

Stora Enso

Full year financial results

January–December 2019

Q4





Record high cash flow despite a challenging quarter

Dividend proposal EUR 0.50 per share

Q4/2019 (compared with Q4/2018)

- Sales decreased by 9.3% to EUR 2 411 (2 657) million, due to significantly lower prices.
- Operational EBIT decreased to EUR 112 (271) million, due to significantly lower prices, partly offset by lower costs achieved through the profit protection programme.
- Operational EBIT margin was 4.6% (10.2%).
- Operating profit (IFRS) was EUR 680 (356) million. There was a positive impact of EUR 600 (37) million, mainly from increases in forest valuations.
- Items affecting comparability (IAC) amounted to EUR -32 (47) million.
- EPS increased to EUR 0.66 (0.39) and EPS excl. IAC was EUR 0.69 (0.33).
- Record cash flow from operations amounted to EUR 721 (323) million, due to good working capital management, and an extra dividend and capital repayment of EUR 223 million from Bergvik Skog. Cash flow after investing activities was EUR 518 (148) million.
- The net debt to operational EBITDA ratio at 2.1 (1.1) was slightly above the target level of 2.0 or less, due to lower EBITDA, the restructuring of Bergvik Skog (impact 0.6) and the adoption of IFRS 16 Leases (impact 0.2).
- Operational ROCE was 4.2% (12.4%), below the strategic target of 13% due to lower profitability. ROCE was negatively impacted by the Bergvik Skog restructuring (impact 0.6 percentage points) and by the adoption of the IFRS 16 Leases (impact 0.2 percentage points).

Year 2019 (compared with year 2018)

- Sales were EUR 10 055 (10 486) million, due to significantly lower prices and lower paper volumes.
- Operational EBIT was EUR 953 (1 325) million, due to significantly lower prices in all segments except for Consumer Board and Paper and lower paper volumes, partly offset by lower costs achieved through the profit protection programme.
- Record cash flow from operations amounted to EUR 1 980 (1 365) million. Cash flow after investing activities was EUR 1 386 (811) million.

Profit protection programme

The programme is proceeding ahead of plan. The target is to achieve EUR 275 million cost savings by the end of 2021. Approximately EUR 105 million of the continuous cost saving were achieved during 2019. Including the one-time cost savings, the total implemented cost saving amounted to EUR 150 million in 2019 (EUR 100 million in Q3/2019).

Main events

- Annica Bresky started as President and CEO of Stora Enso on 1 December 2019.
- As of 1 January 2020, Stora Enso merged its containerboard business in the Packaging Solutions division with the Consumer Board division, creating a new Packaging Materials division. The remaining business in Packaging Solutions, together with Stora Enso's recently created Formed Fiber unit, constitute a more focused Packaging Solutions division.
- Stora Enso invests EUR 9 million to build a pilot facility for enabling the production of bio-based plastics as a barrier in transparent packaging. The pilot plant, part of Biomaterials division, will be located at Langerbrugge Mill in Belgium.
- Stora Enso and Sulapac commercialised a renewable and biodegradable straw to combat the global problem of plastic waste.
- Stora Enso entered into a global partnership with Atos to bring new automated retail solutions and services to the market. The new service is based on the concept of "Intelligent Cabinets" which are RFID (Radio Frequency Identification) enabled e-kiosks designed for on-the-go purchasing.
- Stora Enso launched a new building concept that makes it easier for architects, engineers and developers to design office buildings from wood.
- Stora Enso signed an agreement to divest its sawn construction timber (KVH) mill at Pfarrkirchen. Kitee sawmill saw shut down during the quarter.
- Paper machine 6 at Imatra Mills was shut down as earlier announced.
- The divestment of the 60% equity stake in the Dawang Mill in China to Shandong Huatai Paper was completed.

Outlook for 2020

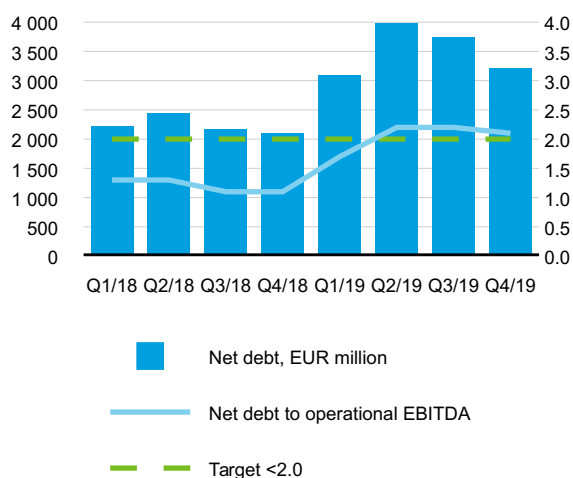
Subdued and mixed trading conditions caused by geopolitical uncertainties are expected to continue to impact Stora Enso in 2020. The decline in demand for European paper will persist, and demand for other Group products is expected to remain mixed. Exceptionally mild winter conditions in the Nordics with reduced period of frozen soil could impact harvesting and transport of wood and may therefore affect the stability of raw material supply and potentially increase wood costs to our Nordic mills. Stora Enso will continue active cost management in 2020–2021 through the profit protection programme implementation. The fixed and variable cost savings target is EUR 275 million to the end of 2021. Various labour unions in Finland are currently on strike which is expected to impact result negatively.

Guidance for Q1/2020

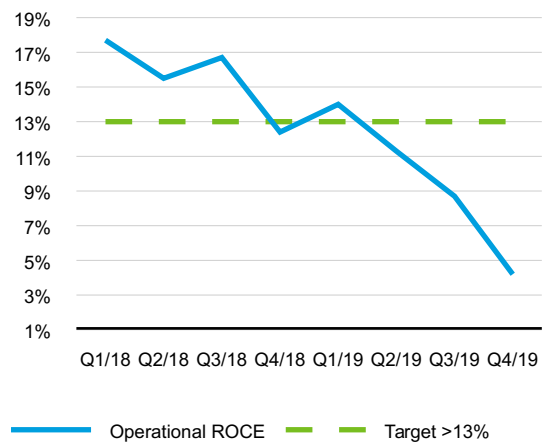
Q1/2020 operational EBIT is expected to be in the range of EUR 90–200 million. During the first quarter, there will be an annual maintenance shutdown at the Ostrołęka Mill paper machine 5. The total maintenance impact is estimated to be approximately EUR 60 million and EUR 10 million lower than in Q4/2019 and in Q1/2019 respectively.

Various labour unions in Finland are currently on strike which also affects Stora Enso's operations. The negative impact of these three-week labour actions is included in the above guidance range for Q1/2020.

Net debt to operational EBITDA



Operational return on capital employed (ROCE)



Key figures

EUR million	Q4/19	Q4/18	Change % Q4/19- Q4/18	Q3/19	Change % Q4/19- Q3/19	2019	2018	Change % 2019-2018
Sales	2 411	2 657	-9.3%	2 402	0.4%	10 055	10 486	-4.1%
Operational EBITDA	259	405	-36.0%	376	-31.0%	1 542	1 878	-17.9%
Operational EBITDA margin	10.8%	15.3%		15.7%		15.3%	17.9%	
Operational EBIT	112	271	-58.8%	231	-51.7%	953	1 325	-28.1%
Operational EBIT margin	4.6%	10.2%		9.6%		9.5%	12.6%	
Operating profit (IFRS)	680	356	91.4%	170	300.0%	1 305	1 390	-6.1%
Profit before tax excl. IAC	678	267	153.4%	152	n/m	1 329	1 190	11.7%
Profit before tax (IFRS)	646	315	105.2%	115	n/m	1 137	1 210	-6.1%
Net profit for the period (IFRS)	519	299	73.9%	59	n/m	856	988	-13.4%
Cash flow from operations	721	323	123.5%	488	47.8%	1 980	1 365	45.0%
Cash flow after investing activities	518	148	248.8%	347	49.1%	1 386	811	70.9%
Capital expenditure	302	237	27.2%	150	101.7%	656	574	14.3%
Capital expenditure excluding investments in biological assets	276	215	28.3%	130	111.5%	579	491	17.9%
Depreciation and impairment charges excl. IAC	136	114	18.6%	130	3.9%	533	479	11.3%
Net interest-bearing liabilities	3 209	2 092	53.4%	3 745	-14.3%	3 209	2 092	53.4%
Operational return on capital employed (ROCE)	4.2%	12.4%		8.7%		9.8%	15.5%	
Earnings per share (EPS) excl. IAC, EUR	0.69	0.33	113.2%	0.13	n/m	1.34	1.29	3.9%
EPS (basic), EUR	0.66	0.39	71.2%	0.09	n/m	1.12	1.28	-13.1%
Return on equity (ROE)	29.1%	18.1%		3.5%		12.1%	15.5%	
Net debt/equity ratio	0.43	0.31		0.55		0.43	0.31	
Net debt to last 12 months' operational EBITDA ratio	2.1	1.1		2.2		2.1	1.1	
Fixed costs to sales, %	27.5%	25.0%		24.2%		24.3%	23.6%	
Equity per share, EUR	9.42	8.51	10.7%	8.72	8.1%	9.42	8.51	10.7%
Average number of employees (FTE)	25 403	26 151	-2.9%	26 414	-3.8%	26 096	26 067	0.1%
TRI rate ¹²	6.6	8.1	-18.5%	7.6	-13.2%	7.0	6.1	14.8%

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

TRI (Total recordable incidents) rate = number of incidents per one million hours worked.

¹ For own employees, including employees of the joint operations Veracel and Montes del Plata

² TRI rate for Q3/19 recalculated due to additional data received after the previous Interim Report.

Production and external deliveries

	Q4/19	Q4/18	Change % Q4/19- Q4/18	Q3/19	Change % Q4/19- Q3/19	2019	2018	Change % 2019-2018
Consumer board deliveries, 1 000 tonnes	687	701	-2.0%	702	-2.1%	2 811	2 914	-3.5%
Consumer board production, 1 000 tonnes	686	694	-1.2%	702	-2.2%	2 775	2 922	-5.0%
Containerboard deliveries, 1 000 tonnes	238	213	11.7%	241	-1.1%	943	985	-4.3%
Containerboard production, 1 000 tonnes	330	338	-2.3%	323	2.3%	1 303	1 320	-1.3%
Corrugated packaging deliveries, million m ²	240	246	-2.4%	236	1.9%	943	940	0.4%
Corrugated packaging production, million m ²	269	273	-1.5%	260	3.3%	1 055	1 048	0.7%
Market pulp deliveries, 1 000 tonnes	662	532	24.4%	559	18.3%	2 362	2 017	17.1%
Wood products deliveries, 1 000 m ³	1 194	1 285	-7.1%	1 231	-2.9%	4 918	5 095	-3.5%
Paper deliveries, 1 000 tonnes	1 029	1 121	-8.2%	1 010	1.9%	4 130	4 591	-10.0%
Paper production, 1 000 tonnes	982	1 087	-9.7%	988	-0.6%	4 065	4 633	-12.3%

CEO comment

Year 2019 was concluded by a challenging quarter characterised by demanding market conditions, especially significantly lower pulp prices. We have focused on what we can impact: our costs, cash flow and managing value over volume. We are satisfied that we were early out with our profit protection programme. It is proceeding ahead of plan and the total implemented cost saving amounted to EUR 150 million in 2019. We will now continue to work on the areas that we can control, to be prepared for a more profitable future when the cycle turns.

Our forest fair valuations have increased significantly since the publication of our third quarter results. The impact came mainly from the forest fair valuation increases in our forests in Sweden and Tornator in Finland.

The lower prices during the quarter had a negative impact on sales and operational EBIT. However, the impact on operational EBIT was partly offset by lower costs achieved through the profit protection programme. I am pleased that we had a record cash flow from operations, due to good working capital management, and extra dividend and capital repayment from Bergvik Skog. Looking at the whole year of 2019, sales remained above EUR 10 billion. Our operational EBIT decreased and was unsatisfactory.

The Board of Directors proposes to the Annual General Meeting a dividend of 0.50 euros per share, unchanged from last year.

Our transformation projects are progressing well, and the kraftliner production at the Oulu Mill is expected to start by the end of 2020. We are also strengthening our portfolio through innovation. To deliver viable alternatives to fossil-based plastics, we have invested to build a pilot facility for bio-based plastics. With this step, we target applications such as barriers in transparent packaging. Together with the Finnish start up Sulapac, we have additionally commercialised a renewable and biodegradable straw. This is one of our contributions to combat the global problem of plastic waste.

We continue to launch new products that enable our customers to leverage digital solutions to further advance their businesses. In this area, I am proud that we have entered into a global partnership with Atos to bring new automated retail solutions and services to the market. With radio-frequency identification (RFID) technology, we enable e-kiosks designed for on-the-go purchasing.

As sustainability is at the core of our business, we take further steps to promote wooden buildings. We have launched a new building concept that makes it easier for architects, engineers and developers to design office buildings from wood. We are engaged in a number of new wooden building projects, this quarter in Austria, Belgium, France, the Netherlands and Switzerland. Building in wood can bring up to 70% faster construction time, up to 80% fewer truck deliveries on site as well as cut carbon emissions by up to 75%, just to mention some of the benefits.

As the development towards a circular bioeconomy is accelerating in society, we are creating an organisation that further strengthens our ability to drive innovation and sustainability with a common agenda. Therefore, we created a new structure for our packaging divisions at year end. As of 2020 our new Forest division, which will better

enhance value creation from our forest assets, will be reported separately to increase transparency.

When it comes to the business climate in the Nordics, I would like to raise a word of caution. For the forestry industry, like for any other industry, we need predictability. Therefore, it is problematic when society is impacted by strikes, which has been the case around the new year. It is utterly important for our countries in this region of the world, to secure the competitive position of exporting industries and ensure that we are well equipped to compete globally.

I can now look back on my first two months in the role as CEO, and I am proud and excited to work with our talented colleagues across the company. We are here to deliver growth and profits, and push the boundaries of sustainability forward together with existing and new customers, partners and investors.

The future grows in the forest!

Annica Bresky, President and CEO

Dividend proposal per share

EUR 0.50

Operational ROCE (Q4/2019)

4.2%

(Target >13%)

Net debt to operational EBITDA

2.1

(Target <2.0)

Reconciliation of operational profitability

EUR million	Q4/19	Q4/18	Change % Q4/19- Q4/18	Q3/19	Change % Q4/19- Q3/19	2019	2018	Change % 2019-2018
Operational EBITDA	259	405	-36.0%	376	-31.0%	1 542	1 878	-17.9%
Depreciation and depletion of equity accounted investments (EAI)	-1	0	n/m	-1	-102.6%	-6	-7	23.6%
Operational decrease in the value of biological assets	-11	-20	45.3%	-14	22.6%	-51	-66	23.5%
Depreciation and impairment excl. IAC	-136	-114	-18.6%	-130	-3.9%	-533	-479	-11.3%
Operational EBIT	112	271	-58.8%	231	-51.7%	953	1 325	-28.1%
Fair valuations and non-operational items ¹	600	37	n/m	-25	n/m	544	45	n/m
Items affecting comparability (IAC)	-32	47	-166.6%	-36	12.9%	-192	20	n/m
Operating profit (IFRS)	680	356	91.4%	170	300.0%	1 305	1 390	-6.1%

¹ Fair valuations and non-operational items include CO₂ emission rights, valuations of biological assets and the Group's share of income tax and net financial items of EAI. Until the end of 2018, fair valuations and non-operational items also included equity incentive schemes and related hedges. The previous periods have not been restated due to immateriality.

Fourth quarter 2019 results (compared with Q4/2018)

Breakdown of change in sales Q4/2018 to Q4/2019

Sales Q4/2018, EUR million	2 657
Price and mix	-8%
Currency	1%
Volume	0%
Other sales ¹	-1%
Total before structural changes	-9%
Structural changes ²	0%
Total	-9%
Sales Q4/2019, EUR million	2 411

¹ Wood, energy, paper for recycling, by-products etc.

² Asset closures, major investments, divestments and acquisitions

Group sales decreased 9.3%, or EUR 246 million, from last year's record high Q4 level to EUR 2 411 (2 657) million. Sales prices continued to decline in pulp, containerboard, sawn goods and most paper grades. Lower board and paper deliveries were partly offset by higher pulp deliveries. The positive sales currency rate impact was offset by lower external wood sales.

Operational EBIT decreased 59% or EUR 159 million from the previous year to EUR 112 (271) million. The operational EBIT margin decreased to 4.6% (10.2%). Significantly lower prices for pulp, containerboard, sawn goods, and most paper grades and the negative volume impact from all other divisions except Biomaterials were only partly offset by lower variable and fixed costs, positively impacted by the profit protection programme.

Lower sales prices, especially for pulp, containerboard, sawn goods, and most paper grades decreased operational EBIT by EUR 226 million. Despite record high pulp deliveries, the total volume impact was EUR 20 million negative, mainly due to lower volumes in Paper, Consumer Board and Packaging Solutions.

Variable costs decreased EUR 76 million mainly due to lower pulp costs, raw material costs for corrugated units, wood costs in Central European saw mills and paper for recycling costs. Fixed costs decreased by EUR 12 million, positively impacted by the profit protection programme and the impact of the adoption of the IFRS 16 Leases standard. Net foreign exchange rates had a positive EUR 28 million impact on operational EBIT. The operational result from equity accounted investments decreased by EUR 13 million, mainly due to the restructuring of Bergvik Skog. Since 1 June 2019, the Group's Swedish forest holdings have been reported as a subsidiary. Depreciation was EUR 16 million higher, impacted by the adoption of the IFRS 16 Leases standard, which had a slight overall positive impact on the operational EBIT level.

The planned and unplanned production downtime to manage inventory levels, increased to 22% (16%) for paper, 11% (9%) for board, and 4% (1%) for wood products.

The average number of employees in the fourth quarter of 2019 was approximately 25 400 (26 200).

Fair valuations and non-operational items had a positive net impact on the operating profit of EUR 600 (positive EUR 44) million. This impact mainly came from the forest fair valuation increase in Stora Enso owned forests in Sweden (EUR 499 million). The forest valuation increase was mainly due to lower discount rates used in the valuation models and updates to other valuation parameters.

Earnings per share increased by 71.2% to EUR 0.66 (0.39), and earnings per share excluding items affecting comparability (IAC) increased to EUR 0.69 (0.33).

The Group recorded items affecting comparability (IACs) with a negative impact of EUR 32 (positive 47) million on its operating profit. The related tax impact was positive EUR 5 (0) million. The IACs relate mainly to the following actions:

- asset write downs in Biomaterials division of EUR 43 million
- adjustments related to the Bergvik Skog restructuring of positive EUR 54 million
- restructuring provisions and fixed asset impairments related to the profit protection programme of EUR 17 million
- expenses related to withholding and sales taxes of EUR 9 million

Net financial expenses of EUR 34 million were EUR 7 million lower. Net interest expenses of EUR 37 million increased by EUR 3 million, mainly as a result of higher gross debt levels and the implementation of IFRS 16 Leases, partly offset by the lower average interest expense rate on borrowings. Other net financial expenses were EUR 5 (3) million. The net foreign exchange rate impact in respect of cash equivalents, interest-bearing assets and liabilities and related foreign-currency hedges amounted to a gain of EUR 8 (loss of EUR 4) million, mainly due to a revaluation of foreign currency net debt in subsidiaries.

Breakdown of change in capital employed 31 December 2018 to 31 December 2019

EUR million	Capital employed
31 December 2018	8 824
Capital expenditure less depreciation	96
Right-of-use assets - adoption of IFRS 16 Leases	530
Impairments and reversal of impairments	-56
Fair valuation of biological assets	493
Operational decrease in biological asset values	-50
Unlisted securities (mainly PVO)	103
Equity accounted investments	-1 202
Net liabilities in defined benefit plans	-58
Operative working capital and other interest-free items, net	-307
Net tax liabilities	-97
Acquisition of subsidiary companies	2 362
Translation difference	34
Other changes	-38
31 December 2019	10 632

The operational return on capital employed (ROCE) in the fourth quarter of 2019 was 4.2% (12.4%). ROCE was negatively impacted by the Bergvik Skog restructuring (impact 0.6 percentage points) and by the adoption of the IFRS 16 Leases (impact 0.2 percentage points).

Fourth quarter 2019 results (compared with Q3/2019)

Sales increased 0.4%, or EUR 9 million, to EUR 2 411 (2 402) million. Operational EBIT decreased by EUR 119 million to EUR 112 (231) million. Sales prices in local currencies had a negative impact of EUR 75 million, mainly due to lower pulp, sawn goods and paper prices, while volumes had a negative impact of EUR 10 million, mainly due to lower consumer board volumes. Variable costs were EUR 47 million lower, but this was more than offset by EUR 77 million higher fixed costs, mainly due to seasonally higher personnel costs, and higher maintenance activity. The net foreign exchange impact decreased profitability by EUR 2 million. Depreciations were EUR 6 million higher, which was partly offset by EUR 3 million higher operational result from equity accounted investments.

Full year 2019 results (compared with full year 2018)

Breakdown of change in sales 2018 to 2019

Sales 2018, EUR million	10 486
Price and mix	-3.0%
Currency	0.0%
Volume	-1.8%
Other sales ¹	0.4%
Total before structural changes	-3.9%
Structural changes ²	-0.2%
Total	-4.1%
Sales 2019, EUR million	10 055

¹ Wood, energy, paper for recycling, by-products etc.

² Asset closures, major investments, divestments and acquisitions

Sales at EUR 10 055 (10 486) million were 4.1% lower than a year earlier, mainly due to lower paper volumes and significantly lower sales prices in all pulp grades and containerboard. Wood product prices were also lower. Consumer Board and paper prices had a positive impact on sales. The impact of the foreign exchange rate movements on sales was EUR 39 million positive. Sales excluding the paper business decreased by 3.0%.

Operational EBIT at EUR 953 (1 325) million decreased by 28.1% or EUR 372 million and represents a margin of 9.5% (12.6%). This decrease is mainly due to significantly lower sales prices in all pulp grades and containerboard and lower wood product prices. Lower paper volumes also had a negative impact on operational EBIT. Consumer board and paper prices had a positive EBIT impact.

Variable costs were EUR 26 million higher, mainly wood and transportation costs. Fixed costs decreased EUR 62 million, due to profit protection programme actions and the adoption of the IFRS 16 leasing standard. The net foreign exchange impact increased operational EBIT by EUR 73 million.

Segments in the fourth quarter 2019 (compared with Q4/2018)

As of 1 January 2020, Stora Enso merged its containerboard business previously in the Packaging Solutions division with the Consumer Board division, creating a new Packaging Materials division. The remaining business in Packaging Solutions, together with the recently created Formed Fiber unit, constitute a more focused Packaging Solutions division. The Group also established a new Forest division as of 1 January. The Interim Report for Q1/2020 will follow the new structure.

Consumer Board division

Successful 'value over volume' management

The ambition of the Consumer Board division is to be the global leader in high-quality virgin fiber cartonboard. We aim to be the preferred partner of customers and brand owners in premium end-use packaging and graphical segments. Our wide board and barrier coating selection is suitable for consumer packaging for liquid, food, pharmaceutical and luxury goods.

EUR million	Q4/19	Q4/18	Change % Q4/19- Q4/18	Q3/19	Change % Q4/19- Q3/19	2019	2018	Change % 2019- 2018
Sales	614	637	-3.7%	640	-4.1%	2 563	2 622	-2.3%
Operational EBITDA	95	74	29.0%	119	-20.0%	433	423	2.5%
Operational EBITDA margin	15.6%	11.6%		18.6%		16.9%	16.1%	
Operational EBIT	51	24	111.3%	73	-30.1%	250	231	8.1%
Operational EBIT margin	8.3%	3.8%		11.3%		9.7%	8.8%	
Operational ROOC	9.5%	5.0%		13.2%		12.3%	11.9%	
Cash flow from operations	145	65	123.6%	163	-11.3%	476	339	40.4%
Cash flow after investing activities	98	13	n/m	135	-27.3%	328	177	84.9%
Board deliveries, 1 000 tonnes	687	701	-2.0%	701	-2.0%	2 812	2 916	-3.6%
Board production, 1 000 tonnes	686	694	-1.2%	702	-2.2%	2 775	2 922	-5.0%

- Sales decreased by 4% or EUR 23 million, to EUR 614 million due to lower board deliveries in Europe.
- Operational EBIT increased by 111% or EUR 27 million to EUR 51 million. Value over volumes approach decreased volumes, but local sales prices were higher. Variable costs were clearly lower due to decreased pulp costs.
- Operational ROOC doubled to 9.5% (5.0%), in-line with profitability increase.
- Key account negotiations were completed successfully with increased prices.
- Stora Enso and Sulapac commercialised a renewable and biodegradable straw to combat the global problem of plastic waste. The new straws are available to brands and consumers looking for more eco-friendly solutions. Another step in our innovation agenda was establishing a competence centre focusing on different coating technologies at the Forshaga Mill in Sweden.
- Paper machine 6 at Imatra Mills in Finland was shut down as earlier announced. The machine's annual capacity was 90 000 tonnes of packaging papers. The closure will decrease Stora Enso's annual sales by approximately EUR 70 million. Production of selected packaging paper grades will continue on Veitsiluoto Mill paper machine 5.

Product	Market	Demand Q4/19 compared with Q4/18	Demand Q4/19 compared with Q3/19	Price Q4/19 compared with Q4/18	Price Q4/19 compared with Q3/19
Consumer board	Europe	Weaker	Slightly weaker	Slightly higher	Slightly lower

Sales and operational EBIT



Operational ROOC

9.5%
(Target: >20%)

Scheduled annual maintenance shutdowns

	2020 for Packaging Materials	2019 for Packaging Materials
Q1	Ostrołęka Mill PM5	Ostrołęka Mill PM5
Q2	Heinola and Ostrołęka kraft mills	—
Q3	Beihai, Imatra and Varkaus mills	Beihai, Imatra, Heinola and Ostrołęka mills
Q4	Fors, Ingerois and Skoghall mills	Fors, Ingerois, Skoghall and Varkaus mills

Packaging Solutions division

Challenges in containerboard, corrugated market continues to perform well

The Packaging Solutions division provides fiber-based board materials and corrugated packaging products and services that are designed for a wide array of applications. Our renewable high-end packaging solutions serve leading converters, brand owners and retailers – including those in e-commerce that are looking to optimise performance, drive innovation and improve their sustainability.

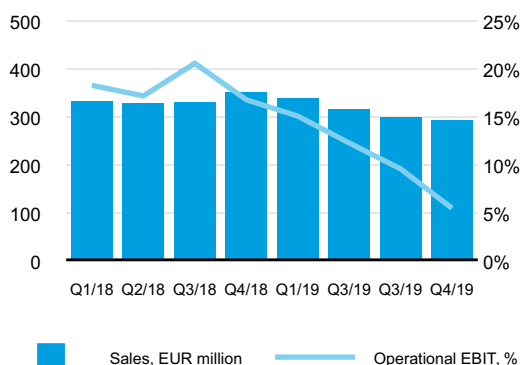
EUR million	Q4/19	Q4/18	Change % Q4/19- Q4/18	Q3/19	Change % Q4/19- Q3/19	2019	2018	Change % 2019-2018
Sales	293	352	-16.6%	299	-2.0%	1 247	1 344	-7.2%
Operational EBITDA	36	76	-53.4%	48	-25.6%	212	313	-32.3%
Operational EBITDA margin	12.2%	21.7%		16.0%		17.0%	23.3%	
Operational EBIT	16	59	-72.6%	29	-44.1%	135	245	-44.7%
Operational EBIT margin	5.5%	16.6%		9.6%		10.8%	18.2%	
Operational ROOC	6.8%	25.7%		12.1%		14.4%	27.2%	
Cash flow from operations	55	66	-17.4%	69	-21.2%	248	272	-8.7%
Cash flow after investing activities	8	41	-81.5%	26	-71.3%	135	172	-21.7%
Board deliveries, 1 000 tonnes	327	336	-2.6%	328	-0.1%	1 299	1 308	-0.7%
Board production, 1 000 tonnes	330	338	-2.3%	323	2.3%	1 303	1 320	-1.3%
Corrugated packaging deliveries, million m ²	267	276	-3.2%	262	2.0%	1 055	1 059	-0.3%
Corrugated packaging production, million m ²	269	273	-1.5%	260	3.3%	1 055	1 048	0.7%

- Sales decreased by 17%, or EUR 59 million from an all-time high level last year to EUR 293 million, mainly due to significantly lower containerboard prices and lower demand in China.
- Operational EBIT decreased by EUR 43 million from last year's record high Q4 level to EUR 16 million. Significantly lower containerboard prices and lower volumes were only partly offset by decreased raw material prices for the corrugated units, lower recycled paper costs and lower fixed costs.
- Operational ROOC decreased to 6.8% (25.7%), driven by significantly lower containerboard prices.
- The conversion of Oulu Mill into kraftliner production is proceeding as planned, and production is expected to start by the end of 2020.
- The expansion of the corrugated packaging plant in Riga, Latvia was completed and the ramp-up is ongoing as planned.

Markets

Product	Market	Demand Q4/19 compared with Q4/18	Demand Q4/19 compared with Q3/19	Price Q4/19 compared with Q4/18	Price Q4/19 compared with Q3/19
Virgin fiber-based containerboard	Global	Weaker	Slightly weaker	Significantly lower	Slightly lower
Recycled fiber based (RCP) containerboard	Europe	Slightly stronger	Slightly stronger	Significantly lower	Slightly lower
Corrugated packaging	Europe	Slightly stronger	Slightly stronger	Slightly lower	Stable

Sales and operational EBIT



Operational ROOC

6.8%

(Target: >20%)

Biomaterials division

Challenging market conditions continue, focus on inventory management

The Biomaterials division offers a variety of pulp grades to meet the demands of paper, board, tissue, textile and hygiene product producers. We maximise the business potential of the by-products extracted in our processes from biomass, such as tall oil and turpentine. Based on our strong innovation approach, all fractions of biomass, like sugars and lignin, hold potential for use in various applications.

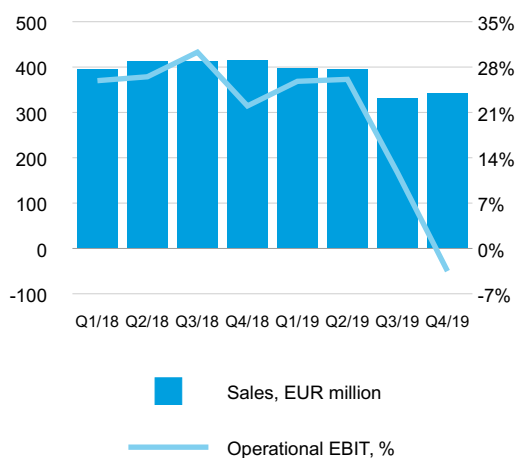
EUR million	Q4/19	Q4/18	Change % Q4/19- Q4/18	Q3/19	Change % Q4/19- Q3/19	2019	2018	Change % 2019-2018
Sales	341	415	-17.9%	331	2.9%	1 464	1 635	-10.5%
Operational EBITDA	21	116	-82.1%	67	-69.0%	356	550	-35.3%
Operational EBITDA margin	6.1%	28.0%		20.3%		24.3%	33.6%	
Operational EBIT	-12	91	-113.1%	39	-130.7%	233	427	-45.6%
Operational EBIT margin	-3.5%	22.0%		11.7%		15.9%	26.1%	
Operational ROOC	-1.9%	15.0%		5.9%		9.4%	17.9%	
Cash flow from operations	66	117	-43.6%	114	-42.2%	423	438	-3.3%
Cash flow after investing activities	11	80	-85.6%	82	-86.0%	266	327	-18.7%
Pulp deliveries, 1 000 tonnes	709	611	15.9%	596	18.9%	2 520	2 432	3.6%

- Sales decreased by 18% or EUR 82 million from last year's all-time high level to EUR 341 million. Significantly lower pulp prices were only partly offset by all-time high deliveries.
- Operational EBIT also decreased by EUR 103 million to EUR -12 million from last year's record high Q4 level. Significantly lower pulp prices were only partly offset by increased total volume impact. This was mainly due to all-time high deliveries to manage inventory levels. The scope of the annual maintenance works was unusually large especially at Skutskär Mill.
- Operational ROOC decreased to -1.9% (15.0%) in-line with lower profitability.
- Uimaharju sawmill, which is located next to Enocell pulp mill, was transferred to the Biomaterials division as from 1 January 2020, to secure delivery of wood chips to the mill.
- Stora Enso is investing EUR 9 million to build a pilot facility to enable the production of bio-based plastics as barrier in transparent packaging. The pilot plant will convert plant-based sugars into the renewable building block required to make polyethylene furanoate (PEF), a bio-based plastic, mainly targeting the food and beverage industry. The pilot plant will be located at Stora Enso's Langerbrugge Mill in Belgium. The investment is expected to be completed by Q2/2021.

Markets

Product	Market	Demand Q4/19 compared with Q4/18	Demand Q4/19 compared with Q3/19	Price Q4/19 compared with Q4/18	Price Q4/19 compared with Q3/19
Softwood pulp	Europe	Stable	Slightly stronger	Significantly lower	Slightly lower
Hardwood pulp	Europe	Stable	Slightly stronger	Significantly lower	Significantly lower
Hardwood pulp	China	Slightly stronger	Slightly stronger	Significantly lower	Lower

Sales and operational EBIT



Operational ROOC

-1.9%
(Target: >15%)

Scheduled annual maintenance shutdowns

	2020	2019
Q1	–	Veracel Mill
Q2	Sunila and Veracel mills	–
Q3	–	Enocell Mill
Q4	Montes del Plata and Skutskär mills	Montes del Plata and Skutskär mills

Wood Products division

Focus on margin protection and record Q4 cash flow

The Wood Products division is a leading provider of innovative wood-based solutions. The product range covers all areas of construction, including massive wood elements and wood components. It also includes a variety of sawn timber goods and pellets for sustainable heating. The emerging product range of biocomposites addresses the opportunities to reduce plastics in broad range of industrial and consumer goods and creates potential in various demanding exterior applications.

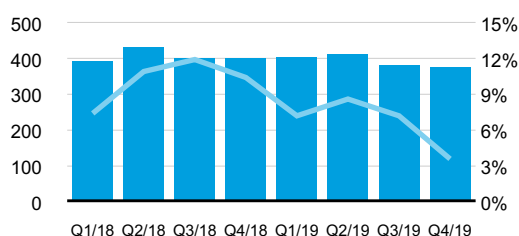
EUR million	Q4/19	Q4/18	Change % Q4/19- Q4/18	Q3/19	Change % Q4/19- Q3/19	2019	2018	Change % 2019-2018
Sales	374	399	-6.4%	380	-1.7%	1 569	1 622	-3.3%
Operational EBITDA	26	50	-48.0%	39	-33.7%	153	199	-23.0%
Operational EBITDA margin	7.0%	12.6%		10.3%		9.8%	12.3%	
Operational EBIT	14	42	-67.5%	27	-50.4%	105	165	-36.0%
Operational EBIT margin	3.6%	10.4%		7.2%		6.7%	10.2%	
Operational ROOC	8.2%	27.1%		15.8%		16.6%	28.1%	
Cash flow from operations	57	38	51.1%	57	-0.1%	183	147	24.7%
Cash flow after investing activities	42	23	81.6%	47	-9.5%	135	80	69.4%
Wood products deliveries, 1 000 m ³	1 149	1 247	-7.9%	1 185	-3.1%	4 753	4 932	-3.6%

- Sales decreased by 6%, or EUR 25 million to EUR 374 million mainly due to lower classic sawn prices and lower deliveries.
- Operational EBIT decreased by EUR 28 million from last year's record high Q4 level to EUR 14 million due to lower sales prices. Lower wood costs in Central European sawmills and lower fixed costs were only partly offset by lower total volume impact, mainly due to curtailments in Nordic mills to manage inventory levels and Kitee closure impact.
- Operational ROOC decreased to 8.2% (27.1%) due to lower profitability.
- Production at Kitee sawmill in Finland was shut down as planned.
- Stora Enso signed an agreement to divest its sawn construction timber (KVH) mill at Pfarrkirchen in Germany. The transaction is expected to be finalised during the first quarter 2020.
- Uimaharju sawmill, which is located next to Enocell pulp mill, was transferred to the Biomaterials division as from 1 January.
- During the quarter, Stora Enso launched a new building concept that makes it easier for architects, engineers and developers to design office buildings from wood.
- Finland's tallest wooden high-rise building, Lighthouse Joensuu, was granted the 'Puupalkinto' Wood Award 2019 for pioneering work to develop the wooden high-rise buildings. Stora Enso supplied the massive wood elements for the building.
- Stora Enso was also selected as the provider of wooden materials for 544 building projects around the world, using 45 000 m³ cross laminated timber (CLT) and 300 m³ laminated veneer lumber (LVL), including:
 - Cohousing in Antwerp, Belgium: 18 housing units using CLT and LVL.
 - Senior housing in Haacht, Belgium: 52 housing units, using CLT.
 - De Groot's office in Amersfoort, Netherlands.
 - Vélizy Morane Saulnier Althéa by Woodeum in Vélizy-Villacoublay France. 95 residential apartments.
 - Two kindergartens in Vienna, Austria.
 - Fokus Fällanden, Switzerland: 42 apartments built in CLT.

Markets

Product	Market	Demand Q4/19 compared with Q4/18	Demand Q4/19 compared with Q3/19	Price Q4/19 compared with Q4/18	Price Q4/19 compared with Q3/19
Wood products	Europe	Slightly weaker	Slightly weaker	Lower	Slightly lower

Sales and operational EBIT



■ Sales, EUR million
— Operational EBIT, %

8.2%

(Target: >20%)

Paper division

Strong cash flow supported by good cost and working capital management

Stora Enso is the second largest paper producer in Europe with an established customer base and a wide product portfolio for print and office use. Customers benefit from Stora Enso's broad selection of papers made from recycled and virgin fiber as well as our valuable industry experience, know-how and customer support.

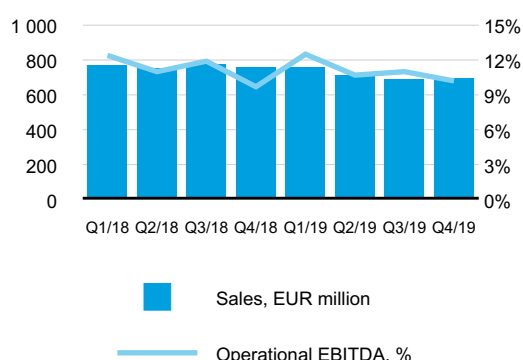
EUR million	Q4/19	Q4/18	Change % Q4/19- Q4/18	Q3/19	Change % Q4/19- Q3/19	2019	2018	Change % 2019-2018
Sales	694	761	-8.8%	690	0.5%	2 856	3 066	-6.8%
Operational EBITDA	71	73	-3.8%	76	-7.1%	318	345	-7.7%
Operational EBITDA margin	10.2%	9.7%		11.0%		11.1%	11.3%	
Operational EBIT	44	45	-3.0%	50	-12.9%	213	234	-9.1%
Operational EBIT margin	6.3%	5.9%		7.3%		7.4%	7.6%	
Operational ROOC	24.7%	22.9%		25.1%		29.3%	30.2%	
Cash flow from operations	97	31	214.5%	118	-18.0%	344	222	54.9%
Cash flow after investing activities	72	19	280.7%	99	-27.8%	264	175	51.4%
Cash flow after investing activities to sales, %	10.3%	2.5%		14.4%		9.3%	5.7%	
Paper deliveries, 1 000 tonnes	1 029	1 121	-8.2%	1 010	1.9%	4 130	4 591	-10.0%
Paper production, 1 000 tonnes	982	1 087	-9.7%	988	-0.6%	4 065	4 633	-12.3%

- Sales decreased by 9%, or EUR 67 million, to EUR 694 million, due to significantly lower paper deliveries and lower prices in most paper grades. The divestment of the Dawang paper mill in China decreased fourth quarter sales by EUR 13 million.
- Operational EBIT decreased EUR 1 million to EUR 44 million due to somewhat lower prices in most grades and significantly lower total volumes, impacted by curtailments to manage inventories. Variable costs were lower, mainly due to lower pulp and paper for recycling costs. Fixed costs decreased due to good cost management and profit protection programme.
- Cash flow after investing activities to sales ratio increased to 10.3% (2.5%), due to very good working capital management.
- The divestment of the 60% equity stake in the Dawang Mill in China to Shandong Huatai Paper was completed. Following this transaction, Stora Enso has no paper production in China and continues to serve Chinese paper customers from its European mills.

Markets

Product	Market	Demand Q4/19 compared with Q4/18	Demand Q4/19 compared with Q3/19	Price Q4/19 compared with Q4/18	Price Q4/19 compared with Q3/19
Paper	Europe	Significantly weaker	Slightly stronger	Slightly lower	Slightly lower

Sales and operational EBITDA



Cash flow after investing activities to sales¹

10.3%

(Target: >7%)

Scheduled annual maintenance shutdowns

	2020	2019
Q1	–	–
Q2	–	Nymölla Mill
Q3	Veitsiluoto Mill	Veitsiluoto Mill
Q4	Nymölla Mill	–

¹ The Paper division's financial target is cash flow after investing activities to sales (non-IFRS), because the division's goal is to generate cash flow for the Group so that it can transform into a renewable materials growth company.

Segment Other

The segment Other includes the Group's Swedish forest holdings, the Finnish forest equity-accounted investment Tornator, Stora Enso's shareholding in the energy company Pohjolan Voima (PVO), operations supplying wood to the Nordic and Baltic mills, plantations not connected to any mill site, and the Group's shared services and administration.

EUR million	Q4/19	Q4/18	Change % Q4/19- Q4/18	Q3/19	Change % Q4/19- Q3/19	2019	2018	Change % 2019-2018
Sales	819	913	-10.3%	786	4.2%	3 396	3 425	-0.9%
Operational EBITDA	11	15	-28.7%	26	-59.3%	70	48	45.3%
Operational EBITDA margin	1.3%	1.6%		3.3%		2.1%	1.4%	
Operational EBIT	0	9	-105.5%	13	-103.8%	17	23	-24.4%
Operational EBIT margin	-0.1%	1.0%		1.7%		0.5%	0.7%	
Cash flow from operations	302	7	n/m	-34	n/m	305	-52	n/m
Cash flow after investing activities	287	-27	n/m	-41	n/m	258	-119	n/m

- Sales decreased by EUR 94 million to EUR 819 million mainly due to decreased sales in Wood Supply.
- Operational EBIT decreased to a breakeven level mainly due to higher costs related to innovations and strategic initiatives.
- During the fourth quarter of 2019 EUR 232 million was received as dividends and capital repayment from Bergvik Skog equity accounted investment.

Financing in the fourth quarter 2019 (compared with Q3/2019)

Capital structure

EUR million	31 Dec 2019	30 Sep 2019	30 Jun 2019	31 Mar 2019	31 Dec 2018
Operative fixed assets ¹	10 779	10 057	10 018	7 197	6 636
Equity accounted investments	483	590	622	1 707	1 729
Operative working capital, net	771	1 163	1 274	1 330	1 078
Non-current interest-free items, net	-571	-506	-508	-482	-488
Operating Capital Total	11 462	11 303	11 406	9 752	8 955
Net tax liabilities	-830	-701	-710	-124	-132
Capital Employed	10 632	10 602	10 696	9 628	8 824
Equity attributable to owners of the Parent	7 429	6 875	6 722	6 522	6 714
Non-controlling interests	-7	-18	1	13	18
Net interest-bearing liabilities	3 209	3 745	3 973	3 093	2 092
Financing Total	10 632	10 602	10 696	9 628	8 824

¹ Operative fixed assets include goodwill, other intangible assets, property, plant and equipment, right-of-use assets, biological assets, emission rights, and unlisted securities.

Cash and cash equivalents net of overdrafts increased by EUR 169 million to EUR 863 million. Net debt decreased by EUR 536 million to EUR 3 209 (EUR 3 745) million mainly as a result of strong cash flow from operations, as well as dividend and capital repayments from Bergvik Skog. The ratio of net debt to the last 12 months' operational EBITDA was 2.1, compared to the ratio of 2.2 in the previous quarter. The net debt/equity ratio on 31 December 2019 was 0.43 (0.55). The average interest rate on borrowings increased to 3.5% (3.3%).

Stora Enso has a EUR 600 million committed revolving credit facility that was fully undrawn at the end of the quarter. Additionally, Stora Enso has access to various committed long-term sources of funding up to EUR 950 (1 000) million.

The fair value of Pohjolan Voima Oy (PVO) shares, accounted for as an equity investment fair valued through other comprehensive income under IFRS 9, increased in the quarter by EUR 29 million to EUR 522 million. During the quarter, Teollisuuden Voima Oyj (TVO) announced that the Olkiluoto 3 (OL3) nuclear power plant start-up schedule will be postponed and based on the updated schedule the OL3 nuclear power plant will commence regular electricity production in March 2021. The delay in the OL3 start-up schedule has been reflected in the fair valuation of PVO shares.

Cash flow in the fourth quarter 2019 (compared with Q3/2019)

Operative cash flow

EUR million	Q4/19	Q4/18	Change % Q4/19- Q4/18	Q3/19	Change % Q4/19- Q3/19	2019	2018	Change % 2019-2018
Operational EBITDA	259	405	-36.0%	376	-31.0%	1 542	1 878	-17.9%
IAC on operational EBITDA	22	47	-54.5%	-22	197.8%	-128	20	n/m
Other adjustments	166	-81	n/m	8	n/m	325	-104	n/m
Change in working capital	274	-50	n/m	126	117.0%	240	-428	156.0%
Cash Flow from Operations	721	323	123.5%	488	47.8%	1 980	1 365	45.0%
Cash spent on fixed and biological assets	-203	-155	-31.0%	-141	-44.1%	-587	-525	-11.8%
Acquisitions of equity accounted investments	0	-19	98.6%	0	n/m	-7	-29	77.2%
Cash Flow after Investing Activities	518	148	248.8%	347	49.1%	1 386	811	70.9%

The fourth quarter 2019 cash flow after investing activities was strong at EUR 518 million. Other adjustments include dividends and capital repayments from the Bergvik Skog equity accounted investment. Working capital decreased by EUR 274 million, due to active working capital management. Cash spent on fixed and biological assets was EUR 203 million. Payments related to the previously announced provisions amounted to EUR 6 million.

Capital expenditure

Additions to fixed and biological assets in the fourth quarter 2019 totalled EUR 302 (237) million, of which EUR 276 million were fixed assets including EUR 7 million of leases capex, and EUR 26 million of biological assets. Depreciations and impairment charges totalled EUR 136 (114) million. Additions in fixed and biological assets had a cash outflow impact of EUR 203 (155) million.

The main projects ongoing in the fourth quarter of 2019 were the Oulu Mill conversion into kraftliner production in Finland, the Launkalne wood products investment in Latvia, the expansion of the existing water treatment plant at Skoghall Mill in Sweden and the investments to boost green energy generation at Maxau Mill in Germany.

Capital expenditure and depreciation forecast 2020

EUR million	Forecast 2020
Capital expenditure	700–750
Depreciation and operational decrease in biological asset values	590–620

Stora Enso's capital expenditure forecast for 2020 was reduced by EUR 100 million from the earlier estimated range of EUR 800–850 million to improve 2020 cash flow. The estimate includes approximately EUR 80 million for the Group's biological assets and the capitalised leasing contracts according to IFRS 16 Leases of approximately EUR 40 million. The depreciation and operational decrease in the biological asset values forecast includes also the impact of IFRS 16. The operational decrease in biological asset values is forecast to be EUR 50–70 million.

Sustainability in the fourth quarter 2019 (compared with Q4/2018)

Safety performance

TRI rate

	Q4/19	Q4/18	Q3/19	2019	2018	Milestone	Milestone to be reached by
TRI rate ^{1,2}	6.6	8.1	7.6	7.0	6.1	5.3	end of 2019

TRI (Total recordable incident) rate = number of incidents per one million hours worked

¹ For own employees, including employees of the joint operations Veracel and Montes del Plata

² TRI rate for Q3/19 recalculated due to additional data received after the previous Interim Report.

Despite the ambition to improve our safety performance, the milestone for 2019 was not achieved. The new milestone will be communicated in the Interim Report for Q1/2020.

An occupational fatality occurred at Ždírec sawmill in Czech Republic in November involving one of our own employees. The investigation is ongoing. In addition, a fatality occurred at Skutskär Mill in Sweden in November involving a customer's contractor employee. An investigation by the authorities concluded that the fatality was due to a fall from the top of a tanker. The learnings from these tragic events will be acted upon in Stora Enso.

Suppliers

Implementation of the Supplier Code of Conduct

	31 Dec 2019	30 Sep 2019	31 Dec 2018	Target
% of supplier spend covered by the Supplier Code of Conduct ¹	96%	96%	95%	95%

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

The target is to maintain the high coverage level of 95%.

Forests, plantations, and land use

Agreements with social landless movements and land occupations in Bahia, Brazil

	31 Dec 2019	30 Sep 2019	31 Dec 2018
Productive area occupied by social movements not involved in the agreements, ha	469	469	468

At the end of the fourth quarter, 469 hectares of productive land owned by Veracel were occupied by social landless movements not involved in the agreements. Veracel continues to recover occupied areas through legal processes.

Since 2012, Veracel has voluntarily approved the transfer of approximately 20 000 hectares of land to benefit landless people. At the end of 2019, the total land area owned by Veracel was 213 000 hectares, of which 79 000 hectares are planted with eucalyptus for pulp production.

Carbon dioxide

Science-based target (SBT) performance compared to 2010 base-year level

	Q4/19	Q4/18	Q3/19	2019	2018	Target	Target to be reached by
Reduction of fossil CO ₂ e emissions per saleable tonne of board, pulp, and paper (kg/t) ^{1,2}	-22%	-16%	-32%	-25%	-18%	-31%	end of 2030

¹ Covering direct fossil CO₂e emissions from production and indirect fossil CO₂e emissions related to purchased electricity and heat (Scope 1 and 2). Excluding joint operations.

² Historical figures recalculated due to additional data after the previous Interim Reports.

In 2017, the Science Based Target initiative approved our 2030 target to reduce our greenhouse gas (GHG) emissions by 31% from operations per tonne of board, pulp, and paper produced compared to a 2010 base-year.

The SBT performance continued to be at a better level mainly due to a significant new contract to purchase certified renewable electricity in Poland from the national pool and less fossil-intensive purchased electricity at Finnish mills and Beihai Mill in China.

As of Q1/2020 the reporting format on SBT performance will be changed from quarterly to rolling four quarters data.

Other events

Stora Enso's Sustainability Report 2018 was chosen as the [best in Finland](#) in a competition organised by an independent group of expert organisations.

Stora Enso and other Confederation of European Paper Industries (CEPI) member companies launched [4evergreen alliance](#) to promote fiber-based packaging in circular economy.

Stora Enso signed the [A4S Net zero statement](#) of support by Accounting for Sustainability. During the quarter Stora Enso also received recognition from the [Finance for Future Awards](#) that highlight the essential role that the finance functions play in driving integrated thinking in decision making and in building sustainable business models.

Short-term risks and uncertainties

Increasing competition, and supply and demand imbalances in the paper, pulp, packaging, wood products and roundwood markets may affect Stora Enso's market share and profitability. Changes in the global economic and political environment, sharp market corrections, increasing volatility in foreign exchange rates and deteriorating economic conditions in the main markets could all affect Stora Enso's profits, cash flows and financial position.

With reference to current geopolitical circumstances, the immediate probability of a further escalation in the tariff wars between the US and China has diminished, but the chance of a lasting de-escalation in the trade conflict remains slim.

To mitigate the impact of deteriorating geopolitical and macroeconomic conditions, and increased uncertainty in the global economy, Stora Enso has a profit protection programme, targeting EUR 275 million reductions in fixed and variable costs by the end of 2021.

Exceptionally mild winter conditions could impact harvesting and the transport of wood and may therefore affect the stability of raw material supply and potentially increase wood costs to our Nordic mills.

The Finnish labour unions Pro, Industrial Union and Paper Workers' Union have initiated a three-week strike affecting the Finnish forest industry. The strikes have led to shut-downs of all Stora Enso's mills in Finland. If a contract with the unions is not reached, the labour disturbances in Finland may continue.

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

Other risks and uncertainties include, but are not limited to: general industry conditions, such as changes in the cost or availability of raw materials, energy and transportation costs; unanticipated expenditures related to the cost of compliance with existing and new environmental and other governmental regulations and to actual or potential litigation; material disruption at one of our manufacturing facilities; risks inherent in conducting business through joint ventures, and other factors that can be found in Stora Enso's press releases and disclosures.

A more detailed description of risks is available in Stora Enso's Financial Report at storaenso.com/annualreport

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

Wood sensitivity analysis: the direct effect of a 10% increase in wood prices would have a negative impact of approximately EUR 170 million on operational EBIT for the next 12 months.

Pulp sensitivity analysis: the direct effect of a 10% increase in pulp market prices would have a positive impact of approximately EUR 115 million on operational EBIT for the next 12 months.

Chemical and filler sensitivity analysis: the direct effect of a 10% increase in chemical and filler prices would have a negative impact of approximately EUR 33 million on operational EBIT for the next 12 months.

A decrease of energy, wood, pulp or chemical and filler prices would have the opposite impact.

Foreign exchange rates 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 against the euro would be approximately positive EUR 114 million, negative EUR 89 million and positive EUR 30 million annual impact, respectively. Weakening of the currencies would have the opposite impact. These numbers are before the effect of hedges and assuming no changes occur other than a single currency exchange rate movement.

The Group incurs annual unhedged net costs worth approximately EUR 158 million in Brazilian real (BRL) in its operations in Brazil and approximately EUR 42 million in Chinese Renminbi (CNY) in its operations in China. For these flows, a 10% strengthening in the value of a foreign currency would have a EUR 16 million and EUR 4 million negative 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.

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.

Legal proceedings in Latin America

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 BRL 20 (EUR 5) 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.

Legal proceedings in Sweden

Insurance claim

In July and August 2016, six Swedish insurance companies filed lawsuits in the Environmental Court and the District Court of Falun against Stora Enso, due to damage caused by the forest fire in Västmanland, Sweden, in 2014. The claimed amount is approximately SEK 300 (EUR 30) million, excluding interest. The environmental law case is closed based on that the environmental code was not applicable on damages caused by fire. The other case in the District Court of Falun has now been settled and the settlement amount in full has been covered by insurance and without financial impact for Stora Enso. Hence, there are no longer any open cases for compensation due to the forest fire. There will be no further reporting of these claims.

Company fine

In January 2018, a Swedish prosecutor filed a lawsuit against Stora Enso and its supplier, due to the forest fire in Västmanland, Sweden in 2014, claiming a company fine of SEK 5 million each. In December 2019, the court acquitted Stora Enso of responsibility for causing the fire. The verdict has been appealed to the Court of Appeal by the prosecutor and the supplier. The prosecutor has reduced the claim for company fine to SEK 2.5 million. There will be no further reporting of this case.

Changes in organisational structure and Group management

Annica Bresky started as President and CEO of Stora Enso on 1 December 2019.

Stora Enso merged its containerboard business in the Packaging Solutions division with the Consumer Board division, creating a new Packaging Materials division. The remaining business in Packaging Solutions, together with Stora Enso's recently created formed fiber unit, constitutes a more focused Packaging Solutions division. The Group also established a new Forest division. The changes are effective as of 1 January 2020.

Hannu Kasurinen was appointed EVP, Head of Consumer Board and member of the Group Leadership Team on 4 December 2019 and as of 1 January 2020, EVP, Head of Packaging Materials.

Gilles van Nieuwenhuyzen left his position as EVP Packaging Solutions on 6 December 2019 to pursue new career opportunities outside the company. David Ekberg, SVP and head of Business Unit Corrugated Nordics in the division took on the role as acting Head of Packaging Solutions as of 6 December 2019.

Jari Suominen was appointed EVP, Head of Forest division as of 1 January 2020. He continues as a member of the Group Leadership Team. Previously, he led the Wood Products division. Seppo Toikka, Head of Strategy and Business Controlling in Wood Products, took on the role as acting Head of the division as of 1 January 2020.

Major events in 2019

Decisions of Annual General Meeting 2019

Stora Enso Oyj's Annual General Meeting (AGM) was held on 14 March 2019 in Helsinki. The AGM approved the proposal by the Board of Directors that the Company distributes a dividend of EUR 0.50 per share for the year 2018.

The AGM approved the proposal that of the current members of the Board of Directors – **Jorma Eloranta, Elisabeth Fleuriot, Hock Goh, Christiane Kuehne, Antti Mäkinen, Richard Nilsson, Göran Sandberg, and Hans Stråberg** – be re-elected members of the Board of Directors until the end of the following AGM and that **Mikko Helander** be elected new member of the Board of Directors for the same term of office. The AGM elected Jorma Eloranta as Chair of the Board of Directors and Hans Stråberg as Vice Chair.

The AGM approved the proposed annual remuneration for the Board of Directors as follows:

Chair	EUR 192 000 (2018: 175 000)
Vice Chair	EUR 109 000 (2018: 103 000)
Members	EUR 74 000 (2018: 72 000)

The AGM also approved the proposal that the annual remuneration for the members of the Board of Directors, be paid in Company shares and cash so that 40% will be paid in Stora Enso R shares to be purchased on the Board members' behalf from the market at a price determined in public trading, and the rest in cash.

The AGM also approved the proposed annual remuneration for the Board committees.

The AGM approved the proposal that PricewaterhouseCoopers Oy be elected as auditor until the end of the following AGM. PricewaterhouseCoopers Oy has notified the company that **Samuli Perälä**, APA, will act as the responsible auditor. It was resolved that the remuneration for the auditor shall be paid according to invoice approved by the Financial and Audit Committee.

The AGM approved the proposals that the Board of Directors be authorised to decide on the repurchase and on the issuance of Stora Enso R shares. The amount of shares to be issued or repurchased shall not exceed a total of 2 000 000 R shares, corresponding to approximately 0.25% of all shares and 0.33% of all R shares.

Decisions by the Board of Directors

At its meeting held after the AGM, Stora Enso's Board of Directors elected Richard Nilsson (chair), Jorma Eloranta, and Elisabeth Fleuriot as members of the Financial and Audit Committee.

Jorma Eloranta (chair), Antti Mäkinen and Hans Stråberg were elected members of the Remuneration Committee.

Christiane Kuehne (chair), Hock Goh and Göran Sandberg were elected members of the Sustainability and Ethics Committee.

Shareholders' Nomination Board

The Shareholders' Nomination Board was appointed in September and it consists of the same members as for the previous period: Jorma Eloranta (Chair of Stora Enso's Board of Directors), Hans Stråberg (Vice Chair of Stora Enso's Board of Directors), **Harri Sailas** (Chair of the Board of Directors of Solidium Oy), and **Marcus Wallenberg** (Chair of the Board of Directors of FAM AB). The Shareholders' Nomination Board elected Marcus Wallenberg as its Chair.

The Shareholders' Nomination Board proposes to the AGM to be held on 19 March 2020 that the Company's Board of Directors shall have nine (9) members.

The Shareholders' Nomination Board proposes that of the current members of the Board of Directors - Jorma Eloranta, Elisabeth Fleuriot, Hock Goh, Mikko Helander, Christiane Kuehne, Antti Mäkinen, Richard Nilsson and Hans Stråberg be re-elected members of the Board of Directors until the end of the following AGM and that **Håkan Buskhe** be elected new member of the Board of Directors for the same term of office.

The Shareholders' Nomination Board proposes that Jorma Eloranta be elected Chair and Hans Stråberg be elected Vice Chair of the Board of Directors. Göran Sandberg has announced that he is not available for re-election to the Board of Directors.

Annual General Meeting 2020

Stora Enso Oyj's Annual General Meeting (AGM) will be held on Thursday 19 March 2020 at 4.00 p.m. Finnish time at the Marina Congress Center, Katajanokanlaituri 6, Helsinki, Finland.

The proposals for decisions relating to the agenda of the AGM and the AGM notice are available on Stora Enso Oyj's website at storaenso.com/agm. Stora Enso Oyj's annual accounts, the report of the Board of Directors and the auditor's report for 2019 will be published on Stora Enso Oyj's website storaenso.com/investors/annual-report during the week commencing 10 February 2020. The proposals for decisions and the other meeting documents will also be available at the AGM. The minutes of the AGM will be available on Stora Enso Oyj's website from 2 April 2020 at the latest.

The Board of Directors' proposal for the payment of dividend

The Board of Directors proposes to the AGM that a dividend of EUR 0.50 per share be distributed on the basis of the balance sheet adopted for the year 2019.

The dividend would be paid to shareholders who on the record date of the dividend payment, 23 March 2020, 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 30 March 2020.

Share capital and shareholdings

During the fourth quarter of 2019, the conversions of 1 230 A shares into R shares were recorded in the Finnish trade register. During 2019, the conversions of 55 838 A shares into R shares were recorded in the Finnish trade register.

On 31 December 2019, Stora Enso had 176 256 834 A shares and 612 363 153 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 237 493 149.

Events after the period

Malin Bendz, Executive Vice President, Human Resources, left her position at Stora Enso on 15 January 2020.

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.

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

Helsinki, 30 January 2020

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 2018 with the exception of new and amended standards applied to the annual periods beginning on 1 January 2019.

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.

Non-IFRS measures

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

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

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

Fair valuations and non-operational items include CO₂ emission rights, valuations of biological assets and the Group's share of income tax and net financial items of EAI. Until the end of 2018, fair valuations and non-operational items also included equity incentive schemes and related hedges. The previous periods have not been restated due to immateriality.

Cash flow from operations (non-IFRS) is a Group specific way to present operative cash flow starting from operational EBITDA instead of operating profit.

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

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

The following new and amended standards are applied to the annual periods beginning on 1 January 2019

Stora Enso has applied the following new and amended standards from 1 January 2019:

- **IFRS 16 Leases.** The new leasing standard replaced the guidance in IAS 17 and related interpretations and is a significant change in accounting by lessees in particular. IFRS 16 requires lessees to recognize a lease liability reflecting future lease payments and a right-of-use (ROU) asset for virtually all lease contracts. The distinction between operating and finance lease is removed for lessees. Before transition to IFRS 16, the Group had mainly contracts classified as operating leases, which were not capitalised and Stora Enso did not have any material finance lease contracts in effect at the end of 2018. Stora Enso is mainly acting as a lessee and does not have any material lease agreements where it would act as a lessor.

In accordance IFRS 16, at inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The change in lease definition mainly relates to the concept of control and amendment in lease definition have no material effect to the Group.

Stora Enso adopted IFRS 16 on 1 January 2019, using the modified retrospective approach and therefore the comparative information will not be restated and continues to be reported under IAS 17 and IFRIC 4. Effect of initial application of IFRS 16 is recognised in balance sheet at 1 January 2019. At transition, lease liabilities are measured at the present value of the remaining lease payments, discounted at the Group's incremental borrowing rate. ROU assets are measured an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments. The Group allocates the consideration in the contract to each lease component and will separate non-lease components if these are identifiable.

ROU assets are initially measured at cost, which comprises the initial amount of the lease liability adjusted mainly for lease payments made at or before the commencement date. The ROU assets are subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the lease term or the end of the useful life of the ROU asset. In addition, the ROU asset is adjusted for certain remeasurements of the lease liability. ROU assets are tested for impairment in accordance with IAS 36 Impairment of Assets.

Lease liabilities are initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the Group's incremental borrowing rate. The lease term applied corresponds to the non-cancellable period except in cases where the Group is reasonably certain to exercise renewal option or prolong the contract. The lease liabilities are measured at amortised cost using the effective interest method. Lease liabilities are remeasured mainly when there is a change in future lease payments arising from a change in an index or rate, or if there is a change in the Group's assessment whether it will exercise an extension option. When lease liability is remeasured, a corresponding adjustment is generally made to the carrying amount of the ROU asset.

The Group has elected not to recognise ROU assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low value assets. The Group has also applied the exemption not to recognise contracts which are ending in 2019. The Group has defined low value asset exemption to include leases in which the underlying asset is not material to Stora Enso. The assessment of whether the underlying asset is material and is within the scope or excluded from the recognition requirements of IFRS 16 is based on the concept of materiality in the Conceptual Framework and IAS 1. Leases of low value assets are mainly including IT and office equipment, certain vehicles and machinery and other low value items. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term. In addition the Group has applied hindsight in determination of lease term if lease contract includes extension options.

On transition to IFRS 16, leases previously classified as operating leases under IAS 17 resulted in the recognition of ROU assets and lease liabilities. It also resulted in decrease in operative expenses and an increase in depreciation charges and interest expenses. Under IFRS 16, cash paid for interest portion of lease liability is presented as part of operating activities and cash payments for the principal portion of lease liability is presented as part of financing activities. The adoption of IFRS 16 does not have an impact on the total net cash flow. Stora Enso's most material lease agreements capitalised at the implementation consist of land leases (~55%), operative machinery and equipment (~30%) and properties (~15%).

Undiscounted operating lease commitments at the end of 2018 were EUR 731 million. On transition to IFRS 16, the Group recognised an additional EUR 525 million of lease liabilities. No adjustment to the opening balance of retained earnings has been made due to IFRS 16 transition. The weighted average discount rate was 4.1%.

EUR million	1 Jan 2019
Operating lease commitments at 31 December 2018	731
Discounted using the incremental borrowing rates at 1 January 2019	544
Finance lease liabilities recognised as at 31 December 2018	1
Short term leases	-9
Leases of low-value assets	-16
Other*	5
Lease liabilities recognised at 1 January 2019	526
Finance lease liabilities recognised as at 31 December 2018	-1
Additional lease liabilities as a result of the initial application of IFRS 16	525

* Lease period adjustments (e.g. extension options), exclusion of non-lease components and variable rents not included in the measurement of the lease liability

As at 1 January 2019, the Group recognised an additional EUR 530 million of ROU assets. Amount is including prepaid expenses of EUR 5 million, presented as accrued expenses in balance sheet before transition and reclassified to ROU assets at IFRS 16 implementation. In addition certain land use contracts, amounting to EUR 80 million, before IFRS 16 transition accounted as intangible assets were classified on transition to IFRS 16 as leases. All the liabilities related to the arrangements have already been settled in previous periods and therefore there is no effect on the lease liability or income statement.

- Other amended IFRS standards and interpretations do not have material effect on the Group.

Future standard changes endorsed by the EU but not yet effective in 2019

- No future standard changes endorsed by the EU.

Condensed consolidated income statement

EUR million	Q4/19	Q4/18	Q3/19	2019	2018
Sales	2 411	2 657	2 402	10 055	10 486
Other operating income	55	27	40	165	92
Change in inventories of finished goods and WIP	-88	-2	-27	-102	125
Materials and services	-1 435	-1 602	-1 429	-5 964	-6 157
Freight and sales commissions	-225	-232	-221	-904	-932
Personnel expenses	-347	-339	-302	-1 331	-1 330
Other operating expenses	-149	-133	-120	-686	-526
Share of results of equity accounted investments	166	112	-12	229	181
Change in net value of biological assets	482	-17	-16	442	-68
Depreciation, amortisation and impairment charges	-189	-114	-145	-597	-479
Operating Profit	680	356	170	1 305	1 390
Net financial items	-34	-41	-55	-168	-180
Profit before Tax	646	315	115	1 137	1 210
Income tax	-127	-16	-57	-281	-221
Net Profit for the Period	519	299	59	856	988
Attributable to:					
Owners of the Parent	520	304	70	880	1 013
Non-controlling interests	0	-5	-11	-24	-24
Net Profit for the Period	519	299	59	856	988
Earnings per Share					
Basic earnings per share, EUR	0.66	0.39	0.09	1.12	1.28
Diluted earnings per share, EUR	0.66	0.39	0.09	1.12	1.28

Consolidated statement of comprehensive income

EUR million	Q4/19	Q4/18	Q3/19	2019	2018
Net profit/loss for the period	519	299	59	856	988
Other Comprehensive Income (OCI)					
Items that will Not be Reclassified to Profit and Loss					
Equity instruments at fair value through other comprehensive income	32	-58	99	109	97
Actuarial gains and losses on defined benefit plans	-73	-20	-4	-78	-24
Income tax relating to items that will not be reclassified	4	6	1	6	5
	-37	-73	95	37	78
Items that may be Reclassified Subsequently to Profit and Loss					
Share of OCI of EAls that may be reclassified	0	0	0	11	4
Currency translation movements on equity net investments (CTA)	26	33	25	206	-36
Currency translation movements on non-controlling interests	0	0	0	0	0
Net investment hedges and loans	7	-3	-11	-9	-14
Cash flow hedges	44	21	-31	-17	-24
Cost of hedging - time value of options	3	-1	-1	3	-2
Non-controlling interests' share of cash flow hedges	0	-1	0	0	-2
Income tax relating to items that may be reclassified	-10	-4	8	2	7
	70	46	-11	196	-68
Total Comprehensive Income	553	272	143	1 089	999
Attributable to:					
Owners of the Parent	553	277	154	1 113	1 025
Non-controlling interests	0	-6	-11	-24	-27
Total Comprehensive Income	553	272	143	1 089	999

CTA = Cumulative Translation Adjustment

OCI = Other Comprehensive Income

EAI = Equity Accounted Investments

Condensed consolidated statement of financial position

EUR million		31 Dec 2019	31 Dec 2018
Assets			
Goodwill	O	302	243
Other intangible assets	O	169	254
Property, plant and equipment	O	5 610	5 234
Right-of-use assets	O	508	0
		6 590	5 731
Biological assets	O	3 627	457
Emission rights	O	37	26
Equity accounted investments	O	483	1 729
Listed securities	I	12	13
Unlisted securities	O	526	422
Non-current interest-bearing receivables	I	72	54
Deferred tax assets	T	81	120
Other non-current assets	O	37	48
Non-current Assets		11 463	8 601
Inventories	O	1 391	1 567
Tax receivables	T	11	9
Operative receivables	O	1 289	1 487
Interest-bearing receivables	I	23	55
Cash and cash equivalents	I	876	1 130
Current Assets		3 590	4 248
Total Assets		15 053	12 849
Equity and Liabilities			
Owners of the Parent		7 429	6 714
Non-controlling Interests		-7	18
Total Equity		7 423	6 732
Post-employment benefit provisions	O	458	401
Other provisions	O	110	101
Deferred tax liabilities	T	875	168
Non-current interest-bearing liabilities	I	3 232	2 265
Other non-current operative liabilities	O	40	34
Non-current Liabilities		4 713	2 970
Current portion of non-current debt	I	376	403
Interest-bearing liabilities	I	572	675
Bank overdrafts	I	13	1
Other provisions	O	55	16
Other operative liabilities	O	1 854	1 960
Tax liabilities	T	48	92
Current Liabilities		2 917	3 147
Total Liabilities		7 630	6 117
Total Equity and Liabilities		15 053	12 849

Items designated with "O" comprise Operating Capital

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

Items designated with "T" comprise Net Tax Liabilities

Condensed consolidated statement of cash flows

EUR million	2019	2018
Cash Flow from Operating Activities		
Operating profit	1 305	1 390
Adjustments for non-cash items	435	404
Change in net working capital	240	-428
Cash Flow Generated by Operations	1 980	1 365
Net financial items paid	-153	-121
Income taxes paid, net	-178	-152
Net Cash Provided by Operating Activities	1 649	1 092
Cash Flow from Investing Activities		
Acquisition of subsidiary shares and business operations, net of acquired cash	-464	-4
Acquisitions of equity accounted investments	-7	-29
Acquisitions of unlisted securities	0	-3
Cash flow on disposal of subsidiary shares and business operations, net of disposed cash	-19	42
Cash flow on disposal of shares in equity accounted investments	0	3
Cash flow on disposal of unlisted securities	6	1
Cash flow on disposal of intangible assets and property, plant and equipment	12	9
Capital expenditure	-587	-525
Proceeds from non-current receivables, net	-18	8
Net Cash Used in Investing Activities	-1 077	-497
Cash Flow from Financing Activities		
Proceeds from issue of new long-term debt	870	578
Repayment of long-term debt and lease liabilities	-1 284	-358
Change in short-term borrowings	-33	39
Dividends paid	-394	-323
Buy-out of interest in subsidiaries from non-controlling interests	-8	-2
Equity injections from, less dividends to, non-controlling interests	-4	-2
Purchase of own shares ¹	-3	-5
Net Cash Provided by Financing Activities	-856	-73
Net Change in Cash and Cash Equivalents	-285	521
Translation adjustment	19	4
Net cash and cash equivalents at the beginning of period	1 128	603
Net Cash and Cash Equivalents at Period End	863	1 128
Cash and Cash Equivalents at Period End	876	1 130
Bank Overdrafts at Period End	-13	-1
Net Cash and Cash Equivalents at Period End	863	1 128
Disposal of Group companies and business operations		
Cash and cash equivalents	4	2
Other intangible assets, property, plant and equipment and biological assets	8	38
Working capital	3	-2
Interest-bearing assets and liabilities	-43	0
Non-controlling interests	11	-1
Net Assets in Divested Companies	-16	38
Gain on sale, excluding CTA release and transaction costs	1	6
Total Disposal Consideration	-15	44
Cash part of consideration	-15	44
Total Disposal Consideration	-15	44

¹ Own shares purchased for the Group's share award programme. The Group did not hold any of its own shares at 31 December 2019.

Statement of changes in equity

EUR million	Fair Valuation Reserve													
	Share Capital	Share Premium and Reserve fund	Invested Non-Restricted Equity Fund	Treasury Shares	Step Acquisition Revaluation Surplus	Equity investments through OCI	Available-for-Sale Investments	Cash Flow Hedges	OCI of Equity Accounted Investments	CTA and Net Investment Hedges and loans	Retained Earnings	Attributable to Owners of the Parent	Non-controlling Interests	Total
Balance at 31 December 2017	1 342	77	633	—	4	—	205	15	-14	-288	4 034	6 008	47	6 055
Adoption of IFRS 2 and IFRS 9						205	-205				8	8		
Balance at 1 January 2018	1 342	77	633	—	4	205	—	15	-14	-288	4 042	6 016	47	6 063
Profit/loss for the period	—	—	—	—	—	—	—	—	—	—	1 013	1 013	-24	988
OCI before tax	—	—	—	—	—	97	—	-26	4	-50	-24	—	-2	-2
Income tax relating to components of OCI	—	—	—	—	—	1	—	5	—	3	4	13	—	13
Total Comprehensive Income	—	—	—	—	—	98	—	-22	4	-47	993	1 026	-27	999
Dividend	—	—	—	—	—	—	—	—	—	—	-323	-323	-2	-326
Acquisitions and disposals	—	—	—	—	—	—	—	—	—	—	—	—	-2	-2
NCI buy-out	—	—	—	—	—	—	—	—	—	—	-2	-2	2	—
Purchase of treasury shares	—	—	—	-5	—	—	—	—	—	—	—	-5	—	-5
Share-based payments	—	—	—	5	—	—	—	—	—	—	-3	2	—	2
Balance at 31 December 2018	1 342	77	633	—	4	304	—	-7	-11	-335	4 706	6 714	18	6 732
Profit/loss for the period	—	—	—	—	—	—	—	—	—	—	880	880	-24	856
OCI before tax	—	—	—	—	—	109	—	-14	11	197	-78	225	—	225
Income tax relating to components of OCI	—	—	—	—	—	—	—	1	—	1	6	9	—	9
Total Comprehensive Income	—	—	—	—	—	109	—	-13	11	198	808	1 113	-24	1 089
Dividend	—	—	—	—	—	—	—	—	—	—	-394	-394	-1	-395
Acquisitions and disposals	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Purchase of treasury shares	—	—	—	-4	—	—	—	—	—	—	—	-4	—	-4
Share-based payments	—	—	—	4	—	—	—	—	—	—	-3	—	—	—
Balance at 31 December 2019	1 342	77	633	—	4	413	—	-20	—	-136	5 116	7 429	-7	7 423

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 biological assets

EUR million	2019	2018
Carrying value at 1 January	6 187	6 224
Additions in right-of-use assets due to adoption of IFRS 16	530	0
Additions in tangible and intangible assets	550	491
Additions in right-of-use assets	29	0
Additions in biological assets	77	83
Costs related to growth of biological assets	-51	-66
Acquisition of subsidiary companies	2 988	5
Disposals	-11	-5
Disposals of subsidiary companies	-8	-37
Depreciation and impairment	-597	-479
Fair valuation of biological assets	493	-2
Translation difference and other	29	-26
Statement of Financial Position Total	10 216	6 187

Acquisitions in Q2 2019 - Bergvik Skog AB restructuring

The Group owns 49.8% of shares in Bergvik Skog AB which continue to be reported as an equity accounted investment.

On 31 May 2019, Bergvik Väst AB, a subsidiary of Bergvik Skog AB, was distributed as dividend to the shareholders of Bergvik Skog AB. At the same date the Group acquired additional 20% of the shares in Bergvik Väst AB from other shareholders resulting in a total holding in Bergvik Väst AB of 69.8%. Simultaneously, Bergvik Väst AB was demerged and Stora Enso became the 100% owner of a new subsidiary, holding around 69.8% of the former Bergvik Väst AB assets and liabilities. The acquisition date of the new subsidiary is 31 May 2019.

As a result of the transaction Stora Enso's direct forest holdings in Sweden are 1.4 million hectares, of which 1.15 million hectares is productive forest land.

Separately from the above transactions Stora Enso also acquired from Bergvik Skog AB 100% of the nursery business Bergvik Skog Plantor AB, three wind turbine projects and real estates companies, presented in the table below as Other acquisitions.

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

EUR million	Acquisition of 69.8% of Bergvik Väst AB	Other acquisitions	Total
Cash and cash equivalents, net of bank overdrafts	64	0	64
Land	305	-	305
Other property, plant and equipment	8	19	27
Biological assets ¹	2 598	-	2 598
Operating working capital	-35	7	-29
Tax liabilities ¹	-598	0	-598
Interest-bearing liabilities	-793	-	-793
Fair value of Net Assets Acquired	1 550	25	1 575
Purchase consideration on acquisitions, cash part ¹	500	27	527
Fair value of 49.8% of shares in Bergvik Väst AB, non-cash	1 106	-	1 106
Total Purchase Consideration	1 605	27	1 633
Fair value of Net Assets Acquired	-1 550	-25	-1 575
Goodwill (provisional for 2019) ¹	56	2	57
Cash out flow with purchase consideration on acquisitions ¹	-500	-27	-527
Cash and cash equivalents, net of bank overdrafts of acquired subsidiaries	64	0	64
Cash flow on acquisition of subsidiary shares and business operations, net of acquired cash	-436	-27	-464

¹ Biological assets increased by EUR 75 million, tax liabilities increased by EUR 8 million, goodwill decreased by EUR 21 million, the fair value of the original 49.79% ownership of Bergvik Väst increased by EUR 48 million and cash consideration decreased by EUR 1 million versus the preliminary balances presented in Q2/2019 Interim Report. The changes are mainly due to updates to biological assets valuation to better reflect the conditions existing at acquisition date.

The fair value of the shares received as a dividend was determined based on the acquired net assets value of Bergvik Väst AB, whereby the fair values of the biological assets and land were estimated through a discounted cash flow model. A deferred tax liability was also included in the acquisition balances.

The fair values of the acquired assets, liabilities and goodwill have been determined on a provisional basis pending finalisation of the post-combination review of the fair value of the acquired assets mainly with respect to biological assets valuation and related deferred tax liabilities.

The provisional goodwill represents the value of securing a competitive raw material supply for the long term in Sweden. With direct ownership, Stora Enso will have a better visibility of its wood supply and the acquisition provides better opportunities to further develop sustainable forest management and strengthening of Group's competitiveness. The goodwill has been allocated to the Divisions benefiting from the acquisition.

Almost all the revenues of the acquired entity are internal from Stora Enso Group's point of view. The acquired entity's net profit has been reported for the first five months of the year in the Group result as part of the Share of results of the equity accounted investments. Therefore, even if the acquisition had taken place from 1 January 2019 it would not have had a significant impact on the Group sales and net profit figure for Q2/19 and for the first half of 2019. Related transaction costs during 2019 amounted to EUR 3 million and were recorded to Other operating expenses.

Mainly, as a result of these transactions, the total amount of equity accounted investments of the Group decreased from EUR 1 729 million at end of 2018 to EUR 622 million at end of June 2019.

Borrowings

EUR million	31 Dec 2019	31 Dec 2018
Bond loans	1 978	1 523
Loans from credit institutions	1 162	1 140
Lease liabilities	440	0
Finance lease liabilities	0	1
Derivative financial liabilities	24	0
Other non-current liabilities	5	4
Non-current interest bearing liabilities including current portion	3 608	2 668
Short-term borrowings	516	566
Interest payable	33	40
Derivative financial liabilities	23	68
Bank overdrafts	13	1
Total Interest-bearing Liabilities	4 192	3 344

EUR million	2019	2018
Carrying value at 1 January	3 344	3 016
Additions in lease liabilities due to adoption of IFRS 16	525	0
Acquisition of subsidiary companies	793	0
Proceeds of new long-term debt	870	578
Additions in lease liabilities	29	0
Repayment of long-term debt	-1 216	-358
Repayment of lease liabilities and interest	-88	0
Change in short-term borrowings and interest payable	-58	46
Change in derivative financial liabilities	-21	32
Translation differences and other	13	30
Total Interest-bearing Liabilities	4 192	3 344

Commitments and contingencies

EUR million	31 Dec 2019	31 Dec 2018
On Own Behalf		
Mortgages	2	2
Operating leases, in next 12 months	0	100
Operating leases, after next 12 months	0	631
Other commitments	3	6
On Behalf of Equity Accounted Investments		
Guarantees	4	4
On Behalf of Others		
Guarantees	6	23
Other commitments	13	13
Total	28	779
Mortgages	2	2
Guarantees	10	27
Operating leases	0	731
Other commitments	17	19
Total	28	779

Operating lease obligations have been reported on balance sheet in accordance with requirements of IFRS 16 Leases since 1 January 2019.

Capital commitments

EUR million	31 Dec 2019	31 Dec 2018
Total	223	111

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

Sales by segment – total

EUR million	2019	Q4/19	Q3/19	Q2/19	Q1/19	2018	Q4/18	Q3/18	Q2/18	Q1/18
Consumer Board	2 563	614	640	675	634	2 622	637	648	691	646
Packaging Solutions	1 247	293	299	316	338	1 344	352	330	329	333
Biomaterials	1 464	341	331	394	398	1 635	415	413	413	394
Wood Products	1 569	374	380	412	403	1 622	399	400	430	393
Paper	2 856	694	690	712	760	3 066	761	779	754	772
Other	3 396	819	786	868	922	3 425	913	831	844	838
Inter-segment sales	-3 040	-724	-725	-770	-821	-3 229	-820	-815	-797	-797
Total	10 055	2 411	2 402	2 608	2 635	10 486	2 657	2 585	2 664	2 579

Sales by segment – external

EUR million	2019	Q4/19	Q3/19	Q2/19	Q1/19	2018	Q4/18	Q3/18	Q2/18	Q1/18
Consumer Board	2 547	610	636	672	630	2 608	634	645	688	642
Packaging Solutions	1 223	288	294	310	332	1 318	346	323	323	326
Biomaterials	1 193	284	268	323	318	1 233	325	305	319	284
Wood Products	1 457	349	356	382	370	1 497	367	366	398	366
Paper	2 800	681	675	699	745	3 004	747	764	738	756
Other	835	200	174	223	239	825	239	183	198	206
Total	10 055	2 411	2 402	2 608	2 635	10 486	2 657	2 585	2 664	2 579

Disaggregation of revenue

EUR million	2019	Q4/19	Q3/19	Q2/19	Q1/19	2018	Q4/18	Q3/18	Q2/18	Q1/18
Product sales	9 935	2 389	2 372	2 567	2 608	10 346	2 623	2 550	2 626	2 547
Service sales	120	22	31	40	27	140	34	35	38	32
Total	10 055	2 411	2 402	2 608	2 635	10 486	2 657	2 585	2 664	2 579

Sales comprise mainly sales of products and are typically recognised at a point in time when Stora Enso transfers control of products to a customer.

Product and service sales by segment

EUR million		2019	Q4/19	Q3/19	Q2/19	Q1/19	2018	Q4/18	Q3/18	Q2/18	Q1/18
Consumer Board	Product sales	2 551	611	637	672	631	2 611	634	645	688	643
	Service sales	12	3	3	3	3	11	3	3	3	3
Packaging Solutions	Product sales	1 244	293	298	315	338	1 340	351	329	328	332
	Service sales	3	1	1	1	1	4	1	1	1	1
Biomaterials	Product sales	1 436	336	324	386	391	1 610	410	407	407	387
	Service sales	28	5	8	8	7	25	5	6	6	7
Wood Products	Product sales	1 550	368	375	406	400	1 619	398	399	429	392
	Service sales	19	6	5	6	3	3	1	0	1	1
Paper	Product sales	2 842	690	687	708	757	3 043	755	773	748	767
	Service sales	14	4	3	4	3	23	6	5	7	5
Other	Product sales	2 459	592	549	627	690	2 430	665	579	587	599
	Service sales	937	227	237	241	232	995	248	252	257	239
Inter-segment sales	Product sales	-2 146	-501	-499	-548	-599	-2 307	-590	-583	-562	-573
	Service sales	-894	-223	-226	-222	-223	-922	-229	-232	-236	-224
Total		10 055	2 411	2 402	2 608	2 635	10 486	2 657	2 585	2 664	2 579

Operational EBIT by segment

EUR million	2019	Q4/19	Q3/19	Q2/19	Q1/19	2018	Q4/18	Q3/18	Q2/18	Q1/18
Consumer Board	250	51	73	72	54	231	24	50	65	91
Packaging Solutions	135	16	29	39	51	245	59	68	57	61
Biomaterials	233	-12	39	103	103	427	91	125	109	102
Wood Products	105	14	27	35	29	165	42	48	47	29
Paper	213	44	50	50	69	234	45	65	54	69
Other	17	0	13	-12	17	23	9	2	-5	17
Operational EBIT	953	112	231	287	324	1 325	271	358	327	369
Fair valuations and non-operational items ¹	544	600	-25	-25	-7	45	37	5	17	-14
Items affecting comparability	-192	-32	-36	-120	-4	20	47	0	-28	0
Operating Profit (IFRS)	1 305	680	170	142	313	1 390	356	363	317	355
Net financial items	-168	-34	-55	-48	-31	-180	-41	-58	-60	-22
Profit before Tax	1 137	646	115	93	282	1 210	315	305	257	333
Income tax expense	-281	-127	-57	-41	-56	-221	-16	-101	-44	-60
Net Profit	856	519	59	52	226	988	299	204	213	273

¹ Fair valuations and non-operational items include CO₂ emission rights, valuations of biological assets and the Group's share of income tax and net financial items of EAI. Until the end of 2018, fair valuations and non-operational items also included equity incentive schemes and related hedges. The previous periods have not been restated due to immateriality.

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

EUR million	2019	Q4/19	Q3/19	Q2/19	Q1/19	2018	Q4/18	Q3/18	Q2/18	Q1/18
Impairments and impairment reversals	-62	-51	-14	6	-3	0	0	0	0	0
Restructuring costs excluding impairments	-52	-15	-5	-31	-1	0	0	0	0	0
Acquisitions and disposals	-59	44	-15	-88	0	20	47	0	-28	0
Other	-19	-9	-2	-8	0	0	0	0	0	0
Total IAC on Operating Profit	-192	-32	-36	-120	-4	20	47	0	-28	0
Fair valuations and non-operational items	544	600	-25	-25	-7	45	37	5	17	-14
Total	353	569	-61	-145	-11	65	84	5	-11	-14

As an update to Bergvik Skog restructuring transactions reported in Q3/2019, a gain of EUR 54 million was recorded as items affecting comparability in Q4/2019. The amount includes an adjustment to net gain on the transaction of EUR 47 million, presented in Share of results of equity accounted investments. The amount also includes an update to reclassification of exchange rate differences historically accumulated to equity (CTA reserve) through the Income Statement of EUR 7 million.

Fair valuations and non-operational items had a positive net impact on the operating profit of EUR 600 (positive EUR 44) million. The impact came mainly from the forest fair valuation increase in Stora Enso owned forests in Sweden (EUR 499 million). The forest valuation increase was mainly due to lower discount rates used in the valuation models and updates to other valuation parameters.

Items affecting comparability (IAC) by segment

EUR million	2019	Q4/19	Q3/19	Q2/19	Q1/19	2018	Q4/18	Q3/18	Q2/18	Q1/18
Consumer Board	-10	-2	0	-4	-4	0	0	0	0	0
Packaging Solutions	6	-5	-6	17	0	0	0	0	0	0
Biomaterials	-51	-51	0	0	0	0	0	0	0	0
Wood Products	-13	-2	0	-10	0	0	0	0	0	0
Paper	-58	-11	-21	-27	0	0	0	0	0	0
Other	-66	39	-9	-96	0	20	47	0	-28	0
IAC on Operating Profit	-192	-32	-36	-120	-4	20	47	0	-28	0
IAC on tax	13	5	2	6	1	-27	0	-27	0	0
IAC on Net Profit	-180	-27	-35	-115	-3	-8	47	-27	-28	0
Attributable to:										
Owners of the Parent	-180	-27	-35	-115	-3	-8	47	-27	-28	0
Non-controlling interests	0	0	0	0	0	0	0	0	0	0
IAC on Net Profit	-180	-27	-35	-115	-3	-8	47	-27	-28	0

Fair valuations and non-operational items¹ by segment

EUR million	2019	Q4/19	Q3/19	Q2/19	Q1/19	2018	Q4/18	Q3/18	Q2/18	Q1/18
Consumer Board	7	7	0	0	0	-1	0	0	0	-1
Packaging Solutions	0	0	0	0	0	-1	0	0	0	-1
Biomaterials	-2	-1	-2	1	0	-3	3	-2	-3	-1
Wood Products	0	0	0	0	0	-1	0	0	0	-1
Paper	-1	1	-3	-3	5	0	-4	-1	4	1
Other	539	594	-20	-23	-12	51	38	7	17	-11
FV and Non-operational Items on Operating Profit	544	600	-25	-25	-7	45	37	5	17	-14

¹ Fair valuations and non-operational items include CO₂ emission rights, valuations of biological assets and the Group's share of income tax and net financial items of EAI. Until the end of 2018, fair valuations and non-operational items also included equity incentive schemes and related hedges. The previous periods have not been restated due to immateriality.

Operating profit/loss by segment

EUR million	2019	Q4/19	Q3/19	Q2/19	Q1/19	2018	Q4/18	Q3/18	Q2/18	Q1/18
Consumer Board	247	56	73	68	50	230	25	50	65	90
Packaging Solutions	141	11	23	56	51	244	59	68	56	60
Biomaterials	180	-65	37	104	103	425	94	123	106	101
Wood Products	92	11	27	25	29	164	42	48	47	28
Paper	154	33	26	20	74	234	41	65	58	70
Other	491	633	-16	-132	5	93	95	9	-16	6
Operating Profit (IFRS)	1 305	680	170	142	313	1 390	356	363	317	355
Net financial items	-168	-34	-55	-48	-31	-180	-41	-58	-60	-22
Profit before Tax	1 137	646	115	93	282	1 210	315	305	257	333
Income tax expense	-281	-127	-57	-41	-56	-221	-16	-101	-44	-60
Net Profit	856	519	59	52	226	988	299	204	213	273

Key exchange rates for the euro

One Euro is	Closing Rate		Average Rate	
	31 Dec 2019	31 Dec 2018	31 Dec 2019	31 Dec 2018
SEK	10.4468	10.2548	10.5868	10.2567
USD	1.1234	1.1450	1.1195	1.1815
GBP	0.8508	0.8945	0.8773	0.8847

Transaction risk and hedges in main currencies as at 31 December 2019

EUR million	EUR	USD	SEK	GBP	Other	Total
Sales during 2019	5 689	1 884	1 045	402	1 035	10 055
Costs during 2019	-4 804	-530	-2 113	-60	-1 317	-8 824
Net amount	886	1 354	-1 068	342	-282	1 231
Estimated annual operating cash flow exposure		1 141	-894	300		
Transaction hedges as at 31 December 2019		-600	557	-136		
Hedging percentage as at 31 December 2019 for the next 12 months		53%	62%	45%		

Changes in exchange rates on Operational EBIT

Operational EBIT: Currency strengthening of +10%	EUR million
USD	114
SEK	-89
GBP	30

The sensitivity is based on the estimated net operating cash flow for the next 12 months. The calculation does not take into account currency hedges, and it assumes that no changes occur other than exchange rate movement in a currency. A currency weakening would have the opposite impact.

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.

Carrying amounts of financial assets and liabilities by measurement and fair value categories: 31 December 2019

EUR million	Amortised cost	Fair value through OCI	Fair value through Income Statement	Hedge accounted derivatives	Total carrying amount	Fair value
Financial assets						
Listed securities	-	12	-	-	12	12
Unlisted securities	-	522	3	-	526	526
Non-current interest-bearing receivables	71	-	-	1	72	72
Trade and other operative receivables	930	38	-	-	968	968
Short-term interest-bearing receivables	3	-	3	17	23	23
Cash and cash equivalents	876	-	-	-	876	876
Total	1 879	573	7	18	2 477	2 477

EUR million	Amortised cost	Fair value through Income Statement	Hedge accounted derivatives	Total carrying amount	Fair value
Financial liabilities					
Non-current interest-bearing liabilities	3 207	4	21	3 232	3 549
Current portion of non-current debt	376	-	-	376	376
Short-term interest-bearing liabilities	546	1	24	572	572
Trade and other operative payables	1 574	25	-	1 598	1 598
Bank overdrafts	13	-	-	13	13
Total	5 716	30	45	5 790	6 107

The following items are measured at fair value on a recurring basis.

EUR million	Level 1	Level 2	Level 3	Total
Listed securities	12	-	-	12
Unlisted securities	-	-	526	526
Trade and other operative receivables	-	38	-	38
Derivative financial assets	-	21	-	21
Total financial assets	12	59	526	597
Trade and other operative liabilities	-	-	25	25
Derivative financial liabilities	-	50	-	50
Total financial liabilities	-	50	25	75

Carrying amounts of financial assets and liabilities by measurement and fair value categories: 31 December 2018

EUR million	Amortised cost	Fair value through OCI	Fair value through Income Statement	Hedge accounted derivatives	Total carrying amount	Fair value
Financial assets						
Listed securities	-	13	-	-	13	13
Unlisted securities	-	415	8	-	422	422
Non-current interest-bearing receivables	54	-	-	-	54	54
Trade and other operative receivables	1 092	44	-	-	1 136	1 136
Short-term interest-bearing receivables	1	-	5	49	55	55
Cash and cash equivalents	1 130	-	-	-	1 130	1 130
Total	2 277	472	13	49	2 811	2 811

EUR million	Amortised cost	Fair value through Income Statement	Hedge accounted derivatives	Total carrying amount	Fair value
Financial liabilities					
Non-current interest-bearing liabilities	2 265	-	-	2 265	2 541
Current portion of non-current debt	403	-	-	403	403
Short-term interest-bearing liabilities	604	7	63	675	675
Trade and other operative payables	1 627	21	-	1 648	1 648
Bank overdrafts	1	-	-	1	1
Total	4 901	28	63	4 992	5 268

The following items are measured at fair value on a recurring basis.

EUR million	Level 1	Level 2	Level 3	Total
Listed securities	13	-	-	13
Unlisted securities	-	-	422	422
Trade and other operative receivables	-	44	-	44
Derivative financial assets	-	54	-	54
Total financial assets	13	98	422	533
Trade and other operative liabilities	-	-	21	21
Derivative financial liabilities	-	70	-	70
Total financial liabilities	-	70	21	91

Reconciliation of level 3 fair value measurement of financial assets and liabilities: 31 December 2019

EUR million	2019	2018
Financial assets		
Opening balance at 1 January	422	318
Gains/losses recognised in income statement	0	-2
Gains/losses recognised in other comprehensive income	109	104
Additions	0	3
Disposals	-5	-1
Closing balance	526	422

EUR million	2019	2018
Financial liabilities		
Opening balance at 1 January	-21	-20
Gains/losses recognised in income statement	-4	0
Translation difference	0	-1
Closing balance	-25	-21

Level 3 Financial Assets

The level 3 financial assets consist mainly of PVO shares for which the valuation method is described in more detail in the Annual Report. The valuation is most sensitive to changes in electricity prices and discount rates. The discount rate of 3.18% 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 +98 million and -77 million, respectively. A +/- 1%-point change in the discount rate would change the valuation by EUR -75 million and +185 million, respectively.

Stora Enso shares

Trading volume

	Helsinki		Stockholm	
	A share	R share	A share	R share
October	113 335	57 265 530	259 266	29 977 796
November	91 085	46 315 780	187 831	20 076 655
December	147 839	40 900 831	211 536	15 432 916
Total	352 259	144 482 141	658 633	65 487 367

Closing price

	Helsinki, EUR		Stockholm, SEK	
	A share	R share	A share	R share
October	13.00	11.63	140.50	125.20
November	13.35	12.20	142.50	128.90
December	13.55	12.97	142.50	135.90

Average number of shares

Million	Q4/19	Q4/18	Q3/19	2019	2018
Periodic	788.6	788.6	788.6	788.6	788.6
Cumulative	788.6	788.6	788.6	788.6	788.6
Cumulative, diluted	789.4	789.7	789.5	789.5	789.9

Calculation of key figures

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

¹ Capital employed = Operating capital – Net tax liabilities

² Average for the financial period

³ Attributable to the owners of the Parent

List of non-IFRS measures

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

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Stora Enso's Q1/2020 results will be published on

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Part of the bioeconomy, Stora Enso is a leading global provider of renewable solutions in packaging, biomaterials, wooden constructions and paper. We believe that everything that is made from fossil-based materials today can be made from a tree tomorrow. Stora Enso has some 26 000 employees in over 30 countries. Our sales in 2019 were EUR 10.1 billion. Stora Enso shares are listed on Nasdaq Helsinki Oy (STEAV, STERV) and Nasdaq Stockholm AB (STE A, STE R). 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.