-326</b>	<b>267</b>	<b>772</b>	<b>906</b>	<b>800</b>
<b>Items that may be reclassified subsequently to profit and loss</b>					
Cumulative translation adjustment (CTA)	-262	23	26	-197	56
Net investment hedges and loans	3	8	-17	-27	14
Cash flow hedges and cost of hedging	55	-1	-23	52	-35
Share of OCI of Non-controlling Interests (NCI)	3	-3	0	0	-3
Income tax relating to items that may be reclassified	-14	1	8	-6	9
	<b>-216</b>	<b>27</b>	<b>-7</b>	<b>-177</b>	<b>42</b>
<b>Total comprehensive income</b>	<b>42</b>	<b>911</b>	<b>1,132</b>	<b>2,265</b>	<b>2,110</b>
<b>Attributable to</b>					
Owners of the parent	41	912	1,138	2,278	2,110
Non-controlling interests	0	-1	-5	-13	0
<b>Total comprehensive income</b>	<b>42</b>	<b>911</b>	<b>1,132</b>	<b>2,265</b>	<b>2,110</b>

CTA = Cumulative translation adjustment

OCI = Other comprehensive income

EAI = Equity accounted investments

## Condensed consolidated statement of financial position

EUR million		31 Dec 2022	31 Dec 2021
<b>Assets</b>			
Goodwill	O	244	282
Other intangible assets	O	121	124
Property, plant and equipment	O	4,860	5,060
Right-of-use assets	O	418	441
		<b>5,643</b>	<b>5,907</b>
Forest assets	O	6,846	6,747
Biological assets	O	4,531	4,547
Forest land	O	2,315	2,201
Emission rights	O	123	137
Equity accounted investments	O	832	580
Listed securities	I	8	13
Unlisted securities	O	1,437	905
Non-current interest-bearing receivables	I	120	51
Deferred tax assets	T	74	143
Other non-current assets	O	38	34
<b>Non-current assets</b>		<b>15,120</b>	<b>14,517</b>
Inventories	O	1,810	1,478
Tax receivables	T	11	17
Operative receivables	O	1,473	1,449
Interest-bearing receivables	I	77	84
Cash and cash equivalents	I	1,917	1,481
<b>Current assets</b>		<b>5,287</b>	<b>4,509</b>
<b>Assets held for sale</b>		<b>514</b>	<b>0</b>
<b>Total assets</b>		<b>20,922</b>	<b>19,026</b>
<b>Equity and liabilities</b>			
Owners of the Parent		12,532	10,683
Non-controlling Interests		-30	-16
<b>Total equity</b>		<b>12,502</b>	<b>10,666</b>
Post-employment benefit obligations	O	159	347
Provisions	O	81	91
Deferred tax liabilities	T	1,443	1,430
Non-current interest-bearing liabilities	I	2,792	3,313
Non-current operative liabilities	O	11	13
<b>Non-current liabilities</b>		<b>4,486</b>	<b>5,195</b>
Current portion of non-current debt	I	667	180
Interest-bearing liabilities	I	513	444
Bank overdrafts	I	0	1
Provisions	O	43	139
Operative liabilities	O	2,410	2,339
Tax liabilities	T	64	61
<b>Current liabilities</b>		<b>3,697</b>	<b>3,165</b>
<b>Liabilities related to assets held for sale</b>		<b>237</b>	<b>0</b>
<b>Total liabilities</b>		<b>8,419</b>	<b>8,360</b>
<b>Total equity and liabilities</b>		<b>20,922</b>	<b>19,026</b>

Items designated with "O" comprise Operating Capital

Items designated with "I" comprise Net Interest-bearing Liabilities

Items designated with "T" comprise Net Tax Liabilities

## Condensed consolidated statement of cash flows

EUR million	2022	2021
<b>Cash flow from operating activities</b>		
Operating profit	2,009	1,568
Adjustments for non-cash items	325	209
Change in net working capital	-461	-25
<b>Cash flow from operations</b>	<b>1,873</b>	<b>1,752</b>
Net financial items paid	-114	-140
Income taxes paid, net	-178	-136
<b>Net cash provided by operating activities</b>	<b>1,582</b>	<b>1,476</b>
<b>Cash flow from investing activities</b>		
Acquisitions of equity accounted investments	-7	-6
Acquisitions of unlisted securities	-11	-1
Cash flow on disposal of subsidiary shares and business operations, net of disposed cash	-77	55
Cash flow on disposal of shares in equity accounted investments	10	47
Cash flow on disposal of forest and intangible assets and property, plant and equipment	17	105
Capital expenditure	-705	-645
Proceeds from/payment of non-current receivables, net	31	-4
<b>Net cash used in investing activities</b>	<b>-742</b>	<b>-449</b>
<b>Cash flow from financing activities</b>		
Proceeds from issue of new long-term debt	366	19
Repayment of long-term debt and lease liabilities	-390	-940
Change in short-term interest-bearing liabilities	9	-59
Dividends paid	-434	-237
Purchase of own shares <sup>1</sup>	-1	-3
<b>Net cash provided by financing activities</b>	<b>-450</b>	<b>-1,220</b>
<b>Net change in cash and cash equivalents</b>	<b>389</b>	<b>-193</b>
Translation adjustment	48	18
Net cash and cash equivalents at the beginning of period	1,480	1,655
<b>Net cash and cash equivalents at period end</b>	<b>1,917</b>	<b>1,480</b>
<b>Cash and cash equivalents at period end</b>	<b>1,917</b>	<b>1,481</b>
<b>Bank overdrafts at period end</b>	<b>0</b>	<b>-1</b>
<b>Net cash and cash equivalents at period end</b>	<b>1,917</b>	<b>1,480</b>

<sup>1</sup> Own shares purchased for the Group's share award programme. The Group did not hold any of its own shares on 31 December 2022.

## Statement of changes in equity

## Fair value reserve

EUR million	Fair value reserve												Total
	Share capital	Share premium and reserve fund	Invested non-restricted equity fund	Treasury shares	Equity instruments through OCI	Cash flow hedges	Revaluation reserve	OCI of Equity Accounted Investments	CTA and net investment hedges and loans	Retained earnings	Attributable to owners of the parent	Non-controlling interests	
<b>Balance at 1 January 2021</b>	<b>1,342</b>	<b>77</b>	<b>633</b>	—	<b>277</b>	<b>23</b>	<b>1,195</b>	<b>12</b>	<b>-267</b>	<b>5,518</b>	<b>8,809</b>	<b>-16</b>	<b>8,793</b>
Net profit for the period	—	—	—	—	—	—	—	—	—	1,266	1,266	3	1,268
OCI before tax	—	—	—	—	501	-35	225	16	70	126	903	-3	900
Income tax relating to OCI	—	—	—	—	1	8	-46	—	2	-22	-59	—	-59
<b>Total comprehensive income</b>	—	—	—	—	<b>501</b>	<b>-27</b>	<b>179</b>	<b>16</b>	<b>72</b>	<b>1,369</b>	<b>2,110</b>	—	<b>2,110</b>
Dividend	—	—	—	—	—	—	—	—	—	-237	-237	—	-237
Acquisitions and disposals	—	—	—	—	—	—	—	—	—	—	—	—	—
Purchase of treasury shares	—	—	—	-3	—	—	—	—	—	—	-3	—	-3
Share-based payments	—	—	—	3	—	—	—	—	—	—	3	—	3
<b>Balance at 31 December 2021</b>	<b>1,342</b>	<b>77</b>	<b>633</b>	—	<b>778</b>	<b>-4</b>	<b>1,373</b>	<b>29</b>	<b>-195</b>	<b>6,650</b>	<b>10,683</b>	<b>-16</b>	<b>10,666</b>
Net profit for the period	—	—	—	—	—	—	—	—	—	1,550	1,550	-13	1,536
OCI before tax	—	—	—	—	519	52	259	58	-224	147	812	—	812
Income tax relating to OCI	—	—	—	—	1	-9	-53	—	3	-25	-83	—	-83
<b>Total comprehensive income</b>	—	—	—	—	<b>520</b>	<b>43</b>	<b>206</b>	<b>58</b>	<b>-220</b>	<b>1,672</b>	<b>2,278</b>	<b>-13</b>	<b>2,265</b>
Dividend	—	—	—	—	—	—	—	—	—	-434	-434	—	-434
Acquisitions and disposals	—	—	—	—	—	—	—	—	—	—	—	—	—
Purchase of treasury shares	—	—	—	-1	—	—	—	—	—	—	-1	—	-1
Share-based payments	—	—	—	1	—	—	—	—	—	5	6	—	6
<b>Balance at 31 December 2022</b>	<b>1,342</b>	<b>77</b>	<b>633</b>	—	<b>1,298</b>	<b>39</b>	<b>1,579</b>	<b>87</b>	<b>-415</b>	<b>7,893</b>	<b>12,532</b>	<b>-30</b>	<b>12,502</b>

CTA = Cumulative Translation Adjustment    OCI = Other Comprehensive Income    NCI = Non-controlling Interests

**Goodwill, other intangible assets, property, plant and equipment, right-of-use assets and forest assets**

EUR million	2022	2021
<b>Carrying value at 1 January</b>	<b>12,654</b>	<b>12,130</b>
Additions in tangible and intangible assets	656	576
Additions in right-of-use assets	45	33
Additions in biological assets	77	58
Depletion of capitalised silviculture costs	-75	-68
Disposals and classification as held for sale <sup>1</sup>	-312	-106
Depreciation and impairment	-640	-697
Fair valuation of forest assets	529	621
Translation difference and other	-445	108
<b>Statement of Financial Position Total</b>	<b>12,489</b>	<b>12,654</b>

<sup>1</sup> Including company disposals

**Borrowings**

EUR million	31 Dec 2022	31 Dec 2021
Bond loans	2,460	2,497
Loans from credit institutions	623	577
Lease liabilities	375	387
Long-term derivative financial liabilities	0	30
Other non-current liabilities	2	4
<b>Non-current interest bearing liabilities including current portion</b>	<b>3,459</b>	<b>3,493</b>
Short-term borrowings	429	372
Interest payable	35	34
Short-term derivative financial liabilities	49	38
Bank overdrafts	0	1
<b>Total Interest-bearing Liabilities</b>	<b>3,972</b>	<b>3,938</b>

EUR million	2022	2021
<b>Carrying value at 1 January <sup>1</sup></b>	<b>3,938</b>	<b>4,756</b>
Translation differences on opening balance	-4	120
Proceeds of new long-term debt	366	19
Repayment of long-term debt	-351	-862
Additions in lease liabilities	45	33
Repayment of lease liabilities and interest	-73	-88
Proceeds/repayments of short-term borrowings	75	-73
Change in interest payable	19	16
Change in derivative financial liabilities	-19	38
Disposals and classification as held for sale	-5	-1
Other	8	2
Translation differences during the year	-28	-22
<b>Total Interest-bearing Liabilities</b>	<b>3,972</b>	<b>3,938</b>

<sup>1</sup> The table format has been updated to better present changes in liabilities arising from cash flow activities and non-cash activities. The comparison figures have been restated accordingly.

## Commitments and contingencies

EUR million	31 Dec 2022	31 Dec 2021
<b>On Own Behalf</b>		
Guarantees	14	15
<b>On Behalf of Equity Accounted Investments</b>		
Guarantees	5	0
<b>On Behalf of Others</b>		
Guarantees	5	6
Other commitments	36	36
<b>Total</b>	<b>60</b>	<b>57</b>
Guarantees <sup>1</sup>	24	21
Other commitments <sup>1</sup>	36	36
<b>Total</b>	<b>60</b>	<b>57</b>

<sup>1</sup> The comparative figures have been restated.

The Group announced its intention in December 2022 to divest its consumer board production and forest operations sites in Beihai, China. As previously disclosed, Stora Enso has been granted investment subsidies and has given certain investment commitments in China. There is a risk that the majority owned local Chinese company may be subject to a claim based on alleged costs resulting from certain uncompleted investment commitments. Given the specific mitigating circumstances surrounding the investment case as a whole, Stora Enso does not consider it to be probable that this situation would result in an outflow of economic benefits that would be material to the Group. The Company continues to monitor the situation as the divestment process proceeds.

## Capital commitments

EUR million	31 Dec 2022	31 Dec 2021
<b>Total</b>	<b>593</b>	<b>220</b>

The Group's direct capital expenditure contracts include the Group's share of direct capital expenditure contracts in joint operations.

## Reconciliation of operational profitability

EUR million	Q4/22	Q4/21	Change % Q4/22– Q4/21	Q3/22	Change % Q4/22– Q3/22	2022	2021	Change % 2022–2021
<b>Operational EBITDA</b>	<b>515</b>	<b>602</b>	<b>-14.4%</b>	<b>689</b>	<b>-25.2%</b>	<b>2,529</b>	<b>2,184</b>	<b>15.8%</b>
Depreciation and silviculture costs of EAI	-3	-3	2.3%	-4	35.8%	-11	-11	-3.0%
Silviculture costs <sup>1</sup>	-27	-27	1.0%	-26	-2.9%	-100	-89	-11.7%
Depreciation and impairment excl. IAC	-130	-145	10.5%	-131	0.7%	-527	-555	5.0%
<b>Operational EBIT</b>	<b>355</b>	<b>426</b>	<b>-16.7%</b>	<b>527</b>	<b>-32.6%</b>	<b>1,891</b>	<b>1,528</b>	<b>23.7%</b>
Fair valuations and non-operational items <sup>2</sup>	381	437	-12.8%	6	n/m	363	394	-7.9%
Items affecting comparability (IAC) <sup>2</sup>	-31	-25	-27.2%	-22	-39.8%	-245	-354	30.8%
<b>Operating profit (IFRS)</b>	<b>705</b>	<b>839</b>	<b>-16.0%</b>	<b>511</b>	<b>38.1%</b>	<b>2,009</b>	<b>1,568</b>	<b>28.1%</b>

<sup>1</sup> Including damages to forests

<sup>2</sup> See section [Non-IFRS measures](#) for IAC and fair valuations and non-operational items definitions.

## Sales by segment – total

EUR million	2022	Q4/22	Q3/22	Q2/22	Q1/22	2021	Q4/21	Q3/21	Q2/21	Q1/21
Packaging Materials	4,690	1,127	1,210	1,222	1,132	3,898	1,062	988	987	862
Packaging Solutions	737	179	179	189	191	723	214	180	170	159
Biomaterials	2,180	649	567	522	442	1,728	494	427	453	355
Wood Products	2,195	471	520	631	573	1,872	510	503	477	382
Forest	2,519	664	581	649	626	2,311	597	546	586	582
Paper	1,772	424	471	462	416	1,703	389	441	446	428
Other	1,097	289	282	290	236	1,092	285	302	265	240
Inter-segment sales	-3,512	-939	-846	-910	-817	-3,163	-831	-809	-792	-732
<b>Total</b>	<b>11,680</b>	<b>2,864</b>	<b>2,963</b>	<b>3,054</b>	<b>2,798</b>	<b>10,164</b>	<b>2,719</b>	<b>2,577</b>	<b>2,592</b>	<b>2,276</b>

## Sales by segment – external

EUR million	2022	Q4/22	Q3/22	Q2/22	Q1/22	2021	Q4/21	Q3/21	Q2/21	Q1/21
Packaging Materials	4,473	1,074	1,158	1,163	1,078	3,715	1,006	937	945	827
Packaging Solutions	714	173	173	182	186	704	209	175	166	155
Biomaterials	1,798	522	471	435	370	1,499	424	364	393	318
Wood Products	2,058	436	487	595	540	1,766	479	481	450	355
Forest	848	223	195	219	211	781	208	180	197	196
Paper	1,691	402	448	443	399	1,644	373	425	431	413
Other	97	33	32	17	14	55	20	14	10	12
<b>Total</b>	<b>11,680</b>	<b>2,864</b>	<b>2,963</b>	<b>3,054</b>	<b>2,798</b>	<b>10,164</b>	<b>2,719</b>	<b>2,577</b>	<b>2,592</b>	<b>2,276</b>

## Disaggregation of revenue

EUR million	2022	Q4/22	Q3/22	Q2/22	Q1/22	2021	Q4/21	Q3/21	Q2/21	Q1/21
Product sales	11,521	2,841	2,927	3,000	2,753	10,047	2,670	2,539	2,581	2,257
Service sales	159	23	37	54	45	117	49	38	11	18
<b>Total</b>	<b>11,680</b>	<b>2,864</b>	<b>2,963</b>	<b>3,054</b>	<b>2,798</b>	<b>10,164</b>	<b>2,719</b>	<b>2,577</b>	<b>2,592</b>	<b>2,276</b>

## Operational EBIT by segment

EUR million	2022	Q4/22	Q3/22	Q2/22	Q1/22	2021	Q4/21	Q3/21	Q2/21	Q1/21
Packaging Materials	596	31	181	188	196	556	133	153	144	127
Packaging Solutions	-2	-1	1	-3	1	26	12	8	2	4
Biomaterials	687	249	197	123	117	495	167	118	145	65
Wood Products	309	-14	70	134	118	364	89	123	100	52
Forest	204	62	47	47	49	267	48	49	46	123
Paper	185	49	49	51	36	-124	-10	-31	-49	-34
Other	-47	-1	-12	-19	-14	-48	-17	-3	-16	-11
Inter-segment eliminations	-41	-20	-6	-15	0	-8	5	-7	-8	1
<b>Operational EBIT</b>	<b>1,891</b>	<b>355</b>	<b>527</b>	<b>505</b>	<b>503</b>	<b>1,528</b>	<b>426</b>	<b>410</b>	<b>364</b>	<b>328</b>
Fair valuations and non-operational items <sup>1</sup>	363	381	6	-45	21	394	437	8	-11	-40
Items affecting comparability <sup>1</sup>	-245	-31	-22	-61	-130	-354	-25	-32	-171	-126
<b>Operating Profit (IFRS)</b>	<b>2,009</b>	<b>705</b>	<b>511</b>	<b>399</b>	<b>394</b>	<b>1,568</b>	<b>839</b>	<b>386</b>	<b>182</b>	<b>161</b>
Net financial items	-151	-39	-63	-29	-19	-149	-46	-37	-30	-36
<b>Profit before Tax</b>	<b>1,858</b>	<b>666</b>	<b>448</b>	<b>370</b>	<b>374</b>	<b>1,419</b>	<b>793</b>	<b>349</b>	<b>152</b>	<b>125</b>
Income tax expense	-322	-82	-81	-71	-88	-151	-177	-50	56	20
<b>Net Profit</b>	<b>1,536</b>	<b>584</b>	<b>367</b>	<b>299</b>	<b>287</b>	<b>1,268</b>	<b>616</b>	<b>299</b>	<b>207</b>	<b>145</b>

<sup>1</sup> See section [Non-IFRS measures](#) for IAC and fair valuations and non-operational items definitions.

## Items affecting comparability (IAC), fair valuations and non-operational items

EUR million	2022	Q4/22	Q3/22	Q2/22	Q1/22	2021	Q4/21	Q3/21	Q2/21	Q1/21
Impairments and impairment reversals	-124	-9	-2	-2	-111	-141	-12	0	-20	-110
Restructuring costs excluding impairments	-3	11	-5	-3	-6	-227	-31	-30	-145	-21
Acquisitions and disposals	-104	-31	-17	-56	0	11	16	-5	0	0
Other	-15	-3	1	0	-13	4	2	3	-6	5
<b>Total IAC on Operating Profit</b>	<b>-245</b>	<b>-31</b>	<b>-22</b>	<b>-61</b>	<b>-130</b>	<b>-354</b>	<b>-25</b>	<b>-32</b>	<b>-171</b>	<b>-126</b>
Fair valuations and non-operational items	363	381	6	-45	21	394	437	8	-11	-40
<b>Total</b>	<b>118</b>	<b>350</b>	<b>-17</b>	<b>-106</b>	<b>-109</b>	<b>40</b>	<b>413</b>	<b>-24</b>	<b>-182</b>	<b>-167</b>

Items affecting comparability had a negative impact on the operating profit of EUR -22 (-32) million. The IACs relate mainly to the disposals and restructurings of Paper units. Fair valuation and non-operational items had a positive impact on the operating profit of EUR 381 (437) million. The impact came mainly from non-operational fair valuation changes of biological assets.

## Items affecting comparability (IAC) by segment

EUR million	2022	Q4/22	Q3/22	Q2/22	Q1/22	2021	Q4/21	Q3/21	Q2/21	Q1/21
Packaging Materials	-8	-1	-3	1	-5	-12	-11	2	-3	0
Packaging Solutions	-100	-2	-5	-57	-36	-4	-2	-1	0	0
Biomaterials	-2	0	0	0	-2	-5	0	1	-1	-5
Wood Products	-56	-6	-21	-2	-27	-1	-1	0	0	0
Forest	-48	1	-6	0	-43	17	17	0	0	0
Paper	-26	-31	10	-1	-4	-304	-11	-31	-136	-126
Other	-6	8	1	-2	-14	-46	-16	-4	-31	5
<b>IAC on Operating Profit</b>	<b>-245</b>	<b>-31</b>	<b>-22</b>	<b>-61</b>	<b>-130</b>	<b>-354</b>	<b>-25</b>	<b>-32</b>	<b>-171</b>	<b>-126</b>
IAC on tax	9	3	1	1	4	58	2	0	31	26
<b>IAC on Net Profit</b>	<b>-236</b>	<b>-29</b>	<b>-21</b>	<b>-60</b>	<b>-126</b>	<b>-296</b>	<b>-23</b>	<b>-33</b>	<b>-139</b>	<b>-101</b>

## Fair valuations and non-operational items by segment

EUR million	2022	Q4/22	Q3/22	Q2/22	Q1/22	2021	Q4/21	Q3/21	Q2/21	Q1/21
Packaging Materials	7	17	1	2	-12	8	7	0	0	0
Packaging Solutions	0	0	0	0	0	0	0	0	0	0
Biomaterials	-17	-9	0	-6	-2	16	16	0	0	0
Wood Products	0	0	0	0	0	0	0	0	0	0
Forest	367	401	2	-47	10	338	412	-5	-21	-48
Paper	12	7	-6	0	11	6	-3	7	1	1
Other	-6	-35	8	6	14	27	6	6	9	6
<b>FV on Operating Profit</b>	<b>363</b>	<b>381</b>	<b>6</b>	<b>-45</b>	<b>21</b>	<b>394</b>	<b>437</b>	<b>8</b>	<b>-11</b>	<b>-40</b>
FV on tax	-38	-46	-1	13	-4	-64	-72	-2	2	8
<b>FV on Net Profit</b>	<b>324</b>	<b>335</b>	<b>5</b>	<b>-32</b>	<b>17</b>	<b>330</b>	<b>366</b>	<b>6</b>	<b>-10</b>	<b>-32</b>

## Operating profit/loss by segment

EUR million	2022	Q4/22	Q3/22	Q2/22	Q1/22	2021	Q4/21	Q3/21	Q2/21	Q1/21
Packaging Materials	595	46	179	191	179	552	129	155	141	127
Packaging Solutions	-101	-3	-4	-59	-35	23	10	7	2	4
Biomaterials	668	240	198	117	113	506	182	119	144	60
Wood Products	253	-20	49	133	91	363	88	123	100	52
Forest	523	463	43	0	16	622	477	44	25	75
Paper	172	26	54	49	43	-423	-24	-55	-185	-159
Other	-59	-27	-3	-15	-13	-67	-28	-1	-38	0
Inter-segment eliminations	-41	-20	-6	-15	0	-8	5	-7	-8	1
<b>Operating Profit (IFRS)</b>	<b>2,009</b>	<b>705</b>	<b>511</b>	<b>399</b>	<b>394</b>	<b>1,568</b>	<b>839</b>	<b>386</b>	<b>182</b>	<b>161</b>
Net financial items	-151	-39	-63	-29	-19	-149	-46	-37	-30	-36
<b>Profit before Tax</b>	<b>1,858</b>	<b>666</b>	<b>448</b>	<b>370</b>	<b>374</b>	<b>1,419</b>	<b>793</b>	<b>349</b>	<b>152</b>	<b>125</b>
Income tax expense	-322	-82	-81	-71	-88	-151	-177	-50	56	20
<b>Net Profit</b>	<b>1,536</b>	<b>584</b>	<b>367</b>	<b>299</b>	<b>287</b>	<b>1,268</b>	<b>616</b>	<b>299</b>	<b>207</b>	<b>145</b>

## Key exchange rates for the euro

One Euro is	Closing Rate		Average Rate (Year-to-date)	
	31 Dec 2022	31 Dec 2021	31 Dec 2022	31 Dec 2021
SEK	11.1218	10.2503	10.6274	10.1448
USD	1.0666	1.1326	1.0539	1.1835
GBP	0.8869	0.8403	0.8526	0.8600

## Fair Values of Financial Instruments

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities;
- Level 2: other techniques, for which all inputs that have a significant effect on the recorded fair value are observable, either directly or indirectly;
- Level 3: techniques which use inputs that have a significant effect on the recorded fair values that are not based on observable market data.

The valuation techniques are described in more detail in the Group's Financial Report. The instruments carried at fair value in the following tables are measured at fair value on a recurring basis.

### Carrying amounts of financial assets and liabilities by measurement and fair value categories: 31 December 2022

EUR million	Amortised cost	Fair value through OCI	Fair value through income statement	Total carrying amount	Fair value	Fair value hierarchy		
						Level 1	Level 2	Level 3
<b>Financial assets</b>								
Listed securities	—	8	—	8	8	8	—	—
Unlisted securities	—	1,423	14	1,437	1,437	—	—	1,437
Non-current interest-bearing receivables	92	28	—	120	120	—	28	—
Derivative assets	—	28	—	28	28	—	28	—
Loan receivables	92	—	—	92	92	—	—	—
Trade and other operative receivables	1,138	66	—	1,204	1,204	—	66	—
Current interest-bearing receivables	10	50	16	77	77	—	67	—
Derivative assets	—	50	16	67	67	—	67	—
Other short-term receivables	10	—	—	10	10	—	—	—
Cash and cash equivalents	1,917	—	—	1,917	1,917	—	—	—
<b>Total</b>	<b>3,157</b>	<b>1,576</b>	<b>30</b>	<b>4,763</b>	<b>4,763</b>	<b>8</b>	<b>161</b>	<b>1,437</b>

EUR million	Amortised cost	Fair value through OCI	Fair value through income statement	Total carrying amount	Fair value	Fair value hierarchy		
						Level 1	Level 2	Level 3
<b>Financial liabilities</b>								
Non-current interest-bearing liabilities	2,792	—	—	2,792	2,749	—	—	—
Derivative liabilities	—	—	—	—	—	—	—	—
Non-current debt	2,792	—	—	2,792	2,748	—	—	—
Current portion of non-current debt	667	—	—	667	667	—	—	—
Current interest-bearing liabilities	462	30	20	513	513	—	50	—
Derivative liabilities	—	30	20	50	50	—	50	—
Current debt	462	—	—	462	462	—	—	—
Trade and other operative payables	2,076	—	—	2,076	2,076	—	—	—
Bank overdrafts	—	—	—	—	—	—	—	—
<b>Total</b>	<b>5,998</b>	<b>30</b>	<b>20</b>	<b>6,048</b>	<b>6,005</b>	<b>—</b>	<b>51</b>	<b>—</b>

In accordance with IFRS, derivatives are classified as fair value through income statement. In the above tables for financial assets and liabilities the cash flow hedge accounted derivatives are however presented as fair value through OCI, in line with how they are booked for the effective portion.

## Carrying amounts of financial assets and liabilities by measurement and fair value categories: 31 December 2021

EUR million	Amortised cost	Fair value through OCI	Fair value through income statement	Total carrying amount	Fair value	Fair value hierarchy		
						Level 1	Level 2	Level 3
<b>Financial assets</b>								
Listed securities	—	13	—	13	13	13	—	—
Unlisted securities	—	900	5	905	905	—	—	905
Non-current interest-bearing receivables	45	6	—	51	51	—	6	—
Derivative assets	—	6	—	6	6	—	6	—
Loan receivables	45	—	—	45	45	—	—	—
Trade and other operative receivables	1,110	39	—	1,149	1,149	—	39	—
Current interest-bearing receivables	52	31	1	84	84	—	32	—
Derivative assets	—	31	1	32	32	—	32	—
Other short-term receivables	52	—	—	52	52	—	—	—
Cash and cash equivalents	1,481	—	—	1,481	1,481	—	—	—
<b>Total</b>	<b>2,687</b>	<b>990</b>	<b>6</b>	<b>3,683</b>	<b>3,683</b>	<b>13</b>	<b>77</b>	<b>905</b>

EUR million	Amortised cost	Fair value through OCI	Fair value through income statement	Total carrying amount	Fair value	Fair value hierarchy		
						Level 1	Level 2	Level 3
<b>Financial liabilities</b>								
Non-current interest-bearing liabilities	3,284	7	23	3,313	3,618	—	30	—
Derivative liabilities	—	7	23	30	30	—	30	—
Non-current debt	3,284	—	—	3,284	3,589	—	—	—
Current portion of non-current debt	180	—	—	180	180	—	—	—
Current interest-bearing liabilities	403	35	7	444	444	—	42	—
Derivative liabilities	—	35	7	42	42	—	42	—
Current debt	403	—	—	403	403	—	—	—
Trade and other operative payables	1,960	—	—	1,960	1,960	—	—	—
Bank overdrafts	1	—	—	1	1	—	—	—
<b>Total</b>	<b>5,827</b>	<b>42</b>	<b>29</b>	<b>5,899</b>	<b>6,204</b>	<b>—</b>	<b>71</b>	<b>—</b>

In accordance with IFRS, derivatives are classified as fair value through income statement. In the above tables for financial assets and liabilities the cash flow hedge accounted derivatives are however presented as fair value through OCI, in line with how they are booked for the effective portion.

## Reconciliation of level 3 fair value measurement of financial assets and liabilities: 31 December 2022

EUR million	2022	2021
<b>Financial assets</b>		
Opening balance at 1 January	905	401
Reclassifications	-1	0
Gains/losses recognised in other comprehensive income	523	504
Additions	10	1
<b>Closing balance</b>	<b>1,437</b>	<b>905</b>

The Group did not have level 3 financial liabilities as at 31 December 2022.

## Level 3 Financial Assets

At period end, Level 3 financial assets included EUR 1,423 million of Pohjolan Voima Oy (PVO) shares for which the valuation method is described in more detail in the Annual Report. The valuation is most sensitive to changes in electricity prices and discount rates. The discount rate of 7.99% used in the valuation model is determined using the weighted average cost of capital method. A +/- 5% change in the electricity price used in the DCF would change the valuation by EUR +127 million and -127 million, respectively. A +/- percentage point change in the discount rate would change the valuation by EUR -158 million and +200 million, respectively.

## Stora Enso shares

During the fourth quarter of 2022, the conversions of 1,401 A shares into R shares were recorded in the Finnish trade register.

During 2022, a total of 5,769 A shares converted into R shares were recorded in the Finnish trade register.

On 31 December 2022, Stora Enso had 176,238,697 A shares and 612,381,290 R shares in issue. The company did not hold its own shares. The total number of Stora Enso shares in issue was 788,619,987 and the total number votes at least 237,476,826.

On 16 January 2023, the conversion of 4 A shares into R shares was recorded in the Finnish trade register.

### Trading volume

	Helsinki		Stockholm	
	A share	R share	A share	R share
October	85,853	30,245,813	129,396	4,244,320
November	78,708	29,219,992	110,104	4,469,947
December	98,431	35,318,809	143,419	5,855,542
<b>Total</b>	<b>262,992</b>	<b>94,784,614</b>	<b>382,919</b>	<b>14,569,809</b>

### Closing price

	Helsinki, EUR		Stockholm, SEK	
	A share	R share	A share	R share
October	14.75	13.19	160.00	143.80
November	14.95	13.98	165.00	152.70
December	13.90	13.15	154.60	146.50

### Number of shares

Million	Q4/22	Q4/21	Q3/22	2022	2021
At period end	788.6	788.6	788.6	788.6	788.6
Average	788.6	788.6	788.6	788.6	788.6
Average, diluted	789.5	789.3	789.5	789.4	789.1

## Calculation of key figures

<b>Operational return on capital employed, operational ROCE (%)</b>	100 x	$\frac{\text{Annualised operational EBIT}}{\text{Capital employed}^{1,2}}$
<b>Operational return on operating capital, operational ROOC (%)</b>	100 x	$\frac{\text{Annualised operational EBIT}}{\text{Operating capital}^2}$
<b>Return on equity, ROE (%)</b>	100 x	$\frac{\text{Net profit/loss for the period}}{\text{Total equity}^2}$
<b>Net interest-bearing liabilities</b>		Interest-bearing liabilities – interest-bearing assets
<b>Net debt/equity ratio</b>		$\frac{\text{Net interest-bearing liabilities}}{\text{Equity}^3}$
<b>Earnings per share (EPS)</b>		$\frac{\text{Net profit/loss for the period}^3}{\text{Average number of shares}}$
<b>Operational EBIT</b>		Operating profit/loss excluding items affecting comparability (IAC) and fair valuations of the segments and Stora Enso's share of operating profit/loss excluding IAC and fair valuations of its equity accounted investments (EAI)
<b>Operational EBITDA</b>		Operating profit/loss excluding silviculture costs and damage to forests, fixed asset depreciation and impairment, IACs and fair valuations. The definition includes the respective items of subsidiaries, joint arrangements and equity accounted investments.
<b>Net debt/last 12 months' operational EBITDA ratio</b>		$\frac{\text{Net interest-bearing liabilities}}{\text{LTM operational EBITDA}}$
<b>Fixed costs</b>		Maintenance, personnel and other administration type of costs, excluding IAC and fair valuations.
<b>Last 12 months (LTM)</b>		12 months prior to the end of reporting period

<sup>1</sup> Capital employed = Operating capital – Net tax liabilities

<sup>2</sup> Average for the financial period

<sup>3</sup> Attributable to the owners of the Parent

### List of non-IFRS measures

Operational EBITDA	Depreciation and impairment charges excl. IAC
Operational EBITDA margin	Operational ROCE
Operational EBIT	Earnings per share (EPS), excl. FV
Operational EBIT margin	Net debt/last 12 months' operational EBITDA ratio
Capital expenditure	Operational ROOC
Capital expenditure excl. investments in biological assets	Cash flow after investing activities
Capital employed	

### Definitions and calculation of key sustainability figures

<b>GHG emissions, scope 1 + 2</b>	Direct fossil CO <sub>2</sub> e emissions from production (scope 1) and indirect fossil CO <sub>2</sub> e emissions related to purchased electricity and heat (scope 2). Excluding joint operations. Reported as last four quarters. Calculated in accordance with the Greenhouse Gas Protocol of the World Resource Institute (WRI). Historical figures recalculated due to divestments or additional data after the previous annual report.
<b>GHG emissions, scope 3</b>	Fossil CO <sub>2</sub> e emissions from other sources along the value chain of all production units are estimated based on the most recent methodology. Joint operations included as suppliers. Currently, material emission categories for scope 3 emissions are updated annually. Accounting based on guidelines provided by the Greenhouse Gas Protocol and the World Business Council for Sustainable Development (WBCSD). Historical figures recalculated due to divestments or additional data after the previous annual report.
<b>Forest certification coverage</b>	The proportion of land in wood production and harvesting owned or leased by Stora Enso that is covered by forest certification schemes. Reporting on total land area and its forest certification coverage aligned with financial reporting on forests assets.
<b>Share of technically recyclable products</b>	The proportion of technically recyclable products based on production volumes as tonnes. Technical recyclability is defined by international standards and tests when available and in the absence of these, by Stora Enso's tests that prove recyclability. The reporting scope includes Stora Enso's packaging, pulp, paper and solid wood products as well as biochemical by-products. Historical figures recalculated due to additional data after the previous annual report.
<b>TRI (Total recordable incidents) rate</b>	Number of incidents per one million hours worked. Including joint operations.
<b>Gender balance: % of female managers among all managers</b>	The share of female managers is accounted for as the headcount of all permanent managers with at least one direct report. The manager must be permanent, but the subordinates can be temporary or permanent. Excluding joint operations.
<b>Total water withdrawal and process water discharges per saleable tonne</b>	Last four quarters for board, pulp and paper units. Excluding joint operations. Excluding mechanical wood product units and packaging converting units due to their low impact on the Group's consolidated water use and different metrics for sales production (cubic metre and square metre) compared to board, pulp and paper units (tonnes).
<b>Supplier Code of Conduct (SCoC) coverage</b>	% of supplier spend (last 12 months) covered by the Supplier Code of Conduct (SCoC). Excludes joint operations, intellectual property rights, leasing fees, financial trading, government fees such as customs, and wood purchases from private individual forest owners.

## Divisions in 2022

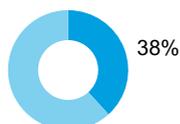
Stora Enso's diversified business portfolio creates resilience to changing market dynamics and fluctuations in demand, while enabling flexibility for evolving transformation.



### Packaging Materials

Leading the development of circular packaging, providing premium packaging materials based on virgin and recycled fiber.

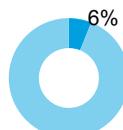
Share of Group external sales



### Packaging Solutions

Developing and selling premium fiber-based packaging products and services.

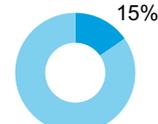
Share of Group external sales



### Biomaterials

Meeting the growing demand for bio-based solutions to replace fossil-based and hazardous materials.

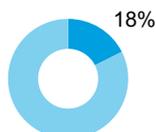
Share of Group external sales



### Wood Products

One of the largest sawn wood producers in Europe and a global leading provider of renewable wood-based solutions.

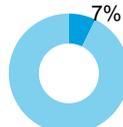
Share of Group external sales



### Forest

Creating value through sustainable forest management, competitive wood supply and innovation.

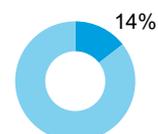
Share of Group external sales



### Paper

A product portfolio for print and office use.

Share of Group external sales



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**Annual General Meeting**  
**16 March 2023**

**January–March 2023 results**  
**25 April 2023**

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Part of the global bioeconomy, Stora Enso is a leading provider of renewable products in packaging, biomaterials, and wooden construction, and one of the largest private forest owners in the world. We believe that everything that is made from fossil-based materials today can be made from a tree tomorrow. Stora Enso has approximately 21,000 employees and Group sales in 2022 of EUR 11.7 billion. Stora Enso shares are listed on Nasdaq Helsinki Oy (STEAV, STERV) and Nasdaq Stockholm AB (STE A, STE R). In addition, the shares are traded in the USA as ADRs (SEOAY). [storaenso.com/investors](https://storaenso.com/investors)

It should be noted that Stora Enso and its business are exposed to various risks and uncertainties and 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. 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. All statements are based on management's best assumptions and beliefs in light of the information currently available to it and Stora Enso assumes no obligation to publicly update or revise any forward-looking statement except to the extent legally required.