Stora Enso
Full year financial results

January–December 2023

Q4

Focus on profit improvement, competitiveness, and cash flow

List of contents

President and CEO Hans Sohlström:

"We have faced unprecedented market conditions and focus our efforts on what we can control to improve our competitiveness and prepare for an uncertain future."

Highlights

Forest valuation

The fair value of Stora Enso's forest assets increased by EUR 393 million to EUR 8.7 billion, due to higher market transaction prices for the Group's own forest assets in Sweden and for Tornator in Finland.

Net-zero target

Stora Enso committed to reaching net-zero CO_2 emissions by 2040 through signing The Climate Pledge.

New profit improvement programme

Stora Enso has initiated a new profit improvement programme targeting annualised EUR 80 million improvement of the operational EBIT.

Focus on profit improvement, competitiveness, and cash flow

Quarterly financial highlights

- Sales decreased by 24% to EUR 2,174 (2,864) million.
- Operational EBIT decreased to EUR 51 (355) million.
- Operational EBIT margin decreased to 2.3% (12.4%).
- Operating result (IFRS) was EUR -326 (705) million.
- Earnings per share (EPS) were EUR -0.36 (0.74) and EPS excl. fair valuations (FV) was EUR -0.64 (0.32).
- The value of the forest assets increased to EUR 8.7 (8.3) billion, equivalent to EUR 11.07 per share.
- Cash flow from operations amounted to EUR 323 (429) million. Cash flow after investing activities was EUR -9 (202) million.

Year 2023 results

- Sales were EUR 9,396 (11,680) million.
- Operational EBIT was EUR 342 (1,891) million.
- Operating result (IFRS) was EUR -322 (2,009) million.
- Earnings per share (EPS) were EUR -0.45 (1.97) and EPS excl. fair valuations (FV) was EUR -0.73 (1.55).
- Cash flow from operations amounted to EUR 954 (1,873) million. Cash flow after investing activities was EUR -40 (1,162) million.
- Net debt increased by EUR 1,314 million to EUR 3,167 (1,853) million, due to the acquisition of De Jong Packaging Group, the board investment at the Oulu site, and dividend payment in 2023.
- The net debt to operational EBITDA (LTM[1]) ratio was 3.2 (0.7). The target to keep the ratio below 2.0 remains.
- Operational ROCE excluding the Forest division (LTM[1]) decreased to 1.0% (20.4%), the target being above 13%.

Key highlights

- Stora Enso finalised the restructuring actions to improve long-term competitiveness and profitability announced in June 2023. The Group closed production units and reduced the number of employees within Group functions. The restructuring actions improve Stora Enso's operational EBIT by approximately EUR 110 million annually. The headcount reduction impact from this restructuring programme was 1,150.
- Stora Enso has initiated a new profit improvement programme targeting annualised EUR 80 million improvement of the operational EBIT. This could lead to a potential reduction of approximately 1,000 employees. No site closures are planned as part of this programme.
- An all-time low level of operating working capital was achieved at year-end, a reduction of EUR 264 million from the end of the third quarter of 2023. This has resulted in a steady net debt level, with a modest increase of EUR 47 million recorded during the fourth quarter of 2023.
- The consumer board investment at the Oulu site in Finland is moving ahead according to schedule. Production is expected to start during 2025.
- The plan to divest the Beihai site in China is proceeding according to plan and the assets have been classified as held-for-sale.
- Stora Enso committed to reaching net-zero carbon emissions by 2040 and became a signatory of The Climate Pledge.

Proposed dividend

The Board of Directors will propose a dividend of EUR 0.10 (EUR 0.60) per share at the Annual General Meeting on 20 March 2024. In addition, the Board of Directors proposes that the AGM would authorise the Board of Directors to decide at its discretion on the payment of an additional dividend up to a maximum of EUR 0.20 per share.

Guidance

Stora Enso's full year 2024 operational EBIT is expected to be higher than for the full year 2023, EUR 342 million.

Sales	Operational EBIT margin	Operational ROCE excl. the Forest division (LTM)
EUR 2,174 million	2.3%	1.0%
(Q4/2022: 2,864)	(Q4/2022: 12.4%)	(Q4/2022: 20.4%)
Net debt to operational EBITDA (LTM)	**EPS (basic)**	**Cash flow from operations**
3.2	EUR -0.36	EUR 323 million
(Q4/2022: 0.7)	(Q4/2022: 0.74)	(Q4/2022: 429)

LTM = Last 12 months

Outlook

Stora Enso expects market conditions to remain uncertain in 2024, with ongoing pressure on demand, prices and margins. However, there are some positive signs such as increasing pulp prices, declining global pulp inventories, less customer destocking, and lower inflation and interest rates.

The first quarter is not expected to show a significant market improvement following a historical low fourth quarter in 2023 and a slow recovery. All variable costs continued to ease in the fourth quarter, except for wood, which are expected to follow similar trends also in the first quarter this year. The potential risk of logistical challenges from the Red Sea area could disrupt the flow of goods and increase costs.

The Packaging Materials and Wood Products divisions continue to suffer from low demand, prices and volume. Although demand for Wood Products remains stable, it is weak due to the ongoing continued slowdown in the construction industry. While there has been a slight improvement in demand for Wood Products from Europe, it is mostly driven by customer inventory build-up. Value chain destocking for Packaging Materials is coming to an end during the first half of 2024, which may support a slight recovery especially in the consumer board segment.

In Biomaterials, the pulp market is showing signs of stabilising and inventory levels are normalising. And while new capacity is ramping up in Latin America, downstream demand remains fragile. There are signs of improvement in Europe, while demand in China has weakened slightly due to oversupply and low season. Packaging grades demand is still struggling, while the tissue sector continues to perform solidly.

Packaging Solutions expects a stronger sequential demand in the first half of the year due to the greenhouse season. However, low demand leads to high price and margin pressure due to containerboard price reductions, inflation-driven fixed costs, and overcapacity. The Forest division expects no major changes in outlook from the previous quarter, with wood demand expected to start rising gradually.

During the second half of 2023, Stora Enso implemented significant restructuring measures to enhance its financial performance going forward. These included the closure of sites and production lines, the sale of assets, the adoption of a more decentralised operating model, and a reduction of employees by approximately 1,150. These actions are expected to improve the Group's cost competitiveness and streamline its organisation, leading to a stronger financial performance in the years to come.

Building on last year's cost-saving initiative, Stora Enso will further pursue profit turnaround and cash flow improvements to reduce costs and improve competitiveness. A new profit improvement programme targeting annualised EUR 80 million improvement of the operational EBIT has been initiated. This could lead to a potential reduction of approximately 1,000 employees.

Market demand development by division quarter-on-quarter, Q4/2023 to Q1/2024

	Q1/2024 market demand outlook quarter-on-quarter
Packaging Materials	Demand for consumer board and containerboard expected to remain stable. Value chain destocking is coming to an end during the first half of 2024.
Packaging Solutions	Demand for corrugated packaging in Europe expected to be stronger mainly due to the seasonally high greenhouse season.
Biomaterials	Demand for pulp expected to be slightly stronger, improving European operating rates. Slightly weaker demand in China due to oversupply and low season.
Wood Products	Demand for sawn wood expected to be stable with some potential improvement due to increasing customer inventories. Weaker demand expected for building solutions.
Forest	Demand for pulpwood expected to be weaker, demand for pulpwood for energy use remains strong. Sawlog demand in Europe expected to be weaker, tight Swedish sawlog market continues.

Key figures

EUR million	Q4/23	Q4/22	Change % Q4/23–Q4/22	Q3/23	Change % Q4/23–Q3/23	2023	2022	Change % 2023–2022
Sales	2,174	2,864	-24.1%	2,127	2.2%	9,396	11,680	-19.6%
Operational EBITDA	212	515	-58.8%	180	17.9%	989	2,529	-60.9%
Operational EBITDA margin	9.8%	18.0%		8.5%		10.5%	21.7%	
Operational EBIT	51	355	-85.8%	21	142.0%	342	1,891	-81.9%
Operational EBIT margin	2.3%	12.4%		1.0%		3.6%	16.2%	
Operating result (IFRS)	-326	705	-146.2%	-1	n/m	-322	2,009	-116.0%
Result before tax (IFRS)	-378	666	-156.8%	-41	n/m	-495	1,858	-126.7%
Net result for the period (IFRS)	-325	584	-155.7%	-34	n/m	-431	1,536	-128.0%
Cash flow from operations	323	429	-24.7%	231	39.8%	954	1,873	-49.1%
Cash flow after investing activities	-9	202	-104.3%	38	-123.0%	-40	1,162	-103.4%
Capital expenditure	422	368	14.6%	242	74.2%	1,125	778	44.6%
Capital expenditure excluding investments in biological assets	401	346	15.9%	227	76.8%	1,054	701	50.3%
Depreciation and impairment charges excl. IAC	133	130	2.4%	130	2.6%	534	527	1.2%
Net debt	3,167	1,853	70.9%	3,120	1.5%	3,167	1,853	70.9%
Forest assets[1]	8,731	8,338	4.7%	8,256	5.8%	8,731	8,338	4.7%
Operational return on capital employed (ROCE), LTM[2]	2.4%	13.7%		4.5%		2.4%	13.7%	
Operational ROCE excl. Forest division, LTM[2]	1.0%	20.4%		4.7%		1.0%	20.4%	
Earnings per share (EPS) excl. FV, EUR	-0.64	0.32	n/m	-0.05	n/m	-0.73	1.55	-147.0%
EPS (basic), EUR	-0.36	0.74	-148.9%	-0.04	n/m	-0.45	1.97	-123.0%
Return on equity (ROE), LTM[2]	-3.8%	13.3%		4.1%		-3.8%	13.3%	
Net debt/equity ratio	0.29	0.15		0.28		0.29	0.15	
Net debt to LTM[2] operational EBITDA ratio	3.2	0.7		2.4		3.2	0.7	
Equity per share, EUR	13.93	15.89	-12.3%	14.03	-0.7%	13.93	15.89	-12.3%
Average number of employees (FTE)	20,047	21,004	-4.6%	21,132	-5.1%	20,822	21,790	-4.4%

Operational key figures, items affecting comparability and other non-IFRS measures: A list of Stora Enso's non-IFRS measures, and the calculation and definitions of the key figures are presented in the section *Alternative performance measures*.

IAC = Items affecting comparability, FV = Fair valuations and non-operational items

[1] Total forest assets value, including leased land, assets held for sale and Stora Enso's share of Tornator.
[2] LTM = Last 12 months – change in the calculation method explained in the section *Alternative performance measures*.

Production and external deliveries

	Q4/23	Q4/22	Change % Q4/23–Q4/22	Q3/23	Change % Q4/23–Q3/23	2023	2022	Change % 2023–2022
Board deliveries[1], 1,000 tonnes	891	1,010	-11.8%	971	-8.3%	3,927	4,294	-8.6%
Board production[1], 1,000 tonnes	954	1,094	-12.8%	1,049	-9.1%	4,185	4,682	-10.6%
Corrugated packaging European deliveries, million m^2	279	166	68.7%	304	-8.0%	1,167	741	57.5%
Corrugated packaging European production, million m^2	258	171	50.6%	273	-5.6%	1,094	771	41.9%
Market pulp deliveries, 1,000 tonnes	550	632	-13.0%	555	-1.0%	2,220	2,374	-6.5%
Wood products deliveries, 1,000 m^3	957	1,043	-8.3%	863	10.8%	3,897	4,397	-11.4%
Wood deliveries, 1,000 m^3	3,435	3,335	3.0%	3,003	14.4%	13,667	13,304	2.7%
Paper deliveries, 1,000 tonnes	173	396	-56.3%	173	0.1%	761	1,924	-60.5%
Paper production, 1,000 tonnes	170	407	-58.3%	180	-6.0%	752	1,926	-60.9%

[1] Includes consumer board and containerboard volumes. The comparative figures for corrugated packaging European deliveries Q3/2023 have been adjusted.

Total maintenance impact

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

EUR million	Q1/2024[1]	Q4/2023[2]	Q3/2023	Q2/2023	Q1/2023	Q4/2022
Total maintenance impact	73	123	110	146	119	180

[1] Estimated
[2] The estimate for Q4/2023 was EUR 120 million.

CEO comment

In a world being rapidly reshaped, we must adapt, streamline, and develop our business to meet the evolving needs of our customers. We have faced unprecedented market conditions and focus our efforts on what we can control to improve our competitiveness and prepare for an uncertain future.

Stora Enso’s financial performance in the fourth quarter of last year was affected by continued market headwinds. This especially impacted our Packaging and Wood Products businesses. Group sales decreased year-on-year by 24% to 2.2 billion euro, with low demand leading to reduced deliveries and lower sales prices across all divisions, except for the Forest division. This resulted in an operational EBIT of 51 million euro, down from 355 million euro a year ago and with an operational EBIT margin decreasing to 2.3%, down from 12.4%. However, on a sequential basis, the operational EBIT improved with an increase of 30 million euro. The forest valuation increased to 8.7 from 8.3 billion euro which is equivalent to 11 euro per share.

Our Board is proposing a dividend distribution of 0.10 euro per share, to be paid in April. Additionally, it is proposed that the Board is authorised, at its discretion, to decide on a second instalment of up to 0.20 euro per share. The authorisation would be valid until 31 December 2024. This is lower than last year's dividend. We understand the significance of dividends to our shareholders and have worked to find a solution that aligns with the current circumstances.

Despite the challenging markets in 2023, I am proud that our teams have taken significant steps to drive competitiveness and improve our current unsatisfactory profitability. We have successfully completed a series of restructuring actions aimed at strengthening our positions in the market, which is expected to increase our operational EBIT by about 110 million euro annually. While this has been accompanied by a decrease in sales of approximately 250 million euro based on 2023 numbers, we believe that this is a necessary step to ensure long-term profitable growth. To achieve this, we have had to make some difficult decisions. We have reduced our workforce by about 1,150 employees. And after the new year, we have announced a plan to permanently close one of our production sites for corrugated board in Sweden due to weakened demand.

We have focused on the cash flow generation by reducing operating working capital and reviewing our capital expenditure priorities. A significant reduction was achieved towards the end of last year, reducing operating working capital by 650 million euro from the peak in the first quarter in 2023. Our liquidity remains strong at 2.5 billion euro in cash and cash equivalents. Cash flow from operations amounted to 323 million euro in the fourth quarter and 954 million euro for the full-year 2023.

To remain competitive and drive growth, Stora Enso will launch a profit improvement programme targeting an annualised 80 million euro improvement of our operational EBIT. This could lead to a potential reduction of approximately 1,000 employees. The employee reductions, efficiency improvements and synergy opportunities would impact all divisions and Group functions. The majority of these savings would materialise in 2025. This plan does not include new production site closures. While difficult, it is necessary for the Group's long-term success. We remain committed to ensuring Stora Enso remains a leader in our industry through our strategy to improve profitability and cash flow.

The long-term value growth of our forest assets and the potential to further monetise our land by developing renewable energy, underpins our future growth potential. Our recent agreement with OX2 on one joint wind power development project on our forest land in Sweden, is a step towards this. Our recent commitment to becoming net zero carbon positive by 2040 and offering 100% regenerative products and solutions by 2050 reflects our long-term ambition for sustainability.

Despite ongoing market volatility, we see some signs of normalisation and expect a higher operational EBIT in 2024 than in 2023, supported by our cost reduction and growth initiatives.

We continue our determined work to build a stronger, more competitive, better, and more valuable Stora Enso. Thank you for your continued support and collaboration.

Sincerely,

Hans Sohlström
President and CEO

Events and product update

Restructuring actions to improve long-term competitiveness and profitability completed

The restructuring actions announced in June 2023 are completed. The De Hoop containerboard unit in the Netherlands and one paper machine in the Anjalankoski unit in Finland were permanently closed during the quarter.

The restructuring actions will improve Stora Enso's operational EBIT by approximately EUR 110 million annually. Annual sales will decrease by approximately EUR 250 million, based on the 2023 numbers. The number of employees was reduced by approximately 1,150.

Plan to close corrugated board operations in Sweden

Stora Enso plans to permanently close Packaging Solutions' corrugated board operations in Vikingstad at the end of November 2024. The planned closure would affect 56 employees. Demand for corrugated board in Sweden has decreased during the past two years, and Stora Enso believes that overcapacity needs to be reduced to remain competitive.

Biocomposite business divested

Stora Enso finalised the divestment of its biocomposite business to Hylte Paper AB, which also owns the paper production at Hylte. The biocomposite business was part of the segment Other.

More capacity for high-quality, cost-competitive consumer board grades

The expansion of board production capacity, announced in 2021, at the Skoghall site in Sweden is completed. Following the investment, the annual packaging board production was increased by approximately 100,000 tonnes to over 900,000 tonnes. The site started to deliver liquid packaging board (LPB) and coated unbleached kraft (CUK) according to plan during the quarter.

Onshore wind power development

Stora Enso and the Swedish renewable energy solutions company OX2 are jointly developing onshore wind power on Stora Enso's land in Sweden. The cooperation covers a potential of approximately 1,000 MW of onshore wind power, as well as the possibility of developing solar power and energy storage in the form of batteries. This partnership is in an early phase and is part of the ambition to start ramping up to 5–10 TWh of wind power production from 2030.

Events after the quarter

New profit improvement initiative launched

Stora Enso will launch a profit improvement programme targeting annualised EUR 80 million improvement of the operational EBIT. This could lead to a potential reduction of approximately 1,000 employees. The majority of savings would materialise in 2025 without production site closures. The reductions will reflect division sizes and are in response to the ongoing weak and uncertain market environment. The majority of the reductions are expected to occur in H1 2024. The initiative follows last year's restructuring programme, which identified overlaps and inefficiencies reflecting division sizes.

Fourth quarter 2023 results (compared with Q4/2022)

Sales	Operational EBIT margin	Earnings per share
MEUR 2,174	2.3%	EUR -0.36
(Q4/2022: 2,864)	(Q4/2022:12.4%)	(Q4/2022: 0.74)

Group sales decreased by 24%, or EUR 690 million, to EUR 2,174 (2,864) million. Sales prices were lower in all divisions, except Forest, despite the positive impact from active mix management. Lower demand decreased deliveries in all divisions. The sales contribution from the acquired De Jong Packaging Group was more than offset by the negative impact of other structural changes. These related to the paper site divestments at Nymölla and Hylte in Sweden, and Maxau in Germany, and the closures of the De Hoop board unit in the Netherlands, the Sunila pulp production site in Finland and the Näpi sawmill in Estonia.

Group operational EBIT decreased to EUR 51 (355) million, and the operational EBIT margin decreased to 2.3% (12.4%). Lower sales prices in all divisions except for Forest decreased profitability by EUR 287 million. Lower volumes in all divisions reduced operational profitability by EUR 103 million. Apart from wood costs, many variable cost categories started to decline; however, costs still increased by EUR 43 million. Fixed costs decreased by EUR 112 million due to a lower maintenance impact and active cost management. Net foreign exchange rates had a positive EUR 12 million impact on operational EBIT. The impact from the structural changes, depreciations, associated companies and other was a positive EUR 5 million on operational EBIT.

Fair valuations and non-operational items (FV) had a positive net impact on the operating result of EUR 229 (381) million.

Items affecting comparability (IAC) had a negative impact of EUR 605 (31) million on the operating result. The main

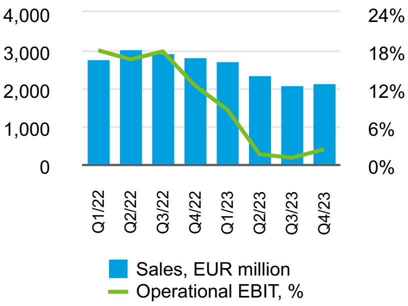
IAC items are related to impairments in Packaging Materials and Biomaterials. More details of the items affecting comparability and fair valuation items are included in the sections for each division and in the section Items affecting comparability (IAC), fair valuations and non-operational items (FV). Operating result (IFRS) was EUR -326 (705) million.

Net financial expenses of EUR 52 million were EUR 13 million higher than a year ago. Net interest expenses of EUR 30 million increased by EUR 9 million. Other net financial expenses increased to EUR 31 (9) million and include a EUR 11 million write-down of receivables related to the disposed Russian entities. The net foreign exchange impact in respect of cash equivalents, interest-bearing assets and liabilities, and related foreign-currency hedges amounted to a gain of EUR 9 (loss of EUR 9) million.

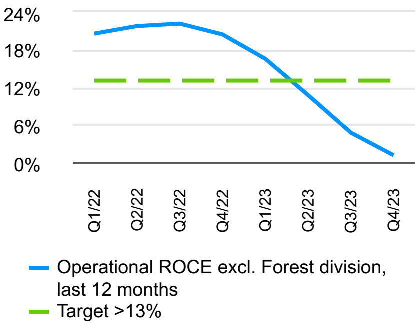
Earnings per share decreased to EUR -0.36 (0.74), and earnings per share excluding fair valuations were EUR -0.64 (0.32).

The operational return on capital employed LTM (ROCE) was 2.4% (13.7%). Operational ROCE excluding the Forest division LTM was 1.0% (20.4%).

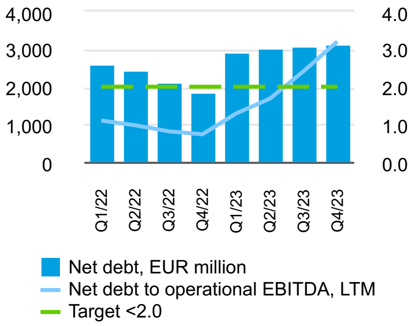
Sales and operational EBIT margin



Operational ROCE excl. Forest (LTM)



Net debt to operational EBITDA (LTM)



LTM = Last 12 months, the calculation method is explained in the section Alternative performance measures.

Breakdown of change in sales

Sales Q4/2022, EUR million	**2,864**
Price and mix	-11%
Currency	-1%
Volume	-4%
Other sales[1]	-1%
Total before structural changes	**-17%**
Structural changes[2]	-7%
Total	**-24%**
Sales Q4/2023, EUR million	**2,174**

[1] Energy, paper for recycling (PfR), by-products etc.
[2] Asset closures, major investments, divestments and acquisitions

Breakdown of change in capital employed

Capital employed 31 December 2022, EUR million	**14,356**
Capital expenditure excl. investments in biological assets less depreciation	521
Investments in biological assets less depletion of capitalised silviculture costs	-5
Impairments and reversal of impairments	-770
Fair valuation of forest assets	241
Unlisted securities (mainly PVO)	-627
Associated companies	94
Net liabilities in defined benefit plans	-31
Operative working capital and other interest-free items, net	-344
Emission rights	-85
Net tax liabilities	170
Acquisition of subsidiaries	818
Disposal of subsidiaries	-227
Translation difference	-60
Other changes	4
Capital employed 31 December 2023	**14,056**

Results full year 2023 (compared with 2022)

Group sales decreased by 20%, or EUR 2,284 million to EUR 9,396 (11,680) million, mainly due to weaker demand and lower deliveries in all divisions. Lower sales prices despite the positive impact from active mix management decreased topline in all other divisions except Forest. The sales contribution from the acquired De Jong Packaging Group was more than offset by the negative impact of other structural changes. These related to the paper site divestments at Nymölla and Hylte in Sweden and Maxau in Germany, and closures of the De Hoop board site in the Netherlands, the Sunila pulp mill in Finland and the Näpi sawmill in Estonia, as well as the exit from Russian operations.

Operational EBIT decreased to EUR 342 (1,891) million and the operational EBIT margin decreased to 3.6% (16.2%). Lower sales prices, in all other divisions except Forest, decreased profitability by EUR 742 million. Lower volumes decreased operational EBIT by EUR 441 million due to weaker market demand. Higher variable costs decreased operational EBIT by EUR 556 million, especially due to increased pulpwood costs.

Fixed costs were EUR 57 million lower, positively impacted by lower maintenance activity. Net foreign exchange rates increased profitability by EUR 119 million. The impact from the structural changes, depreciations, associated companies and other, was positive EUR 14 million on operational EBIT. Operating result (IFRS) was EUR -322 (2,009) million.

Fair valuations and non-operational items (FV) had a positive net impact on the operating result of EUR 231 (363) million. Items affecting comparability (IAC) had a negative impact of EUR 895 (245) million on the operating result. The main IAC and FV items are presented in the section Items affecting comparability (IAC), fair valuations and non-operational items (FV).

Sales

MEUR 9,396

(2022: 11,680)

Operational EBIT margin

3.6%

(2022: 16.2%)

Fourth quarter 2023 results (compared with Q3/2023)

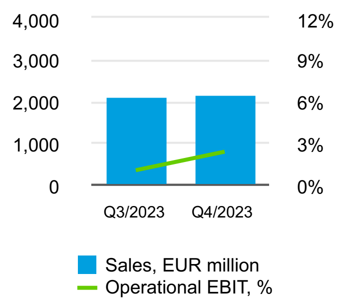
Group sales increased by 2%, or EUR 47 million, to EUR 2,174 (2,127) million. Higher sales prices, especially in Biomaterials and Forest increased the topline. Weaker demand and deliveries, especially in Packaging Materials, was offset by seasonally higher deliveries in Wood Products and Forest.

Operational EBIT increased to EUR 51 (21) million and the margin to 2.3% (1.0%). The sales prices increased operational EBIT by EUR 22 million, especially due to Biomaterials and Forest. Variable costs decreased by EUR 4 million as most input costs, apart from pulpwood, continued to support profitability.

Volumes had a negative EUR 6 million impact, mainly due to Packaging Materials. Net foreign exchange rates had a positive EUR 7 million impact on operational EBIT. Fixed costs were EUR 19 million lower supported by lower maintenance costs. The impact from structural changes, depreciations, associated companies and other was a negative EUR 18 million.

Operating result (IFRS) was EUR -326 (-1) million. More details of the items affecting comparability (IAC) and fair valuations (FV) are included in the sections for each division.

Sales and operational EBIT margin



Packaging Materials

- Consumer board market stabilised at a low level, order inflow improved
- Containerboard and paper markets remained weak
- Weak demand kept pressure on prices in all segments

Operational ROOC (LTM)

-1.6%

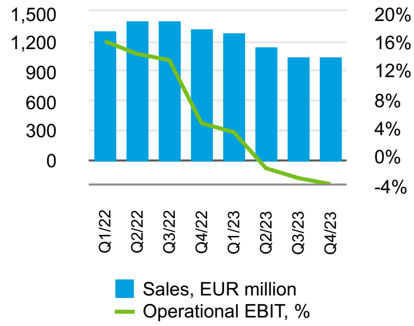
(Target: >20%)

Maintenance shutdowns

	2023	2024
Q1	—	—
Q2	Beihai, Ostrołęka, Langerbrugge	Beihai, Langerbrugge
Q3	Anjalankoski, Heinola, Ostrołęka, Oulu, Varkaus	Ostrołęka, Oulu, Varkaus, Heinola
Q4	Fors, Imatra, Skoghall	Anjalankoski, Fors, Imatra, Skoghall

- Sales decreased by 22%, or EUR 290 million, to EUR 1,045 million, mainly due to lower containerboard and paper prices, and lower volumes for consumer board.
- Operational EBIT decreased to EUR -43 million, driven by lower containerboard and paper prices, and lower consumer board volumes. Variable cost decline, except for wood, continued. The operational EBIT was also affected by planned maintenance stops.
- Operational ROOC (LTM) was -1.6% (18.6%), below the long-term target of >20%.

Sales and operational EBIT margin



EUR million	Q4/23	Q4/22	Change % Q4/23–Q4/22	Q3/23	Change % Q4/23–Q3/23	2023	2022	Change % 2023–2022
Sales	1,045	1,335	-21.7%	1,057	-1.1%	4,557	5,496	-17.1%
Operational EBITDA	35	142	-75.0%	46	-23.4%	267	993	-73.1%
Operational EBITDA margin	3.4%	10.6%		4.4%		5.9%	18.1%	
Operational EBIT	-43	59	-172.4%	-34	-25.0%	-57	655	-108.8%
Operational EBIT margin	-4.1%	4.4%		-3.2%		-1.3%	11.9%	
Fair valuations and non-operational items[1]	12	17	-27.5%	0	n/m	12	7	75.3%
Items affecting comparability (IAC)[1]	-474	-2	n/m	-4	n/m	-597	-9	n/m
Operating result (IFRS)	-504	74	n/m	-38	n/m	-642	653	-198.3%
Operational EBIT, LTM	-57	655	-108.8%	44	-229.3%	-57	655	-108.8%
Operating capital, LTM average	3,580	3,512	1.9%	3,640	-1.7%	3,580	3,512	1.9%
Operational ROOC, LTM	-1.6%	18.6%		1.2%		-1.6%	18.6%	
Cash flow from operations	155	168	-7.7%	140	10.4%	370	823	-55.1%
Cash flow after investing activities	-59	61	-196.9%	20	n/m	-235	488	-148.2%
Board and paper deliveries, 1,000 tonnes	1,176	1,273	-7.6%	1,215	-3.2%	4,963	5,425	-8.5%
Board and paper production, 1,000 tonnes	1,124	1,286	-12.6%	1,230	-8.6%	4,843	5,502	-12.0%

[1] The IAC for Q4/23 included impairments of fixed assets of EUR -228 million for the Oulu containerboard unit, EUR -202 million for China operations, EUR -12 million for the Anjala site's paper assets, EUR -26 million of goodwill impairments related to the Anjala and De Hoop sites and EUR -6 million for other cases. The fair valuations for Q4/23 included non-operational fair valuation changes of biological assets of EUR 12 (17) million.
LTM = Last 12 months Comparative figures have been restated as described in the release from 29 March 2023.

Market development during Q4/2023

Product	Market	Demand Q4/23 compared with Q4/22	Demand Q4/23 compared with Q3/23	Price Q4/23 compared with Q4/22	Price Q4/23 compared with Q3/23
Consumer board	Europe	Significantly weaker	Weaker	Slightly lower	Slightly lower
Kraftliner	Global	Stable	Weaker	Significantly lower	Stable
Testliner	Europe	Stable	Slightly weaker	Significantly lower	Slightly lower
Paper	Europe	Slightly weaker	Stronger	Slightly lower	Slightly lower

Source: Fastmarket RISI, Fastmarket FOEX, CEPI, Numera Analytics, Stora Enso. Consumer board prices include FBB only.

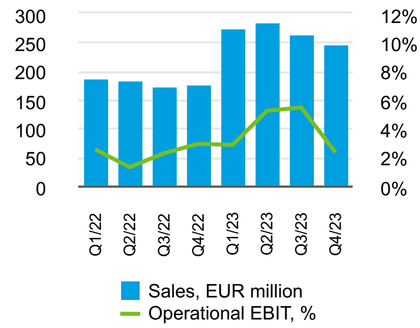
Packaging Solutions

- Weak market conditions and price pressure continued
- Low, but stabilised demand across most markets and segments
- An adverse impact from a low season in fresh-produce, such as fruit, vegetables and flowers, segment, the key segment for the acquired De Jong Packaging Group in Western Europe

Operational ROOC (LTM)	Sales YoY	Operational EBIT margin
4.9%	**+40%**	**2.3%**
(Target: >15%)		(Q4/2022: 2.9%)

- Sales increased by 40% or EUR 70 million to EUR 247 million, driven by the acquisition of De Jong Packaging Group, i.e. Business Unit Western Europe.
- Operational EBIT increased slightly to EUR 6 million. All geographical markets, except the seasonally driven fresh-produce segment in Western Europe, improved. Proactive cost mitigation actions supported the result development.
- Operational ROOC (LTM) was 4.9%, below the long-term target of >15%.

Sales and operational EBIT margin



EUR million	Q4/23	Q4/22	Change % Q4/23–Q4/22	Q3/23	Change % Q4/23–Q3/23	2023	2022	Change % 2023–2022
Sales	247	177	39.8%	266	-7.1%	1,077	727	48.2%
Operational EBITDA	25	11	120.0%	31	-21.0%	111	42	167.3%
Operational EBITDA margin	10.0%	6.3%		11.7%		10.3%	5.7%	
Operational EBIT	6	5	11.3%	14	-60.4%	43	16	164.8%
Operational EBIT margin	2.3%	2.9%		5.4%		4.0%	2.2%	
Items affecting comparability (IAC)[1]	-1	0	-17.8%	0	-7.3%	-26	-98	73.3%
Operating result (IFRS)	5	5	10.7%	14	-62.7%	17	-81	120.9%
Operational EBIT, LTM	43	16	164.8%	42	1.4%	43	16	164.8%
Operating capital, LTM average	874	204	n/m	709	23.3%	874	204	n/m
Operational ROOC, LTM	4.9%	7.9%		6.0%		4.9%	7.9%	
Cash flow from operations	47	17	178.8%	40	17.3%	145	11	n/m
Cash flow after investing activities	26	9	182.7%	21	26.8%	62	-14	n/m
Corrugated packaging European deliveries, million m^2	278	170	63.8%	304	-8.4%	1,178	767	53.7%
Corrugated packaging European production, million m^2	258	171	50.6%	273	-5.6%	1,094	771	41.9%

[1] The IAC for Q4/22 included EUR -2 million of fixed asset write downs and EUR 2 million item related to disposal of Russian operations.
LTM = Last 12 months
Comparative figures have been restated as described in the release from 29 March 2023. The comparative figures for corrugated packaging European deliveries have been adjusted.

Market development during Q4/2023

Product	Market	Demand Q4/23 compared with Q4/22	Demand Q4/23 compared with Q3/23	Price Q4/23 compared with Q4/22	Price Q4/23 compared with Q3/23
Corrugated packaging	Europe	Stable	Slightly stronger	Significantly lower	Slightly lower

Source: Fastmarket RISI

Biomaterials

- Underlying demand continued at a weak level, especially for board and paper segments
- Prices improved sequentially, global pulp inventories fell below the 5-year average

Operational ROOC (LTM)

4.5%

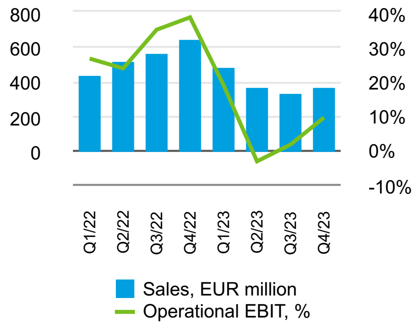
(Target: >15%)

Maintenance shutdowns

	2023	2024
Q1	Veracel	—
Q2	Montes del Plata, Skutskär	Montes del Plata, Skutskär
Q3	—	Enocell, Veracel
Q4	Enocell	—

- Sales decreased from the all-time high quarterly sales in Q4/22 by 42%, or EUR 275 million to EUR 375 million. Sales prices were significantly lower, as were deliveries, due to the closure of the Sunila pulp mill and the annual maintenance shutdown at the Enocell site.
- Operational EBIT decreased from an all-time high level in Q4/22 to EUR 35 million due to lower sales prices and volumes. Variable costs were higher driven by somewhat higher wood costs.
- Operational ROOC (LTM) was 4.5%, below the long-term target of >15%.

Sales and operational EBIT margin



EUR million	Q4/23	Q4/22	Change % Q4/23–Q4/22	Q3/23	Change % Q4/23–Q3/23	2023	2022	Change % 2023–2022
Sales	375	649	-42.3%	345	8.7%	1,587	2,180	-27.2%
Operational EBITDA	70	284	-75.5%	38	81.3%	256	822	-68.9%
Operational EBITDA margin	18.6%	43.8%		11.1%		16.1%	37.7%	
Operational EBIT	35	249	-86.1%	5	n/m	118	687	-82.8%
Operational EBIT margin	9.3%	38.4%		1.4%		7.4%	31.5%	
Fair valuations and non-operational items[1]	24	-9	n/m	-3	n/m	25	-17	248.9%
Items affecting comparability (IAC)[1]	-105	0	-100.0%	-17	n/m	-224	-2	n/m
Operating result (IFRS)	-46	240	-119.3%	-15	-204.6%	-81	668	-112.1%
Operational EBIT, LTM	118	687	-82.8%	333	-64.5%	118	687	-82.8%
Operating capital, LTM average	2,625	2,715	-3.3%	2,716	-3.4%	2,625	2,715	-3.3%
Operational ROOC, LTM	4.5%	25.3%		12.2%		4.5%	25.3%	
Cash flow from operations	71	213	-66.7%	73	-3.0%	431	682	-36.7%
Cash flow after investing activities	26	168	-84.5%	25	1.9%	234	536	-56.4%
Pulp deliveries, 1,000 tonnes	567	693	-18.2%	580	-2.3%	2,277	2,554	-10.8%

[1] The IAC for Q4/23 included impairments of fixed assets of EUR -59 million for the Enocell site, an impairment of goodwill of EUR -44 million for the Nordic Mills, and EUR -2 million for other cases. The fair valuations for Q4/23 included non-operational fair valuation changes of biological assets of EUR 24 (-9) million.
LTM = Last 12 months

Market development during Q4/2023

Product	Market	Demand Q4/23 compared with Q4/22	Demand Q4/23 compared with Q3/23	Price Q4/23 compared with Q4/22	Price Q4/23 compared with Q3/23
Softwood pulp	Europe	Significantly weaker	Stable	Significantly lower	Slightly higher
Hardwood pulp	Europe	Significantly weaker	Stable	Significantly lower	Higher
Hardwood pulp	China	Significantly stronger	Stable	Significantly lower	Significantly higher

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

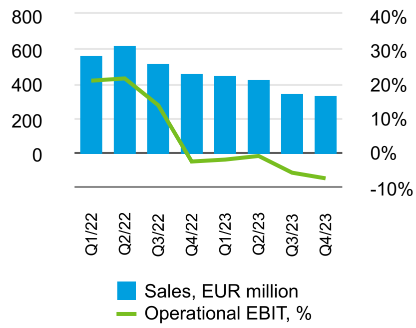
Wood Products

- Continued weak overall demand and low margins
- The result was impacted by lower sawn wood prices and lower volumes
- A substantial decline in building permits and projects reduced the demand for Cross Laminated Timber (CLT) and Laminated Veneer Lumber (LVL)

Operational ROOC (LTM)	Sales YoY	Operational EBIT margin
-9.3%	**-28%**	**-7.8%**
(Target: >20%)		(Q4/2022: -2.9%)

- Sales decreased by 28%, or EUR 131 million, to EUR 341 million, mainly impacted by lower sales prices and volumes, especially for sawn wood.
- Operational EBIT decreased to EUR -27 million, impacted by lower prices and volumes.
- Operational ROOC (LTM) was below the long-term target of >20% at -9.3% (43.2%).
- Cost mitigation actions and production curtailments were taken to adjust to the weaker market.

Sales and operational EBIT margin



EUR million	Q4/23	Q4/22	Change % Q4/23–Q4/22	Q3/23	Change % Q4/23–Q3/23	2023	2022	Change % 2023–2022
Sales	341	471	-27.7%	349	-2.5%	1,580	2,195	-28.0%
Operational EBITDA	-15	-1	n/m	-10	-55.6%	-17	356	-104.6%
Operational EBITDA margin	-4.4%	-0.1%		-2.8%		-1.0%	16.2%	
Operational EBIT	-27	-14	-94.7%	-21	-23.6%	-64	309	-120.8%
Operational EBIT margin	-7.8%	-2.9%		-6.1%		-4.1%	14.1%	
Items affecting comparability (IAC)[1]	-13	-6	-112.6%	-1	n/m	-22	-56	60.5%
Operating result (IFRS)	-40	-20	-100.3%	-22	-79.5%	-86	253	-134.0%
Operational EBIT, LTM	-64	309	-120.8%	-51	-25.2%	-64	309	-120.8%
Operating capital, LTM average	687	714	-3.8%	713	-3.5%	687	714	-3.8%
Operational ROOC, LTM	-9.3%	43.2%		-7.2%		-9.3%	43.2%	
Cash flow from operations	15	54	-71.2%	38	-58.9%	43	346	-87.5%
Cash flow after investing activities	-1	28	-103.7%	31	-103.3%	3	264	-98.9%
Wood products deliveries, 1,000 m^3	915	999	-8.5%	822	11.2%	3,727	4,235	-12.0%

[1] The IAC for Q4/23 included impairments of fixed assets of EUR -7 million for the Veitsiluoto site, EUR -4 million for the Launkalne site, EUR -5 million for the Honkalahti site, a EUR 4 million impact from the disposal of the Näpi site and a EUR -3 million impact from other cases. The IAC for Q4/22 were in total related to the disposal of the Russian operations.

LTM = Last 12 months

Market development during Q4/2023

Product	Market	Demand Q4/23 compared with Q4/22	Demand Q4/23 compared with Q3/23	Price Q4/23 compared with Q4/22	Price Q4/23 compared with Q3/23
Wood products	Europe	Weaker	Stronger	Significantly lower	Lower
Wood products	Overseas	Slightly weaker	Significantly stronger	Significantly lower	Lower

Source: Stora Enso

Forest

- Record high quarterly results driven by strong performance in the Group's forest assets
- Continuous increase in the Group's forest assets fair value to EUR 8.7 billion, driven by market price increases
- Wood prices increased compared to a year ago
- Flexible use of the Group's forests and efficient wood sourcing continued to secure reliable wood availability
- The wood market in the Baltics and Nordics remained tight, especially for pulpwood in Finland and sawlogs in Sweden, due to high industrial and energy wood demand

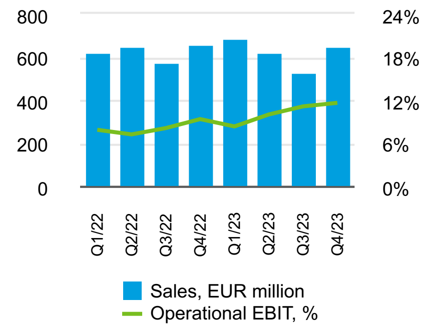
Operational ROCE (LTM)
4.4%
(Target: >3.5%)

Sales YoY
-2%

Total value of forest assets
EUR 8.7 billion
(Q4/2022: EUR 8.3 billion)

- Sales decreased by 2%, or EUR 14 million, to EUR 650 million. The effect of higher wood prices was fully offset by lower volumes.
- Operational EBIT of EUR 75 million reflects resilient and strong operational performance in the Group's forest assets.
- Operational ROCE (LTM), at 4.4% (3.7%), was above the 3.5% long-term target.
- The fair value of Stora Enso's forest assets increased by EUR 393 million year-on-year to EUR 8.7 billion, due to higher market transaction prices for the Group's forest assets in Sweden and for Tornator in Finland.

Sales and operational EBIT margin



EUR million	Q4/23	Q4/22	Change % Q4/23–Q4/22	Q3/23	Change % Q4/23–Q3/23	2023	2022	Change % 2023–2022
Sales[1]	650	664	-2.1%	534	21.8%	2,490	2,519	-1.2%
Operational EBITDA	90	79	13.6%	72	25.7%	305	256	18.8%
Operational EBITDA margin	13.9%	11.9%		13.4%		12.2%	10.2%	
Operational EBIT	75	62	21.7%	59	27.2%	253	204	24.0%
Operational EBIT margin	11.6%	9.3%		11.1%		10.2%	8.1%	
Fair valuations and non-operational items[2]	221	401	-44.9%	-5	n/m	206	367	-43.7%
Items affecting comparability (IAC)[2]	4	1	n/m	3	30.7%	2	-48	103.9%
Operating result (IFRS)	300	463	-35.3%	57	n/m	461	523	-11.7%
Operational EBIT, LTM	253	204	24.0%	240	5.6%	253	204	24.0%
Capital employed, LTM average	5,740	5,518	4.0%	5,620	2.1%	5,740	5,518	4.0%
Operational ROCE, LTM	4.4%	3.7%		4.3%		4.4%	3.7%	
Cash flow from operations	54	20	169.7%	-12	n/m	70	146	-52.0%
Cash flow after investing activities	40	-3	n/m	-24	263.2%	19	91	-78.6%
Wood deliveries, 1,000 m^3	7,848	9,136	-14.1%	7,069	11.0%	32,401	38,217	-15.2%
Operational fair value change of biological assets	34	22	58.0%	27	24.6%	120	87	38.5%

[1] In Q4/2023, internal wood sales to Stora Enso's divisions represented 58% of net sales and external sales to other forest companies represented 42%.

[2] The IAC for Q4/23 included a reversal of land related impairment of EUR 4 million. The IAC for Q4/22 included a land related impairment of EUR -5 million and a EUR 6 million related to the disposal of Russian operations. The fair valuations for Q4/23 included non-operational fair valuation changes of biological assets of EUR 162 (261) million and non-operational items of associated companies of EUR 59 (142) million. The fair valuations in Q4/22 additionally included a EUR -3 million impact from adjustments for differences between the fair value and acquisition cost of forest assets upon disposal.
LTM = Last 12 months

Segment Other

The segment Other includes the reporting of the emerging businesses (including Formed Fiber and Selfly Store), as well as Stora Enso's shareholding in the energy company Pohjolan Voima (PVO), and the Group's shared services and administration.

EUR million	Q4/23	Q4/22	Change % Q4/23–Q4/22	Q3/23	Change % Q4/23–Q3/23	2023	2022	Change % 2023–2022
Sales	207	528	-60.7%	179	16.0%	964	2,150	-55.2%
Operational EBITDA	2	20	-88.8%	-11	120.4%	18	102	-82.5%
Operational EBITDA margin	1.1%	3.8%		-6.1%		1.9%	4.7%	
Operational EBIT	-1	14	-110.0%	-15	91.0%	1	63	-98.8%
Operational EBIT margin	-0.7%	2.6%		-8.5%		0.1%	2.9%	
Fair valuations and non-operational items[1]	-28	-27	-3.3%	12	n/m	-13	6	n/m
Items affecting comparability (IAC)[1]	-16	-23	30.5%	-6	-151.2%	-28	-33	14.4%
Operating result (IFRS)	-46	-37	-23.7%	-10	n/m	-41	36	-213.1%
Cash flow from operations	-20	-42	54.0%	-47	58.9%	-105	-136	22.4%
Cash flow after investing activities	-40	-61	33.8%	-35	-14.8%	-123	-203	39.5%

[1]The IAC for Q4/23 included impairments of fixed assets of EUR -14 million for Group operations, EUR -4 million related to disposals of Kvarnsveden, Hylte and Biocomposite business, and EUR 2 million related to provision reversals. The IAC in Q4/22 included EUR -38 million related to impairments in former paper site Hylte, Nymolla and Maxau, EUR 19 million related the disposal of Kvarnsveden site, EUR -1 million related to provision increases and EUR -3 million related to other cases. The fair valuations for Q4/23 included non-cash income and expenses related to CO_2 emission rights and liabilities of EUR -28 (-27) million. Comparative figures have been restated as described in the release from 29 March 2023.

- Sales decreased by EUR 320 million to EUR 207 million. The main drivers were the divestments of three paper production units, lower transportation sales following the new operational model, and lower energy sales following lower market prices.
- Operational EBIT decreased to EUR -1 million, mainly due to lower margins for electricity sales and divestment of the paper assets.
- The divisions are charged for electricity at market prices. Through its 15.7% 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 2023 (compared with Q3/2023)

EUR million	31 Dec 2023	30 Sep 2023	30 Jun 2023	31 Mar 2023	31 Dec 2022
Operative fixed assets[1]	14,206	14,014	13,803	14,503	14,368
Associated companies	926	865	850	820	832
Operative working capital, net	488	752	893	949	862
Non-current interest-free items, net	-252	-184	-198	-211	-255
Operating Capital Total	**15,368**	**15,447**	**15,348**	**16,061**	**15,806**
Net tax liabilities	-1,312	-1,321	-1,309	-1,488	-1,451
Capital Employed[2]	**14,056**	**14,126**	**14,039**	**14,573**	**14,356**
Equity attributable to owners of the Parent	10,985	11,067	11,066	11,688	12,532
Non-controlling interests	-97	-61	-58	-31	-30
Net debt	3,167	3,120	3,030	2,917	1,853
Financing Total[2]	**14,056**	**14,126**	**14,039**	**14,573**	**14,356**

[1] Operative fixed assets include goodwill, other intangible assets, property, plant and equipment, right-of-use assets, forest assets, emission rights, and unlisted securities.
[2] Including assets held for sale and related liabilities.

Cash and cash equivalents net of overdrafts increased by EUR 411 million to EUR 2,464 million.

Net debt increased by EUR 47 million to EUR 3,167 (3,120) million during the fourth quarter. The ratio of net debt to the last 12 months' operational EBITDA was at 3.2 (2.4). The net debt/equity ratio on 31 December 2023 increased to 0.29 (0.28). The average interest expense rate on borrowings at the reporting date was 4.0% (3.8%).

During the fourth quarter, Stora Enso issued SEK 6,525 million of new green bonds and private placements. The bonds feature several tranches, with maturities ranging from 2025 to 2033. In addition, the maturity of the revolving credit facility of EUR 700 million was extended by one year to 2028.

Stora Enso had in total EUR 800 million committed undrawn credit facilities as per 31 December 2023. Additionally, the Company has access to EUR 1,100 million statutory pension premium loans in Finland.

Valuation of forest assets

The value of total forest assets, including leased land, Stora Enso's share of Tornator's forest assets and assets held for sale in China, increased by EUR 476 million to EUR 8,731 (8,256) million. The increase is mainly an effect of foreign exchange rate impact and an increase in the Swedish and Finnish forest market transaction prices. The fair value of biological assets, including Stora Enso's share of Tornator and assets held for sale, increased by EUR 479 million to EUR 6,123 (5,644) million.

The value of forest land, including leased land, Stora Enso's share of Tornator and assets held for sale, decreased by EUR 3 million to EUR 2,608 (2,611) million.

Credit ratings

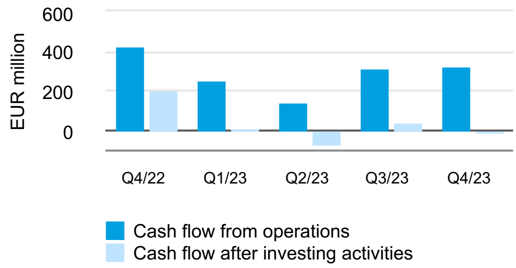
Rating agency	Long/short-term rating	Valid from
Fitch Ratings	BBB- (stable)	4 August 2023
Moody's	Baa3 (stable) / P-3	17 November 2023

Cash flow in the fourth quarter of 2023 (compared with Q3/2023)

Operative cash flow

EUR million	Q4/23	Q4/22	Change % Q4/23–Q4/22	Q3/23	Change % Q4/23–Q3/23	2023	2022	Change % 2023–2022
Operational EBITDA	212	515	-58.8%	180	17.9%	989	2,529	-60.9%
IAC on operational EBITDA	-6	8	-170.1%	-11	47.7%	-126	-133	5.2%
Other adjustments	-91	-77	-17.9%	-37	-147.4%	-210	-62	-236.2%
Change in working capital	207	-18	n/m	99	109.7%	300	-461	165.1%
Cash flow from operations	**323**	**429**	**-24.7%**	**231**	**39.8%**	**954**	**1,873**	**-49.1%**
Cash spent on fixed and biological assets	-328	-225	-46.1%	-193	-69.8%	-989	-705	-40.4%
Acquisitions of associated companies	-3	-2	-92.1%	0	n/m	-5	-7	32.0%
Cash flow after investing activities	**-9**	**202**	**-104.3%**	**38**	**-123.0%**	**-40**	**1,162**	**-103.4%**

Cash flow after investing activities was EUR -9 (38) million. Working capital decreased by EUR 207 million, mainly due to lower inventories and trade receivables, and was partly offset by lower trade payables. Cash spent on fixed and biological assets was EUR 328 million. Payments related to the previously announced provisions amounted to EUR 22 million. Cash flow from operations was strong despite lower operational EBITDA. In Q4/2023, EUR 323 million and in 2023 EUR 954 million, mainly due to working capital reduction.



Capital expenditure in the fourth quarter of 2023 (compared with Q4/2022)

Additions to fixed and biological assets totalled EUR 422 (368) million, of which EUR 401 (346) million were fixed assets and EUR 21 (22) million biological assets.

Depreciations and impairment charges excluding IACs totalled EUR 133 (130) million. Additions in fixed and biological assets had a cash outflow impact of EUR 328 (225) million.

Capital expenditure by division

EUR million	Q4/23	2023		Investment to be finalised
Packaging Materials	287	663	Oulu consumer board investment in Finland Board machine 8 capacity increase at Skoghall in Sweden	2025 2024
Packaging Solutions	26	161	De Lier site expansion in the Netherlands	2023
Biomaterials	64	204	Skutskär bleach plant upgrade in Sweden Enocell unbleached kraft pulp (UKP)	2024 2024
Wood Products	27	51		n/a
Forest	13	31		n/a
Other	5	15		n/a
Total	**422**	**1,125**		

Capital expenditure and depreciation forecast 2024

EUR million	Forecast 2024
Capital expenditure	1,000–1,100
Depreciation and depletion of capitalised silviculture costs	620–670

Stora Enso's capital expenditure forecast includes approximately EUR 75 million for the Group's forest assets.

The depletion of capitalised silviculture costs is forecast to be EUR 75–85 million.

Key sustainability targets and performance

Stora Enso contributes to the circular bioeconomy transition in the three areas in which it has the biggest impact and opportunities: climate change, circularity, and biodiversity. The foundation for these is the conduct of everyday business in a responsible manner.

Climate change

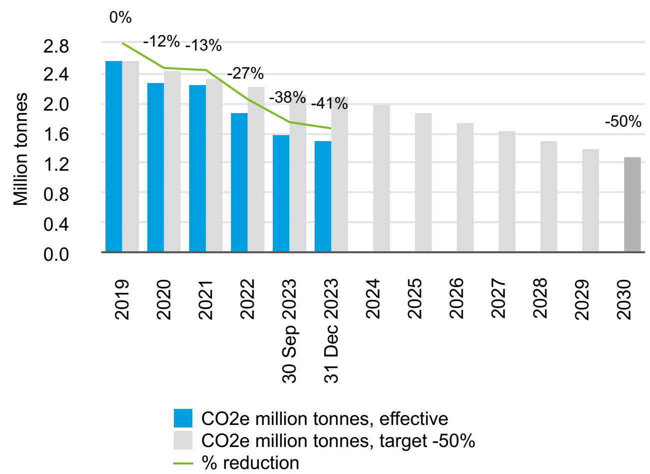
Stora Enso's science-based target is to reduce absolute Scope 1, 2 and 3 greenhouse gas (CO_2e) emissions by 50% by 2030 from the 2019 baseline, in line with the 1.5-degree scenario.

By the end of the year, the Scope 1 and 2 CO_2e emissions were 1.52 million tonnes or 41% less than in the base year (2022: 1.88 million tonnes or 27% less). During 2023, the decrease in emissions was mainly a consequence of lower production volumes as well as site and production line closures. Stora Enso continues to further reduce emissions by improving energy efficiency, replacing fossil fuels with renewables, and increasing the share of non-fossil electricity.

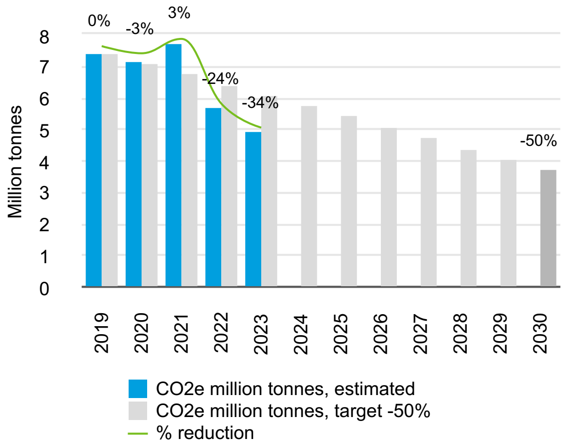
In 2023, Stora Enso's estimated Scope 3 CO_2e emissions along the value chain were 4.95 million tonnes or 34% less than in the baseline (2022: 5.69 million tonnes or 24% less). The decrease in emissions was mainly a result of lower production volumes as well as production site and line closures. Stora Enso continues to further improve its Scope 3 performance by enhancing efficiency and lowering carbon intensity in the value chain, collaborating with raw material suppliers, logistics suppliers, and customers.

Stora Enso committed to achieving net-zero CO_2 emissions by 2040 by signing The Climate Pledge during the last quarter of 2023. The commitment is a logical step for Stora Enso in its long-term ambition to become net carbon positive, and to offer 100% regenerative products and solutions by 2050. Stora Enso remains committed to its target for 2030, approved by the Science Based Targets initiative.

Direct and indirect CO_2e emissions (Scope 1+2, rolling four quarters)[1, 2]



CO_2e emissions along the value chain (Scope 3)[1, 2]



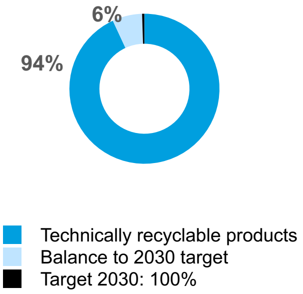
[1] Calculated as rolling four quarters. For more on definitions, see *Calculation of key figures*.
[2] Comparative figures are restated due to structural changes or additional data after previous interim reports.

Circularity

Stora Enso's target is to reach 100% recyclable products by 2030. By the end of 2023, 94% (2022: 94%) of the Group's products were recyclable. Stora Enso aims to ensure the recyclability of products through an increased focus on circularity in innovation processes and collaborates actively with customers and partners to set up infrastructure to improve the actual recycling of products.

One of the key collaborations on improving the actual recycling of products is led by Stora Enso and Tetra Pak in Poland. The new fiber recycling line for post-consumer beverage cartons began operations in Ostrołęka during 2023. The line is set to triple the country's annual recycling capacity of post-consumer beverage cartons and has the potential to recycle the entire volume of beverage cartons sold in Poland, along with additional volumes from Central and Eastern Europe.

Circularity: share of technically recyclable products[1 2]



[1] As of 31 December 2023
[2] For definitions, see the section *Calculation of key figures*.

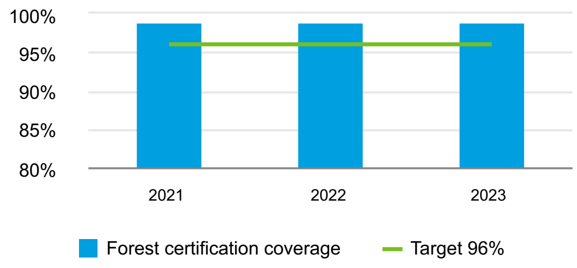
Biodiversity

Stora Enso is committed to achieving a net-positive impact on biodiversity in its own forests and plantations by 2050 through active biodiversity management. The Group steers its biodiversity actions through a Biodiversity Leadership Programme to improve biodiversity at species, habitat and landscape levels. Progress is monitored with science-based impact indicators reported on the Group's website.

Throughout the year, Stora Enso, Tornator, and WWF continued their collaboration to enhance forest streams in Finland. Together, the organisations built 30 spawning grounds for endangered trout and restored hundreds of metres of freshwater habitats, an essential environment for freshwater species. Nearly 90 volunteers from Stora Enso participated in the restoration activities. The collaboration is integral to Stora Enso's biodiversity action programme, focusing on conservation, restoration, and water protection.

Biodiversity is an integral part of forest certifications including protection of valuable ecosystems. Stora Enso's target is to maintain a forest certification coverage level of at least 96% for the Group's own and leased forest lands. The forest certification coverage has remained stable and amounted to 99% in 2023 (2022: 99%).

Biodiversity: forest certification coverage[1]



[1] For definitions, see the section *Calculation of key figures*.

Responsible business practices

Stora Enso reports on the sustainability indicators below on a quarterly basis. For full annual overview of Stora Enso's sustainability targets and 2023 performance, see storaenso.com.

Key performance indicators (KPIs)	31 Dec 2023	30 Sep 2023	31 Dec 2022	Target
Occupational safety: TRI rate, year-to-date[1]	4.7	4.8	5.9	4.9 by the end of 2023
Gender balance: % of female managers among all managers	24%	25%	23%	25% by the end of 2024
Water: total water withdrawal per saleable tonne (m^3/tonne)[2]	61	60	57	Decreasing trend from 2016 baseline (60m^3/tonne)
Water: process water discharges per saleable tonne, (m^3/tonne)[1,2]	35	35	34	17% reduction by 2030 from 2019 baseline (36m^3/tonne)
Sustainable sourcing: % of supplier spend covered by the Supplier Code of Conduct (SCoC)[1]	95%	96%	96%	95% or above

[1] The figures exclude De Jong Packaging Group. [2] Comparative figures are restated due to structural changes. For definitions, see *Calculation of key figures*.

At the end of the year, the Group's TRI rate was 4.7, exceeding the 2023 target of 4.9. Focus was placed on preventive safety measures and reinforcing divisions' accountability on improving performance. A new leading indicator, the ´Safety Engagement Rate`, was introduced to monitor proactive safety reporting and further improve safety culture and performance. In 2023, no fatal injuries occurred at Stora Enso's sites.

Stora Enso promotes a diverse and inclusive working environment throughout the organisation to enhance performance, collaboration, and innovation. At the end of 2023, the share of female managers was 24%, progressing in line with the target set for 2024. Similarly, the share of female representation was 25% among all employees and 36% within the Group Leadership Team.

While water is relatively abundant at the Group's production sites, water stress may still impact operations locally and through wider supply chains. Stora Enso uses the WRI Aqueduct Water Risk Atlas to assess water-related risks. According to this tool, six of the Group's production units operate in regions with High Baseline Water Stress. Approximately 96% of water is recycled back into the environment while only 4% is consumed in production processes. Lower production volumes are currently adversely affecting the performance per saleable tonne, as a regular water flow needs to be maintained, particularly in wastewater treatment.

Stora Enso continuously works to maintain a high coverage rate for the Supplier Code of Conduct, outlining common requirements for all suppliers. In 2023, the coverage rate decreased slightly but remains on target.

ESG ratings and recognitions

Stora Enso actively participates in the following ESG assessment schemes:

ESG rating	Stora Enso score / best possible score	Rating compared to peers
CDP	Climate A-/A Forest B/A Water B/A	Above the industry average
FTSE Russell	4.4/5	Among highest rank in the industry
ISS Corporate Rating	B/A+	Among highest rank in the industry
ISS QualityScore	Governance 2/1* Social 1/1* Environment 1/1*	Among highest rank in the industry
MSCI	AAA/AAA	Among highest rank in the industry
Sustainalytics	14.4/0**	Among highest rank in the industry
VigeoEiris	71/100	Among highest rank in the industry

*1 to 10 (1 indicating the lowest risk) **0 to 100 (0 indicating the lowest risk)

Other

Stora Enso’s Sustainability Report 2022 was, for the sixth consecutive year, recognised as one of the top ten sustainability reports by the World Business Council for Sustainable Development (WBCSD).

Stora Enso was also ranked as the top leader in the Financial Times Diversity Leaders index.

Short-term risks

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

The geopolitical unrest could have an adverse impact on the Group. Retaliatory measures, conflict-related risks to people, operations, trade credit, cyber security, supply, and demand, could also affect the Group negatively.

The risk of a prolonged global economic downturn and recession, continued high inflation, as well as sudden interest rate increases, currency fluctuations, trade union strike actions, and logistical chain disruptions could all adversely affect the Group’s profits, cash flow and financial position, as well as access to material, flow of goods and transport.

The challenging and rapidly changing macroeconomic and geopolitical disruption may increase cost, add complexity and lower short-term visibility. A slow market recovery might further impact market demand, prices, profit margin and volumes of the Group's products. New capacity and volume entering the market might distort demand, volumes, inventories and pricing, with the risk of a deepening margin squeeze. Moreover, forced capacity cuts might further impact on profitability.

There is a risk of continued high interest rates along with increased price volatility for raw materials such as wood, chemicals, other components and energy in Europe. The continued tight wood market could cause increased costs, limit harvesting and cause disruptions such as delays and/ or lack of wood supply to the Group's production sites.

Regulatory or similar initiatives might challenge the Group's strategy, growth and operations.

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 Stora Enso's manufacturing facilities with operational or environmental impacts; risks inherent in conducting business through joint ventures; and other factors.

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, the outcome of such a process could result in adverse financial impact on Stora Enso.

A more detailed risk description will be included in Stora Enso’s Annual Report 2023, to be published on 13 February 2024 at 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 5 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 200 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 120 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 54 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 81 million, negative EUR 9 million and positive EUR 9 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 179 million expense exposure in Brazilian real (BRL) and approximately EUR 67 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 18 million and a positive EUR 7 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.

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.

Changes in Group management

Annette Stube, Executive Vice President Sustainability, and a member of the Group Leadership Team, left her role at Stora Enso in December 2023 to assume a position in another company.

Minna Björkman, Executive Vice President Sourcing and Logistics, and a member of the Group Leadership Team (GLT), left her position in the GLT to assume a business leadership role in Stora Enso's Packaging Materials division in November 2023.

Ad Smit was appointed Executive Vice President of the Packaging Solutions division and a member of the Group Leadership Team in October. He started on 1 December 2023. He led the Business Unit Western Europe within Stora Enso's Packaging Solutions division since January 2023. David Ekberg left his position as Executive Vice President of the Packaging Solutions division on 30 November 2023.

Katariina Kravi, EVP, People and Communication, has assumed the responsibility of the Brand and Communications function as of 1 February 2024, in addition to the People and Culture function. She was acting Head of Brand and Communications since May 2023.

Tobias Bäärnman, EVP, Strategy and Sustainability, has assumed the responsibility of the Sustainability function as of 1 February 2024, in addition to the Strategy and Innovation function. He was acting Head of Sustainability since 1 January 2024.

Decisions by the Annual General Meeting 2023

Stora Enso Oyj's Annual General Meeting was held on 16 March 2023 in Helsinki, Finland. The AGM adopted the accounts for 2022, reviewed the Remuneration Report 2022 and granted the Company's Board of Directors and Chief Executive Officer discharge from liability for the period.

The AGM approved the proposal by the Board of Directors that the Company distribute a dividend of EUR 0.60 per share for the year 2022. It was paid on 27 March 2023.

Astrid Hermann was elected new member of the Board of Directors. The AGM elected Kari Jordan as Chair of the Board of Directors and Håkan Buskhe as Vice Chair.

More information about the AGM in 2023 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: Kari Jordan (Chair of Stora Enso's Board of Directors), Håkan Buskhe (Vice Chair of Stora Enso's Board of Directors), Jouko Karvinen (Solidium Oy), and Marcus Wallenberg (FAM AB). The Shareholders' Nomination Board elected Marcus Wallenberg as its Chair.

The Shareholders' Nomination Board will propose to the Annual General Meeting to be held on 20 March 2024 that the Company's Board of Directors shall have eight (8) members.

The Shareholders' Nomination Board proposes that of the current members of the Board of Directors, Håkan Buskhe, Elisabeth Fleuriot, Helena Hedblom, Astrid Hermann, Kari Jordan, Christiane Kuehne and Richard Nilsson be re-elected members of the Board of Directors until the end of the following AGM and that Reima Rytsölä 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. Antti Mäkinen has announced that he is not available for re-election to the Board of Directors.

Annual General Meeting 2024

Stora Enso Oyj's Annual General Meeting (AGM) will be held on Wednesday 20 March 2024 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 will be available on Stora Enso Oyj's website at storaenso.com/agm on 2 February 2024. Stora Enso Oyj's annual accounts, the report of the Board of Directors and the auditor's report for 2023 will be published on Stora Enso Oyj's website storaenso.com/annualreport on 13 February 2024. 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 0.10 per share be distributed on the basis of the balance sheet adopted for the year 2023. In addition, the Board of Directors proposes that the AGM would authorise the Board of Directors to decide at its discretion on the payment of an additional dividend up to a maximum of EUR 0.20 per share. The authorisation would be valid until 31 December 2024.

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 2023, 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 2023, EPS excluding fair valuations was EUR -0.73.

The dividend would be paid to shareholders who on the record date of the dividend payment, 22 March 2024, 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 4 April 2024.

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

Helsinki, 1 February 2024
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 2022 with the exception of new and amended standards applied to the annual periods beginning on 1 January 2023 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.

Changes in segment reporting

Due to the divestments and reorganisation of retained Paper division operations, Stora Enso's segment reporting was changed as of 1 January 2023. The Paper division was discontinued and not reported as a separate segment from 1 January 2023 onwards. The paper sites divested in 2023 (Maxau, Nymölla and Hylte) together with all previously sold and closed sites are reported as part of segment Other. The retained sites Langerbrugge and Anjala are reported as part of the Packaging Materials division.

As of 1 January 2023, emerging business related units in the Packaging Solutions division were moved to segment Other. These units include Formed Fiber, Circular Solutions (biocomposites) and Selfly Store.

Comparative figures have been restated accordingly. As of 1 January 2023, the reportable segments are Packaging Materials, Packaging Solutions, Biomaterials, Wood Products, Forest, and segment Other.

Acquisition of Group companies – De Jong Packaging Group

In September 2022, Stora Enso signed an agreement to acquire De Jong Packaging Group and the transaction was completed at the beginning of January 2023. De Jong Packaging Group is based in the Netherlands and is one of the largest corrugated packaging producers in the Benelux countries. De Jong Packaging Group is also active in containerboard production through the acquisition of the De Hoop mill in the Netherlands in 2021. De Jong Packaging Group has 16 sites in the Netherlands, Belgium, Germany and the UK and employs approximately 1,300 people. The acquisition will advance Stora Enso's strategic direction, increase its corrugated packaging capacity, accelerate revenue growth and build market share in renewable packaging in Europe. De Jong Packaging Group's product portfolio and geographic presence will complement and enhance Stora Enso's offering. The acquisition is expected to generate synergies over the cycle, mainly through sourcing, containerboard integration optimisation and commercial opportunities.

The shares of the acquired companies are mainly 100% owned, with certain units having minor non-controlling interests. The non-controlling interest is measured on basis of the proportionate share of the identifiable net assets.

The cash purchase consideration was EUR 612 million, excluding a contingent earn-out component. The maximum amount of the earn-out component is EUR 45 million. It will be settled in cash in 2024 and it is subject to De Jong Packaging Group achieving certain earnings thresholds. The contingent consideration is measured at its fair value and estimated at EUR 0 million on the date of acquisition.

The fair values of the identifiable assets and liabilities as of the acquisition date are presented in the table below.

EUR million	Q4/2023
Net assets acquired	
Cash and cash equivalents	27
Property, plant and equipment	200
Intangible assets	222
Right-of-use assets	99
Working capital	5
Tax assets and liabilities	-56
Interest-bearing assets and liabilities	-233
Fair value of net assets acquired	**265**
Purchase consideration, cash part	612
Purchase consideration, contingent	0
Total purchase consideration	**612**
Fair value of net assets acquired	-265
Non-controlling interest	2
Goodwill	**349**
Cash outflow on acquisitions	-612
Cash and cash equivalents of acquired subsidiaries	27
Cash flow on acquisition, net of acquired cash	**-584**

The post combination review was completed at the end of 2023 and therefore the acquisition accounting is considered to be final. There were no significant measurement period adjustments in Q4 2023. The goodwill represents the expected synergies, mainly through sourcing, containerboard integration optimisation and commercial opportunities. The goodwill is allocated to the divisions benefiting from the acquisition, Packaging Solutions and Packaging Materials. None of the goodwill recognised is expected to be deductible for tax purposes.

For Q1–Q4/2023, De Jong Packaging Group contributed sales of EUR 598 million and an IFRS net loss of EUR 88 million on the Group's results, which mainly relate to the De Hoop unit closure impairment and provision charges with approximately EUR -58 million net result impact. Excluding De Hoop containerboard site in the Netherlands, that was permanently closed during the fourth quarter of 2023, De Jong clearly contributed positively to Group's operational EBIT. The acquired units are included in Stora Enso Group's consolidated sales and net result from the beginning of 2023. The related transaction costs amounted to EUR 6 million and are presented in other operating expenses. The acquired units are reported in the Packaging Solutions and Packaging Materials divisions.

Disposal of Group companies

In Q4/2023 Stora Enso completed the transaction for the biocomposite business, the transaction did not have significant impact to the Group. The following table reflects the net assets of the companies sold in 2023, including Nymölla, Maxau, Hylte and Wood Products DIY site disposals.

EUR million	Q1-Q4/23	Q1-Q4/22
Net assets sold		
Cash and cash equivalents	29	90
Property, plant and equipment	271	8
Intangible assets	60	0
Working capital	-5	-1
Tax assets and liabilities	-28	6
Interest-bearing assets and liabilities	-96	-19
Net assets in disposed companies	**233**	**85**
Total disposal consideration	**266**	**70**

Assets held for sale

As announced in December 2022, Stora Enso has initiated a sales process for divesting its consumer board production site and forestry operations in Guangxi, China.

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 the sale of such assets. In addition, the sale must be highly probable and expected to be completed within one year after the date of classification.

These assets and related liabilities are presented separately in the consolidated statement of financial position and are 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.

In accordance with the progress in the ongoing divestment process, the Guangxi operations have been classified as held for sale at the end of Q4/2023. Assets held for sale include mainly fixed assets, forest assets, inventories and operative receivables, whereas related liabilities consist mainly of non-current and current interest bearing liabilities and operative liabilities.

The following new and amended standards are applied to the annual periods beginning on 1 January 2023

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

Future standard changes endorsed by the EU but not yet effective in 2023

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

Condensed consolidated income statement

EUR million	Q4/23	Q4/22	Q3/23	2023	2022
Sales	**2,174**	**2,864**	**2,127**	**9,396**	**11,680**
Other operating income	81	89	62	378	326
Change in inventories of finished goods and WIP	-83	1	-75	-209	258
Materials and services	-1,431	-1,757	-1,394	-6,133	-6,979
Freight and sales commissions	-198	-288	-195	-883	-1,148
Personnel expenses	-319	-330	-283	-1,275	-1,315
Other operating expenses	-104	-134	-113	-638	-594
Share of results of associated companies	82	156	15	136	221
Change in net value of biological assets	204	268	1	209	195
Depreciation, amortisation and impairment charges	-733	-165	-145	-1,303	-635
Operating result	**-326**	**705**	**-1**	**-322**	**2,009**
Net financial items	-52	-39	-40	-173	-151
Result before tax	**-378**	**666**	**-41**	**-495**	**1,858**
Income tax	53	-82	7	64	-322
Net result for the period	**-325**	**584**	**-34**	**-431**	**1,536**
Attributable to					
Owners of the Parent	-287	586	-33	-357	1,550
Non-controlling interests	-38	-2	-1	-74	-13
Net result for the period	**-325**	**584**	**-34**	**-431**	**1,536**
Earnings per share					
Basic earnings per share, EUR	-0.36	0.74	-0.04	-0.45	1.97
Diluted earnings per share, EUR	-0.36	0.74	-0.04	-0.45	1.96

Consolidated statement of comprehensive income

EUR million	Q4/23	Q4/22	Q3/23	2023	2022
Net result for the period	**-325**	**584**	**-34**	**-431**	**1,536**
Other comprehensive income (OCI)					
Items that will not be reclassified to profit and loss					
Equity instruments at fair value through OCI	171	-175	-85	-645	519
Actuarial gains and losses on defined benefit plans	-72	-101	3	-52	147
Revaluation of forest land	-67	-149	0	-49	259
Share of OCI of associated companies	-24	58	0	-23	58
Income tax relating to items that will not be reclassified	28	41	-2	22	-77
	36	**-326**	**-84**	**-748**	**906**
Items that may be reclassified subsequently to profit and loss					
Cumulative translation adjustment (CTA)	134	-262	115	56	-197
Net investment hedges and loans	2	3	8	-15	-27
Cash flow hedges and cost of hedging	41	55	-8	-1	52
Share of OCI of Non-controlling Interests (NCI)	2	3	-2	5	0
Income tax relating to items that may be reclassified	-10	-14	2	-1	-6
	170	**-216**	**115**	**44**	**-177**
Total comprehensive income	**-120**	**42**	**-3**	**-1,135**	**2,265**
Attributable to					
Owners of the parent	-84	41	0	-1,066	2,278
Non-controlling interests	-36	0	-3	-69	-13
Total comprehensive income	**-120**	**42**	**-3**	**-1,135**	**2,265**

CTA = Cumulative translation adjustment
OCI = Other comprehensive income

Condensed consolidated statement of financial position

EUR million		31 Dec 2023	31 Dec 2022
Assets			
Goodwill	O	505	244
Other intangible assets	O	283	121
Property, plant and equipment	O	4,544	4,860
Right-of-use assets	O	323	418
		5,656	**5,643**
Forest assets	O	6,921	6,846
Biological assets	O	4,652	4,531
Forest land	O	2,269	2,315
Emission rights	O	108	123
Investments in associated companies	O	926	832
Listed securities	I	9	8
Unlisted securities	O	810	1,437
Non-current interest-bearing receivables	I	76	120
Deferred tax assets	T	134	74
Other non-current assets	O	58	38
Non-current assets		**14,699**	**15,120**
Inventories	O	1,466	1,810
Tax receivables	T	31	11
Operative receivables	O	1,191	1,473
Interest-bearing receivables	I	64	77
Cash and cash equivalents	I	2,464	1,917
Current assets		**5,216**	**5,287**
Assets held for sale		839	514
Total assets		**20,754**	**20,922**
Equity and liabilities			
Owners of the Parent		10,985	12,532
Non-controlling Interests		-97	-30
Total equity		**10,889**	**12,502**
Post-employment benefit obligations	O	217	159
Provisions	O	83	81
Deferred tax liabilities	T	1,433	1,443
Non-current interest-bearing liabilities	I	4,446	2,792
Non-current operative liabilities	O	11	11
Non-current liabilities		**6,190**	**4,486**
Current portion of non-current debt	I	286	667
Interest-bearing liabilities	I	476	513
Provisions	O	85	43
Operative liabilities	O	2,112	2,410
Tax liabilities	T	45	64
Current liabilities		**3,004**	**3,697**
Liabilities related to assets held for sale		671	237
Total liabilities		**9,865**	**8,419**
Total equity and liabilities		**20,754**	**20,922**

Items designated with “O” comprise Operating Capital
Items designated with “I” comprise Net debt
Items designated with “T” comprise Net Tax Liabilities

Condensed consolidated statement of cash flows

EUR million	2023	2022
Cash flow from operating activities		
Operating result	-322	2,009
Adjustments for non-cash items	976	325
Change in net working capital	300	-461
Cash flow from operations	**954**	**1,873**
Net financial items paid	-116	-114
Income taxes paid, net	-85	-178
Net cash provided by operating activities	**752**	**1,582**
Cash flow from investing activities		
Acquisition of subsidiary shares and business operations, net of acquired cash	-584	0
Acquisitions of associated companies	-5	-7
Acquisitions of unlisted securities	-18	-11
Cash flow on disposal of subsidiary shares and business operations, net of disposed cash	237	-77
Cash flow on disposal of shares in equity accounted investments	0	10
Cash flow on disposal of forest and intangible assets and property, plant and equipment	47	17
Capital expenditure	-989	-705
Proceeds from/payment of non-current receivables, net	-1	31
Net cash used in investing activities	**-1,313**	**-742**
Cash flow from financing activities		
Proceeds from issue of new long-term debt	2,006	366
Repayment of long-term debt and lease liabilities	-716	-390
Change in short-term interest-bearing liabilities	272	9
Dividends paid	-472	-434
Purchase of own shares[1]	-6	-1
Net cash provided by financing activities	**1,084**	**-450**
Net change in cash and cash equivalents	**523**	**389**
Translation adjustment	24	48
Net cash and cash equivalents at the beginning of period	1,917	1,480
Net cash and cash equivalents at period end	**2,464**	**1,917**
Cash and cash equivalents at period end	**2,464**	**1,917**
Bank overdrafts at period end	**0**	**0**
Net cash and cash equivalents at period end	**2,464**	**1,917**

[1] Own shares purchased for the Group's share award programme. The Group did not hold any of its own shares on 31 December 2023.

Statement of changes in equity

					Fair value reserve								
EUR million	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 associated companies	CTA and net investment hedges and loans	Retained earnings	Attributable to owners of the parent	Non-controlling interests	Total
Balance at 1 January 2022	**1,342**	**77**	**633**	**—**	**778**	**-4**	**1,373**	**29**	**-195**	**6,650**	**10,683**	**-16**	**10,666**
Net result 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
Total comprehensive income	**—**	**—**	**—**	**—**	**520**	**43**	**206**	**58**	**-220**	**1,672**	**2,278**	**-13**	**2,265**
Dividend	—	—	—	—	—	—	—	—	—	-434	-434	—	-434
Acquisitions and disposals	—	—	—	—	—	—	—	—	—	—	—	—	—
Purchase of treasury shares	—	—	—	-1	—	—	—	—	—	—	-1	—	-1
Share-based payments	—	—	—	1	—	—	—	—	—	5	6	—	6
Balance at 31 December 2022	**1,342**	**77**	**633**	**—**	**1,298**	**39**	**1,579**	**87**	**-415**	**7,893**	**12,532**	**-30**	**12,502**
Net result for the period	—	—	—	—	—	—	—	—	—	-357	-357	-74	-431
OCI before tax	—	—	—	—	-645	-1	-49	-23	41	-52	-730	5	-726
Income tax relating to OCI	—	—	—	—	0	—	10	—	—	12	22	—	22
Total comprehensive income	**—**	**—**	**—**	**—**	**-645**	**-1**	**-39**	**-23**	**41**	**-397**	**-1,066**	-69	**-1,135**
Dividend	—	—	—	—	—	—	—	—	—	-473	-473	—	-473
Acquisitions and disposals	—	—	—	—	—	—	—	—	—	—	—	2	2
Purchase of treasury shares	—	—	—	-6	—	—	—	—	—	—	-6	—	-6
Share-based payments	—	—	—	6	—	—	—	—	—	-8	-2	—	-2
Balance at 31 December 2023	**1,342**	**77**	**633**	**—**	**653**	**38**	**1,540**	**63**	**-375**	**7,015**	**10,985**	**-97**	**10,889**

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	2023	2022
Carrying value at 1 January	**12,489**	**12,654**
Additions in tangible and intangible assets	946	656
Additions in right-of-use assets	108	45
Additions in biological assets	71	77
Depletion of capitalised silviculture costs	-81	-75
Acquisition of subsidiaries	859	0
Disposals and classification as held for sale[1]	-727	-312
Depreciation and impairment	-1,303	-640
Fair valuation of forest assets	241	529
Translation difference and other	-27	-445
Statement of Financial Position Total	**12,577**	**12,489**

[1] Including company disposals.

Borrowings

EUR million	31 Dec 2023	31 Dec 2022
Bond loans	3,601	2,460
Loans from credit institutions	794	623
Lease liabilities	334	375
Long-term derivative financial liabilities	1	0
Other non-current liabilities	2	2
Non-current interest-bearing liabilities including current portion	**4,733**	**3,459**
Short-term borrowings	418	429
Interest payable	52	35
Short-term derivative financial liabilities	6	49
Total Interest-bearing Liabilities	**5,209**	**3,972**

EUR million	2023	2022
Carrying value at 1 January	**3,972**	**3,938**
Additions in long-term debt, companies acquired	131	0
Proceeds of new long-term debt	2,006	366
Repayment of long-term debt	-619	-351
Additions in lease liabilities, companies acquired	99	0
Additions in lease liabilities	109	45
Repayment of lease liabilities and interest	-87	-73
Change in short-term borrowings	177	75
Change in interest payable	40	19
Change in derivative financial liabilities	-41	-19
Disposals and classification as held for sale	-575	-5
Other	26	8
Translation differences	-29	-32
Total Interest-bearing Liabilities	**5,209**	**3,972**

Commitments and contingencies

EUR million	31 Dec 2023	31 Dec 2022
On Own Behalf		
Guarantees	18	14
Other commitments	6	0
On Behalf of associated companies		
Guarantees	5	5
On Behalf of Others		
Guarantees	16	5
Other commitments	0	36
Total	**44**	**60**
Guarantees	38	24
Other commitments	6	36
Total	**44**	**60**

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 2023	31 Dec 2022
Total	**683**	**593**

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

Key exchange rates for the euro

One Euro is	Closing Rate		Average Rate (Year-to-date)	
	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022
SEK	11.0960	11.1218	11.4728	10.6274
USD	1.1050	1.0666	1.0816	1.0539
GBP	0.8691	0.8869	0.8699	0.8526

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 2023

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
Financial assets								
Listed securities	—	9	—	9	9	9	—	—
Unlisted securities	—	794	15	810	810	—	—	810
Non-current interest-bearing receivables	62	14	—	76	76	—	15	—
Derivative assets	—	14	—	15	15	—	15	—
Loan receivables	62	—	—	62	62	—	—	—
Trade and other operative receivables	835	30	—	865	865	—	30	—
Current interest-bearing receivables	21	39	4	64	64	—	43	—
Derivative assets	—	39	4	43	43	—	43	—
Other short-term receivables	21	—	—	21	21	—	—	—
Cash and cash equivalents	2,464	—	—	2,464	2,464	—	—	—
Total	**3,382**	**887**	**19**	**4,288**	**4,288**	**9**	**87**	**810**

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
Financial liabilities								
Non-current interest-bearing liabilities	4,445	1	—	4,446	5,071	—	1	—
Derivative liabilities	—	1	—	1	1	—	1	—
Non-current debt	4,445	—	—	4,445	5,069	—	—	—
Current portion of non-current debt	286	—	—	286	286	—	—	—
Current interest-bearing liabilities	469	4	2	476	476	—	6	—
Derivative liabilities	—	4	2	6	6	—	6	—
Current debt	469	—	—	469	469	—	—	—
Trade and other operative payables	1,806	—	—	1,806	1,806	—	—	—
Bank overdrafts	—	—	—	—	—	—	—	—
Total	**7,006**	**6**	**2**	**7,014**	**7,639**	**—**	**8**	**—**

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 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
Financial assets								
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	—	—	—
Total	**3,157**	**1,576**	**30**	**4,763**	**4,763**	**8**	**161**	**1,437**

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
Financial liabilities								
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	—	—	—	—	—	—	—	—
Total	**5,998**	**30**	**20**	**6,048**	**6,005**	**—**	**51**	**—**

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 2023

EUR million	2023	2022
Financial assets		
Opening balance at 1 January	**1,437**	**905**
Reclassifications	0	-1
Gains/losses recognised in other comprehensive income	-646	523
Additions	18	10
Closing balance	**810**	**1,437**

The Group did not have level 3 financial liabilities as at 31 December 2023.

Level 3 Financial Assets

At period end, Level 3 financial assets included EUR 778 million of Pohjolan Voima Oy (PVO) shares for which the valuation method is described in more detail in the Annual Report. The valuation decreased by EUR 645 million versus December 2022, mainly due to lower electricity market prices. The valuation is most sensitive to changes in electricity prices and discount rates. The discount rate of 6.93% 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 +92 million and -92 million, respectively. A +/- percentage point change in the discount rate would change the valuation by EUR -140 million and +183 million, respectively.

Stora Enso shares

During the fourth quarter of 2023, the conversions of 1,030 A shares into R shares were recorded in the Finnish trade register.

During 2023, a total of 7,364 A shares converted into R shares were recorded in the Finnish trade register.

On 31 December 2023, Stora Enso had 176,230,916 A shares and 612,389,071 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 237,469,823.

On 15 January 2024, the conversion of 24,348 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	70,208	43,439,469	54,653	8,913,866
Novermber	47,165	35,854,044	59,917	4,587,086
December	126,516	35,869,767	117,443	5,228,204
Total	**243,889**	**115,163,280**	**232,013**	**18,729,156**

Closing price

	Helsinki, EUR		Stockholm, SEK	
	A share	**R share**	**A share**	**R share**
October	11.55	11.33	136.60	133.50
Novermber	12.05	11.91	140.00	136.00
December	12.45	12.53	139.00	139.10

Number of shares

Million	Q4/23	Q4/22	Q3/23	2022
At period end	788.6	788.6	788.6	788.6
Average	788.6	788.6	788.6	788.6
Average, diluted	789.9	789.5	789.8	789.4

Sales

Sales by segment – total

EUR million	2023	Q4/23	Q3/23	Q2/23	Q1/23	2022	Q4/22	Q3/22	Q2/22	Q1/22
Packaging Materials	4,557	1,045	1,057	1,155	1,300	5,496	1,335	1,421	1,424	1,317
Packaging Solutions	1,077	247	266	288	276	727	177	176	186	189
Biomaterials	1,587	375	345	379	488	2,180	649	567	522	442
Wood Products	1,580	341	349	436	454	2,195	471	520	631	573
Forest	2,490	650	534	620	687	2,519	664	581	649	626
Other	964	207	179	213	364	2,150	528	575	568	481
Inter-segment sales	-2,859	-691	-603	-717	-848	-3,589	-959	-876	-925	-828
Total	**9,396**	**2,174**	**2,127**	**2,374**	**2,721**	**11,680**	**2,864**	**2,963**	**3,054**	**2,798**

Comparative figures have been restated as described in the release from 29 March 2023.

Sales by segment – external

EUR million	2023	Q4/23	Q3/23	Q2/23	Q1/23	2022	Q4/22	Q3/22	Q2/22	Q1/22
Packaging Materials	4,362	1,006	1,012	1,103	1,242	5,257	1,277	1,362	1,359	1,258
Packaging Solutions	1,066	244	264	285	273	704	171	170	179	184
Biomaterials	1,363	322	297	321	423	1,798	522	471	435	370
Wood Products	1,453	313	322	400	416	2,058	436	487	595	540
Forest	989	266	218	246	258	848	223	195	219	211
Other	162	22	14	18	108	1,014	234	279	267	234
Total	**9,396**	**2,174**	**2,127**	**2,374**	**2,721**	**11,680**	**2,864**	**2,963**	**3,054**	**2,798**

Comparative figures have been restated as described in the release from 29 March 2023.

Disaggregation of revenue

EUR million	2023	Q4/23	Q3/23	Q2/23	Q1/23	2022	Q4/22	Q3/22	Q2/22	Q1/22
Product sales	9,317	2,153	2,109	2,348	2,707	11,521	2,841	2,927	3,000	2,753
Service sales	79	21	18	25	15	159	23	37	54	45
Total	**9,396**	**2,174**	**2,127**	**2,374**	**2,721**	**11,680**	**2,864**	**2,963**	**3,054**	**2,798**

Alternative performance measures

Definitions and purpose for alternative performance measures can be found at the end of this section.

Reconciliation of operational profitability

EUR million	Q4/23	Q4/22	Change % Q4/23–Q4/22	Q3/23	Change % Q4/23–Q3/23	2023	2022	Change % 2023–2022
Operational EBITDA	**212**	**515**	**-58.8%**	**180**	**17.9%**	**989**	**2,529**	**-60.9%**
Depreciation and silviculture costs of associated companies	-4	-3	-55.3%	-3	-56.4%	-11	-11	-4.1%
Silviculture costs[1]	-24	-27	10.4%	-27	8.4%	-102	-100	-1.9%
Depreciation and impairment excl. IAC	-133	-130	-2.4%	-130	-2.6%	-534	-527	-1.2%
Operational EBIT	**51**	**355**	**-85.8%**	**21**	**142.0%**	**342**	**1,891**	**-81.9%**
Fair valuations and non-operational items	229	381	-40.0%	5	n/m	231	363	-36.4%
Items affecting comparability (IAC)	-605	-31	n/m	-26	n/m	-895	-245	-265.2%
Operating result (IFRS)	**-326**	**705**	**-146.2%**	**-1**	**n/m**	**-322**	**2,009**	**-116.0%**

[1] Including damages to forests

Operational EBIT by segment

EUR million	2023	Q4/23	Q3/23	Q2/23	Q1/23	2022	Q4/22	Q3/22	Q2/22	Q1/22
Packaging Materials	-57	-43	-34	-22	41	655	59	188	200	208
Packaging Solutions	43	6	14	15	8	16	5	4	2	5
Biomaterials	118	35	5	-13	91	687	249	197	123	117
Wood Products	-64	-27	-21	-6	-11	309	-14	70	134	118
Forest	253	75	59	62	57	204	62	47	47	49
Other	1	-1	-15	-9	27	63	14	29	14	6
Inter-segment eliminations	49	5	13	9	21	-42	-20	-7	-15	0
Operational EBIT	**342**	**51**	**21**	**37**	**234**	**1,891**	**355**	**527**	**505**	**503**
Fair valuations and non-operational items	231	229	5	-14	11	363	381	6	-45	21
Items affecting comparability	-895	-605	-26	-276	12	-245	-31	-22	-61	-130
Operating result (IFRS)	**-322**	**-326**	**-1**	**-253**	**258**	**2,009**	**705**	**511**	**399**	**394**
Net financial items	-173	-52	-40	-51	-29	-151	-39	-63	-29	-19
Result before Tax	**-495**	**-378**	**-41**	**-304**	**228**	**1,858**	**666**	**448**	**370**	**374**
Income tax expense	64	53	7	47	-43	-322	-82	-81	-71	-88
Net result	**-431**	**-325**	**-34**	**-257**	**185**	**1,536**	**584**	**367**	**299**	**287**

Comparative figures have been restated as described in the release from 29 March 2023.

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

Items affecting comparability in 2023

EUR million	Q4/23	2023
Impairments - Packaging Materials	-468	-468
Impairments - Biomaterials	-103	-103
Impairments - Wood Products	-16	-16
Impairments - Segment Other	-14	-14
Impairment reversal - Forest	3	5
Disposal of Nymölla	0	-30
Disposal of Hylte	2	-45
Disposal of Maxau	0	52
Disposal of biocomposite business	-1	-15
Disposal of Wood Products DIY unit	-1	-4
Disposals related transaction costs	-1	-6
Acquisition of De Jong Packaging Group	0	-16
Closure of Sunila pulp mill	1	-116
Closure of De Hoop	1	-79
Restructuring - Anjala	0	-26
Restructuring - Packaging Materials	-4	-21
Restructuring - Packaging Solutions	-1	-10
Restructuring - Wood Products	3	-5
Restructuring - Biomaterials	-2	-4
Restructuring - Group functions	-3	-15
Restructuring (2021 announced) - Kvarnsveden	1	29
Restructuring (2021 announced) - Veitsiluoto	0	9
Updates in environmental provisions	-1	-5
Other items	-1	-2
Total	**-605**	**-895**

Items affecting comparability in 2022

EUR million	Q4/22	2022
Disposal of Russian operations - Packaging Solutions	1	-93
Disposal of Russian operations - Wood Products	-5	-56
Disposal of Russian operations - Forest	7	-43
Disposal of Russian operations - other divisions	-1	-6
Impairments, transaction costs and other items related to the upcoming paper site disposals (Nymölla, Hylte and Maxau)	-38	-28
Disposal of Kvarnsveden site	8	8
Impairments - Forest	-5	-5
Impairments - Segment Other	-2	-2
Restructuring (2021 announced) - Kvarnsveden	12	13
Restructuring (2021 announced) - Veitsiluoto	-1	-10
Restructuring - Packaging Materials	-1	-4
Restructuring - Packaging Solutions	-2	-5
Restructuring - Biomaterials	0	-4
Updates in environmental provisions (mainly closed Finnish sites	-2	-13
Other items	-2	3
Total	**-31**	**-245**

Fair valuations and non-operational items in 2023 and 2022

EUR million	Q4/23	2023	Q4/22	2022
Non-operational fair valuation changes of biological assets, Packaging Materials	12	12	17	7
Non-operational fair valuation changes of biological assets, Biomaterials	24	25	-9	-17
Non-operational fair valuation changes of biological assets, Forest	162	156	261	201
Non-cash income and expenses related to CO_2 emission rights and liabilities, Other	-28	-13	-27	6
Non-operational items of associated companies, Forest	59	56	142	169
Adjustments for differences between fair value and acquisition cost of forest assets upon disposal, Forest	0	-5	-3	-3
Total	**229**	**231**	**381**	**363**

Items affecting comparability (IAC) by segment

EUR million	2023	Q4/23	Q3/23	Q2/23	Q1/23	2022	Q4/22	Q3/22	Q2/22	Q1/22
Packaging Materials	-597	-474	-4	-98	-21	-9	-2	-3	2	-6
Packaging Solutions	-26	-1	0	-5	-20	-98	0	-5	-57	-36
Biomaterials	-224	-105	-17	-101	0	-2	0	0	0	-2
Wood Products	-22	-13	-1	-8	0	-56	-6	-21	-2	-27
Forest	2	4	3	-2	-3	-48	1	-6	0	-43
Other	-28	-16	-6	-61	56	-33	-23	12	-4	-17
IAC on operating result	**-895**	**-605**	**-26**	**-276**	**12**	**-245**	**-31**	**-22**	**-61**	**-130**
Tax on IAC	100	53	6	43	-3	9	3	1	1	4
IAC on net result	**-795**	**-552**	**-20**	**-233**	**10**	**-236**	**-29**	**-21**	**-60**	**-126**

Comparative figures have been restated as described in the release from 29 March 2023.

Fair valuations and non-operational items by segment

EUR million	2023	Q4/23	Q3/23	Q2/23	Q1/23	2022	Q4/22	Q3/22	Q2/22	Q1/22
Packaging Materials	12	12	0	0	0	7	17	1	2	-12
Packaging Solutions	0	0	0	0	0	0	0	0	0	0
Biomaterials	25	24	-3	5	-1	-17	-9	0	-6	-2
Wood Products	0	0	0	0	0	0	0	0	0	0
Forest	206	221	-5	0	-9	367	401	2	-47	10
Other	-13	-28	12	-19	21	6	-27	2	6	25
FV on operating result	**231**	**229**	**5**	**-14**	**11**	**363**	**381**	**6**	**-45**	**21**
Tax on FV	-25	-24	-1	4	-3	-38	-46	-1	13	-4
FV on net result	**206**	**205**	**3**	**-10**	**8**	**324**	**335**	**5**	**-32**	**17**

Comparative figures have been restated as described in the release from 29 March 2023.

Operating result by segment

EUR million	2023	Q4/23	Q3/23	Q2/23	Q1/23	2022	Q4/22	Q3/22	Q2/22	Q1/22
Packaging Materials	-642	-504	-38	-120	21	653	74	185	204	190
Packaging Solutions	17	5	14	10	-12	-81	5	-1	-54	-31
Biomaterials	-81	-46	-15	-109	90	668	240	198	117	113
Wood Products	-86	-40	-22	-14	-11	253	-20	49	133	91
Forest	461	300	57	60	44	523	463	43	0	16
Other	-41	-46	-10	-89	104	36	-37	43	16	14
Inter-segment eliminations	49	5	13	9	21	-42	-20	-7	-15	0
Operating result (IFRS)	**-322**	**-326**	**-1**	**-253**	**258**	**2,009**	**705**	**511**	**399**	**394**
Net financial items	-173	-52	-40	-51	-29	-151	-39	-63	-29	-19
Result before tax	**-495**	**-378**	**-41**	**-304**	**228**	**1,858**	**666**	**448**	**370**	**374**
Income tax expense	64	53	7	47	-43	-322	-82	-81	-71	-88
Net result	**-431**	**-325**	**-34**	**-257**	**185**	**1,536**	**584**	**367**	**299**	**287**

Comparative figures have been restated as described in the release from 29 March 2023.

Calculation of operational return on capital employed (ROCE) and return on equity (ROE) based on the last 12 months

EUR million	Q4/23	Q4/22	Q3/23
Operational EBIT, LTM	342	1,891	647
Capital employed, LTM average	14,230	13,795	14,336
Operational ROCE, LTM	**2.4%**	**13.7%**	**4.5%**
Operational EBIT excl. Forest division, LTM	89	1,687	407
Capital employed excl. Forest division, LTM average	8,490	8,276	8,715
Operational ROCE excl. Forest division, LTM	**1.0%**	**20.4%**	**4.7%**
Net result for the period, LTM	-431	1,536	478
Total equity, LTM average	11,413	11,532	11,727
Return on equity (ROE), LTM	**-3.8%**	**13.3%**	**4.1%**
Net debt	3,167	1,853	3,120
Operational EBITDA, LTM	989	2,529	1,292
Net debt to LTM operational EBITDA ratio	**3.2**	**0.7**	**2.4**

LTM = Last 12 months. The change in the calculation method is explained in the section Alternative performance measures.

Calculation of EPS excl. FV

EUR million	Q4/2023	Q4/2022	Q3/2023	2023	2022
Earnings per share (EPS) excl. FV EUR					
Net profit for the period attributable to owners of the Parent	-287	586	-33	-357	1,550
FV on Net profit for the period attributable to owners of the Parent	217	335	3	218	324
Net profit for the period attributable to owners of the parent excl. FV	**-504**	**251**	**-37**	**-575**	**1,225**
Average number of shares	789	789	789	789	789
Earnings per share (EPS) excl. FV EUR	-0.64	0.32	-0.05	-0.73	1.55

Calculation of net debt

EUR million	31 Dec 2023	31 Dec 2022	30 Sep 2023
Listed securities	9	8	7
Non-current interest-bearing receivables	76	120	104
Current interest-bearing receivables	64	77	27
Cash and cash equivalents	2,464	1,917	2,077
Interest-bearing assets	**2,613**	**2,122**	**2,216**
Non-current interest-bearing liabilities	4,446	2,792	4,182
Current portion of non-current debt	286	667	489
Current interest-bearing liabilities	476	513	640
Bank overdrafts	0	0	24
Interest-bearing liabilities held-for-sale	571	4	0
Interest-bearing liabilities	**5,780**	**3,976**	**5,335**
Net debt	**3,167**	**1,853**	**3,120**

Definitions and calculation of alternative performance measures

According to the European Securities and Markets Authority (ESMA) Guidelines, an alternative performance measure is understood as a financial measure of historical or future financial performance, financial position, or cash flows, not defined under IFRS. Used together with the IFRS measures, alternative performance measures provide meaningful supplemental information to the management, investors, analysts and other parties with regards to the financial development of the business operations.

Alternative performance measures	Definition	Purpose
Operating result (IFRS)	Net result for the period excluding income tax and net financial items (finance costs).	Used in combination with below measures to determine the profitability of the Group.
Operational EBIT	Operating result (IFRS) excluding items affecting comparability (IAC) and fair valuations and non-operational items (FV) of the line-by-line consolidated entities and Stora Enso's share of operating result excluding IAC and FV of its associated companies.	The Group's key non-IFRS performance metric, which is used to evaluate the performance of operating segments and, in combination with below ratios, to steer allocation of resources to them.
Operational EBITDA	Operating result (IFRS) excluding silviculture costs and damage to forests, fixed asset depreciation and impairment, IACs and FV. The definition includes the respective items of subsidiaries, joint arrangements and associated companies.	Used by management to analyse the business and, from time-to-time, for short term and long-term target setting.
Operational return on capital employed, operational ROCE, LTM[3] (%)	Operational EBIT[3] / Capital employed[1] x 100	Used for long-term Group financial targets setting.
Operational return on operating capital, operational ROOC, LTM[3] (%)	Operational EBIT[3] / Operating capital[1] x 100	Used for long-term divisional financial targets setting.
Return on equity, ROE, LTM[3] (%)	Net result for the period / Total equity[1] x 100	A measure of the profitability in relation to equity.
Net debt	Interest-bearing liabilities – interest-bearing assets, marked with "I" in the statement of financial position.	Used for long-term Group financial targets setting.
Net debt/equity ratio	Net debt / Equity[2]	Used for long-term Group financial targets setting.
Net debt/last 12 months' operational EBITDA ratio	Net debt / LTM operational EBITDA	Used for long-term Group financial targets setting.
Earnings per share (EPS) excluding FV	Net result for the period excluding fair valuations and non-operational items after tax divided by the weighted average number of shares	Stora Enso's dividend policy is to distribute 50% of earnings per share (EPS) excluding fair valuation over the cycle.
Operating capital and capital employed	Operating capital is comprised of items marked with "O" in the statement of financial position. Capital employed = Operating capital – Net tax liabilities. Net tax liabilities are marked with "T" in the statement of financial position.	Used for long-term Group financial targets setting.
Items affecting comparability (IAC)	The most common IAC are significant 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.	Represent certain significant items, identified by the management, considered not indicative of the operating business performance due to their nature and/or frequency.
Fair valuations and non-operational items (FV)	Fair valuations and non-operational items include non-cash income and expenses related to CO_2 emission rights and liabilities, 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 associated companies. Non-operational fair value changes of biological assets reflect changes made to valuation assumptions and parameters. 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 result (biological assets) and other comprehensive income (forest land) and are included in operational EBIT only at the disposal date (for non-strategic forest assets disposals).	Represent adjustments for certain items considered by the management less relevant for understanding operating business performance. These adjustments result in differences in the recognition and measurement principles applicable under IFRS.
Operational fair value change of biological assets	Operational fair value changes of biological assets contain all other fair value changes (see above about non-operational fair value changes of biological assets), mainly due to inflation and differences in actual harvesting levels compared to the harvesting plan.	The long-term value change of the growing forests is an important component of the forestry business profitability.
Cash flow from operations (non-IFRS) and Cash flow after investing activities (non-IFRS)	Cash flow from operations (non-IFRS) is equal to Net cash provided by operating activities (IFRS) before cash flows related to financial items and income taxes. Cash flow after investing activities (non-IFRS) is equal to Cash flow from operations (non-IFRS) minus cash spent on intangible assets, property, plant and equipment, and biological assets and acquisitions of associated companies.	These are measures of cash generation, working capital efficiency and capital expenditure outflows.
Capital expenditure	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.	A measure of the operating business investments capitalised as tangible and intangibles assets.
Fixed costs	Maintenance, personnel and other administration type of costs, excluding IAC and FV.	A measure of the costs that are less variable in nature.

[1] Average for the last five quarter ends [2] Attributable to the owners of the Parent [3] Last 12 months prior to the end of reporting period

Changes in the calculation of operational ROCE and ROOC

Presenting return measures based on the last 12 months is an effective way to analyse the most recent financial data on an annualised basis and is considered more suitable for tracking the development of long-term targets.

From Q1/2023 onwards, Stora Enso presents the operational return on capital employed (operational ROCE) based on the last 12 months prior to the end of the reporting period. This is calculated by dividing the operational EBIT of the last 12 months with the average capital employed. The average capital employed for the last 12 months is determined as the average of the published capital employed of the last five quarter-ends.

Similarly, the return on operating capital (operational ROOC) for the divisions and the return on equity (ROE) for the Group will be based on the last 12 months prior to the end of the reporting period.

The presentation of operational ROCE, operational ROOC and ROE based on quarter or year-to-date figures has been discontinued.

Definitions and calculation of key sustainability figures

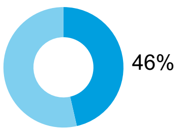
GHG emissions, Scope 1 + 2	Direct absolute CO_2e emissions from production (Scope 1) and indirect absolute CO_2e emissions related to purchased electricity and heat (Scope 2). Excluding joint operations. Reported as rolling 12 months. Calculated in accordance with the Greenhouse Gas Protocol of the World Resource Institute (WRI).
GHG emissions, Scope 3	Absolute CO_2e 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).
Forest certification coverage	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.
Share of technically recyclable products	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.
TRI (Total recordable incidents) rate	Number of incidents per one million hours worked. Including joint operations, but excluding De Jong Packaging Group.
Gender balance: % of female managers among all managers	The share of female managers is calculated 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. Reported as rolling 12 months. Excluding joint operations.
Total water withdrawal per saleable tonne	Reported as rolling 12 months. Excluding joint operations. Total water withdrawal includes process water and cooling and non-contact water intakes by board, pulp, and paper production sites as cubic metres (m^3).
Process water discharges per saleable tonne	Reported as rolling 12 months. Excluding joint operations and De Jong Packaging Group. Process water discharges include the discharges of board, pulp, and paper production sites as cubic metres (m^3).
Supplier Code of Conduct (SCoC) coverage	The share of supplier spend (rolling 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. Excluding De Jong Packaging Group.

Divisions

Packaging Materials

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

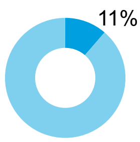
Share of Group external sales



Packaging Solutions

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

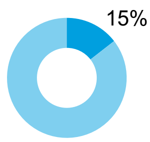
Share of Group external sales



Biomaterials

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

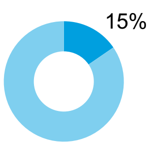
Share of Group external sales



Wood Products

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

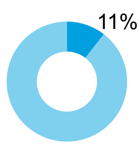
Share of Group external sales



Forest

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

Share of Group external sales



Contact information

Stora Enso Oyj
P.O.Box 309
FI-00101 Helsinki, Finland
Visiting address: Salmisaarenaukio 2
Tel. +358 2046 111

Stora Enso AB
P.O.Box 70395
SE-107 24 Stockholm, Sweden
Visiting address: World Trade Center
Klarabergsviadukten 70
Tel. +46 1046 46 000

storaenso.com
storaenso.com/investors

For further information, please contact:
Anna-Lena Åström, SVP Investor Relations, tel. +46 702 107 691
Carl Norell, SVP Corporate Communications, tel. +46 722 410 349

Stora Enso Oyj's Annual General Meeting (AGM) will be held on
20 March 2024

Stora Enso's Q1/2024 results will be published on
25 April 2024

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 20,000 employees and our sales in 2023 were EUR 9.4 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 on OTC Markets (OTCQX) in the USA as ADRs and ordinary shares (SEOAY, SEOFF, SEOJF).
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.