Financial Report

Part of Stora Enso's Annual Report 2017

THE RENEWABLE MATERIALS COMPANY

storaenso

Everything made with fossil-based materials today can be made from a tree tomorrow.

Part of the bioeconomy, Stora Enso is a leading provider of renewable solutions in packaging, biomaterials, wooden constructions, and paper globally. Our materials are renewable, reusable, and recyclable, and form the building blocks for a range of innovative solutions that can help replace products based on fossil fuels and other non-renewable materials. We employ some 26 000 people and our shares are listed on the Helsinki (STEAV, STERV) and Stockholm (STE A, STE R) stock exchanges.

Stora Enso's Annual Report 2017 consists of four reports: Progress Book, Sustainability Report, Financial Report, and Corporate Governance Report.

The Progress Book explains Stora Enso's strategy, how we create value, and how our work is progressing.

The Sustainability Report covers Stora Enso's social, environmental, and economic sustainability performance.

The Financial Report consists of the report of the Board of Directors and the financial statements, Stora Enso in capital markets, and our tax footprint.

The Corporate Governance Report covers Stora Enso's governance policy, practices, and actions as well as remuneration in 2017.

You can find the highlights of the year and the online Financial Report at storaenso.com/annualreport, where all reports can be downloaded.

Contents

Unaudited

Limited Assurance

In this report:
This publication consists of both audited and unaudited contents. The audited parts include the consolidated financial statements, the notes to the financial statements and the extract from the parent company Stora Enso Oyj's financial statements. The unaudited parts - such as the Introduction, the Report of the Board of Directors, Stora Enso in capital markets and Stora Enso as a taxpayer - are marked with grey on the top of the page. The contents of Stora Enso as a taxpayer have been assured by an independent third-party assurance provider with a level of Limited Assurance. The official audited financial statements in Finnish and an unofficial Swedish translation can be found on the company's website:

› storaenso.com/about/download-center

Unaudited

Stora Enso in 2017

Key figures

	2017	2016	Change % 2017-2016	Target
Sales, EUR million	10 045	9 802	2.5%	
Operational EBITDA[1], EUR million	1 587	1 463	8.5%	
Operational EBIT, EUR million	1 004	884	13.6%	
Operational EBIT margin	10.0%	9.0%		
Operating profit (IFRS), EUR million	904	783	15.5%	
Net profit for the period, EUR million	614	407	50.9%	
Net interest-bearing liabilities, EUR million	2 253	2 726	-17.4%	
Operational return on capital employed, ROCE	11.9%	10.2%		>13%
EPS (basic), EUR	0.79	0.59		
Net debt/last 12 months' operational EBITDA, ratio[1]	1.4	1.9		<3.0
Debt/equity ratio	0.38	0.47		<0.80
Fixed costs to sales	25.1%	25.3%		<20%

[1] Restated due to a change in Group's operational EBITDA definition to include the operational EBITDA of its equity accounted investments (EAI). For more information see chapter Accounting policies in the end of the **Report of the Board of Directors**.

Why to invest in Stora Enso

Stora Enso is the leading provider of renewable solutions in packaging, biomaterials, wooden constructions, and paper on global markets. Stora Enso is transforming from a traditional paper and board producer to a global renewable materials growth company.

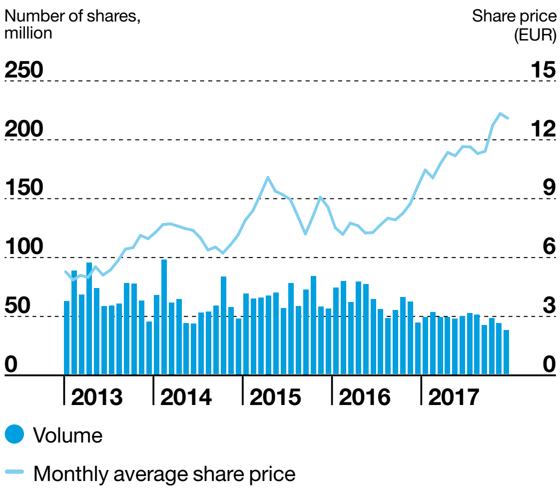
After asset transformation, Stora Enso focuses on offering innovative products and services for its customers addressing attractive end-use segments. This is expected to lead to faster growth than relevant markets excluding Paper division. Stora Enso also aims to deliver sustainable profitable growth and to generate superior return on capital employed (ROCE), which is one its key strategic targets.

Stora Enso divisions are Consumer Board, Packaging Solutions, Biomaterials, Wood Products and Paper. In 2017, Group sales totalled EUR 10 billion and operational EBIT EUR 1 billion.

Stora Enso shares are listed on Nasdaq Helsinki Oy (STEAV, STERV) and Nasdaq Stockholm AB (STE A, STE R). In addition, the shares are traded in the USA as ADRs (SEOAY).

Share price performance and volumes

Helsinki, Stora Enso R



Dividend proposal

EUR 0.41

The Board of Directors' dividend proposal for the year 2017

Divisions in brief

Consumer Board division

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

Operational ROOC (2017)

14.6%

(Target: >20%)

Packaging Solutions division

Packaging Solutions division provides fibre-based board materials and corrugated packaging products and services designed for a wide array of applications. Our renewable high-end packaging solutions serve leading converters, brand owners, and retailers across multiple industries looking to optimise performance and drive innovation.

Operational ROOC (2017)

19.6%

(Target: >20%)

Biomaterials division

Biomaterials division offers a wide variety of pulp grades to meet the demands of paper, board, tissue, textile and hygiene product producers. We also develop new ways to maximise the value extractable from the wood as well as other kinds of lignocellulosic biomasses. The extracted sugars and lignin hold potential for use in a range of applications.

Operational ROOC (2017)

10.5%

(Target: >15%)

Wood Products division

Wood Products division provides versatile wood-based solutions for building and housing. Our product range covers all areas of construction, including massive wood elements, wood components and sawn goods. We also offer pellets for sustainable heating. Our customers are mainly merchants and retailers, industrial integrators and construction companies.

Operational ROOC (2017)

20.5%

(Target: >18%)

Paper division

Paper division provides best-in-class paper solutions for the print media and office use. The wide selection covers papers made from virgin wood and recycled fibres. Our main customer groups include publishers, retailers, printing houses, merchants, converters, and office suppliers. We create value for our customers by providing competitive products and services that meet their quality and sustainability requirements.

Cash flow after investing activities to sales (2017)

5.5%

(Target: >7%)

Sales 2017

- Consumer Board **25%**
- Packaging Solutions **12%**
- Biomaterials **15%**
- Wood Products **17%**
- Paper **29%**
- Other and elimination of inter-segment sales **2%**

Operational EBIT 2017

- Consumer Board **28%**
- Packaging Solutions **17%**
- Biomaterials **26%**
- Wood Products **11%**
- Paper **13%**
- Other and eliminations **5%**

Unaudited

Report of the Board of Directors

Stora Enso's non-financial reporting according to the Finnish Accounting Act can be found under the following headings: Stora Enso introduction, Personnel, Sustainability and Risks and risk management.

Stora Enso introduction

Part of the bioeconomy, Stora Enso (the Group or the Company) is a leading provider of renewable solutions in packaging, biomaterials, wooden constructions and paper on global markets. Our customers include packaging producers, brand owners, paper and board producers, publishers, retailers, printing houses, converters, and joinery and construction companies. With our foundation in wood-based materials and solutions, Stora Enso is in a key position to drive development in line with the global trends, and create customer and end-consumer value in the bioeconomy. We believe that everything that is made from fossil-based materials today can be made from a tree tomorrow.

Our materials are renewable, reusable and recyclable. They form the building blocks for a range of innovative solutions in packaging, wooden construction and biomaterials that can help replace products based on fossil fuels and other non-renewable materials. We make every effort to use 100% of a tree for our products as well as for producing bioenergy. In production, we are driving down the use of fossil fuels and pushing towards carbon neutrality as much as it is technically and commercially feasible. We practice and promote sustainable forestry, and work to ensure that more trees are planted than are harvested.

The Group has some 26 000 employees. Our sales in 2017 were EUR 10 billion, with an operational EBIT of EUR 1 billion. Stora Enso shares are listed on Nasdaq Helsinki Oy (STEAV, STERV) and Nasdaq Stockholm AB (STE A, STE R).

Markets and deliveries

Demand for cartonboard increased by 2.1% in Western Europe and continued to grow strongly in Eastern Europe, reaching 3.7% growth in 2017. Demand for cartonboard in North America increased slightly by 0.6% and demand growth in Asia Pacific continued but with slightly lower pace, reaching still 2.8% in 2017.

Containerboard demand was healthy in 2017. The annual average growth rate increased to over 3% due to overall positive economic development. Demand growth of corrugated board was strong; the annual average growth rate in our European focus countries and China was over 4% in 2017.

World chemical market pulp demand rose approximately 2.3% during 2017. Softwood pulp demand was up 2.1%, and hardwood pulp by 2.7% compared to 2016. Global demand increased in all regions in 2017 except for Latin America and Europe, where the demand was flat or slightly contracting. The global increase in supply was concentrated on the hardwood pulp grade.

Global market pulp capacity rose approximately 3.2%, equivalent to 2.1 million tonnes in 2017. Hardwood capacity increased by 4.7%, mainly in Asia and Latin America. Softwood capacity increased by 1.5%, mainly in Western Europe. The overall demand-capacity balance stood at 91%, 1% down from 2016.

Strong pulp markets were further supported by low inventories and numerous unexpected disruptions on the supply side over the year, especially in the hardwood pulp grade.

Softwood sawn demand remained on good level in 2017, with slight increase in Europe and steady increase in North America. Overall market demand was favourable in all major markets except those in the Middle East and North Africa, where governments in countries like Egypt and Algeria dealt with financing issues for importers. Australian sawn wood market remained active with increased prices during the year. Japanese housing market was stable with eroding prices due to weaker yen and overstocking in some products. There was a slight increase in European sawn softwood production, driven by growing consumption in sub region and increasing overseas exports.

Structural erosion of paper demand continued in Europe and North America during 2017. European paper demand in 2017 was 3% weaker than in 2016. However, European supply and demand was more balanced especially in newsprint and uncoated magazine grades as result of substantial capacity closures and increased exports outside Europe. In North America demand declined by 6% compared to 2016. In Asia demand remained stable. Global paper consumption was 2% lower in 2017 than 2016. However, variation between paper grades is wide. Uncoated fine paper global demand was stable whereas newsprint declined by 7%.

Deliveries and production

	2017	2016	Change % 2017–2016
Consumer board deliveries, 1 000 tonnes	2 816	2 507	12.3%
Consumer board production, 1 000 tonnes	2 871	2 554	12.4%
Containerboard external deliveries, 1 000 tonnes	1 023	869	17.7%
Containerboard production, 1 000 tonnes	1 333	1 221	9.2%
Corrugated packaging deliveries, million m^2	1 103	1 082	1.9%
Market pulp external deliveries, 1 000 tonnes	2 135	2 068	3.2%
Wood product deliveries, 1 000 m^3	5 097	4 814	5.9%
Paper deliveries, 1 000 tonnes	4 713	5 141	-8.3%
Paper production, 1 000 tonnes	4 672	5 155	-9.4%

Estimated consumption of board, pulp, sawn softwood, and paper in 2017

Tonnes, million	Europe	North America	Asia and Oceania
Consumer board	11.0	9.2	27.9
Containerboard	32.4	31.7	80.6
Corrugated board (billion m^2)[1]	10.0	n/a	75.9
Chemical market pulp	17.9	7.9	31.1
Sawn softwood (million m^3)	94.4	97.8	n/a
Newsprint	6.0	3.0	10.3
Uncoated magazine paper	3.2	1.4	0.2
Coated magazine paper	4.7	2.5	3.1
Coated fine paper	5.1	3.7	11.7
Uncoated fine paper	7.5	7.5	20.5

[1] European focus markets (Baltics, FI, PL, RU, SE) and China.

Source: Pöyry, ICCA, RISI, Numera, Euro-Graph, PPPC, Stora Enso, UNECE

The Group's consumer board deliveries totalled 2 816 000 tonnes in 2017, which is 309 000 tonnes or 12% higher compared to a year ago mainly due to the ramp-up of the Beihai consumer board mill. Containerboard deliveries increased from 869 000 tonnes to 1 023 000 tonnes, +18%, mainly due to the ramp-up of Varkaus kraftliner mill and higher external deliveries from Heinola fluting mill. Corrugated board deliveries increased slightly to 1 103 000 m^2. Market pulp deliveries increased by 67 000 tonnes or 3% to 2 135 000 tonnes due to increased deliveries in standalone pulp mills driven by Montes del Plata pulp mill. Wood products deliveries increased by 283 000 m^3 or 6% to 5 097 000 m^3. Paper deliveries totalled 4 713 000 tonnes, down 428 000 tonnes or -8% from 2016 mainly due to the divestments of Kabel Mill, Arapoti Mill and Suzhou Mill site.

Operational key figures, items affecting comparability and other non-IFRS measures

The list of Stora Enso's non-IFRS measures and the calculation of our key figures are presented at the end of the Report of the Board of Directors. See also the chapter Non-IFRS measures at the end of this report.

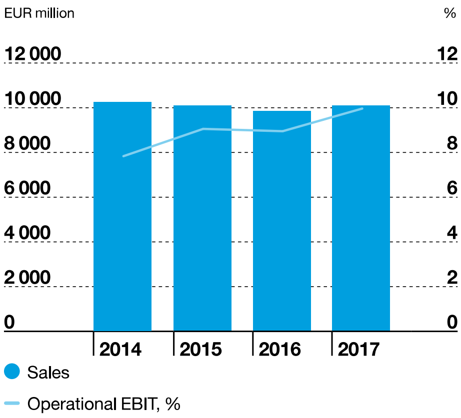
Financial results – Group

Sales at EUR 10 045 (9 802) million were 2.5% higher than a year earlier, mainly due to higher volumes in all divisions except Paper, favourable pulp prices in all grades and also favourable prices in Packaging Solutions and Wood Products divisions. The impact of the foreign exchange rate movements on sales was EUR 55 million negative. Sales excluding the paper business increased by 8.5%. The higher volumes are primarily driven by the ramp-ups at Beihai consumer board mill, Murów sawmill, Varkaus laminated veneer lumber (LVL) & Varkaus kraftliner mills, higher pulp production output and operational improvements in China Packaging. In addition, the share of new products and services increased significantly.

Stora Enso announced the divestment of its 35% holding in the equity accounted investment Bulleh Shah Packaging Ltd in Pakistan in July 2017 and the divestment was completed in September 2017. In October, Stora Enso divested 100% of its shares in the Finnish Puumerkki Oy and the Estonian Puumerkki AS, a specialised wholesaler of wooden building materials.

Operational EBIT reached a significant milestone at EUR 1 004 (884) million and increased 13.6%, mainly due to higher volumes, higher sales prices and better mix. Net foreign exchange rate movements and higher variable and fixed costs had a negative impact on operational EBIT. The increased costs were largely offset by good cost management through the Profit Improvement Programme.

Sales and operational EBIT



Operational EBIT margin at 10.0% (9.0%) improved from the previous year. Higher volumes increased the operational EBIT by EUR 155 million and favourable sales prices and better mix by EUR 166 million. Higher variable costs in logistics, chemicals, energy and fibre decreased operational EBIT by EUR 83 million. The impact of higher fixed costs was EUR 67 million negative to operational EBIT, main reasons being the investments in innovation activities in Biomaterials division, higher maintenance costs and higher personnel costs due to the ramp ups of new sites and higher production volumes. The impact of exchange rates on sales and costs decreased operational EBIT by EUR 50 million after hedges. Depreciation was EUR 3 million higher.

The share of the operational results of equity accounted investments amounted to EUR 89 (80) million, with the main contributions from Bergvik Skog and Tornator.

The IFRS operating profit includes a negative net effect of fair valuations of EUR 7 (negative EUR 5) million from the accounting of share-based compensation, Total Return Swaps (TRS) and CO_2 emission rights. In addition, the IFRS operating profit includes a negative net effect of EUR 6 (negative EUR 121) million from IAS 41 forest valuation from subsidiaries and joint operations and also a negative net effect of EUR 3 (positive EUR 59) million from Stora Enso's share of net financial items, taxes and IAS 41 forest valuations of equity accounted investments.

Fixed asset impairments amounted to EUR 27 (92) million.

The Group recorded items affecting comparability (IAC) with a negative impact of EUR 84 (negative EUR 34) million on its IFRS operating profit and a positive impact of EUR 11 million (negative EUR 22) on income taxes.

The IAC relate to the closure of Kvarnsveden Mill paper machine 8 (a negative IAC of EUR 17 million), the devaluation of Green Certificates (a negative IAC of EUR 10 million), the divestment of the 35% holding in Bulleh Shah Packaging Ltd (a negative IAC of EUR 20 million), the divestment of Puumerkki Oy and Puumerkki AS (a negative IAC of EUR 9 million). In addition there was a negative IAC of EUR 24 million due to increases in environmental provisions at several sites impacting Segment Other, and Consumer Board and Paper divisions.

The IFRS operating profit was EUR 904 (783) million.

Segment share of operational EBIT, IAC, fair valuations and non-operational items and operating profit/loss

	Year Ended 31 December					
	Operational EBIT		IAC, Fair Valuations and Non-Operational items		Operating Profit/Loss	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Consumer Board	285	254	-32	-187	253	67
Packaging Solutions	170	64	-4	-22	166	42
Biomaterials	264	224	-10	-13	254	211
Wood Products	111	88	-9	-	102	88
Paper	128	211	-22	78	106	289
Other	46	43	-23	43	23	86
Total	**1 004**	**884**	**-100**	**-101**	**904**	**783**
Net financial items					-162	-242
Profit before Tax					**742**	**541**
Income tax expense					-128	-134
Net Profit					**614**	**407**

Operational EBIT comprises the operating profit excluding IAC and fair valuations of the segments and Stora Enso's share of the operating profit excluding IAC and fair valuations of its equity accounted investments (EAI).

IAC = Items affecting comparability. These are exceptional transactions that are not related to recurring business operations. The most common IAC are capital gains and losses relating to disposal of fixed assets, impairments or impairment reversals, disposal gains and losses relating to group companies, environmental provisions, provisions for planned restructurings, other provisions and penalties. Items affecting comparability are normally disclosed individually if they exceed one cent per share.

Fair valuations and non-operational items include equity incentive schemes and related hedges, CO_2 emission rights, valuations of biological assets and the Group's share of tax and net financial items of EAI.

Items affecting comparability, fair valuations and non-operational items

	Year Ended 31 December	
EUR million	**2017**	**2016**
Impairments and reversals of intangible asset and property, plant and equipment and biological assets	-8	-133
Restructuring costs excluding fixed asset impairments	-14	-19
Disposals	-28	144
Other	-34	-26
Items affecting comparability	**-84**	**-34**
Fair valuations and non-operational items	-16	-67
Total	**-100**	**-101**

Segment share of operative assets, operative liabilities and operating capital

	Year Ended 31 December					
	Operative Assets		Operative Liabilities		Operating Capital	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Consumer Board	2 477	2 486	537	513	1 940	1 973
Packaging Solutions	1 100	1 027	223	173	877	854
Biomaterials	2 578	2 880	253	195	2 325	2 685
Wood Products	789	766	238	235	551	531
Paper	1 561	1 629	811	653	750	976
Other and eliminations	2 339	2 267	389	636	1 950	1 631
Total	**10 844**	**11 055**	**2 451**	**2 405**	**8 393**	**8 650**

Key figures

	2017	**2016**	**2015**
Sales, EUR million	10 045	9 802	10 040
Operational EBIT, EUR million	1 004	884	915
Operational EBIT margin	10.0%	9.0%	9.1%
Operating profit (IFRS), EUR million	904	783	1 059
Operating margin (IFRS)	9.0%	8.0%	10.5%
Return on equity (ROE)	10.3%	7.2%	14.6%
Operational ROCE	11.9%	10.2%	10.6%
Debt/equity ratio	0.38	0.47	0.60
EPS (basic), EUR	0.79	0.59	1.02
EPS excluding IAC, EUR	0.89	0.65	1.24
Dividend and distribution per share[1], EUR	0.41	0.37	0.33
Payout ratio, excluding IAC	46.1%	56.9%	26.6%
Payout ratio (IFRS)	51.9%	62.7%	32.4%
Dividend and distribution yield, (R share)	3.1%	3.6%	3.9%
Price/earnings (R share), excluding IAC	14.9	15.7	6.8
Equity per share, EUR	7.62	7.36	6.83
Market capitalisation 31 Dec, EUR million	10 422	8 085	6 618
Closing price 31 Dec, A/R share, EUR	13.20/13.22	10.40/10.21	8.40/8.39
Average price, A/R share, EUR	11.93/11.54	8.50/7.88	8.87/8.70
Number of shares 31 Dec (thousands)	788 620	788 620	788 620
Trading volume A shares (thousands)	6 768	1 254	1 641
% of total number of A shares	3.8%	0.7%	0.9%
Trading volume R shares (thousands)	571 717	765 122	798 507
% of total number of R shares	93.4%	125.0%	130.5%
Average number of shares, basic (thousands)	788 620	788 620	788 620
Average number of shares, diluted (thousands)	790 024	789 888	789 809

[1] See the Board of Directors' proposal for dividend distribution.

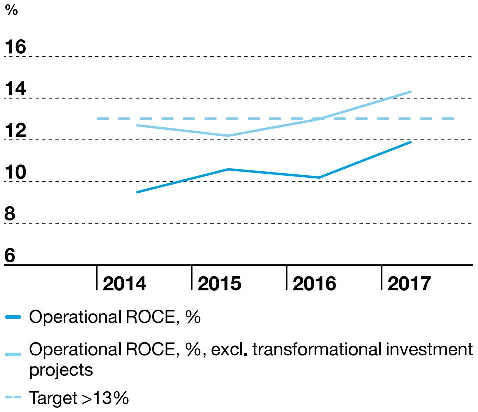
Net financial expenses at EUR 162 million were EUR 80 million lower than a year ago. The reduction was mainly due to the net foreign exchange result gain of EUR 34 (loss EUR 43) million coming from the revaluation of foreign currency cash, interest-bearing assets and liabilities and related hedges. The net interest expenses decreased by EUR 2 million, due to significantly reduced debt levels, partly offset by lower capitalised interest and lower interest income from loan receivables. Other net financial expenses were EUR 1 million lower.

The net tax charge totalled EUR 128 (134) million, equivalent to an effective tax rate of 17% (25%), as described in more detail in **Note 9**, Income taxes, of the Consolidated Financial Statements.

The loss attributable to non-controlling interests was EUR 11 (56) million, leaving a profit of EUR 625 (463) million attributable to Company shareholders.

Earnings per share excluding items affecting comparability were EUR 0.89 (0.65) and including items affecting comparability EUR 0.79 (0.59). Operational return on capital employed was 11.9% (10.2%).

Operational ROCE



The Group capital employed was EUR 8 308 million on 31 December 2017, a decrease of EUR 286 million on a year earlier.

Breakdown of Capital Employed Change

	Capital Employed
31 Dec 2016, EUR million	**8 594**
Capital expenditure less depreciation	126
Impairments and reversal of impairments	-21
Fair valuation of biological assets	-6
Costs related to growth of biological assets	-66
Available-for-sale: operative (mainly PVO)	66
Equity accounted investments	52
Net liabilities in defined benefit plans	56
Operative working capital and other interest-free items, net	-69
Net tax liabilities	-34
Translation difference	-394
Other changes	4
31 Dec 2017, EUR million	**8 308**

Financing

Cash flow from operations was EUR 1 492 (1 633) million and cash flow after investing activities was EUR 825 (834) million. Working capital decreased by EUR 37 (283) million, trade payables increased having a positive impact of EUR 170 million and short-term receivables increased having a negative impact of EUR 128 million into working capital. Payments related to restructuring actions and environmental provisions were EUR 35 million.

Operative Cash Flow

EUR million	2017	2016
Operational EBITDA[1]	1 587	1 463
IAC on operational EBITDA	-76	-61
Other adjustments	-56	-52
Change in working capital	37	283
Cash Flow from Operations	**1 492**	**1 633**
Cash spent on fixed and biological assets	-658	-798
Acquisitions of equity accounted investments	-9	-1
Cash Flow after Investing Activities	**825**	**834**

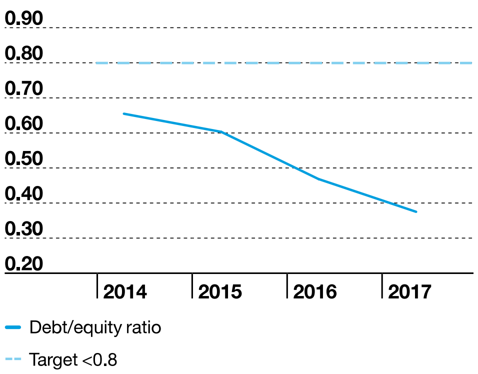
[1] Restated due to a change in Group's operational EBITDA definition to include the operational EBITDA of its equity accounted investments (EAI). See chapter Change in the operational EBITDA calculation at the end of the Report of the Board of Directors.

At the end of the period, net interest-bearing liabilities of the Group were EUR 2 253 (2 726) million. Cash and cash equivalents net of bank overdrafts amounted to EUR 603 (949) million.

During the fourth quarter, Stora Enso signed a new sustainability linked EUR 600 million revolving credit facility agreement with a syndicate of 13 banks to refinance its existing EUR 700 million facility. Part of the pricing for the facility agreement is based on Stora Enso's Science Based Targets to combat global warming by reducing greenhouse gases, including CO_2. The new facility matures in January 2023 and will be used as a backup for short-term facilities. The facility has no financial covenants. In addition, Stora Enso has access to various long-term sources of funding up to EUR 950 (1 000) million.

The debt/equity ratio at 31 December 2017 was 0.38 (0.47). The currency effect on equity was negative EUR 256 (positive EUR 115) million net of the hedging of equity translation risks mainly due to weakening of the US dollar, Brazilian real, Swedish crown, Chinese renminbi and Russian ruble.

Debt/equity ratio



The fair valuation of cash flow hedges and available-for-sale investments recorded in other comprehensive income increased equity by EUR 69 (increase EUR 148) million mainly due to increased electricity prices resulting to higher fair value of Group's shareholding in Pohjolan Voima.

At the end of the year, the ratings for Stora Enso's rated bonds were as follows:

Ratings as at 31 Dec 2017

Rating agency	Long/short-term rating	Valid from
Standard & Poor's	BB+ (stable) / B	21 August 2017
Moody's	Ba2 (positive) / NP	4 August 2016

Financial results – Segments

Consumer Board division

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

EUR million	2017	2016
Sales	2 516	2 342
Operational EBITDA[1]	477	452
Operational EBITDA margin[1]	19.0%	19.3%
Operational EBIT	285	254
Operational EBIT margin	11.3%	10.8%
Operational ROOC	14.6%	12.7%
Cash flow from operations	458	453
Cash flow after investing activities	218	40
Board deliveries, 1 000 tonnes	2 816	2 507
Board production, 1 000 tonnes	2 871	2 554

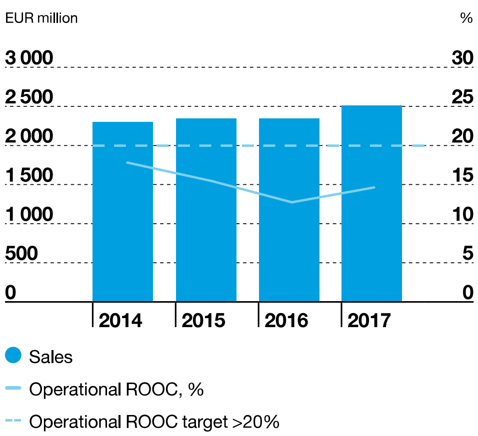
[1] Restated due to a change in Group's operational EBITDA definition to include the operational EBITDA of its equity accounted investments (EAI). See chapter Change in the operational EBITDA calculation at the end of the Report of the Board of Directors.

Consumer Board division sales at EUR 2 516 (2 342) million grew over 7% due to the ramp up of the Beihai consumer board mill. Delivery volumes at the European mills board grew slightly, but the growth was offset by lower board prices and negative foreign exchange rate impact.

Operational EBIT at EUR 285 (254) million grew over 12% from previous year, due to the ramp up of the Beihai consumer board mill. Operational EBIT was negatively impacted by lower board prices, and higher pulp, chemical, energy and transportation costs. Fixed costs were also higher, mainly due to the ramp up of the Beihai consumer board mill and its first full year of production.

Sales and operational ROOC

Consumer Board



Packaging Solutions division

Packaging Solutions division provides fibre-based board materials and corrugated packaging products and services designed for a wide array of applications. Our renewable high-end packaging solutions serve leading converters, brand owners and retailers across multiple industries looking to optimise performance and drive innovation.

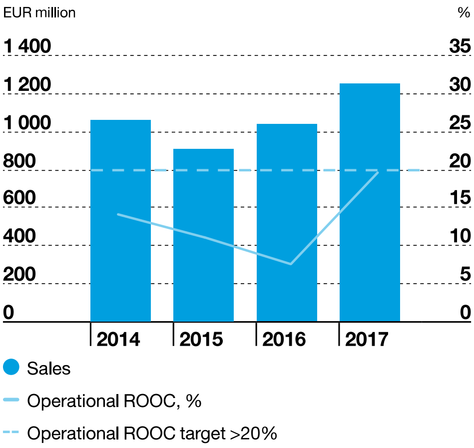
EUR million	2017	2016
Sales	1 255	1 044
Operational EBITDA[1]	240	131
Operational EBITDA margin[1]	19.1%	12.5%
Operational EBIT	170	64
Operational EBIT margin	13.5%	6.1%
Operational ROOC	19.6%	7.6%
Cash flow from operations	249	132
Cash flow after investing activities	156	63
Board deliveries, 1 000 tonnes	1 023	869
Board production, 1 000 tonnes	1 333	1 221
Corrugated packaging deliveries, million m²	1 103	1 082
Corrugated packaging production, million m²	1 102	1 073

[1] Restated due to a change in Group's operational EBITDA definition to include the operational EBITDA of its equity accounted investments (EAI). See chapter Change in the operational EBITDA calculation at the end of the Report of the Board of Directors.

Packaging Solutions division sales were EUR 1 255 (1 044) million, up 20% compared to 2016. The increase was mainly due to the ramp up of the Varkaus kraftliner mill, higher volumes in all units and favourable price development.

Operational EBIT at EUR 170 (64) million was 166% up from the previous year, mainly due to the ramp up of the Varkaus kraftliner mill, strong operational performance predominantly in China Packaging and higher prices. Higher prices in containerboard however had a negative operational EBIT impact on the corrugated business. Fixed costs were higher reflecting the growing business.

Sales and operational ROOC
Packaging Solutions



Biomaterials division

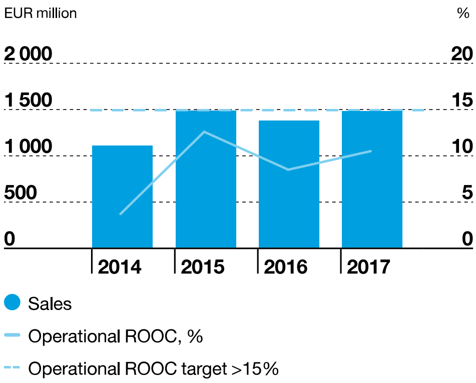
Biomaterials division offers a variety of pulp grades to meet the demands of paper, board, tissue, textile and hygiene product producers. We also develop new ways to maximise the value extractable from the wood as well as other kinds of lignocellulosic biomasses. The extracted sugars and lignin hold potential for use in a range of applications.

EUR million	2017	2016
Sales	1 483	1 376
Operational EBITDA	409	361
Operational EBITDA margin	27.6%	26.2%
Operational EBIT	264	224
Operational EBIT margin	17.8%	16.3%
Operational ROOC	10.5%	8.5%
Cash flow from operations	404	419
Cash flow after investing activities	271	278
Pulp deliveries, 1 000 tonnes	2 597	2 508

Biomaterials division sales were EUR 1 483 (1 376) million, up 8% on 2016, due to higher volumes and higher pulp sales prices in all grades.

Operational EBIT at EUR 264 (224) million was 18% up from previous year, mainly due to higher prices in all grades. Operational EBIT was negatively impacted by higher transportation, wood and chemical costs. Fixed costs were higher due to investments into innovation activities. Foreign exchange rates had a negative impact on operational EBIT, mainly due to weaker USD.

Sales and operational ROOC
Biomaterials



Wood Products division

Wood Products division provides versatile wood-based solutions for building and housing. Our product range covers all areas of construction, including massive wood elements, wood components and sawn goods. We also offer pellets for sustainable heating. Our customers are mainly merchants and retailers, industrial integrators and construction companies.

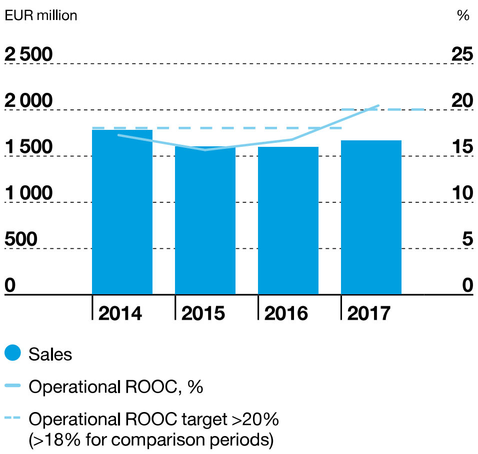
EUR million	2017	2016
Sales	1 669	1 595
Operational EBITDA	147	118
Operational EBITDA margin	8.8%	7.4%
Operational EBIT	111	88
Operational EBIT margin	6.7%	5.5%
Operational ROOC	20.5%	16.8%
Cash flow from operations	152	142
Cash flow after investing activities	90	75
Deliveries, 1 000 m³	4 926	4 643

Wood Products division sales were EUR 1 669 (1 595) million, up 5% from 2016 mainly due to the ramp ups of the Varkaus laminated veneer lumber (LVL) line and the modernisation and expansion of the Murów sawmill. Higher prices and the growth in value added business, especially CLT, also impacted sales positively. The Building components sales increased by 14%. In November 2017, Stora Enso divested 100% of its shares in the Finnish Puumerkki Oy and the Estonian Puumerkki AS. In addition the Baltic Wood supply sourcing operations were moved to Segment Other in Q2 2017. The comparable sales growth would have been 7%.

Operational EBIT at EUR 111 (88) million was 26% up from previous year, mainly due to higher volumes, higher prices and growth in value added business. Operational EBIT was negatively impacted by higher raw material costs, especially log prices and foreign exchange loss.

Sales and operational ROOC

Wood Products



Paper division

Paper division provides best-in-class paper solutions for the print media and office use. The wide selection covers papers made from virgin wood and recycled fibres. Our main customer groups include publishers, retailers, printing houses, merchants, converters, and office suppliers. We create value for our customers by providing competitive products and services that meet their quality and sustainability requirements.

EUR million	2017	2016
Sales	2 920	3 245
Operational EBITDA[1]	239	327
Operational EBITDA margin[1]	8.2%	10.1%
Operational EBIT	128	211
Operational EBIT margin	4.4%	6.5%
Operational ROOC	14.8%	19.4%
Cash flow from operations	259	351
Cash flow after investing activities	160	277
Cash flow after investing activities to sales	5.5%	8.5%
Paper deliveries, 1 000 tonnes	4 713	5 141
Paper production, 1 000 tonnes	4 672	5 155

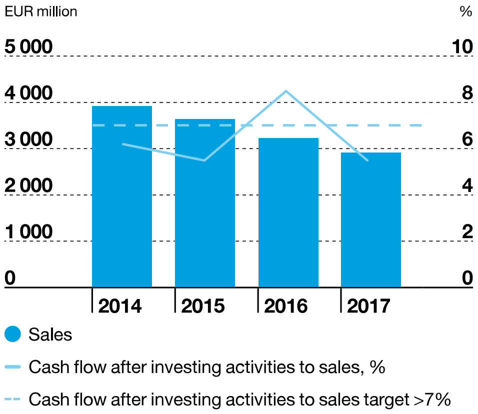
[1] Restated due to a change in Group's operational EBITDA definition to include the operational EBITDA of its equity accounted investments (EAI). See chapter Change in the operational EBITDA calculation at the end of the Report of the Board of Directors.

Paper division sales were EUR 2 920 (3 245) million, down 10% from 2016 mainly due to restructuring and disposals. Foreign exchange losses had EUR 33 million negative impact on sales. In addition, especially Wood Free Coated (WFC) paper prices were clearly lower than during 2016. Volumes of the ongoing business were lower mainly due to Veitsiluoto PM2 accident in August 2017. Stora Enso divested the Arapoti Paper Mill in Brazil in late 2015 and the divestment was completed in March 2016. Divestment of the Suzhou Mill site in China was announced and paper production ceased in June 2016. Stora Enso's 33.33% ownership of the Swedish recycled materials company IL Recycling AB was divested in June 2016. Divestment of the Kabel coated magazine paper mill in Germany was completed in September 2016.

Operational EBIT at EUR 128 (211) million was 39% down from 2016 mainly due to lower volumes, lower prices especially in WFC, negative foreign exchange impact and higher variable costs in chemicals, energy and paper for recycling. Fixed costs had a positive impact on operational EBIT.

Sales and cash flow after investing activities to sales[1]

Paper



[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 Nordic forest equity-accounted investments, Stora Enso's shareholding in the energy company Pohjolan Voima, operations supplying wood to the Nordic and Baltic mills, plantations not connected to any mill site, and Group shared services and administration.

EUR million	2017	2016
Sales	2 490	2 477
Operational EBITDA[1]	75	74
Operational EBITDA margin[1]	3.0%	3.0%
Operational EBIT	46	43
Operational EBIT margin	1.8%	1.7%
Cash flow from operations	-30	136
Cash flow after investing activities	-70	101

[1] Restated due to a change in Group's operational EBITDA definition to include the operational EBITDA of its equity accounted investments (EAI). See chapter Change in the operational EBITDA calculation at the end of the Report of the Board of Directors.

Sales of the Segment Other at EUR 2 490 (2 477) million and Operational EBIT at EUR 46 (43) million were both slightly up from previous year.

Investments and capital expenditure

Additions to fixed and biological assets including interest and internal costs capitalised in 2017 totalled EUR 640 (729) million. The total amount includes additions in biological assets of EUR 80 (91) million.

The ramp-up of Beihai Mill continues to proceed ahead of plan. The consumer board machine is expected to reach full production during the first half of 2018, and the operational EBITDA break-even was reached in Q4/2017. The polyethylene (PE) coating investment at Beihai Mill was completed during Q4/2017. In January 2017, Stora Enso initiated a process with the Government of Guangxi with the aim to remove the authorisation for the hardwood chemical pulp mill from its investment permit.

The EUR 70 million investment in a new PE extrusion coating plant and an automated roll warehouse (ARW) at Imatra Mills in Finland was completed during Q4/2017. The investment enhances Stora Enso's ability to meet increasing customer demand for food service board and liquid packaging board.

At Ala Sawmill in Sweden, operations started at the new boiler and pellet production line in Q1/2017 after the EUR 16 million investment. At Honkalahti Sawmill in Finland, the EUR 10 million investment in the new boiler was completed and operations started in Q3/2017.

Investment in a Xylose Demo Plant in Raceland, Louisiana, USA proceeded to the commissioning phase and the plant is estimated to start commercial deliveries in 2018.

The EUR 19 million investment for the consolidation of the manufacturing of corrugated packaging in Lahti, Finland, is expected to be finalised by the end of Q1/ 2018.

The EUR 27 million investment in Skutskär pulp mill in Sweden to increase its fluff capacity to meet the growing demand in the hygiene market is proceeding as planned and is expected to be completed during Q2/2018.

In January 2017, Stora Enso announced an investment of EUR 9 million in its consumer board mills in Imatra and Ingerois, Finland, and Fors, Sweden, to continue the commercialisation of micro-fibrillated cellulose (MFC) and to accelerate product development. With the new investments, Stora Enso will accelerate the product development of new MFC applications, which will include barrier layers for grease and oxygen and biodegradable film as a replacement for aluminium in paperboard packaging.

In January 2017, Stora Enso announced an investment of EUR 12 million to build a new production line that will manufacture biocomposite granules at Hylte Mill in Sweden. Biocomposite granules enable the use of renewable wood to substitute a large portion of the fossil-based materials in products typically produced in plastics. Production is scheduled to begin during Q1/2018. The annual capacity will be approximately 15 000 tonnes per year.

In February 2017, Stora Enso announced a EUR 28 million investment million at its Heinola Fluting Mill in Finland to meet a growing customer demand globally. The investment improves quality and increases the production capacity of its AvantFlute SC product portfolio. The project is estimated to be completed in the Q2/2018. AvantFlute SC is semi-chemical fluting made from virgin fibre and was developed especially to endure demanding conditions. The production capacity of AvantFlute SC will increase by 15 000 tonnes once the investment is completed and fully implemented. The current annual production capacity at Heinola Fluting Mill is 300 000 tonnes of fluting.

In July, Stora Enso announced an investment of approximately EUR 45 million in a new production unit for cross laminated timber (CLT) in connection with its Gruvön Mill in Sweden. The investment will further enhance Stora Enso's position as a global provider of high quality engineered wooden elements and as a market leader in CLT. The production is scheduled to begin during Q1/2019. The estimated yearly capacity of the production line will be approximately 100 000 m³ after the ramp-up.

In October, Stora Enso announced an investment of EUR 94 million to grow in renewable materials and to increase competitiveness in consumer board and biomaterials. EUR 52 million will be invested to increase the dissolving pulp production capacity at Enocell Mill and EUR 42 million to enhance the availability of the chemi-thermomechanical pulp (CTMP) at Imatra Mills. Both mills are located in Finland. Enocell Mill, which is part of the Biomaterials division, will be converted to focus entirely on production of dissolving pulp. The softwood pulp production will be gradually discontinued after the investment. The mill will have a total capacity of 430 000 tonnes of dissolving pulp annually, of which 185 000 tonnes will be hardwood and 245 000 tonnes softwood dissolving pulp. The investment is scheduled to be completed during Q2/2019. The investment at Imatra Mills, part of the Consumer Board division, includes a new CTMP drying and re-pulping plant, as well as extension of the pulp warehouse. This aims to enhance the availability of CTMP and to drive the commercialisation of micro-fibrillated cellulose (MFC). The project is scheduled to be completed in Q1/2019.

Research and development

Stora Enso's expenditure on research and development (R&D) in 2017 was EUR 127 (132) million, which was equivalent to 1.3% (1.3%) of sales.

The company is focusing on five R&D themes ('Bio-based chemistry', 'Materials sciences', 'Process solutions', 'Forestry and Renewable Feedstock' as well as 'Internet of Things (IoT) and Industrial Digitalisation'). Examples of activities within the R&D themes include bio-based barriers, micro materials, composites, biotechnology (bio-based chemicals), printed intelligence and wood-based building solutions.

Intellectual property is an increasingly important tool to support Stora Enso's strategy and to differentiate from our competitors. During 2017 Stora Enso continued to strengthen its patent portfolio, with 49 priority founding patent applications filed and over 220 patents granted worldwide.

The strong effort to replace fossil-based chemicals and polymers with high performing bio-based chemicals continued during 2017, with the focus on developing customer value in selected entry segments. The demo-plant at Raceland started up and crude xylose is being produced and refining is in progress. All volumes that will be produced at the plant are contracted to xylitol producers.

In addition our liquid xylose was successfully tested in the laboratory by potential customers in the Americas for production of bio-based chemicals. The production will keep ramping up throughout 2018.

The Innovation Centre in Sickla, Stockholm is another important step on the road towards Stora Enso's transformation into a renewable materials company. It helps to build on the company's long, worldwide tradition in forestry, which – when coupled with access to sustainable raw materials and our expertise in fibres – gives us an excellent starting point for creating solutions that will benefit our customers and end-users in various industries and markets. The centre focuses on improved pulp properties, regenerated cellulose & MFC, lignin and bio-based chemicals.

The Innovation Centre for packaging, located at the Group's head office in Helsinki, has turned out to be an excellent venue for identifying new opportunities and developing innovations in renewable materials. In the Innovation Centre, Stora Enso, together with customers and other stakeholders, can develop innovative and sustainable packaging solutions. The Innovation Centre offers, among other things, an inspiring space for collaboration, a showroom for highlighting our best offering and a packaging design lab. In 2017 more than 250 meetings, workshops and events were organised there.

Stora Enso's priority in 2017 was aligning the R&D Innovation processes within the overall organisation, focusing on harmonising the different existing ideation platforms. Now, WeNovate, our group-wide tool for collecting and evaluating ideas is up and running. In 2017, we ran 7 campaigns and generated 175 ideas, of which some were forwarded for the stage gate process in the responsible divisions.

The 2016 established Innovation and Digitalisation funds are gaining a lot of attention from the divisions and improves the process of turning ideas into value.

The development of the pre-commercial micro-fibrillated cellulose (MFC) plant at Imatra Mills continued in 2017 focusing on application development. To further enhance the MFC production and the production of light weight carton at the same time, Stora Enso invested EUR 9 million in new MFC production at Imatra, Ingerois and Fors mills. The new capacity corresponds to 500 000 tonnes of board made with MFC after a ramp-up period of 3–5 years.

Development of intelligent packaging solutions is still ongoing, targeting the integration of Radio Frequency Identification (RFID) into packages for consumer engagement and supply chain purposes, as well as brand protection and tamper evidence applications. The first pilot cases with brand owners are in place.

Supporting Stora Enso's innovation strategy, we have a number of co-operation projects with research organisations and academic institutions. The aim is to build a clearer understanding of how our needs and the universities' capabilities can meet, first and foremost in the research sphere surrounding Stora Enso research themes and the long-term research needs in the divisions. The second target is to widen the contact network. Thirdly, we aim to identify topics where we have a special interest regarding the universities' bachelor and master programmes, also for recruiting talents to mills and research/innovation centres.

Our collaboration partners include Aalto University in Finland, and Chalmers University of Technology in Sweden, the Royal Institute of Technology, VTT Technical Research Centre of Finland, SweTree Technologies Ltd, and Wallenberg Wood Science Center R&D. Stora Enso is a member of national, European and trade associations focused on the bioeconomy and forest agendas including Confederation of European Paper Industries (CEPI), Forest Technology Platform (FTP), and the Swedish and Finnish Forest Industry Federations. Stora Enso is also a member in the EU's Biobased Industries Consortium (BIC) and the Bio-Based Industries Initiative Joint Undertaking, a new partnership within the EU Horizon 2020 research programme.

Personnel

On 31 December 2017, there were 25 700 (25 400) employees in the Group. The average number of employees in 2017 was 26 200, which was approximately 100 lower than the average number in 2016. The numbers include 50% of the employees at Veracel in Brazil and Montes del Plata in Uruguay.

In February, the Group announced the closure of paper machine 8 at Kvarnsveden Mill in Sweden. The closure was completed during September and affected approximately 120 people. In November, the Group divested the Finnish Puumerkki Oy and the Estonian Puumerkki AS, employing approximately 170 people. Also in November, the Group announced the divestment of Baienfurt sheeting centre in Germany. The divestment was completed during Q1/2018 and employs approximately 60 people.

Personnel expenses totalled EUR 1 331 (1 334) million or 13.3% of sales. Wages and salaries were EUR 999 (1 006) million, pension costs EUR 166 (165) million and other employer costs amounted to EUR 158 (163) million.

At the end of 2017, the Group's top three countries in respect to the number of employees were Finland, China and Sweden. 26% (26%) of employees were women.

Personnel turnover in 2017 was 14.6% (22.9%). The drop in personnel turnover is mainly due to a combination of changes done at the China Packaging units, which had exceptionally high personnel turnover in the past. Illness-related absenteeism amounted to 3.1% (2.9%) of total theoretical working hours.

Stora Enso's lost-time accident (LTA, number of lost-time accidents per one million hours worked) rate (for own employees, excluding Veracel and Montes del Plata) was 5.3 (4.4), an increase of 20.5% from the previous year. Part of the increase in the LTA-rate can be explained by the change in the reporting practices. During the year, the LTA rate milestone for 2017 was changed from 3.8 to 4.0 based on past performance. The total recordable incident (TRI) rate was 7.7 (11.7).

Stora Enso's key performance indicator for leadership, the Leadership Index, measures the employees' perceptions of their leaders. It is calculated based on the annual employee survey. Our target was to achieve an index of 80/100 by 2018. This target was reached ahead of schedule in 2016, and it further improved to 81 in 2017.

Employee-related information including the personnel strategy is discussed in more detail in the Group's **Sustainability Report 2017** and the **Progress Book 2017**, published during week 9.

Remuneration to the Board of Directors and key management is described in **Note 7** of the Consolidated financial statements.

Sustainability

Sustainability is a key element of Stora Enso's corporate governance, promoted by the Board of Directors, the CEO and the Group Leadership Team (GLT). The CEO carries the ultimate responsibility for the successful implementation of the sustainability strategy. Work on sustainability is led by the Executive Vice President, Sustainability, who reports directly to the CEO. The Board of Directors' Sustainability and Ethics Committee oversees the implementation of Stora Enso's Sustainability Strategy and Ethics and Compliance Strategy. The Committee met four times in 2017.

More information on Stora Enso's approach to sustainability and consolidated results on sustainability indicators are published in the separate **Sustainability Report 2017**.

Human rights

Stora Enso's human rights commitment extends from employees and on-site contractors, through external suppliers of materials and services and business partners, to communities living near the Group's operations. In addition to Stora Enso's commitment to the UN Guiding Principles on Business and Human Rights, the Group's Sustainability Agenda is aligned with the ten principles of the UN Global Compact, including its principles on human rights. Stora Enso also respects and follows the reporting requirements of the UK Modern Slavery Act.

Human rights risks are required to be taken into account throughout our operations, including investment decisions related to mergers, acquisitions, and divestments. The Group's investment guidelines stipulate that environmental and social risks and impacts, including those related to human rights, must be duly identified, assessed, and addressed prior to any investments in projects with business critical risks.

Stora Enso is currently developing a human rights strategy and it will be further refined during 2018. The strategy will define a set of prioritised human rights that are the most relevant for Stora Enso over the long-term.

In 2017, our focus was on finalising the implementation of the Human Rights Action Plan that resulted from our group-wide Human Rights Assessment conducted in 2014 and a related report published in 2015.

During the year, an internal assurance process was carried out to ensure that actions were adequately concluded and evidence documented.

By the end of 2017, 88% of the preventive and remediation actions were completed and 100% of the actions were brought to an appropriate conclusion. The actions are based on the UN Guiding Principles on Business and Human Rights and criteria created in collaboration with Danish Institute for Human Rights. 9% of the actions were closed and 3% were identified as actions requiring continuous review. As all actions were progressed to an appropriate conclusion by the end of 2017, the reporting on the Human Rights Action Plan progress will stop.

Suppliers

Stora Enso's key performance indicator on responsible sourcing measures the proportion of total supplier spend covered by the Group's Supplier Code of Conduct (SCoC). By the end of 2017, 95% of Stora Enso's total spend on materials, goods, and services was duly covered (92% at the end of 2016), meeting our target for the year.

Business ethics

In 2017, a total of 61 reports received through Stora Enso's various grievance channels were identified as potential non-compliance cases (58 in 2016). Proven misconduct leading to disciplinary and/or legal actions, and/or improvements in the processes and procedures was identified in 14 (18) of the completed investigations, while 22 (5) further complaints were found to be valid without involving misconduct. None of the proven misconduct cases were related to child labour, forced labour, or discrimination.

The company's Code of Conduct index monitors and evaluates employees' perceptions of Stora Enso's work on topics covered by the Code of Conduct and it is based on the annual employee survey results. In 2017, this index improved to 83 (81 in 2016). Our goal is to maintain this positive trend.

Forests, plantations, and land use

Progress on responsible forestry is followed with a key performance indicator (KPI) that measures the percentage of the lands owned and managed by Stora Enso covered by certification systems. The target was to reach 96% coverage by the end of 2017. In 2017, coverage amounted to 92% (90%). The KPI will be redefined during 2018, and reflecting this, a new target will be set. At year-end Stora Enso owned or managed lands with a total area of 972 600 hectares.

In 2017, the total amount of wood (including roundwood, wood chips, and sawdust) delivered to our mills was 37.5 million m^3 (solid under bark) (37.6 million m^3 in 2016). The share of third-party certified wood in the Group's total wood supply was 85% (83%).

Managing land contracts in Guangxi, China
Stora Enso leases a total of 82 591 hectares of land in four regions of Guangxi, of which 29 581 hectares (30 500 hectares in 2016), corresponding to 36% (37%) of the total area, is social land leased from village collectives, individual households, and local forest farms. In many cases, these social lands had already been sub-leased, sometimes repeatedly, resulting in chains of sub-leases. Often the original owners did not benefit from increased land rental prices because of these chains.

Stora Enso has been reviewing and correcting land lease contracts in Guangxi since 2009, when irregularities in the contract chains were first discovered. By the end of 2017, 66% of the contracts were found to be free from contractual defects (66% by the end of 2016) corresponding to 16 267 hectares (16 480) of social land. In irreconcilable cases, we terminate leases in a responsible manner, considering all potential impacts. When contracts have no defects, this means that the ownership of land is clear or resolved, and that contracting procedures have proven to be legal, authentic and valid.

As announced on 19 January 2017, Stora Enso is reconsidering its plans to build a chemical pulp mill in Beihai, and decrease the area of its leased forestland in the Guangxi region. As part of this process, Stora Enso aims to have only land leased that is free of contractual defects. Stora Enso has moved from contract correction to normal contract management and therefore we will stop the reporting on contract correction progress.

Land occupations by the Social Landless Movements in Bahia, Brazil
In Bahia, Brazil, work continued on a Sustainable Settlement Initiative launched in 2012 to provide farming land and educational support for local families in the landless people's social movements.

At the end of 2017, additional areas of Veracel's productive land totalling 3 043 hectares (3 499 hectares at the end of 2016) were occupied by landless groups not involved in the Sustainable Settlement Initiative. During the year, Veracel continued to seek repossession of these areas through legal processes, and the company resumed forest management activities in total on 456 hectares compared to the situation at the end of 2016. At the end of 2017, the total land area owned by Veracel was 213 500 hectares, of which 75 000 hectares are planted with eucalyptus for pulp production.

Carbon dioxide

Since 2007, Stora Enso's target has been to reduce our fossil CO_2 emissions per saleable tonne of board, pulp, and paper by 35% from 2006 levels by the end of 2025. Stora Enso is ahead of the 2025 target. In 2017, our fossil CO_2 emissions per saleable tonne of board, pulp, and paper were 40% lower than the 2006 benchmark level (40% lower in 2016). This means Stora Enso has already reached the target, although the Group's CO_2 intensity has been adversely affected by the coal-based energy consumption at our Beihai Mill in China. Stora Enso has begun to investigate long-term options to gradually move away from coal to biomass and other non-fossil fuels.

In December 2017, Stora Enso's Science Based Targets to combat global warming were approved by the Science Based Target Initiative. With the new targets, Stora Enso commits to reduce greenhouse gas (GHG) emissions from operations 31% per tonne of pulp, paper and board produced by 2030 from a 2010 base-year. To reduce Scope 3 emissions, Stora Enso commits to have 70% of non-fibre suppliers and downstream transportation suppliers in terms of spend set their own GHG reduction targets by 2025, towards the aim that these suppliers adopt science-based GHG reduction targets by 2030. In addition, the company will educate 100% of customer-facing staff on the advantages of setting science-based targets by 2020. Stora Enso plans to report progress on the Science Based Targets in Q1/2018, and at the same time retire the old target listed above.

Environmental investments and liabilities

In 2017 Stora Enso's environmental investments amounted to EUR 65 (41) million. These investments were mainly to improve the quality of air and water, to enhance resource efficiency and energy self-sufficiency, and to minimise the risk of accidental spills.

Stora Enso's environmental costs in 2017 excluding interest and including depreciation totalled EUR 170 (172) million. These costs include taxes, fees, refunds, permit-related costs, and repair and maintenance costs, as well as waste water treatment chemicals and certain other materials.

Provisions for environmental remediation amounted to EUR 108 (100) million at 31 December 2017, details of which are in **Note 22**, Other Provisions, of the Consolidated financial statements. There are currently no active or pending legal claims concerning environmental issues that could have a material adverse effect on Stora Enso's financial position. Cost related to environmental remediation measures amounted to EUR 11 (9) million.

Risks and risk management

Our approach to risk management

Risk is an integral component of business, and it is characterised by both threats and opportunities. Stora Enso is committed to ensuring that systematic, holistic and proactive management of risks and opportunities is a core capability and an integral part of all Group activities, and that a risk aware corporate culture is fostered in all decision making. Through consistent application of dynamic risk analysis, we manage risk in order to enhance opportunities and reduce threats to thus achieve our competitive advantage.

Risk governance

Stora Enso defines risk as the effect of uncertainty on our ability to meet organisational values, objectives and goals. The Group Risk and Internal Control Policy, which is approved by the Board of Directors, sets out the overall approach to governance and the management of risks in accordance with the COSO (Committee of Sponsoring Organizations) framework and in line with the ISO 31000 standard.

The Board retains the ultimate responsibility for the overall risk management process and for determining what an appropriate and acceptable level of risk is. The Board has established the Financial and Audit Committee to provide support to the Board in relation to the monitoring of the adequacy of the risk management process within Stora Enso, and specifically regarding the management and reporting of financial risks. The Sustainability and Ethics Committee is responsible for overseeing the company's sustainability and ethical business conduct, its' strive to be a responsible corporate citizen, and its contribution to sustainable development.

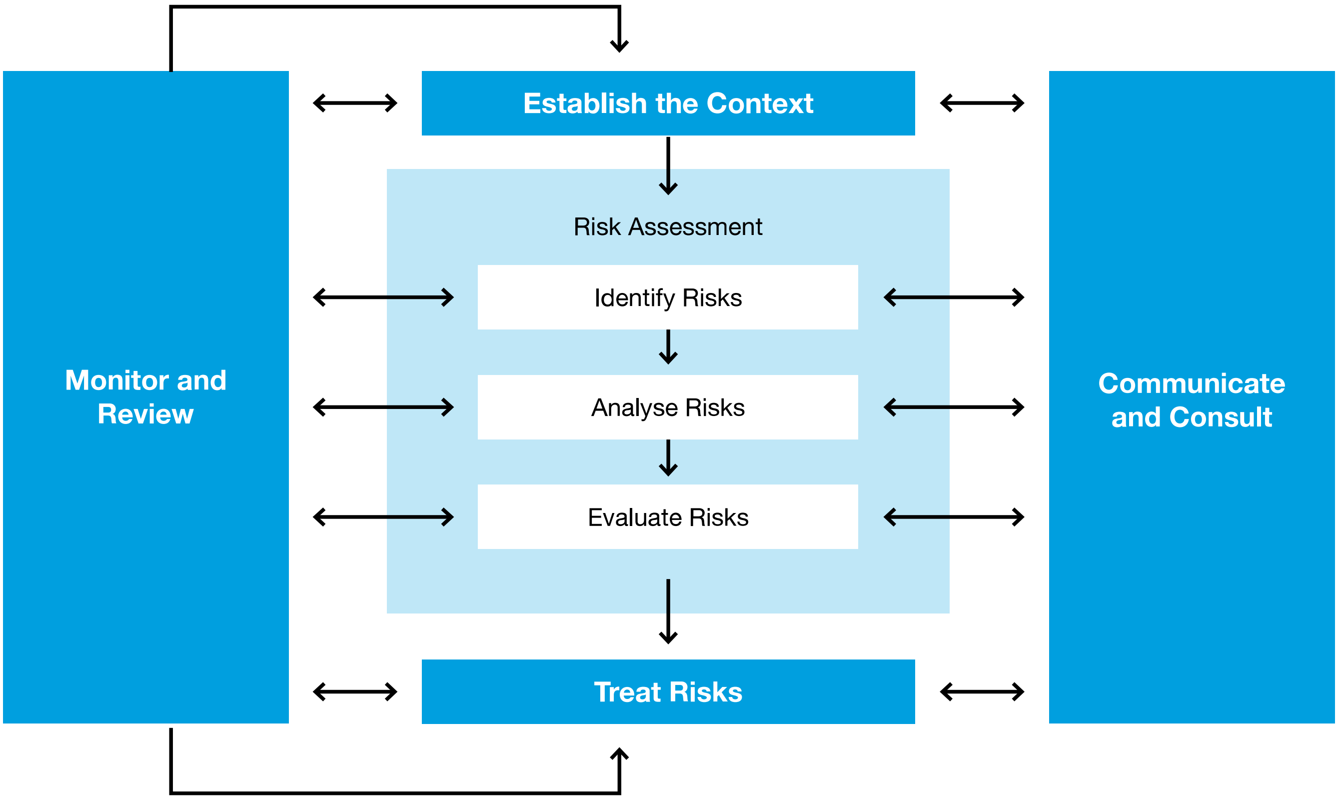
The head of Enterprise Risk Management, reporting to the CFO, is responsible for the design, development and monitoring of the top-down implementation of the Group risk management framework. Each division head, together with their respective management teams, are responsible for process execution and cascading the framework and guidelines further down in the organisation. The Internal Audit unit evaluates the effectiveness and efficiency of the Stora Enso risk management process.

Risk management process

In connection with the annual strategy process, business divisions and group service and support functions conduct a holistic baseline risk assessment, linked to their key objectives. Specific guidance regarding the risk management process is outlined in the enterprise risk management instructions, distributed with the annual strategy guidelines.

Business entities and functions identify the sources of risk, events including changes in circumstances and their causes and their potential consequences. Stora Enso's risk model outlines the overall risk universe which is used to support holistic risk identification and risk consolidation, while also providing taxonomy as well as consistency tin risk terminology. Risk appetite is determined across main risk categories on the business division level.

Risk management process



Risk analysis involves developing an understanding of the risk to provide an input for risk evaluation. The purpose of risk evaluation is to determine the risk priorities and to support decision making to determine which risks require treatment/actions. Risks are assessed in terms of their impact and likelihood of occurrence while the effectiveness of existing risk reduction is factored in to define the residual risk level. Pre-defined impact scales consider financial, people and reputational impacts, on both a quantitative and qualitative basis.

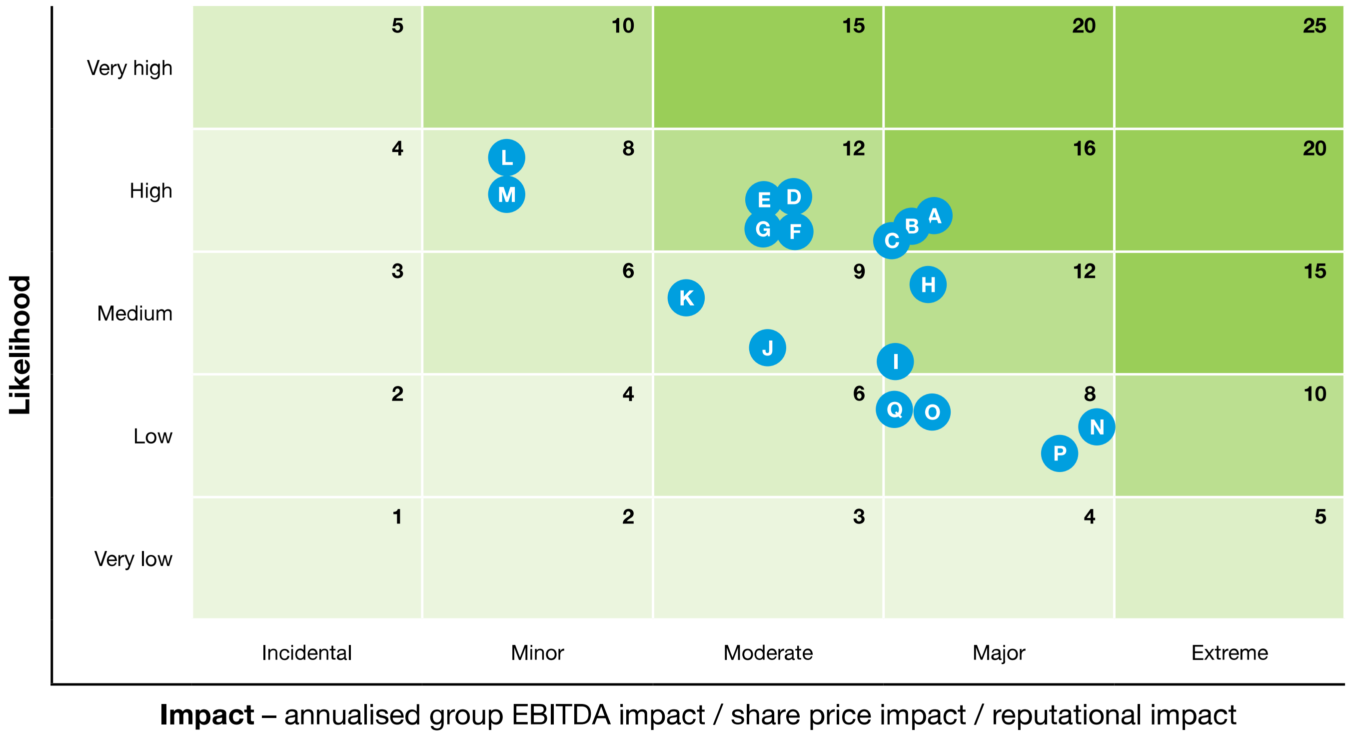
Risk treatment involves selecting one or more risk management option, such as avoidance, reduction, sharing or retention. Additional risk mitigation actions are determined for risks which exceed the perceived risk tolerance incorporating the assignment of responsibility, schedule and timetable of the risk treatment actions.

Following the annual baseline assessment, prioritised and emerging risks, as well as the corresponding risk mitigation and business continuity plans related to those risks, are reviewed in divisional business review meetings on a quarterly basis.

Despite the measures taken to manage risks and mitigate the impact of risks, and while some of the risks remain beyond the direct control of the management, there can be no absolute assurance that risks, if they occur, will not have a materially adverse effect on Stora Enso's business, financial condition, operating profit or ability to meet financial obligations.

Main risk factors

Risk map



Key risks in 2017

	Risk	Risk classification	Time span	Change vs 2016	Level of possible management influence
Major impact – high likelihood*					
A	Global warming	E/S	LT	↑	
B	Macroeconomy and currency rates	E/S/F	ST/LT	→	
C	Sourcing	I/S/O	LT	↑	
Moderate impact – high likelihood*					
D	Regulatory changes	E/S/C	ST/LT	→	
E	Product safety	M/O/C	ST	→	
F	Community relations and social responsibility	I/O/C	ST	→	
G	Information technology and security	I/O	ST	↑	
Major impact – medium likelihood*					
H	Ethics and compliance	M/C	ST	↓	
I	Strategic investments	M/C	ST/LT	→	
Moderate impact – medium likelihood*					
J	People and empowerment	I/O	ST/LT	→	
K	Competition and market demand	E/S	ST/LT	→	
Minor impact – high likelihood*					
L	Occupational health and safety	I/O	ST	↑	
M	Physical assets	I/O	ST/LT	↑	
Minor impact – low likelihood*					
N	Litigation	I/S	ST	↓	
O	Forest and land use	I/O/C	ST/LT	+	
P	Digitalisation	I/S	ST/LT	+	
Q	Mergers, acquisitions and divestures	M/I/O/C	ST	→	

* Residual risk = risk remaining after risk treatment

Symbols

M = Mandatory obligations
E = External factors
I = Internal capabilities
S = Strategic
O = Operational
C = Compliance
F = Financial market and reporting
ST = Short-term
LT = Long-term

Change vs 2016

Increased ↑
Decreased ↓
Stable →
New +

Level of possible management influence

Low High

Strategic risks

Macroeconomic and foreign currency risks

Stora Enso operates in more than 30 countries and is affected by the global economy. Changes in broad economic conditions, sharp market corrections, increasing volatility in foreign exchange rates and chronic fiscal imbalances could have negative and material impact on the Group's profit, cash flows and financial position. A prolonged global recession may materially and adversely affect Stora Enso's performance and financial condition. A recession may also materially affect the Group's customers, suppliers and other parties with whom it does business. Exchange rate fluctuations may have a material impact on the reported results through transaction and translation risk impact.

A significant and sustained economic downturn, or any similar event, could have a material adverse effect on the Group's operational performance and financial condition. The Group's reported results and reported net assets may fluctuate as the exchange rates change.

Stora Enso is exposed to several financial market risks that the Group is responsible for managing under policies approved by the Board of Directors. The objective is to achieve cost-effective funding in Group companies and manage financial risks using financial instruments to reduce earnings volatility. The main exposures for the Group besides currency risk are interest rate risk, funding risk, commodity price risk and credit risk.

Financial risks are discussed in detail in **Note 24**, Financial risk management, of the Consolidated financial statements.

Policy principles and mitigation measures
The Group has a diversified portfolio of businesses which mitigates exposure to any one country or product segment. We monitor the external environment continuously and our planning assumptions take account of important near- to medium-term and long-term drivers related to key macro-economic factors. We closely monitor the Board-approved risk appetite compliance for specific financial metrics and actively manage cash flow and liquidity. We hedge 50% of the highly probable 12-month net foreign exchange flows in main currency pairs. Currency translation risk is reduced by funding assets, whenever economically possible, in the same currency as the asset. The divisions regularly monitor their order flows and other leading indicators, where available, so that they may respond quickly to deterioration in trading conditions. In the event of a significant economic downturn, the Group would identify and implement cost reduction measures to offset the impact on margins from deterioration in sales.

Related opportunities

- A diverse business portfolio and geographical presence, competitive strength and resilient balance sheet reduce the Group's risk exposures
- Strategic opportunities in changing currency and macroeconomic environment.

Global warming

Changes in precipitation patterns, typhoons and severe frost periods in the subtropics could cause damage to tree plantations. Increases in average temperatures could lead to changes in the tree species composition of forests. Milder winters could impact harvesting and transport of wood in northern regions and the related costs. Additional demand for biomass fuels and agricultural land may limit the availability of land for fibre production, affecting the price of biomass. The increasing global demand for water may in the long-term impact the Group's operations through our supply chains.

Policy principles and mitigation measures
Stora Enso is committed to contributing and mitigating the effects of climate change by actively seeking opportunities to reduce the Group's carbon footprint. Risks related to climate change are managed via activities related to finding clean, affordable and safe energy sources for production and transportation, and reducing energy consumption. Additional measures include energy efficiency initiatives, the use of carbon-neutral biomass fuels, maximising the utilisation of combined heat and power, and sequestration of carbon dioxide in forests and products. Diligent plantation planning is ensured to avoid frost sensitive areas and non-controversial tree breeding and R&D programmes are applied to increase tolerance of extreme temperatures. Stora Enso maintains a diversity of forest types and structures and enforces diversification in wood sourcing. Wood harvesting in soft soils involves the implementation of best practices guidelines. Agroforestry concepts have been introduced to integrate the different land use forms and to mitigate the competition for land and the effects of increasing food prices.

Related opportunities

- With regards to global warming, we believe that the opportunities outweigh risks in near term.
- Products based on renewable materials with a low carbon footprint help customers and society at large to reduce CO_2 emissions by providing an alternative to solutions based on fossil fuels or other non-renewable materials.

Mergers, acquisitions, divestitures and restructuring

Failure to achieve the expected benefits from any acquisition or value from assets or businesses sold can have serious financial impacts. The Group could find itself liable for past acts or omissions of the acquired business, without any adequate right of redress. Failure to achieve expected values from the sales of assets or deliveries beyond the expected receipt of funds may also impact the Group's financial position. In connection with an acquisition, past practices with targets related to e.g. pollution, competition law compliance or corruption could result in additional costs for Stora Enso and cause reputational damage. Divestments may involve additional costs due to historical and unaccounted liabilities. Business restructuring may also involve reputational impacts.

Policy principles and mitigation measures
Rigorous M&A guidelines, including due diligence procedures are applied to the evaluation and execution of all acquisitions that require the approval of the Board of Directors. Structured governance and policies such as the policy for responsible rightsizing, are followed when making restructuring decisions.

Related opportunities

- A strong balance sheet and cash flow enable value enhancing M&A, when the timing and opportunity are right.

Strategic investments

Stora Enso's business strategy is to transform itself from a traditional paper and board producer to a customer-focused renewable materials growth company. The success of this transformation depends on the Group's ability to understand the needs of the customer and find the best way to serve them with the right offering and with the right production asset portfolio. Failure to complete strategic projects in accordance with the agreed schedule, budget or specifications can have serious impacts on our financial performance. Significant, unforeseen changes in costs or an inability to sell the envisaged volumes or achieve planned price levels may prevent us from achieving our business goals.

Policy principles and mitigation measures
Risks are mitigated through profound and detailed pre-feasibility and feasibility studies which are prepared for each large investment. Group investment guidelines stipulate the process, governance, risk management and monitoring procedures for strategic projects. Environmental and Social Impact Assessments (ESIAs) are conducted for all new projects that could cause significant adverse effects in local communities. Post completion audits are carried out for all significant investments.

Related opportunities

- Replacing fossil-based materials by innovating and developing new products and services based on wood and other renewable materials.

Competition and market demand

Continued competition and supply and demand imbalances in the raw material, energy and products market may have an impact on profitability. The paper, pulp, packaging and wood products industries are mature, capital intensive and highly competitive. Stora Enso's principal competitors include a number of large international forest products companies and numerous regional and more specialised competitors. Customer demand for products is influenced by the general economic conditions and inventory levels, and affects product price levels. Product prices, which tend to be cyclical in this industry, are affected by capacity utilisation, which decreases in times of economic slowdowns. Changes in prices differ between products and geographic regions.

The following table shows the operating profit sensitivity to a +/- 10% change in either price or volume for different segments based on figures for 2017.

Operating Profit: Impact of Changes +/- 10%, EUR million

Segments	Price	Volume
Consumer Board	240	89
Packaging Solutions	121	51
Biomaterials	146	71
Wood Products	164	42
Paper	269	67

Policy principles and mitigation measures
The ability to respond to changes in product demand and consumer preferences and to develop new products on a competitive and economic basis calls for innovation, continuous capacity management and structural development. The risks related to factors such as demand, price, competition and customers are regularly monitored by each division and unit as a routine part of business management. These risks are also continuously monitored and evaluated on a Group level to gain a perspective of the Group's total asset portfolio and overall long-term profitability potential.

Related opportunities

- Our expertise in wood and other biomass is focused on responding to customer and consumer demand in a changing world.

Digitalisation

The digital transformation of businesses continues to alter the ways in which organisations operate. Digital capabilities penetrate all aspects of business and operating models, reshaping how companies and functions generate value. Therefore, digitalisation also involves potentially disruptive forces. Moreover, customers, regulators and other stakeholders expect companies to understand what data they have or could have, what risks it poses, and to have plans to manage it well.

Business process erosion, failure to take advantage of the upside that technology offers or inability to harvest related synergies could significantly impair Stora Enso's competitiveness in the market place.

Policy principles and mitigation measures
Stora Enso has an extensive digitalisation programme with the aim to develop a competitive advantage by making full use of the opportunities to drive revenue growth and internal efficiency. Stora Enso has established a programme with external partners to search for technological development initiatives with a clear business purpose. With experimental and fast prototyping, these projects will help to identify and further develop initiatives that will speed up Stora Enso's digital maturity by exploring new technologies and capabilities.

Related opportunities

- Opportunities related to digitalisation clearly exceed related risks
- New technologies offer significant potential for higher level of process optimisation and automatisation, new business models and enhanced value propositions for customers and consumers.

Operational risks

Sourcing and logistics

Violation of Supplier Code of Conduct could result in contractual, financial and reputational damages and loss of sales if Stora Enso were to be blacklisted by customers. Similarly poor occupational safety performance of subcontractors can be a risk to our reputation. Increasing input costs or availability of materials, goods and services may adversely affect Stora Enso's profitability. Securing access to reliable low-cost supplies and proactively managing costs and productivity are of key importance. Reliance on outside suppliers for natural gas, oil and coal, and for peat and nearly half of the electricity consumed, leaves the Group susceptible to changes in energy market prices and disturbances in the supply chain.

The following table shows Stora Enso's major cost items.

Composition of Costs in 2017

Operative Costs	% of Costs	% of Sales
Logistics and commissions	11	10
Manufacturing Costs		
Fibre	34	31
Chemicals and fillers	9	9
Energy	7	6
Material	7	6
Personnel	14	13
Other	12	11
Depreciation	6	5
Total Costs and Sales	**100**	**91**
Total operative Costs and Sales in EUR million	**9 130**	**10 045**
Equity accounted investments (EAI), operational		89
Operational EBIT		**1 004**

In many areas Stora Enso is dependent on suppliers and their ability to deliver a product or a service at the right time and of the right quality. The most important products are fibre, chemicals and energy, and machinery and equipment in capital investment projects. The most important services are transport and various outsourced business support services. For some of these inputs, the limited number of suppliers is a risk.

Policy principles and mitigation measures
Input cost volatility is closely monitored on the business unit, divisional and Group level. The Group applies consistent long-term energy risk management. The price and supply risks are mitigated through increased own generation, shareholding in competitive power assets such as PVO/TVO, physical long-term contracts and financial derivatives. The Group hedges price risks in raw material and end-

product markets, and supports the development of financial hedging markets. The Group uses a wide range of suppliers and monitors them to avoid situations that might jeopardise continued production, business transactions or development projects.

Suppliers and subcontractors must also comply with Stora Enso's sustainability requirements as they are part of Stora Enso's value chain, and their weak sustainability performance could harm Stora Enso and its reputation. Stora Enso's sustainability requirements for suppliers and audit schemes cover its raw materials, and other goods and services procured. Suppliers are assessed for risks related to their environmental, social and business practices through self-assessment questionnaires and supplier audits. Findings from such assessments are continuously followed up and progressive blacklisting procedures are applied as necessary.

Environmental and social responsibility in wood procurement and forest management is a prime requirement of stakeholders. Failing to ensure that the origin of wood used by the Group is acceptable could have serious consequences in the markets. Stora Enso manages this risk through its policies of sustainable sourcing of wood and fibre, and land management, which set the basic requirements for all Stora Enso wood procurement operations. Traceability systems are used to document that all wood and fibre come from legal and acceptable sources.

Related opportunities

- Add value and bring innovation to our business globally by building strong and measurable relationships with the best suppliers.
- Enforce harmonised sourcing processes to increase capabilities, increase tender quality to reduce cost, and develop sustainable suppliers to reduce risk.

Product safety

Some of our products are used to package liquids and food consumer products, so any defects could affect health or packaging functions and result in costly product recalls. Wood products are incorporated into buildings, and this may involve product liability resulting from failures in structural design, product selection or installation. Failure to ensure product safety could result in product recalls involving significant costs including compensation for indirect costs of customers, and reputational damage.

Policy principles and mitigation measures
The mills producing food and drink contact products have established certified hygiene management systems based on risk and hazard analysis. To ensure the safety of its products, Stora Enso actively participates in CEPI (Confederation of European Paper Industry) working groups on chemical and product safety. In addition, all Stora Enso mills have certified ISO quality management systems. Furthermore, contractual liability limitation and insurance protection are used to limit the risk exposure to Stora Enso.

Related opportunities

- Differentiation and value creation through superior product quality and the highest level of product conformity.

Community relations and social responsibility

Social risks may harm existing operations and the execution of investments, especially in growth markets. Failure to successfully manage relationships with local communities and non-governmental organisations (NGOs) could disrupt our operations and adversely affect the Group's reputation. The Group operates in certain countries, where land and resource ownership rights remain unclear and where related disputes may arise.

Potential impacts include reputational impacts and negative media coverage, harm to communities and rights holders, disruption of operations, and loss of the licence to operate.

Policy principles and mitigation measures
Stora Enso strives to identify and minimise risks related to social issues in good time, in order to guide decision-making in its investment processes as well as in its ongoing operations. Tools such as sustainability risk assessment, human rights due diligence and Environmental and Social Impact Assessments (ESIA) help ensure that no unsustainable projects are initiated and all related risks and opportunities are fully understood in all operations. These tool also enable project plans and operating practices to be adapted to suit local circumstances. Furthermore, dialogue with NGOs is a part of the Group's stakeholder engagement. More information on community engagement is presented in Stora Enso's Sustainability Report.

Related opportunities

- Ensuring that the communities around our operations thrive economically, socially, and environmentally is crucial for the success and sustainability of Stora Enso.
- Clear business benefits to Stora Enso through a strong focus on social responsibility, as customers, business partners, investors and potential employees become more and more attracted to socially responsible companies.

Occupational health and safety

Failure to maintain high levels of safety management can result in harm to the Group's employees or contractors, and also to communities near our operations and the environment. Impacts in addition to physical injury, health effects and environmental damage could include liability to employees or third parties, impairment of the Group's reputation, or inability to attract and retain skilled employees. Government authorities could additionally enforce the closure of our operations on a temporary basis.

Personnel security can never be compromised and thus Stora Enso must be aware of potential safety risks and provide adequate guidelines to people for managing risks related to, for example, travel, work and living in countries with security or crime concerns. Focusing on the security of key personnel is also important from a business continuity perspective.

Policy principles and mitigation measures
Stora Enso measures its performance in health and safety through lag indicators on accidents and near-misses, and lead indicators on safety observations. The target in safety is to achieve zero accidents, but demanding milestones have also been set for accident and incident rates. Stora Enso has adopted a common model for safety management, establishing a set of safety tools that all units must implement in their operations. Implementation of the tools is followed up and reported internally on a quarterly basis, and support is offered to units through training, coaching and the sharing of best-practice. The main responsibility for identifying and managing safety risks remains with the units. At the mill level, safety and health risks are assessed jointly, in co-operation with the occupational health service providers. Global health and safety risks are monitored and assessed by the Group's Occupational Health and Safety unit.

Stora Enso carries out constant monitoring of risks related to the security and safety of the personnel, including health issues, and information available on the Intranet is delivered directly to travelling employees. An external service provider takes care of action in medical or security crises, under guidance from Stora Enso's crisis management team.

Related opportunities

- Leading health and safety performance strengthens the brand as an employer.
- Improved engagement, efficiency and productivity.

People and empowerment

Recruiting, retaining and developing a competent workforce and managing key talent throughout Stora Enso's global organisation are crucial to success. Competition for personnel is intense and the Group may not be successful in attracting or retaining qualified personnel. A significant portion of Stora Enso employees are members of labour unions and there is a risk that the Group may face labour market disruptions especially in a time of restructuring and redundancies due to divestments and mill closures.

The loss of key employees, the Group's inability to attract new or adequately trained employees, or a delay in hiring key personnel could seriously harm the Group's business and impede the Group and its business divisions from reaching their strategic objectives. Labour market disruptions and strikes could have adverse material effects on the business, financial conditions and profitability.

Policy principles and mitigation measures
Stora Enso manages the risks and loss of key talents through a combination of different actions. Some of the activities aim at providing a better overview of the workforce of the whole Group, making the Stora Enso employer brand better known both internally and externally, globalising some of the remuneration practices and intensifying the efforts to identify and develop talents. Finally, the Group actively focuses on talent and management assessments, including succession planning for key positions. The majority of employees are represented by labour unions under several collective agreements in different countries where Stora Enso operates, thus relations with unions are of high importance to manage labour disruption risks.

Related opportunities

- Skilled and dedicated employees are essential for success.
- Engaged high performing people enable the implementation of transformation strategy and commercial success.

Information technology and information security

The Group is dependent on IT systems for both internal and external communications and for the day-to-day management of its operations. The Group's information systems, personnel and facilities are subject to cyber security risk. Failure to capitalise on digitalisation and cognitive technologies could impair Stora Enso's competitiveness. Other IT related risks relate to the potential unavailability of IT services due to human error in operations, damaged hardware in data rooms and data centres, network connection issues and the failure of suppliers to follow service level agreements.

Accidental disclosure of confidential information due to a failure to follow information handling guidelines or due to an accident or criminal act may result in financial damage, penalties, disrupted or delayed launch of new lines of business or ventures, loss of customer and market confidence, loss of research secrets and other business critical information. Further risks involve the loss of backup media and violation of data privacy regulations.

Policy principles and mitigation measures
The management of risks is actively pursued in the Information Risk Management System and best practice change management and project methodologies are applied. A number of security controls have been implemented to strengthen the protection of confidential information and to facilitate compliance with international regulations. Specific measures include a thorough RfP process in supplier selection for business-critical services, supplier audits, annual controls and audit, data centres located in low-risk areas, backup connections for critical services, disaster recovery plans, targeted scanning and investigation activities, encryption of communication, information and devices, remote management of security on devices and information security awareness training.

Related opportunities

- Efficient operations, performance optimisation, innovative product offerings, and new customer services through digitisation and sophisticated IT systems.

Physical assets and business disruption

The physical assets that comprise the installed capacity of the production facilities have inherent risks or the potential for failure, and also involve the potential for off-specification operation that could result in poor product quality, lower output or increased production costs. In addition to the inherent risks of catastrophic failure, the management must also consider the relative importance, e.g. criticality, of each asset on the plant's ability to meet delivery commitments and the business plan. In some instances the risks are the result of inherent design deficiencies, mode of operation or operating practices. In Stora Enso the significant asset risks lie predominantly in integrated (but also non-integrated) pulp and related energy production.

Policy principles and mitigation measures
Protecting production assets and business results is a high priority for Stora Enso to achieve the target of avoiding any unplanned production stoppages. This is achieved through structured methods of identifying, measuring and controlling different types of risk and exposure. Divisional risk specialists manage this process together with insurance companies and other loss prevention specialists. Each year a number of technical risk inspections are carried out at production units. Risk improvement programmes and cost-benefit analyses of proposed investments are managed via internal reporting and risk assessment tools. Internal and external property loss prevention guidelines, fire loss control assessments, key machinery risk assessments and specific loss prevention programs are also utilised.

Planned stoppages for maintenance and other work are important to keep machinery in good order. Preventive maintenance programs and spare part criticality analyses are utilized to secure the high availability and efficiency of key machinery. Striking a balance between accepting risks and avoiding, treating or sharing risks is a high priority.

Related opportunities

- Optimised maintenance and well controlled loss prevention programmes
- Potential for competitive advantage through improved productivity and overall efficiency

Natural catastrophe risks

Stora Enso has to acknowledge that natural catastrophes such as storms, flooding, earthquakes or volcanic activity may affect the Group's premises and operations. However, most of the Group's assets are located in areas where the probability of flooding, earthquakes and volcanic activity is low.

Policy principles and mitigation measures
The outcome of such catastrophes can be reduced by emergency and business continuity plans that have been proactively designed together with the relevant authorities.

Compliance risks

Ethics and compliance

Stora Enso operates in a highly regulated business area and is thereby exposed to risks related to breach of applicable laws and regulations (e.g. capital markets regulation, company and tax laws, customs regulation and safety regulation) and breaches of group policies such as the Code of Conduct, Supplier Code of Conduct and Business Practice Policy regarding fraud, anti-trust, corruption, conflict of interests and other misconduct. Stora Enso may face high compliance and remediation costs under environmental laws and regulations. See also Information systems and information security. Potential impacts include prosecution, fines, penalties, and contractual, financial and reputational damage.

Policy principles and mitigation measures
Stora Enso's Ethics and Compliance Programme, including policy setting, value promotion, training and knowledge sharing and grievance mechanisms are kept continuously up to date and developed. Other compliance mechanisms include Stora Enso Group's internal control system and Internal Audit assurance, the Supplier Code of Conduct in supplier contracts, supplier risk assessments, supplier trainings, supplier audits and black-listing procedures. In response to capital markets regulations, Stora Enso's Disclosure Policy emphasises the importance of transparency, credibility, responsibility, proactivity and interaction.

Environmental risks are minimised through environmental management systems and environmental due diligence for acquisitions and divestments, and indemnification agreements where effective and appropriate remediation projects are required. Special remediation projects related to discontinued activities and mill closures are executed based on risk assessments.

Related opportunities

- Focusing on wider ethical topics rather than mere compliance with regulations will lead to successful business, foster accountability and enhance corporate reputation.

Forest and land use

Wood is our most important raw material. Adverse changes in growing conditions and natural hazards, caused by climate change, for example, could result in significant financial loss to Stora Enso. Failure to meet stakeholder expectations or to ensure the chain of custody and economically, socially and environmentally sustainable forest and land management practices throughout our wood procurement and plantation operations could also result in significant reputational and financial loss to Stora Enso. Furthermore, global challenges such as population growth, increasing demand for agricultural land, and the widening gap between the supply and demand for wood, all require us to use natural resources even more efficiently.

Policy principles and mitigation measures
Our Policy for Wood and Fibre Sourcing, and Land Management, robust traceability systems and our active promotion of forest certification all help to ensure that no wood or fibre from unacceptable sources enters our supply chain. In addition, when sourcing logging residues and other forest biomass for energy use, we follow the specific guidelines developed for the harvesting of forest energy, which include strict environmental considerations.

Related opportunities
As trees absorb carbon dioxide (CO_2) from the atmosphere and – together with wood-based products – act as carbon sinks, wood from sustainably managed forests represents a carbon neutral, renewable alternative to many non-renewable materials. If forests and plantations are managed sustainably, new generations of trees will replace those that are logged, sequestering more CO_2 from the atmosphere. Well-managed forests can make entire ecosystems more resilient to negative impacts, and benefit from positive ones.

Litigation

The international nature of the Group's operations exposes it to the potential for litigation from third parties. Material levels of litigation may arise from many of the Group's activities. Significant levels of litigation in our industry sector have in the past related mainly to major contracts and shareholder agreements. Acquisitions and disposals and the restructuring of under-performing businesses may also give rise to litigation. For more information on specific litigation and legal cases affecting the Group, see **Note 29**, Commitments and contingencies, of the Consolidated financial statements.

Policy principles and mitigation measures
Levels of litigation are actively monitored. A periodic report of potential exposures and current litigation is submitted by all businesses and reviewed by the Group General Counsel. Contracting procedures are continuously reviewed and improved against a framework used by all Stora Enso business units.
See also Product safety risk.

Related opportunities

- Determining cohesive litigation strategies case-by-case to pursue desired litigation outcomes may result in significant financial redemptions and cost recovery.

Regulatory changes and political risks

The Group's businesses may be affected by political or regulatory developments in any of the countries and jurisdictions in which the Group operates, including changes to fiscal, tax, environmental or other regulatory regimes. Potential impacts include higher costs and capex to meet new environmental requirements, expropriation of assets, imposition of royalties or other taxes targeted at our industry, and requirements for local ownership or beneficiation. In particular, the EU energy and carbon policies may impact upon the availability and price of wood fibre. Additionally, political instability may result in civil unrest, nullification of existing agreements, harvesting permits or land leases. Unpredicted changes in forest certification schemes could limit the availability of certified raw materials.

Policy principles and mitigation measures

- Active monitoring of regulatory and political developments in the countries where the Group operates
- Participation in policy development mainly through industry associations

Related opportunities
Regulatory changes involve market growth potential for sustainable products. Resource efficiency, the circular economy and renewability are increasingly important sources of competitive advantage.

Corporate governance in Stora Enso

Stora Enso complies with the Finnish Corporate Governance Code issued by the Securities Market Association (the "Code"). The Code is available at **cgfinland.fi**. Stora Enso also complies with the Swedish Corporate Governance Code ("Swedish Code"), with the exception of the deviations listed in Appendix 1 of the Corporate Governance Report. The deviations are due to differences between the Swedish and Finnish legislation, governance code rules and practices, and in these cases Stora Enso follows the practice in its domicile. The Swedish Code is issued by the Swedish Corporate Governance Board and is available at **corporategovernanceboard.se**.

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.

Latin American Cases

Veracel

Fibria and Stora Enso each own 50% of Veracel, and the joint ownership is governed by a shareholder agreement. In May 2014, Fibria initiated arbitration proceedings against Stora Enso claiming that Stora Enso was in breach of certain provisions of the shareholder agreement. Fibria has estimated that the interest to be paid regarding the dispute should be approximately USD 54 (EUR 45) million. Stora Enso denied the claims. In December 2017 the arbitration panel delivered an award in favour of Stora Enso. Hence, Stora Enso does not plan to report further on the case.

In June 2017, Veracel received a tax infringement note referring to year 2012 with a total amount of BRL 224 (EUR 56) million including interest and fines. The dispute is limited to fiscal year 2012 for which the tax authority applied another transfer pricing method due to a different interpretation of a transition rule. Veracel acts in full compliance with Brazilian transfer pricing law and has filed an administrative defense against the tax note in July 2017. The total exposure at year end is BRL 228 (EUR 57) million considering interest until 31 December 2017. Stora Enso's share of the exposure is BRL 114 (EUR 29) million. No provisions have been recorded in Veracel's or Stora Enso's accounts for this tax dispute.

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 Finland

Roundwood claim

In December 2009, the Finnish Market Court fined Stora Enso for competition law infringements in the market for roundwood in Finland from 1997 to 2004. Stora Enso did not appeal against the ruling. In March 2011 Metsähallitus of Finland initiated legal proceedings against Stora Enso, UPM and Metsäliitto claiming compensation for damages allegedly suffered due to competition law infringements. In its ruling issued in June 2016, the Helsinki District Court dismissed Metsähallitus' claim for damages against Stora Enso, Metsäliitto and UPM. Metsähallitus has appealed this ruling. Following reductions by Metsähallitus, the total claim against the defendants now amounts to approximately EUR 125 million and the secondary claim against Stora Enso to approximately EUR 68 million.

In addition, certain Finnish municipalities and private forest owners initiated similar legal proceedings against Stora Enso, UPM and Metsäliitto. In the autumn of 2017, the Helsinki District Court dismissed the claims of 486 private forest owners and 32 municipalities. The total amount of pending claims jointly and severally against Stora Enso, UPM and Metsäliitto is approximately EUR 7 million and claims solely against Stora Enso is approximately EUR 3 million. Stora Enso denies that the plaintiffs suffered any damages whatsoever and will forcefully defend itself. No provisions have been made in Stora Enso's accounts for these lawsuits.

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 million (EUR 30 million). Stora Enso denies liability.

In a verdict in October 2017 the Environmental Court ruled in favour of Stora Enso. The Insurance companies has appealed against the verdict. Concerning the case in the District Court of Falun a procedural dismissal in the first instance has been reversed by the Court of Appeal but Stora Enso has appealed to the Supreme Court seeking final dismissal.

Changes in Group management

On 1 May 2017, Annica Bresky became the Executive Vice President of the Consumer Board division and a member of the Group Leadership Team. She was previously the President and CEO of Iggesund Paperboard AB, part of the Swedish Holmen Group.

On 1 June 2017, Markus Mannström became the Executive Vice President of hte Biomaterials division. Previously, he was the Group's Chief Technology Officer (CTO) and has been a member of the Group Leadership Team since 2015.

Juan Carlos Bueno, Executive Vice President, Biomaterials division, was a member of the Group Leadership Team until 31 May 2017.

Share capital

Stora Enso Oyj's shares are divided into A and R shares. The A and R shares entitle holders to the same dividend but different voting rights. Each A share and each ten R shares carry one vote at a shareholders' meeting. However, each shareholder has at least one vote.

During 2017, a total of 114 770 A-shares converted into R-shares were recorded in the Finnish Trade Register. On 31 December 2017, Stora Enso had 176 392 320 A shares and 612 227 667 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 237 615 086.

The Board of Directors is not currently authorised to issue, acquire or dispose of shares in the Company.

Major shareholders as at 31 December 2017

By voting power	A shares	R shares	% of shares	% of votes
1 Solidium Oy[1]	61 255 036	35 792 540	12.3%	27.3%
2 FAM AB[2]	63 123 386	17 000 000	10.2%	27.3%
3 Social Insurance Institution of Finland	23 825 086	1 279 062	3.2%	10.1%
4 Varma Mutual Pension Insurance Company	9 913 018	140 874	1.3%	4.2%
5 MP-Bolagen i Vetlanda AB, (Werner von Seydlitz dödsbo)	4 803 000	3 087 000	1.0%	2.2%
6 Ilmarinen Mutual Pension Insurance Company	3 492 740	15 231 189	2.4%	2.1%
7 Erik Johan Ljungberg's Education Foundation	1 780 540	2 336 224	0.5%	0.8%
8 Swedbank Robur Funds	-	10 454 540	1.3%	0.4%
9 The State Pension Fund	-	7 900 000	1.0%	0.3%
10 Bergslaget's Healthcare Foundation	626 269	1 609 483	0.3%	0.3%
11 Nordea Investment Funds	-	7 242 182	0.9%	0.3%
12 Unionen (Swedish trade union)	-	5 297 200	0.7%	0.2%
13 Keva (Local Government Pensions Institution)	-	5 251 101	0.7%	0.2%
14 SEB Investment Management	-	5 231 079	0.7%	0.2%
15 Investment Fund OP Suomi	-	4 253 482	0.5%	0.2%
Total	**168 819 075**	**122 105 956**	**37.0%[3]**	**76.1%[3]**
Nominee-registered shares	74 491 298	467 494 861	68.7%[3, 4]	51.0%[3, 4]

[1] Entirely owned by the Finnish State.
[2] As confirmed to Stora Enso.
[3] As some of the shareholdings on the list are nominee registered, the percentage figures do not add up to 100%.
[4] According to Euroclear Finland.

The list has been compiled by the Company on the basis of shareholder information obtained from Euroclear Finland, Euroclear Sweden and a database managed by Citibank, N.A (Citi). This information includes only directly registered holdings, thus certain holdings (which may be substantial) of shares held in nominee or brokerage accounts cannot be included. The list is therefore incomplete.

Share Distribution, 31 December 2017

By size of holding, A share	Shareholders	%	Shares	%
1–100	3 385	43.79%	168 947	0.10%
101–1 000	3 721	48.13%	1 383 342	0.78%
1 001–10 000	588	7.60%	1 366 647	0.78%
10 001–100 000	31	0.40%	639 562	0.36%
100 001–1 000 000	0	0.00%	0	0.00%
1 000 001–	6	0.08%	172 833 822	97.98%
Total	**7 731**	**100.00%**	**176 392 320**	**100.00%**

By size of holding, R share	Shareholders	%	Shares	%
1–100	7 570	23.60%	454 486	0.07%
101–1 000	18 133	56.54%	7 920 267	1.29%
1 001–10 000	5 797	18.07%	15 381 103	2.51%
10 001–100 000	481	1.50%	13 064 030	2.13%
100 001–1 000 000	70	0.22%	20 141 107	3.30%
1 000 001 –	21	0.07%	555 307 384	90.70%
Total	**32 072**	**100.00%**	**612 268 377**	**100.00%**

According to Euroclear Finland.

Ownership Distribution, 31 December 2017

	% of shares	% of votes
Solidium Oy[1]	12.3%	27.3%
FAM AB[2]	10.2%	27.3%
Under nominee names (non-Finnish/non-Swedish shareholders)	48.7%	16.3%
Social Insurance Institution of Finland (KELA)	3.2%	10.1%
Finnish institutions (excl. Solidium and KELA)	11.1%	9.0%
Swedish institutions (excl. FAM)	5.7%	4.9%
Finnish private shareholders	3.8%	2.3%
Swedish private shareholders	3.1%	2.2%
ADR holders	1.9%	0.6%
Total	**100.0%**	**100.0%**

[1] Entirely owned by the Finnish State.

[2] As confirmed to Stora Enso.

Near-term outlook and short-term risks

Q1/2018 sales are estimated to be similar to or slightly higher than the amount of EUR 2 511 million recorded in Q4/2017, and operational EBIT is expected to be somewhat higher than the EUR 280 million recorded in Q4/2017. There are no major scheduled annual maintenance shutdowns during Q1/2018.

Stora Enso profit improvement programme is progressing according to plan and the earlier target to decrease the annual costs by EUR 50 million with full annualised impact in 2018 is valid.

Increasing competition, and supply and demand balances in the paper, pulp, packaging, wood products and roundwood markets may have an impact on the 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 have impacts on Stora Enso's profits, cash flows and financial position.

Continued exceptionally mild winter conditions with more rain, less snow and reduced periods of frozen soils has impacted harvesting and transport of wood, and thus affect the stability of raw material supply and increase wood costs to the Nordic mills. The Russian policy to prefer wood deliveries to domestic forest industry instead of wood exports is likely to continue. Possible limitations of birch plywood exports may cause disturbance also to pulpwood exports.

Energy sensitivity analysis: the direct effect of a 10% increase in electricity, heat, oil and other fossil fuel market prices would have a negative impact of approximately EUR 13 million on operational EBIT for the next 12 months, after the effect of hedges.

Wood sensitivity analysis: the direct effect of a 10% increase in wood prices would have a negative impact of approximately EUR 182 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 105 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 64 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 crown and British pound against the euro would be about positive EUR 126 million, negative EUR 96 million and positive EUR 36 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 120 million in Brazilian real (BRL) in its operations in Brazil. For these flows, a 10% strengthening in the value of BRL would have a EUR 12 million negative impact on operational EBIT.

Events after the balance sheet date

In January the paper manufacturer Feldmuehle Uetersen GmbH filed for insolvency. Uetersen mill was owned by Stora Enso until 2015. At year end 2017 Stora Enso had open receivables from Feldmuehle Uetersen amounting to EUR 9 million. In case Uetersen mill will be discontinued, Stora Enso has contractual obligation to cover the costs of possible environmental remediation.

The divestment of the Consumer Board sheeting centre business in Baienfurt, Germany to Pyroll, a Finnish converting firm was completed in January 2018. The transaction had no significant impact on the Group.

On 26 January 2018, a Swedish prosecutor initiated proceedings in a District court claiming that Stora Enso and a contractor due to negligence had caused the forest fire in Västmanland in 2014. Further, the prosecutor request that Stora Enso and the contractor pay SEK 5 million (EUR 0.5 million) each in corporate fines. Stora Enso denies liability and disputes the claim.

Proposal for the distribution of dividend

The Board of Directors proposes to the AGM that a dividend of EUR 0.41 per share be distributed for the year 2017.

The dividend would be paid to shareholders who on the record date of the dividend payment, 3 April 2018, are recorded in the shareholders' register maintained by Euroclear Finland Ltd. or in the separate register of shareholders maintained by Euroclear Sweden AB for Euroclear Sweden registered shares. Dividends payable for Euroclear Sweden registered shares will be forwarded by Euroclear Sweden AB and paid in Swedish crown. 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 10 April 2018.

Annual General Meeting

The Annual General Meeting (AGM) will be held at 16.00 (Finnish time) on Wednesday 28 March 2018 at Marina Congress Center, Katajanokanlaituri 6, Helsinki, Finland.

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 relating to disposal of fixed assets, impairments or impairment reversals, disposals gains and losses relating to Group companies, environmental provisions, provisions for planned restructurings, other provisions and penalties. Items affecting comparability are normally disclosed individually if they exceed one cent per share.

Fair valuations and non-operational items include equity incentive schemes and related hedges, CO_2 emission rights, valuations of biological assets and the Group's share of income tax and net financial items of EAI.

Cash flow from operations (non-IFRS) is a group specific way to present operative cash flow without hedging result from OCI and 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 EAIs.

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

Change in the operational EBITDA calculation

Starting from the fourth quarter of 2017, Stora Enso will include the operational EBITDA of its equity accounted investments (EAI) in the group's operational EBITDA. Previously Stora Enso has included the operational EBIT of EAIs in the Group's operational EBIT only.

The new definition of the non-IFRS measure of operational EBITDA is operating profit/loss excluding operational decrease in the value of biological assets, fixed asset depreciation and impairment, IAC and fair valuations. The definition includes the respective items of subsidiaries, joint arrangements and equity accounted investments.

This change has affected the following key figures: operational EBITDA, operational EBITDA margin, and net debt to last 12 months' operational EBITDA ratio.

The historical figures are restated according to the new reporting structure and presented in Stora Enso Oyj stock exchange release, published on 7 November 2017.

There will be no impact on operational EBIT, the subtotals of the Consolidated income statement or the Group's IFRS figures.

Calculation of key figures

Operational return on capital employed, operational ROCE (%)	$100 \times \dfrac{\text{Operational EBIT}}{\text{Capital employed}^{1,2}}$
Operational return on operating capital, operational ROOC (%)	$100 \times \dfrac{\text{Operational EBIT}}{\text{Operating capital}^{1,2}}$
Return on equity, ROE (%)	$100 \times \dfrac{\text{Net profit/loss for the period}}{\text{Total equity}^{2}}$
Net interest-bearing liabilities	Interest-bearing liabilities – interest-bearing assets
Debt/equity ratio	$\dfrac{\text{Net interest-bearing liabilities}}{\text{Equity}^{3}}$
Earnings per share (EPS)	$\dfrac{\text{Net profit/loss for the period}^{3}}{\text{Average number of shares}}$
Payout ratio, excl. IAC, %	$100 \times \dfrac{\text{Dividend distribution / share}}{\text{EPS excl. IAC}}$
Dividend and distribution yield, %	$100 \times \dfrac{\text{Dividend distribution / share}}{\text{Closing price of share}}$
Price/earnings ratio (P/E), excl. IAC	$\dfrac{\text{Closing price of share}}{\text{EPS excl. IAC}}$
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	$\dfrac{\text{Net interest-bearing liabilities}}{\text{Last 12 months' operational EBITDA}}$
Fixed costs	Maintenance, personnel and other administrative type of costs, excluding IAC and fair valuations
Last 12 months (LTM)	12 months prior to the reporting date
TRA	Total recordable incident rate = number of incidents per one million hours worked
LTA	Lost-time accident rate = number of lost-time accidents per one million hours worked

[1] Capital employed = Operating capital – Net tax liabilities
[2] Average for the financial period
[3] Attributable to owners of the Parent

List of non-IFRS measures

Operational EBITDA
Operational EBITDA margin
Operational EBIT
Operational EBIT margin
Capital expenditure
Capital employed
Operational ROCE
Earnings per share (EPS), excl. IAC
Operational ROOC
Net debt/last 12 months' operational EBITDA
Cash flow from operations
Cash flow after investing activities

Consolidated financial statements

Consolidated income statement

		Year Ended 31 December	
EUR million	**Note**	**2017**	**2016**
Sales	3	**10 045**	**9 802**
Other operating income	5	147	123
Changes in inventories of finished goods and work in progress		28	9
Materials and services		-5 945	-5 833
Freight and sales commissions		-968	-920
Personnel expenses	6	-1 331	-1 334
Other operating expenses	5	-551	-561
Share of results of equity accounted investments	13	66	156
Change in net value of biological assets	12	-72	-261
Depreciation, amortisation and impairment charges	10	-515	-398
Operating Profit	3	**904**	**783**
Financial income	8	38	44
Financial expense	8	-200	-286
Profit before Tax		**742**	**541**
Income tax	9	-128	-134
Net Profit for the Year		**614**	**407**
Attributable to:			
Owners of the Parent	18	625	463
Non-controlling Interests	19	-11	-56
Net Profit for the Year		**614**	**407**
Earnings per Share			
Basic and diluted earnings per share, EUR	32	0.79	0.59

Consolidated statement of comprehensive income

		Year Ended 31 December	
EUR million	**Note**	**2017**	**2016**
Net profit for the year		614	407
Other Comprehensive Income (OCI)			
Items that will Not be Reclassified to Profit and Loss			
Actuarial losses/gains on defined benefit plans	20	61	-62
Income tax relating to items that will not be reclassified	9	-10	15
		51	**-47**
Items that may be Reclassified Subsequently to Profit and Loss			
Share of OCI of equity accounted investments that may be reclassified	27	5	-
Currency translation movements on equity net investments (CTA)	28	-288	124
Currency translation movements on non-controlling interests	19	-3	-3
Net investment hedges	28	40	-11
Cash flow hedges	27	32	13
Available-for-sale investments	14	39	138
Income tax relating to items that may be reclassified	9	-10	-1
		-185	**260**
Total Comprehensive Income		**480**	**620**
Attributable to:			
Owners of the Parent		494	679
Non-controlling interests	19	-14	-59
Total Comprehensive Income		**480**	**620**

The accompanying Notes are an integral part of these Consolidated financial statements.

Consolidated statement of financial position

EUR million		Note	As at 31 December 2017	2016
Assets				
Goodwill	O	11	237	238
Other intangible assets	O	11	229	180
Property, plant and equipment	O	11	5 310	5 611
		11	**5 776**	**6 029**
Biological assets	O	12	448	489
Emission rights	O		12	14
Equity accounted investments	O	13	1 600	1 594
Available-for-sale investments: listed securities	I	14	21	42
Available-for-sale investments: operative	O	14	318	253
Non-current loan receivables	I	17	55	7
Deferred tax assets	T	9	154	214
Other non-current assets	O	15	50	57
Non-current Assets			**8 434**	**8 699**
Inventories	O	16	1 321	1 346
Tax receivables	T	9	9	9
Operative receivables	O	17	1 319	1 273
Interest-bearing receivables	I	17	80	46
Cash and cash equivalents	I		607	953
Current Assets			**3 336**	**3 627**
Total Assets			**11 770**	**12 326**
Equity and Liabilities				
Share capital		18	1 342	1 342
Share premium			77	77
Fair value reserve		27	210	136
Cumulative translation adjustment		28	-288	-32
Invested non-restricted equity fund			633	633
Retained earnings			3 409	3 187
Net profit for the year			625	463
Equity Attributable to Owners of the Parent			**6 008**	**5 806**
Non-controlling Interests		19	47	62
Total Equity			**6 055**	**5 868**
Post-employment benefit provisions	O	20	377	436
Other provisions	O	22	111	114
Deferred tax liabilities	T	9	166	203
Non-current debt	I	26	2 046	2 655
Other operative liabilities	O	23	52	61
Non-current Liabilities			**2 752**	**3 469**

Current portion of non-current debt	I	26	370	552
Interest-bearing liabilities	I	26	596	563
Bank overdrafts	I	26	4	4
Other provisions	O	22	23	20
Other operative liabilities	O	23	1 888	1 774
Tax liabilities	T	9	82	76
Current Liabilities			**2 963**	**2 989**
Total Liabilities			**5 715**	**6 458**
Total Equity and Liabilities			**11 770**	**12 326**

Items designated "O" comprise Operating Capital, items designated "I" comprise Interest-bearing Net Liabilities, items designated "T" comprise Net Tax Liabilities. The accompanying Notes are an integral part of these Consolidated financial statements.

Consolidated cash flow statement

		Year Ended 31 December	
EUR million	**Note**	**2017**	**2016**
Cash Flow from Operating Activities			
Net profit for the year		614	407
Result from the Statement of Other Comprehensive Income		-	-1
Adjustments and reversal of non-cash items:			
Taxes	9	128	134
Depreciation and impairment charges	10	515	398
Change in value of biological assets	12	72	261
Change in fair value of share awards and TRS		10	-1
Share of results of equity accounted investments	13	-66	-156
Profits and losses on sale of fixed assets and investments	5	7	15
Net financial items	8	162	242
Other adjustments		-7	-8
Dividends received from equity accounted investments	13	20	58
Interest received		3	12
Interest paid		-143	-144
Other financial items, net		-53	-48
Income taxes paid	9	-97	-92
Change in net working capital, net of businesses acquired or sold		37	283
Net Cash Provided by Operating Activities		**1 202**	**1 360**
Cash Flow from Investing Activities			
Acquisition of shares in equity accounted investments	13	-9	-1
Acquisition of available-for-sale investments	14	-8	-2
Proceeds from disposal of subsidiary shares and business operations, net of disposed cash	4	-4	40
Proceeds from disposal of shares in equity accounted investments	13	5	26
Proceeds from disposal of available-for-sale investments	14	-	10
Proceeds from disposal of intangible assets and property, plant and equipment	11	45	220
Income taxes paid on disposal of property		-15	-13
Capital expenditure	3, 11	-578	-707
Investment in biological assets	12	-80	-91
Proceeds from/payment of non-current receivables, net		-52	64
Net Cash Used in Investing Activities		**-696**	**-454**
Cash Flow from Financing Activities			
Proceeds from issue of new long-term debt		425	368
Repayment of long-term debt		-1 034	-781
Change in short-term borrowings		76	-46
Dividends paid		-292	-260
Buy-out of interest in subsidiaries from non-controlling interests	19	-	-46
Equity injections from, less dividends to, non-controlling interests	19	-1	-2
Purchase of own shares		-3	-2
Net Cash Used in Financing Activities		**-829**	**-769**

Net Change in Cash and Cash Equivalents	**-323**	**137**
Translation adjustment	-23	5
Net Cash and cash equivalents at beginning of year	949	807
Net Cash and Cash Equivalents at Year End	**603**	**949**
Cash and Cash Equivalents at Year End[1]	**607**	**953**
Bank Overdrafts at Year End	**-4**	**-4**
Net Cash and Cash Equivalents at Year End	**603**	**949**

[1] Cash and cash equivalents comprise cash-in-hand, deposits held at call with banks and other liquid investments with original maturity of less than three months. Bank overdrafts are included in current liabilities.

The accompanying Notes are an integral part of these Consolidated financial statements.

Consolidated cash flow statement

Supplemental cash flow information

EUR million	Note	Year Ended 31 December 2017	2016
Change in Net Working Capital consists of:			
Change in inventories		-25	-11
Change in interest-free receivables:			
Current		-137	56
Non-current		1	11
Change in interest-free liabilities:			
Current		200	184
Non-current		-2	43
Change in Net Working Capital, Net of Businesses Acquired or Sold		**37**	**283**
Cash and Cash Equivalents consist of:			
Cash on hand and at banks		592	621
Cash equivalents		15	332
Cash and Cash Equivalents		**607**	**953**
Non-Cash Investing Activities			
Total capital expenditure		560	638
Amounts paid		-578	-707
Non-Cash Part of Additions to Intangible Assets and Property, Plant and Equipment		**-18**	**-69**
Disposals			
Cash Flow on Disposals			
Cash part of the consideration	4	-	41
Cash and cash equivalents in divested companies	4	-7	-1
Net Cash Flow from Disposal		**-7**	**40**
Non-cash part of the consideration		1	4
Total Consideration, net of Cash and Cash Equivalents in Divested Companies		**-6**	**44**
Cash Received Regarding Previous year disposals		**3**	**-**
Net Assets Sold			
Cash and cash equivalents		7	1
Other intangible assets and property, plant and equipment	11	3	39
Working capital		1	6
Interest-bearing assets and liabilities		-1	3
Non-controlling interests	19	-	-4
Total Net Asset Sold		**10**	**45**

The accompanying Notes are an integral part of these Consolidated financial statements.

Statement of changes in equity

					Fair Valuation Reserve									
EUR million	**Share Capital**	**Share Premium and Reserve Fund**	**Invested Non-Restricted Equity Fund**	**Treasury Shares**	**Step Acquisition Revaluation Surplus**	**Available for Sale Investments**	**Cash Flow Hedges**	**OCI of Equity Accounted Investments**	**CTA and Net Investment Hedges**	**Retained Earnings**	**Attributable to Owners of the Parent**	**Non-controlling Interests**	**Total**
Balance at 31 December 2015	**1 342**	**77**	**633**	**-**	**4**	**27**	**-24**	**-19**	**-147**	**3 495**	**5 388**	**125**	**5 513**
Profit/loss for the year	-	-	-	-	-	-	-	-	-	463	463	-56	407
OCI before tax	-	-	-	-	-	138	13	-	113	-62	202	-3	199
Income tax relating to components of OCI	-	-	-	-	-	-3	-	-	2	15	14	-	14
Total Comprehensive Income	**-**	**-**	**-**	**-**	**-**	**135**	**13**	**-**	**115**	**416**	**679**	**-59**	**620**
Dividend	-	-	-	-	-	-	-	-	-	-260	-260	-	-260
Acquisitions and disposals	-	-	-	-	-	-	-	-	-	-1	-1	-4	-5
Purchase of treasury shares	-	-	-	-2	-	-	-	-	-	-	-2	-	-2
Share-based payments	-	-	-	2	-	-	-	-	-	-	2	-	2
Balance at 31 December 2016	**1 342**	**77**	**633**	**-**	**4**	**162**	**-11**	**-19**	**-32**	**3 650**	**5 806**	**62**	**5 868**
Profit/loss for the year	-	-	-	-	-	-	-	-	-	625	625	-11	614
OCI before tax	-	-	-	-	-	39	32	5	-248	61	-111	-3	-114
Income tax relating to components of OCI	-	-	-	-	-	4	-6	-	-8	-10	-20	-	-20
Total Comprehensive Income	**-**	**-**	**-**	**-**	**-**	**43**	**26**	**5**	**-256**	**676**	**494**	**-14**	**480**
Dividend	-	-	-	-	-	-	-	-	-	-292	-292	-1	-293
Purchase of treasury shares	-	-	-	-3	-	-	-	-	-	-	-3	-	-3
Share-based payments	-	-	-	3	-	-	-	-	-	-	3	-	3
Balance at 31 December 2017	**1 342**	**77**	**633**	**-**	**4**	**205**	**15**	**-14**	**-288**	**4 034**	**6 008**	**47**	**6 055**

Notes to the Consolidated financial statements

Note 1 Accounting principles

Principal activities

Stora Enso Oyj ("the Company") is a Finnish public limited liability company organised under the laws of the Republic of Finland and with its registered address at Kanavaranta 1, 00160 Helsinki. Its shares are currently listed on Nasdaq Helsinki and Stockholm. The operations of Stora Enso Oyj and its subsidiaries (together "Stora Enso" or "the Group") are organised into the following divisions: Consumer Board, Packaging Solutions, Biomaterials, Wood Products, Paper and the segment Other. Segment Other includes the Nordic forest equity accounted investments, Stora Enso's shareholding in Pohjolan Voima, operations supplying wood to the Nordic and Baltic mills, plantations not connected to any mill site and group shared services and administration. The Group's main market is Europe, with an expanding presence in Asia and South America.

The Financial Statements were authorised for issue by the Board of Directors on 8 February 2018.

Basis of preparation

The Consolidated Financial Statements of Stora Enso Oyj have been prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union, including International Accounting Standards (IAS) and interpretations issued by the IFRS Interpretations Committee (IFRIC). The Consolidated Financial Statements of Stora Enso Oyj have been prepared according to the historical cost convention, except as disclosed in the accounting policies. The detailed accounting principles are explained in the related notes with a few exceptions where the accounting principles are presented in this note. The Consolidated fnancial statements are presented in euros, which is the parent company's functional currency.

New and amended standards and interpretations adopted in 2017

The Group has applied the following amendments which are effective from 1 January 2017:

• Amendments to IAS 7 Disclosure Initiative. These amendments are intended to clarify IAS 7 'Statement of Cash Flows' to improve information provided to users of financial statements about an entity's financing activities and to enable users to evaluate changes in liabilities arising from financing activities. The effective date for these amendments is 1 January 2017. The amendment did not have a significant effect on the consolidated financial statements of the Group as most of the new information requirements are already covered in **Note 26** Debt.
• Amendments to IAS 12, Income taxes on the recognition of deferred tax assets for unrealised losses. These amendments on the recognition of deferred tax assets for unrealised losses clarify how to account for deferred tax assets related to debt instruments measured at fair value. The effective date for these amendments is 1 January 2017. The amendment does not have any impact on the Group.

Consolidation principles

The Consolidated financial statements include the parent company, Stora Enso Oyj, and all companies controlled by the Group. Control is defined as when the Group:

• has power over the investee,
• is exposed, or has rights, to variable returns from its involvement with the investee; and
• has the ability to use its power to affect its returns.

If facts and circumstances indicate that there are changes to the three elements of control listed above the Group reassess whether or not it controls an investee. Acquired companies are accounted for under the purchase method whereby they are included in the Consolidated financial statements from the date the control over the subsidiary is obtained, whereas, conversely, divestments are included up to the date when the control is lost. The principal subsidiaries and joint operations are listed in **Note 30** Principal subsidiaries and joint operations.

All intercompany transactions, receivables, liabilities and unrealised profits, as well as intragroup profit distributions, are eliminated. Accounting policies for subsidiaries, joint arrangements and all equity accounted investments are adjusted where necessary to ensure consistency with the policies adopted by Stora Enso. Non-controlling interests are presented as a separate component of equity.

Associated companies over which Stora Enso exercises significant influence are accounted for using the equity method, which involves recognising the Group's share of the equity accounted investment profit or loss for the year less any impaired goodwill in the Consolidated income statement. These companies are undertakings in which the group has significant influence, but which it does not control. Significant influence means the power to participate in the financial and operating policy decisions of the company without control or joint control over those policies. The most significant of such companies are listed in **Note 13** Equity accounted investments.

The Group's interest in an associated company is carried in the Consolidated Statement of Financial Position at an amount that reflects its share of the net assets of the associate together with any remaining goodwill upon acquisition. When the Group share of losses exceeds the carrying amount of an investment, the carrying amount is reduced to zero and any recognition of further losses ceases unless the Group is obliged to satisfy obligations of the investee that it has guaranteed or which it is otherwise committed to.

A joint venture is a joint arrangement whereby the partners who have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of the joint arrangement, which exists only when decisions on relevant activities require the unanimous consent of the parties sharing control.

Joint operations are joint arrangements whereby the partners who have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement.

Joint control is the contractually agreed sharing of the control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the partners sharing control.

The Group has two joint operations: Veracel and Montes del Plata. In relation to its interest in joint operations, as a joint operator, the Group recognises assets, liabilities, revenues and expenses using the line-by-line method.

- Veracel is a jointly (50%/50%) owned company of Stora Enso and Fibria located in Brazil. The pulp mill produces 1.2 million tonnes of bleached Eucalyptus hard wood pulp per year and both owners are entitled to half of the mill's output. The eucalyptus is sourced mostly from the company's own forestry plantations. The mill commenced production in May 2005 and the group's share of the pulp shipments are sent primarily to Stora Enso mills in Europe and China.
- Montes del Plata is a jointly (50%/50%) owned company of Stora Enso and Arauco located in Uruguay. The Montes del Plata Pulp Mill's annual capacity is 1.4 million tonnes of bleached Eucalyptus hard wood pulp and Stora Enso's part, 650 000 tonnes, is sold entirely as market pulp. The eucalyptus is sourced mostly from the company's own forestry plantations. The mill started in June 2014.

Revenue recognition

Sales comprise products, raw materials and services less indirect sales tax and discounts, and are adjusted for exchange differences on sales in foreign currencies. Sales are recognised after Stora Enso has transferred the risks and rewards of ownership to the buyer and the Group retains neither a continuing right to dispose of the goods, nor effective control of those goods; usually, this means that sales are recorded upon the delivery of goods to customers in accordance with the agreed terms of delivery.

Stora Enso's terms of delivery are based on Incoterms 2010, which are the official rules for the interpretation of trade terms as issued by the International Chamber of Commerce (ICC). The main categories of the terms covering Group sales are:

- "D" terms, under which the group is obliged to deliver the goods to the buyer at the agreed place in the manner specified in the chosen rule, in which case the Point of Sale is the moment of delivery to the buyer.
- "C" terms, whereby the Group arranges and pays for the external carriage and certain other costs, though the Group ceases to be responsible for the goods once they have been handed over to the carrier in accordance with the relevant term. The Point of Sale is thus the handing over of the goods to the carrier contracted by the seller for the carriage to the agreed destination.
- "F" terms, being where the buyer arranges and pays for the carriage, thus the Point of Sale is the handing over of the goods to the carrier contracted by the buyer at the agreed point.

Where local rules may result in invoices being raised in advance of the above, the effect of this revenue advancement is quantified, and an adjustment is made for it.

Revenues from services are recorded once the service has been performed.

Shipping and handling costs

When Stora Enso is responsible for arranging transport for its sales, such costs are not billed separately but are included in revenue in the value of the goods billed to customers; the shipping costs incurred are shown in materials and services.

Foreign currency transactions

Transactions in foreign currencies are recorded at the rate of exchange prevailing at the transaction date, but at the end of the month foreign-currency-denominated receivables and liabilities are translated using the month-end exchange rate. Foreign exchange differences for operating items are recorded in the appropriate income statement account in the operating profit, and, for financial assets and liabilities, they are entered in the financial items of the Consolidated income statement, except when deferred in equity as qualifying net investment hedges. Translation differences on non-monetary financial assets, such as equities classified as available-for-sale, are included in equity.

Foreign currency translations

The Group operates internationally and is thus exposed to currency risks arising from exchange rate fluctuations on the value of its net investment in non-euro area foreign subsidiaries and equity accounted investments. The Income Statements of subsidiaries with functional and presentational currencies other than the euro are translated into the Group reporting currency using the average exchange rates for the year, whereas the Statements of Financial Position of these subsidiaries are translated using the exchange rates at the reporting date. Exchange differences arising from the retranslation of net investments in foreign entities that are non-euro foreign subsidiaries, joint arrangements or equity accounted investments, and of financial instruments that are designated as and are hedges of such investments, are recorded directly in the shareholders' equity in the cumulative translation adjustment (CTA), as shown in the Consolidated statement of comprehensive income and **Note 28** Cumulative translation adjustments and equity hedging. The cumulative translation differences of divestments and liquidations are combined with their gain or loss on disposal. The CTA is also recycled in the Consolidated Income Statement upon the repayment of share capital, return of investment and any partial disposal of a business unit.

Future standard changes endorsed by the EU but not yet effective in 2017

- IFRS 15 Revenue from Contracts with Customers. The new standard specifies how and when revenue is recognised and increases the disclosure requirements. The standard provides a single, principle based, five-step model to be applied to all contracts with customers. The new standard is based on the principle that revenue is recognised when control of a good or service transfers to a customer. The new standard replaces current IAS 18 and IAS 11 standards and related interpretations. The standard is effective from 1 January 2018.

Stora Enso is a leading provider of renewable solutions in packaging, biomaterials, wooden constructions and paper on global markets. Our customers include publishers, retailers, brand owners, print and board producers, printing houses, merchants, converters and joineries and construction companies.

The Group evaluated the impact of IFRS 15 based on the amount and timing of revenue recognition as part of a project during 2015, 2016 and 2017. The main customer contracts for each division have been reviewed based on a standardised questionnaire that followed the five-step model for revenue recognition.

The first step was to evaluate whether the existing contracts meet the definition of contracts with customers as per IFRS 15. The relevant attributes of contracts under IFRS 15 are: approval of the contracts by the parties to the contract, ability to identify each party's rights regarding the goods or services to be transferred, clear payment terms, commercial substance of the contract and expectation that the consideration can be collected from the customer. Stora Enso's customer contracts can typically be clearly identified based on the customer orders with clear terms and individual pricing and thus no significant changes in the identification of contracts compared to existing revenue recognition practices were noted.

The second step was about the identification of performance obligations included in sales contracts. Stora Enso's sales mainly comprise sales of products and, to a limited extent, services such as transportation and silviculture services. Performance obligations are normally explicitly defined as the products and services are delivered based on customer contracts. No additional separate performance obligations have been identified in the contracts with customers that would materially impact the revenue recognition under IFRS 15 standard compared to the current revenue recognition practises. No significant contracts were identified where the Group would act as an agent on behalf of another party. Certain non-significant amounts of transport and freight sales and silviculture services currently presented under Other operating income will be reclassified on the adoption of IFRS 15 to the Sales line in the Consolidated Income Statement.

The third and fourth steps relate to determining and allocating the transaction price. Transaction price is the amount the Group expects to receive in exchange for a fulfilled performance obligation. The prices received by the Group, net of Value Added and Sales taxes, are divided into fixed and variable parts, and do not include significant financing components. The variable consideration comprises different discounts as e.g. payment discounts and volume rebates. These are deducted from sales in line with estimates of the amount of the discount the customer is entitled to. In certain cases, service fees are paid to a company in the customer's organization acting as a negotiating partner, facilitating the making of contracts under a frame agreement. These service fees are currently presented as part of operative costs and in certain cases, under IFRS 15, if the payment cannot be allocated to a distinct service, the fees will be treated as rebates and deducted from sales. A significant part of the Group's sales contracts contain performance obligations that are easily identifiable with a defined price for each obligation. Therefore IFRS 15 does not materially change the principles applied by the Group regarding the determination and allocation of the transaction price.

The fifth step is about recognising revenue in the period during which the control of goods or services transfers to the customers. The delivery terms applied by the Group in its sales contracts determine the point of time, at which the control of goods is transferred to the customer. The revenue recognition from sale of services occurs in a manner consistent with the delivery of the service to the customer (e.g. silviculture services). The revenue recognition principles and delivery terms applied by the Group are described in more detail above under section Revenue recognition and will be generally unaltered by the adoption of IFRS 15.

In conclusion, the adoption will have no significant impact on the substance of the principles applied by the Group to the amount and timing of revenue recognition.

The Group intends to adopt the modified retrospective application of IFRS 15 from 1 January 2018, without adjusting prior reporting periods. This means applying the new guidance only to contracts that are not completed at the adoption date. No adjustment to the opening balance of retained earnings is expected as there are no changes in the timing of the revenue recognition as a result of applying IFRS 15.

• IFRS 9 Financial Instruments will replace IAS 39 Financial Instruments: Recognition and Measurement. The standard includes requirements for recognition and measurement, impairment, derecognition and general hedge accounting. The version of IFRS 9 issued on July 2014 supersedes all previous versions and the group intends to apply it prospectively from 1 January 2018, without presenting restated comparatives in line with IFRS 1, paragraph E1 and E2. An exception to this is that in respect of the time value of currency options under hedge accounting, Stora Enso will apply the IFRS 9 treatment retrospectively for those options that were in the Group's books at 1 January 2018.

The Group intends to classify its equity investments in Pohjolan Voima shares, currently classified as available-for-sale investments (AFS) under IAS 39, at fair value under other comprehensive income (FVTOCI) under IFRS 9. The main difference between AFS and FVTOCI is that gains and losses resulting from changes in the fair value of equity investments accounted for under FVTOCI are not recycled to the Income Statement upon impairment or disposal, with only the dividend income recognized in the Income Statement.

Under IFRS 9, the changes in the time value of currency options used as hedges of foreign currency sales will be recognised in Other Comprehensive Income to the extent that they relate to the hedged items, and will be reclassified from equity to profit or loss in the same period or periods during which the expected future cash flows will affect the profit or loss. This will reduce Income Statement volatility compared to IAS 39.

The new impairment model for financial assets requires the recognition of doubtful receivables allowances based on expected credit losses, rather than only incurred credit losses as under current IAS 39. The main impact for the Group relates to trade receivables that do not contain a significant financing component, and as allowed by IFRS, the Group will use a simplified approach whereby the loss allowance will be measured at the initial recognition and throughout the life of the receivable at an amount equal to its lifetime expected credit losses. In calculating the expected credit loss rates, the group will consider the customers' ability to fulfil their obligations based on historical performance, current condition and credit evaluations. The new IFRS 9 impairment model will result in a non-significant increase in doubtful receivables allowances.

The adoption of IFRS 9 will not have a significant impact on Group figures.

• Amendments to IFRS 4: Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts. These amendments address concerns arising from implementing the new financial instruments Standard, IFRS 9, before implementing the IFRS 17 Insurance Contracts that will replace IFRS 4. The effective date for these amendments is 1 January 2018. This amendment is not relevant to the Group.
• IFRS 16 Leases. This standard replaces the current guidance in IAS 17 and is a significant change in accounting by lessees in particular. Under IAS 17, lessees were required to make a distinction between a finance lease (on the balance sheet) and an operating lease (off the balance sheet). IFRS 16 now requires lessees to recognise a lease liability reflecting future lease payments and a 'right-of-use asset' for virtually all lease contracts. There is an optional exemption for certain short-term leases and leases of low-value assets; however, this exemption can only be applied by lessees. Service components of lease contracts are not required to be reported on the balance sheet. Under IFRS 16, 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 effective date for this standard is 1 January 2019.

The effects of this standard on the Group financial statements are under investigation. It is expected that the Operating profit will somewhat increase since the interest component of operating leases rental payments will be reclassified from Other operating expenses to Financial expenses. At the same time, right-of-use assets and Financial liabilities will increase due to the adoption of new accounting rules. More details about the value of current operating lease agreements are included in **Note 29** Commitments and Contingencies.

Future standard changes not yet effective and not yet endorsed by the EU in 2017

- Amendments to IFRS 2: Classification and Measurement of Share-based Payment Transactions. These narrow-scope amendments clarify how to account for certain types of share-based payment transactions. The effective date for these amendments is 1 January 2018. The amendment does not have a significant effect on the group's financial statement.
- Amendments to IAS 40: Transfers of Investment Property. These amendments clarify transfers of property to, or from, investment property. The effective date for these amendments is 1 January 2018. The amendment does not have a significant effect on the Group's financial statement.
- Amendments to IAS 28: Long-term Interests in Associates and Joint Ventures. These amendments clarify that an entity should apply IFRS 9 Financial Instruments to long-term interests in an associate or joint venture that form part of the net investment in the associate or joint venture but to which the equity method is not applied. The effective date for these amendments is 1 January 2019. The amendment does not have a significant effect on the Group's financial statement.
- IFRS 17 Insurance Contracts: This standard replaces IFRS 4, which currently permits a wide variety of practices in accounting for insurance contracts. The effective date for these amendments is 1 January 2021. The standard is not relevant for the Group.
- Other published standard changes or interpretations are not expected to have a significant effect on the Group's Consolidated financial statements or disclosures.

Note 2 Critical accounting estimates and judgements

Use of estimates

The preparation of Consolidated financial statements conforming to IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, as well as the disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the period. The estimates are based on historical experience and various other assumptions that are believed to be reasonable, though actual results and timing could differ from the estimates. Management believes that the accounting policies below represent those matters requiring the exercise of judgement where a different opinion could result in the greatest changes to reported results.

Intangible assets and property, plant and equipment

For material intangible assets and property, plant and equipment in an acquisition, an external advisor makes a fair valuation of the acquired intangible assets and property, plant and equipment and assists in determining their remaining useful lives. Management believes that the assigned values and useful lives, as well as the underlying assumptions, are reasonable, though different assumptions and assigned lives could have a significant impact on the reported amounts.

The carrying amounts of Intangible assets and property, plant and equipment are reviewed at each reporting date or whenever events or changes in circumstances indicate that the carrying amount of an asset may be impaired. The recoverable amount of an asset is estimated as the higher of fair value less the cost of disposal and the value in use, with an impairment charge recognised whenever the carrying amount exceeds the recoverable amount. The value in use is calculated using a discounted cash flow model which is most sensitive to the discount rate as well as the expected future cash flows. The key assumptions used in the impairment testing, including sensitivity analysis, are explained further in **Note 10** Depreciation, amortisation and impairment charges.

Goodwill

Goodwill is tested per Cash Generating Unit (CGU) or by group of CGUs at least on an annual basis and any impairment is measured using the discounted cash flow valuation method. This method uses future projections of cash flows from each of the reporting units in a CGU or group of CGUs and includes, among other estimates, projections of future product pricing, production levels, product costs, market supply and demand, projected maintenance capital expenditures and an assumption of the weighted average cost of capital. A pre-tax discount rate used for the net present value calculation of projected cash flows reflects the weighted average cost of capital.

The Group has evaluated the most sensitive estimates which when changed could have a material effect on the fair value of the assets or goodwill and therefore could lead to an impairment. These estimates are expected sales prices of the products, expected inflation rate of the product costs and discount rate. The key assumptions used in the impairment testing, including sensitivity analysis, are explained further in **Note 10** Depreciation, amortisation and impairment charges.

Control assessment of joint operations and associates

Note 1 Accounting principles describes Veracel and Montes del Plata as joint operations. In both companies Stora Enso's ownership is 50%. The interpretations as joint operations are based on shareholders' agreements which give Stora Enso rights to a share of the returns and make the Group liable indirectly for the liabilities, as our ability to pay for the pulp is used to finance the debts. Joint operations are consolidated with the proportionate line-by-line method.

The forest holding companies Bergvik Skog Ab and Tornator Oyj are equity accounted investments. Stora Enso does not control the companies alone or jointly with other parties and thus retains its significant minority interest as equity accounted investments. Equity accounted investments are accounted for using the equity method. These companies are presented in **Note 13** Equity accounted investments.

Fair value of financial instruments

Where the fair value of financial assets and liabilities cannot be derived directly from publicly quoted market prices, other valuation techniques such as discounted cash flow models, transaction multiples, the Black and Scholes model and the Gordon model are employed. The key judgements include future cash flows, credit risk, volatility and changes in assumptions about these factors which could affect the reported fair value of the financial instruments. Investments in debt and equity securities of unlisted entities, such as Pohjolan Voima Oy (PVO), represent a significant portion of the group's assets and require significant management judgement, as explained in more detail in Notes **14** Available-for-sale investments and **24** Financial risk management.

Income taxes

Tax assets and liabilities are reviewed on a periodic basis and balances are adjusted appropriately. Management considers that adequate provision has been made for future tax consequences based on the current facts, circumstances and tax law. However, should any tax positions be challenged and not prevail, different outcomes could result and have a significant impact on the amounts reported in the Consolidated financial statements.

Post-retirement benefits

The determination of the Group pension obligation and expense is subject to the selection of certain assumptions used by actuaries in calculating such amounts, including, among others, the discount rate, the expected rate of return on plan assets, the annual rate of increase in future compensation levels and estimated lifespans. Amounts charged in the Income statement are determined by independent actuaries, however, where actual results differ from the initial estimates, together with the effect of any change in assumptions or other factors, these differences are recorded directly in equity, as disclosed in the Statement of comprehensive income. See **Note 20** Post-employment benefits for detailed information on the assumptions used in the pension liability calculations.

Biological assets

The Group has biological assets in equity accounted investment companies, joint operation companies and in subsidiaries. Biological assets, in the form of standing trees, are accounted for under IAS 41, which requires that the assets are measured at fair value less the costs to sell them. Fair value is determined using discounted cash flows from continuous operations based on sustainable forest management plans taking into account the growth potential of one cycle. These discounted cash flows require estimates of growth, harvest, sales price and costs, and changes in these premises are included in the Consolidated income statement, for directly owned interests and for joint operations, on the line for Change in Net Value of Biological assets. For those assets shown in the Consolidated statement of financial position of equity accounted investments, changes are included on the line for Share of results of equity accounted investments. It is therefore important that the Group's, joint operation companies' and the equity accounted investments' management makes appropriate estimates of future price levels and trends for sales and costs, and undertakes regular surveys of the forest to establish the volumes of wood available for cutting and their current growth rates. See **Note 12** Biological assets for more detailed information.

Environmental provisions

The Group has made provisions for known environmental liabilities where legal or constructive obligation exists, based on management's best estimate of the remediation costs. There is some uncertainty regarding the timing and amount of these costs and therefore the final liability could differ significantly from the original estimate.

Note 3 Segment information

Stora Enso's reportable segments are formed by five divisions, Consumer Board, Packaging Solutions, Biomaterials, Wood Products, Paper and segment Other.

The activities of the reportable segments are:

Consumer Board

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

Packaging Solutions

Packaging Solutions division provides fibre-based board materials and corrugated packaging products and services designed for a wide array of applications. Our renewable high-end packaging solutions serve leading converters, brand owners, and retailers across multiple industries looking to optimise performance and drive innovation.

Biomaterials

Biomaterials division offers a wide variety of pulp grades to meet the demands of paper, board, tissue, textile and hygiene product producers. We also develop new ways to maximise the value extractable from the wood as well as other kinds of lignocellulosic biomasses. The extracted sugars and lignin hold potential for use in a range of applications.

Wood Products

Wood Products division provides versatile wood-based solutions for building and housing. Our product range covers all areas of construction, including massive wood elements and wood components. We also offer a variety of sawn timber goods, and pellets for sustainable heating. Our customers are mainly merchants and retailers, industrial integrators, and construction companies.

Paper

Paper division provides best-in-class paper solutions for the print media and office use. The wide selection covers papers made from virgin wood and recycled fibres. Our main customer groups include publishers, retailers, printing houses, merchants, converters, and office suppliers. We create value for our customers by providing competitive products and services that meet their quality and sustainability requirements.

Other

The segment Other includes the Nordic forest equity-accounted investments, Stora Enso's shareholding in the energy company Pohjolan Voima, operations supplying wood to the Nordic and Baltic mills, plantations not connected to any mill site, and Group shared services and administration

Sales by segment

	Year Ended 31 December					
	External	**Internal**	**Total**	**External**	**Internal**	**Total**
EUR million	**2017**			**2016**		
Consumer Board	2 501	15	2 516	2 331	11	2 342
Packaging Solutions	1 230	25	1 255	1 019	25	1 044
Biomaterials	1 096	387	1 483	981	395	1 376
Wood Products	1 573	96	1 669	1 488	107	1 595
Paper	2 857	63	2 920	3 175	70	3 245
Other	788	1 702	2 490	808	1 669	2 477
Elimination of internal sales	-	-2 288	-2 288	-	-2 277	-2 277
Total	**10 045**	**-**	**10 045**	**9 802**	**-**	**9 802**

Sales include external service income of EUR 86 (EUR 76) million.

Segment share of operating profit/loss

	Year Ended 31 December	
	Operating Profit/Loss	
EUR million	**2017**	**2016**
Consumer Board	253	67
Packaging Solutions	166	42
Biomaterials	254	211
Wood Products	102	88
Paper	106	289
Other	23	86
Total	**904**	**783**
Net financial items	-162	-242
Profit before Tax	**742**	**541**
Income tax expense	-128	-134
Net Profit	**614**	**407**

Intangible asset and property, plant and equipment (PPE), depreciations, impairments and reversals, disposal gains and losses and capital expenditure by segment

	Year Ended 31 December					
	Intangible Assets and PPE		**Depreciations/Impairments/ Reversals/ Disposal gains and losses**		**Capital Expenditure**	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Consumer Board	1 611	1 639	160	158	187	312
Packaging Solutions	783	746	68	85	92	56
Biomaterials	1 825	2 108	109	109	90	92
Wood Products	429	403	35	30	58	72
Paper	951	945	114	-7	101	73
Other	177	188	29	23	32	33
Total	**5 776**	**6 029**	**515**	**398**	**560**	**638**

Goodwill by segment

	Year Ended 31 December			
	Goodwill		Impairment	
EUR million	**2017**	**2016**	**2017**	**2016**
Consumer Board	-	-	-	-
Packaging Solutions	19	19	-	11
Biomaterials	28	32	-	-
Wood Products	107	104	-	-
Paper	83	83	-	-
Other	-	-	-	-
Total	**237**	**238**	**-**	**11**

Average personnel

	Year Ended 31 December	
Segment	**2017**	**2016**
Consumer Board	4 168	4 118
Packaging Solutions	7 901	7 372
Biomaterials	1 768	1 797
Wood Products	4 031	3 937
Paper	5 022	5 786
Other	3 316	3 259
Total	**26 206**	**26 269**

	As at 31 December	
	2017	**2016**
Year-End Personnel	**25 657**	**25 447**

	Year Ended 31 December	
Location	**2017**	**2016**
Austria	939	912
Baltic States	1 211	1 203
Belgium	525	536
Czech Republic	875	810
Finland	6 675	6 667
France	42	45
Germany	1 063	1 465
Poland	2 033	1 930
Russia	1 088	1 093
Spain	16	15
Sweden	5 127	5 091
Other Europe	216	221
Total Europe	**19 810**	**19 988**
Brazil	421	475
China (incl. Hong Kong)	5 341	5 156
India	-	-
USA	96	88
Uruguay	327	344
Other countries	211	218
Total	**26 206**	**26 269**

External sales by destination and origin

	Year Ended 31 December					
	Sales by Destination		**Sales by Origin**		**Balance of Trade**	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Austria	278	279	375	357	97	78
Baltic States	243	237	273	266	30	29
Belgium	144	160	265	257	121	97
Czech Republic	151	146	257	243	106	97
Denmark	134	138	26	21	-108	-117
Finland	699	730	3 634	3 694	2 935	2 964
France	465	467	14	8	-451	-459
Germany	1 282	1 378	455	626	-827	-752
Italy	343	326	-	-	-343	-326
Netherlands	261	240	-	23	-261	-217
Poland	528	498	492	421	-36	-77
Russia	300	280	209	180	-91	-100
Spain	284	295	-	-	-284	-295
Sweden	965	981	2 733	2 704	1 768	1 723
UK	456	510	15	18	-441	-492
Other Europe	879	808	91	101	-788	-707
Total Europe	**7 412**	**7 473**	**8 839**	**8 919**	**1 427**	**1 446**
Australia / New Zealand	156	175	18	21	-138	-154
Brazil	62	72	300	276	238	204
China (incl. Hong Kong)	918	712	478	272	-440	-440
Japan	303	284	-	-	-303	-284
Middle East	238	240	-	-	-238	-240
Uruguay	28	28	399	306	371	278
USA	236	128	7	2	-229	-126
Other countries	692	690	4	6	-688	-684
Total	**10 045**	**9 802**	**10 045**	**9 802**	**-**	**-**

Total assets, capital employed and shareholders' equity by location

	As at 31 December					
	Total Assets		Capital Employed		Shareholders' Equity	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Austria	171	169	99	99	106	104
Baltic States	106	106	87	76	169	160
Belgium	256	276	167	182	188	208
Czech Republic	158	150	132	122	125	108
Finland	3 552	3 663	2 279	2 169	1 281	1 358
Germany	369	406	21	31	63	77
Poland	588	548	455	450	306	267
Russia	174	178	94	99	141	133
Sweden	2 743	2 783	1 795	1 814	1 372	879
Other Europe	112	110	64	46	221	211
Total Europe	**8 229**	**8 389**	**5 193**	**5 088**	**3 972**	**3 505**
Brazil	455	530	433	502	391	462
China (incl. Hong Kong)	1 326	1 386	1 100	1 143	400	480
Uruguay	1 556	1 781	1 473	1 703	1 106	1 181
USA	138	145	105	114	118	127
Other countries	66	95	4	44	21	51
Total	**11 770**	**12 326**	**8 308**	**8 594**	**6 008**	**5 806**

Total capital employed represents operating capital less net tax liabilities

Reconciliation of operating capital to total assets

	As at 31 December	
EUR million	**2017**	**2016**
Operating Capital	**8 393**	**8 650**
Operative liabilities	2 451	2 405
Interest-bearing receivables	763	1 048
Tax receivables	163	223
Total Assets	**11 770**	**12 326**

Operating capital ("O" items) is designated thus on the Balance Sheet and represents the sum of Intangible Asset and Property, Plant and Equipment, biological assets, emission rights, unlisted shares, other non-current assets, inventories, current operative receivables and liabilities, provisions and other non-current operative liabilities.

Intangible asset and property, plant and equipment (PPE), capital expenditure and depreciations, impairments and reversals, disposal gains and losses by location

	Year Ended 31 December					
	Intangible Assets and PPE		Depreciations/Impairments/ Reversals/ Disposal gains and losses		Capital Expenditure	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Austria	107	107	6	6	5	5
Baltic States	42	45	6	6	3	4
Belgium	202	222	25	50	5	12
Czech Republic	115	111	5	5	3	3
Finland	1 320	1 227	178	175	279	214
Germany	296	314	28	35	10	12
Poland	423	409	33	27	20	21
Russia	67	67	8	7	14	7
Sweden	787	765	103	181	150	82
Other Europe	4	12	-	-6	1	-1
Total Europe	**3 363**	**3 279**	**392**	**486**	**490**	**359**
Brazil	248	306	30	24	13	11
China (incl. Hong Kong)	823	890	49	-157	38	218
Uruguay	1 227	1 426	40	41	13	15
USA	113	126	3	3	5	35
Other countries	2	2	1	1	1	-
Total	**5 776**	**6 029**	**515**	**398**	**560**	**638**

Note 4 Acquisitions and disposals

Accounting principles

Acquired companies are accounted for under the purchase method whereby they are included in the Consolidated financial statements from the date the control over the subsidiary is obtained, whereas, conversely, divestments are included up to the date when the control is lost.

Stora Enso has not acquired any companies or business operations in 2016 or 2017.

Disposal of group companies and business operations

	Year Ended 31 December	
EUR million	**2017**	**2016**
Net Assets Sold		
Cash and cash equivalents	7	1
Intangible assets and Property, plant and equipment	3	39
Working capital	1	6
Interest-bearing assets and liabilities	-1	3
Non-controlling interest	-	-4
Net Assets in Divested Companies and Businesses	**10**	**45**
Total Disposal Consideration in Cash and Cash in Kind	**1**	**45**
Impairment of assets recognised in 2015[1]	-	-34
Impairment of assets recognised in 2016[2]	-	-11
CTA release	-	-22
Transaction costs	-	-4
Total Net Gain/loss	**-9**	**-71**
Attributable to the owners of the parent	**-9**	**-64**
Attributable to the non-controlling interest holders	**-**	**-7**

[1] Relates to the disposal of Arapoti Mill on 31 March 2016. Impairment was recognised at the signing in December 2015.
[2] Relates to disposals of the Arapoti and Kabel Mills.

On 1 November 2017, Stora Enso sold 100% of its shares in the Finnish Puumerkki Oy and the Estonian Puumerkki AS to Mimir Invest AB, a global investment firm. Puumerkki is a specialised wholesaler of wooden building materials. The transaction resulted in a loss of EUR 8 million. The divestment supports Stora Enso's Wood Products division in focusing on its growth strategy and further building on the strength of its premium portfolio of products and services.

On 5 July 2017, Stora Enso signed an agreement to divest the business and assets of its Swedish subsidiary Stora Enso Re-board AB, a producer of rigid paperboard for expositions and displays, to Culas AB. The transaction did not have a material impact on the Group.

On 24 March 2017, Stora Enso disposed of the shares of the real estate company Sunilan Kesäniemi Oy. The transaction did not have a material impact on the Group.

On 2 January 2017, Stora Enso divested its Finnish subsidiary Formeca Oy, a provider of high-quality machines for automated packaging lines, to Amitec Oy, a specialised engineering and machine construction company based in Finland. The transaction did not have a material impact on the Group.

On 1 June 2016, Stora Enso signed an agreement to divest its Kabel coated magazine paper mill in Germany, to Kabel Premium Pulp & Paper GmbH, owned by a German based investor group. The transaction was structured as an asset deal and the cash consideration for the sold assets was EUR 30 million. After closing adjustments the loss on disposal amounted to EUR 9 million consisting of a EUR 5 million operational and a EUR 4 million tax expense. The divestment was completed on 1 September 2016. Majority of Kabel Mill's approximately 540 employees were transferred to the new owner. Kabel Mill was part of the Paper division.

On 31 December 2015, Stora Enso signed an agreement to divest its entire 80% shareholding in the Arapoti magazine paper mill in Paraná, Brazil, to Papeles Bio Bio, a Chilean paper producer. The final consideration for the divestment of the shares was EUR 15 million resulting in a loss of EUR 62 million including cumulative translation adjustments (CTA) and transaction costs. EUR 7 million of the total negative impact was allocated to the non-controlling interest holders. The disposal of Arapoti Mill was completed in the first quarter of 2016. EUR 34 million of the total loss was recognised at signing in the fourth quarter of 2015 while EUR 4 million was recorded for customary purchase price adjustments during the first three quarters of 2016. The cumulative translation adjustment loss amounted to EUR 22 million. Transaction costs amounted to EUR 2 million. Arapoti Mill was part of the Paper division.

Note 5 Other operating income and expense

Accounting principles

Research and development

Research costs are expensed as incurred in other operating expenses in the Consolidated Income Statement. Development costs are also expensed as incurred unless it is probable that future economic benefits will flow to the Group, in which case they are capitalised as intangible assets and depreciated over the period of the income streams.

Government grants

Government grants relating to the purchase of property, plant and equipment are deducted from the carrying value of the asset, while the net cost are capitalised. Other government grants are recognised as income on a systematic basis over the periods necessary to match them with the related costs which they were intended to compensate.

Emission rights and trading

The Group's participation in the European Emissions Trading Scheme, in which it has been allocated allowances to emit a fixed tonnage of carbon dioxide over a fixed period of time, gives rise to an intangible asset for the allowances, a government grant and a liability for the obligation to deliver allowances equal to the emissions that have been made during the compliance period. Emission allowances recorded as intangible assets are recognised when the Group is able to exercise control and are measured at level 1 fair value at the date of initial recognition. If the market value for the emission allowances falls significantly below the carrying amount, and the decrease is considered permanent. At that point an impairment charge is booked for allowances which the Group will not use internally. The liability to deliver allowances is recognised based on actual emissions; this liability will be settled using allowances on hand and measured at the carrying amount of those allowances, with any excess emissions measured at the market value of the allowances at the period end.

In the Consolidated Income Statement, the Group will expense emissions made at the fair value of the rights at their grant date, under materials and services, together with purchased emission rights at their purchase price. Such costs will be offset under other operating income by the income from the original grant of the rights used at their fair value at the grant date, together with income from the release or sale of surplus rights. The Consolidated Income Statement will thus be neutral in respect of all rights consumed that were within the original grant. Any net effect represents the costs of purchasing additional rights to cover excess emissions, or the sale of unused rights in the case that the realised emissions are below the allowances received free of charge or the impairment of allowances are not required for internal use.

Green certificates

Stora Enso is part of the local green energy production system which entitles selected mills in Sweden, Belgium and Poland to receive green certificates based on megawatt hours of green energy produced. Green certificates represent the environmental value of renewable energy generated. The certificates can be traded separately from the energy produced. Several countries use green certificates as a mean to make the support of green electricity generation closer to a market economy instead of more bureaucratic investment support and feed-in tariffs. The certificates are typically received free of charge and they can be traded in the local market to offset part of the production costs. Green certificates are often sold to electricity distributors which have a quota obligation to buy a certain percentage of their electricity from renewable sources. Green certificates are evidencing that the electricity has been produced from sustainable sources.

All certificates received are recognized at grant date market value only in the Balance Sheet. Certificates are posted to prepaid costs and accrued income and a corresponding liability is entered into accrued liabilities and deferred income. As such the fluctuation in market prices does not have impact on the Income statement. The income is recognised only when the certificate is sold.

Other Operating Income and expense

	Year Ended 31 December	
EUR million	**2017**	**2016**
Other Operating Income		
Emission rights granted and disposal gains	13	13
Sale of Green Certificates	18	36
Capital gains on sale of Intangible Assets and Property, Plant and Equipment	4	3
Dividend and gain on sale of unlisted shares	3	6
Insurance compensation	25	2
Freight sales, rent and other	76	52
Government grants	8	11
Total	**147**	**123**

Other Operating Expenses include		
Rents paid	98	102
Research and development	85	80
Credit losses, net of reversals	-7	11
CTA release	-	23
Materials and Services include		
Emissions rights to be delivered and disposal losses	10	12

The Group has recorded an Other Operating Income of EUR 13 (EUR 13) million related to Emissions. Under Material and Services an expense of EUR 10 (EUR 12) million has been booked related to the cost of CO_2 emissions from production. Actual realised profits amounted to EUR 3 (EUR 5) million on the disposal of surplus rights and EUR 2 (EUR 1) million is the value of excess emission rights held at the year end.

The Group also generates income from its renewable power generation in Belgium. The power is produced from biomass, so the Group is entitled to Green Certificates for onward sale to electricity retailers for fulfilling their renewable power quota obligations. The income from the sale of green certificates amounted to EUR 18 (EUR 36) million.

In 2017 Group recorded EUR 25 (EUR 2) million insurance compensation which related mainly to an incident at Veitsiluoto Mill paper machine (PM) 2.

In 2016 the Group recorded cumulative translation adjustment loss of EUR 23 million mainly relating to the divestment of Arapoti Mill in Brazil.

Total sales of excess freight capacity in 2017 amounted to EUR 66 (EUR 43) million.

Auditor's fees and services

	Year Ended 31 December	
EUR million	**2017**	**2016**
Audit fees	4	4
Audit-related	-	-
Tax fees	-	-
Other fees	1	1
Total	**5**	**5**

Aggregate fees for professional services rendered to the Group principal auditor Deloitte amounted to EUR 5 (EUR 5) million. Audit fees relate to the auditing of the annual financial statements or ancillary services normally provided in connection with statutory and regulatory filings. Audit-related fees are incurred for assurance and associated services that are reasonably related to the performance of the audit or for the review of the financial statements.

Note 6 Personnel expenses

Personnel expenses

	Year Ended 31 December	
EUR million	**2017**	**2016**
Wages and salaries	999	1 006
Pensions (see below)	166	165
Share-based remuneration (**Note 21**)	10	6
Total return swaps	-2	-6
Other statutory employer costs	136	141
Other voluntary costs	22	22
Total	**1 331**	**1 334**

Pensions

	Year Ended 31 December	
EUR million	**2017**	**2016**
Defined benefit plans	13	12
Defined contribution plans	153	153
Total	**166**	**165**

The average number of employees in 2017 amounted to 26 206 compared with 26 269 in 2016. Pension costs are discussed further in **Note 20** Post-employment benefits.

In 2017, the expense of the share-based remuneration was EUR 10 (EUR 6) million. The expense of share-based remuneration net of Total Return Swaps (TRS) in 2017 amounted to EUR 8 (0) million. This was due to the increase in the Stora Enso R share price from EUR 10.21 at 31 December 2016 to EUR 13.22 by 31 December 2017 and an income of EUR 2 (EUR 6) million was recorded in respect to TRS.

The Group may hedge its share awards programme by using (TRS) shown under personnel costs alongside the share awards expenses they relate to, so that both the risk and the result from the hedging of that risk appear in the same section of the Income Statement. The TRS are not designated under hedge accounting.

Share-based remuneration comprising of share awards and related hedges are described in more detail in **Note 21** Employee variable compensation and equity incentive schemes.

Remuneration of the Group Leadership Team and Board are described in **Note 7** Board and executive remuneration.

Note 7 Board and executive remuneration

Board remuneration and committee memberships

	Year Ended 31 December				
	2017			2016	
EUR thousand	**Cash**	**Shares**	**Total**	**Total**	**Committee Memberships**
Board Members at 31 December 2017					
Jorma Eloranta, Chairman	126	68	194	106	Remuneration, Nomination[2,3], Financial and Audit
Hans Stråberg, Vice Chairman	66	40	106	76	Remuneration, Nomination[2,3]
Anne Brunila	52	28	80	80	Sustainability and Ethics
Elisabeth Fleuriot	48	28	76	76	Remuneration
Hock Goh	48	28	76	70	Sustainability and Ethics
Christiane Kuehne	56	28	84	-	Financial and Audit
Mikael Mäkinen	56	28	84	84	Financial and Audit
Richard Nilsson	62	28	90	96	Financial and Audit
Göran Sandberg	48	28	76	-	Sustainability and Ethics
Former Board members					
Gunnar Brock (until 27 April 2017)	-	-	-	194	
Total Remuneration as Directors[1]	**562**	**304**	**866**	**782**	

[1] 40% of the Board remuneration in 2017 was paid in Stora Enso R shares purchased from the market and distributed as follows: to Chairman 6 012 R shares, Vice Chairman 3 536 R shares, and members 2 475 R shares each. The Company has no formal policy requirements for the Board members to retain shares received as remuneration.
[2] Stora Enso's Shareholders' Nomination Board has been appointed by the AGM in 2016 to exist until otherwise decided. The Shareholders' Nomination Board according to its Charter as approved by the AGM comprises of 4 members: the Chairman and Vice Chairman of the Board of Directors, as well as two members appointed by the two largest shareholders (one each) as of 31 August each year.
[3] Marcus Wallenberg appointed by FAM AB is Chairman of the Nomination Board. Harri Sailas is the member of the Shareholders' Nomination Board appointed by Solidium Oy. Jorma Eloranta and Hans Stråberg were appointed as members of the Shareholders' Nomination Board in their roles as Chairman and Vice Chairman of the Board of Directors.

The Stora Enso Annual General Meeting (AGM) in 2016 established a Shareholders' Nomination Board to exist until otherwise decided and to annually prepare proposals for the AGM's approval concerning the number of members of the Board of Directors, the Chairman, Vice Chairman and other members of the Board as well as the remuneration for the Chairman,Vice Chairman and members of the Board and its committees.

Board share interests at 31 December 2017

	Shares held[1]	
	A	**R**
Board Members at 31 December 2017		
Jorma Eloranta, Chairman	1 150	12 660
Hans Stråberg, Vice Chairman	-	35 006
Anne Brunila	-	18 384
Elisabeth Fleuriot	-	18 384
Hock Goh	-	24 167
Christiane Kuehne	-	2 475
Mikael Mäkinen	-	31 060
Richard Nilsson	-	16 517
Göran Sandberg	-	2 475
Total Shares Held	**1 150**	**161 128**

[1] Board members' related parties hold no Stora Enso shares.

The following Board members also Served in 2017

	Shares Held when Board Membership Ended	**Effective Date of Board Membership Ending**
Gunnar Brock	78 000	27 April 2017

Group Leadership Team (GLT) remuneration and share interests

The table below includes the remuneration paid to GLT members during the year, including the shares vested in that year. The company recommends and expects the CEO and GLT members to hold Stora Enso shares at a value corresponding to at least one annual base salary. Stora Enso shares received as remuneration are therefore recommended not to be sold until this level has been reached.

The aggregate cost of remuneration for GLT in 2017 amounted to EUR 11.1 (EUR 9.9) million. The total number of GLT members was twelve (twelve) at year end in 2017. Annica Bresky joined GLT on 1 May, and one GLT member left during the year, Juan Carlos Bueno on 31 May.

In accordance with their respective pension arrangements, GLT members may retire at sixty-five years of age with pensions consistent with local practices in their respective home countries. Contracts of employment provide for six months' notice prior to termination with severance compensation of twelve months basic salary if the termination is at the Company's request.

The outcome of the financial targets relating to the Short term incentive programmes for the performance year 2016, and Long term incentive programmes for the performance years 2014 to 2016 were reviewed and confirmed by the Remuneration Committee in the ordinary February meeting, and approved by the Board of Directors in February.

Note 21 Employee variable compensation and equity incentive schemes includes details of incentive schemes and share opportunity programmes for the management and staff of Stora Enso.

Group Leadership Team remuneration

	Year Ended 31 December					
	2017			2016		
EUR thousand	**CEO**	**Others[1]**	**GLT Total**	**CEO**	**Others**	**GLT Total**
Remuneration						
Annual salary[4]	913	3 583	4 496	934	3 964	4 898
Local housing (actual costs)	-	70	70	-	119	119
Other benefits	20	610	630	20	581	601
Termination benefits	-	531	531	-	-	-
Short Term Incentive programme[3]	532	643	1 175	499	924	1 423
Long Term Incentive programme[3]	549	1 403	1 952	151	424	575
	2 014	**6 840**	**8 854**	**1 604**	**6 012**	**7 616**
Pension Costs						
Mandatory plans	69	1 029	1 098	64	1 044	1 108
Stora Enso voluntary plans	555[2]	544	1 099	550	625	1 175
	624	**1 573**	**2 197**	**614**	**1 669**	**2 283**
Total Compensation	**2 638**	**8 413**	**11 051**	**2 218**	**7 681**	**9 899**

[1] The amounts include payments related to Juan Carlos Bueno until 31 May 2017. Payments related to the new GLT member Annica Bresky are included from 1 May 2017.
[2] The CEO participates in the Swedish Executive Pension Plan where pension accruals are unfunded for all participants, the liability is calculated and insured in accordance with Swedish legislation. The unfunded liability for the CEO amounts to EUR 2 049 thousand.
[3] Disclosed amounts for Short and Long term Incentives include amounts for executives who were GLT members at the time of the payment in March 2017.
[4] Annual salary for executives is disclosed only for the period during which they were GLT members.

Executives other than CEO

Short Term Incentive (STI) programmes for management

GLT members have STI programmes with up to a maximum of 40% or 50% of their annual fixed salary, payable the year after the performance period. 70% of the STI for 2016 and 2017 was based on financial measures and 30% on Individual Key Targets.

Long Term Incentive (LTI) programmes for management

Since 2014, the LTI programmes have had three-year targets and vest in one portion only after three years and the absolute maximum vesting level is 100% of the number of shares granted. Three quarters (75%) of the opportunity under the 2017 programme is in Performance Shares, where the shares are vested in accordance with performance criteria proposed by the Remuneration Committee and approved by the Board of Directors. One quarter (25%) of the opportunity under the 2017 programme is in Restricted Shares, for which vesting is subject to continued employment.

Under the 2017 LTI programme, GLT members (in GLT at year end) can potentially receive 269 386 shares assuming the maximum vesting level during the three-year vesting period (2017-2019) is achieved.

The fair value of employee services received in exchange for share-based compensation payments is accounted for in a manner that is consistent with the method of settlement and is either cash or equity settled as described in more detail in **Note 21**. For the equity settled part, it is possible that the actual cash cost does not agree with the accounting charges because the share price is not updated at the time of the vesting. The figures in the Group Leadership Team Remuneration table refer to individuals who were executives at the time of settlement.

During the year, the 2014 programme vested in one portion after three years, dependent on Economic Value Added (EVA) for the Stora Enso Group. The number of shares settled on executives (GLT members at settlement date) from previous Restricted Share programmes and Performance Share programmes amounted to 138 388 shares with a cash value at the 1 March 2017 settlement date of EUR 1 403 254 based on the share price at that date.

Chief Executive Officer – Karl-Henrik Sundström

The CEO has been employed since 1 August 2012 and assumed the position as CEO on 1 August 2014. He has a notice period of six months with a severance payment of twelve months salary on termination by the company but with no contractual payments on any change of control. The CEO's benefits include pension provisions. The CEO's pension plan consists of a collectively agreed pension plan in Sweden (ITP2) and a defined contribution (DC) top up pension plan. Contributions to the DC plan in the 20-30 interval Income Base Amounts (IBA; one IBA was 61 500 SEK in 2017) is 23%, contributions above 30 IBA are 35% for the salary the CEO had prior to assuming this position and 39% of the salary increase amount received when assuming the position as CEO. The retirement age is sixty-five years.

Short Term Incentive (STI) programme for CEO

The CEO is entitled to an STI programme decided by the Board each year giving a maximum of 75% of the annual fixed salary. The STI for 2016 and 2017 was 70% based on financial measures and 30% on Individual Key Targets.

Long Term Incentive (LTI) programmes for CEO

The CEO participates in 2015, 2016 and 2017 share based LTI programmes. The programmes have three year targets and vest in only one portion after three years. Three quarters (75%) of the opportunity is in Performance Shares, where shares will vest in accordance with performance criteria proposed by the Remuneration Committee and approved by the Board of Directors. One quarter (25%) of the opportunity is in Restricted Shares, for which vesting is only subject to continued employment.

The CEO has the potential to receive up to 81 401 shares under the 2017 LTI programme. The grant value of EUR 825 406 is based on the share price at the grant date and assuming maximum vesting level during the three-year vesting period is achieved. The CEO received shares from previous Restricted Share programmes and Performance Share programmes, which amounted to 54 181 shares with a cash value at the 1 March 2017 settlement date of EUR 549 395 based on the share price of EUR 10.14 at that date.

Group Leadership Team share interests

Executives in Office at the Year End	R Shares Held[1]	Performance Share Opportunity 2018–2020[2]	Restricted Share Opportunity 2018–2020[2]
Johanna Hagelberg	4 745	50 396	16 798
Kati ter Horst	19 166	79 469	26 490
Malin Bendz	13 793	30 400	10 133
Ulrika Lilja	16 582	41 816	13 939
Annica Bresky	-	25 191	8 397
Per Lyrvall[3]	44 632	61 180	20 393
Markus Mannström	25 746	35 580	11 860
Noel Morrin	18 092	54 680	18 227
Gilles van Nieuwenhuyzen	-	87 369	29 123
Seppo Parvi	17 026	62 192	20 730
Karl-Henrik Sundström[4]	114 548	199 584	66 528
Jari Suominen	23 068	60 471	20 157
Total, Serving Officers[5]	**297 398**	**788 328**	**262 775**

[1] None of the GLT members holds A shares.
[2] Potential shares to GLT members listed here are gross of taxes
[3] Spouse holds 1 257 shares.
[4] 41 700 of the shares are held by a related party (Alma Patria AB).
[5] The Company recommends and expects GLT members to hold Stora Enso shares at a value corresponding to at least one annual base salary. Stora Enso shares received as remuneration are therefore recommended not to be sold until this level has been reached.

The following executive officers also served in 2017

	Shares Held when GLT Membership Ended	Performance Share Opportunity when GLT Membership Ended[1]	Restricted Share Opportunity when GLT Membership Ended[1]	Effective Date of GLT Membership Ending
Juan Carlos Bueno	-	87 083	29 028	31 May 2017

[1] Unvested Performance and Restricted share awards were forfeited when employment ended.

Note 8 Net financial items

Accounting principles

Net financial items comprise of net interest expenses, foreign exchange gains and losses and other financial income and expenses mainly arising from interest-bearing assets and liabilities.

Financial income and expense

	Year Ended 31 December	
EUR million	**2017**	**2016**
Net Financial Expense in the Income Statement		
Financial income	38	44
Financial expense	-200	-286
Total	**-162**	**-242**
Represented by		
Interest expense		
Borrowings	-140	-163
Net interest from interest rate derivatives	-2	1
Finance leases	-1	-1
Interest capitalised	-	12
Interest income on loans and receivables	3	10
Net interest on net defined benefit liabilities	-6	-7
Exchange gains and losses		
Currency derivatives	24	30
Borrowings and deposits	10	-73
Other financial income	1	3
Other financial expense		
Other fair value changes	-	-4
Others	-51	-50
Total	**-162**	**-242**

Gains and losses on derivative financial instruments are shown in Note 27 Derivatives.

In 2017, the net interest expense on borrowings decreased due to a lower and further improved debt portfolio. There were no capitalised borrowing costs in 2017 (EUR 12 million in 2016). In 2016, these were mainly related to the Beihai Mill project in Guangxi, China which commenced production during the second quarter of 2016. The average interest rate used for capitalisation was 4.5% in 2016. Costs on long-term debt issues capitalised as part of non-current debt amounted to EUR 17 (EUR 25) million in the Statement of financial position. During the year EUR 7 (EUR 8) million was amortised through interest expense by using the effective interest rate method.

Exchange gains and losses for currency derivatives mainly relate to non-hedge accounted instruments fair valued in the Income statement as well as time value of options under hedge accounting.

In 2016 the other fair value changes included under other financial expenses were mainly related to the change in the fair value of interest rate derivatives not under hedge accounting. During 2017, the Group did not have any non-hedge accounted interest-rate derivatives.

In 2017 the Group recorded a net expense of EUR 29 (EUR 34) million due to repurchases of bond notes with the impact recorded under other financial expense. In addition, the Group recorded a net expense of EUR 10 million related to an early loan repayment in 2017. The transactions are explained in more detail in **Note 26** Debt.

The rest of the amount reported under other financial expense mainly relates to net financial fees for unused committed credit facilities, guarantees and rating agencies.

Total foreign exchange gains and losses in the income statement excluding hedges

	Year Ended 31 December	
EUR million	**2017**	**2016**
Sales	-23	4
Costs and expenses	1	-7
Borrowings and deposits	10	-73
Total	**-12**	**-76**

Note 9 Income taxes

Accounting principles

The Group income tax expense/benefit includes taxes of group companies based on taxable profit/loss for the period, together with tax adjustments for previous periods and the change in deferred income taxes.

Deferred income taxes are provided using the liability method, as measured with enacted, or substantially enacted, tax rates, to reflect the net tax effects of all temporary differences between the tax bases and the accounting bases of assets and liabilities. No deferred tax is recognised for the initial recognition of goodwill and the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction it affects neither accounting profit nor taxable profit. Deferred tax assets reduce income taxes payable on taxable income in future years. The deferred tax assets, whether arising from temporary differences or from tax losses, are recognised only to the extent that it is probable that future taxable profits will be available against which the assets can be utilised.

Tax expense

	Year Ended 31 December	
EUR million	**2017**	**2016**
Current Tax	-123	-131
Deferred Tax	-5	-3
Total Tax	**-128**	**-134**

Income tax rate reconciliation

	Year Ended 31 December	
EUR million	**2017**	**2016**
Profit before tax	742	541
Tax at statutory rates applicable to profits in the country concerned[1]	-147	-131
Non-deductible expenses and tax exempt income[2]	6	-16
Valuation of deferred tax assets	-22	-4
Taxes from prior years	-6	2
Changes in tax rates and tax laws	5	-2
Impairment of goodwill	-	-2
Profits from equity accounted investments	18	30
Other[3]	18	-11
Total Tax	**-128**	**-134**
Effective Tax Rate	**17.3%**	**24.8%**
Statutory Tax Rate (blended)	**19.8%**	**24.1%**

[1] Includes impact of EUR 9 million from countries with tax holidays and tax benefits in 2017 and impact of EUR -25 million from tax holidays and other tax benefits in 2016.
[2] The tax value of non-deductible expenses of EUR 17 million has been netted against tax exempt income of EUR 23 million in 2017, and the tax value of non-deductible expenses of EUR 45 million has been netted against tax exempt income of EUR 29 million in 2016.
[3] The 2017 figure includes an EUR 19 million release of deferred tax liabilities in relation to subsidiary dividend distribution as the distribution is not probable within the foreseeable future.

The statutory tax rate is a weighted average of the statutory tax rates prevailing in jurisdictions where Stora Enso operates.

Change in deferred taxes in 2017

EUR million	Value at 1 Jan 2017	Income Statement	OCI	Acquisitions/ Disposals	Translation difference	Value at 31 Dec 2017
Fixed assets	-176	12	-	-	1	-163
Financial instruments	-5	-	-2	-	-	-7
Untaxed reserves	-30	13	-	-	2	-15
Pensions and provisions	46	10	-10	-	-	46
Tax losses and tax credits carried forward	193	-64	-	-	-2	127
Other deferred taxes	-17	16	-	-	1	-
Total	**11**	**-13**	**-12**	**-**	**2**	**-12**
Equity hedges (CTA)		8	-8	-	-	-
Change in Deferred Tax	**11**	**-5**	**-20**	**-**	**2**	**-12**
Assets[1]	214					154
Liabilities[1]	-203					-166

[1] Deferred tax assets and liabilities have been offset in accordance with IAS 12.

OCI = Other Comprehensive income, CTA = Cumulative Translation Adjustment

Change in deferred taxes in 2016

EUR million	Value at 1 Jan 2016	Income Statement	OCI	Acquisitions/ Disposals	Translation difference	Value at 31 Dec 2016
Fixed assets	-168	-16	-	2	6	-176
Financial instruments	-2	-	-3	-	-	-5
Untaxed reserves	-42	9	-	-	3	-30
Pensions and provisions	17	19	15	-6	1	46
Tax losses and tax credits carried forward	207	-15	-	-	1	193
Other deferred taxes	-18	2	-	4	-5	-17
Total	**-6**	**-1**	**12**	**-**	**6**	**11**
Equity hedges (CTA)	-	-2	2	-	-	-
Change in Deferred Tax	**-6**	**-3**	**14**	**-**	**6**	**11**
Assets[1]	246					214
Liabilities[1]	-252					-203

[1] Deferred tax assets and liabilities have been offset in accordance with IAS 12.

The recognition of deferred tax assets is based on the Group's estimations of future taxable profits available against which the group can utilise the benefits.

Tax losses

	As at 31 December					
	Tax losses carried forward		**Recognised tax values**		**Unrecognised tax values**	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Expiry within five years	856	431	118	70	47	40
Expiry after five years	104	580	3	102	22	24
No expiry	1 059	1 185	6	20	234	249
Total	**2 019**	**2 196**	**127**	**192**	**303**	**313**

Tax losses of EUR 573 (EUR 801) million relate to Finland.

Non-recognised deferred tax assets on deductible temporary differences amounted to EUR 51 (EUR 59) million. There is no expiry date for these differences. Taxable temporary differences in respect of investments in subsidiaries, branches and associates and interests in joint ventures for which deferred tax liabilities have not been recognised amounted to EUR 214 (EUR 237) million.

Note 10 Depreciation, amortisation and impairment charges

Accounting principles

Depreciation, amortisation and impairment charges
Depreciation or amortisation of an asset begins when it is available for use in the location and condition necessary for it to be operated in the manner intended by management. Depreciation or amortisation ceases when the asset is derecognised or classified as held for sale in accordance with IFRS 5. Depreciation or amortisation does not cease when the asset becomes idle. Tangible and intangible assets are depreciated and amortised on a straight-line basis over their useful lives. Useful lives are reviewed periodically. If an asset is disposed of, proceeds exceeding the carrying value of the asset up to its historical cost are netted against depreciation, amortisation and impairment charges. Only disposal proceeds exceeding the historical cost of an asset are presented as other operating income (note 5). If the asset's book value is higher than the disposal proceeds, the difference is recognised as an impairment in the period when a binding sales contract is signed.

The carrying amounts of intangible assets and property, plant and equipment are reviewed at each reporting date to determine whether there is any indication of impairment, whereas goodwill is tested annually. If any such indication exists, the recoverable amount is estimated as the higher of the fair value less costs of disposal and the value in use, with an impairment loss being recognised whenever the carrying amount exceeds the recoverable amount.

A previously recognised impairment loss on property, plant and equipment is reversed if there has been a change in the estimates used to determine the recoverable amount, however, not to an extent higher than the carrying amount that would have existed had no impairment loss been recognised in prior years. For goodwill, however, a recognised impairment loss is not reversed.

Whilst intangible assets and property, plant and equipment are subject to impairment testing at the cash generating unit (CGU) level, goodwill is subject to impairment testing at the CGU level for groups of CGUs, which represents the lowest level within the group at which goodwill is monitored for internal management purposes.

Depreciation, amortisation and impairment charges

	Year Ended 31 December	
EUR million	**2017**	**2016**
Depreciation and Amortisation		
Intangible assets	18	18
Buildings and structures	82	85
Plant and equipment	382	389
Other tangible assets	11	12
Total	**493**	**504**
Impairment and Disposal Gains/Losses		
Goodwill	-	11
Intangible assets	11	-
Land	5	-
Buildings and structures	-	25
Plant and equipment	7	60
Other tangible assets	4	7
Gain on sale of fixed assets	-2	-159
Loss on sale of fixed assets	3	-
Total	**28**	**-56**
Reversal of Impairment		
Intangible assets	-3	-
Buildings and structures	-	-9
Plant and equipment	-3	-41
Total	**-6**	**-50**
Depreciation, Amortisation and Impairment Charges	**515**	**398**

Depreciation and amortisation

The total depreciation and amortisation charge amounted to EUR 493 million and was EUR 11 million less than in 2016. A breakdown of depreciation, amortisation and impairment charges by divisions is set out in **Note 3** Segment information.

Disposal gains and losses

There were no material disposal gains or losses relating to fixed assets in 2017.

On 6 June 2016 Stora Enso announced the divestment of key assets of its Suzhou Mill in China, including the land-use rights and buildings, to the local government of Suzhou National New & Hi-tech Industrial Development Area (SND). The cash consideration for the assets was EUR 240 million. According to Stora Enso's accounting policy, disposal proceeds exceeding the carrying value of the asset but not its historical cost are netted against depreciation, amortisation and impairment charges. In 2016, the depreciation, amortisation and impairment charges included a disposal profit of EUR 159 million as well as a reversal of previous impairment charges of EUR 41 million. Suzhou mill was part of the Paper division.

Impairment testing

The recoverable amount for the CGUs has been determined based on a value-in-use calculation using cash flow projections from financial budgets approved by the Board of Directors and management. The pre-tax discount rates are calculated for each cash generating unit taking into account the tax and risk profile of the country in which the cash flow is generated. The table in the goodwill impairment testing section below sets out the pre-tax discount rates used for goodwill impairment testing, which are similar to those used in the impairment testing of other intangible assets and property, plant and equipment.

Impairments were calculated using a value-in-use method for each CGU based on the following main assumptions:

- Sales price estimates in accordance with internal and external specialist analysis
- Cash flows were prepared in real terms
- Current cost structure to remain unchanged
- For goodwill testing a four-year future period was used after which the perpetuity value was based on zero growth rates, whereas for intangible assets, property, plant and equipment testing the period was the remaining expected economic life of the assets.

Other intangible assets and property, plant and equipment impairment

The total impairment charges on other intangible assets and property, plant and equipment in 2017 amounted to EUR 27 (EUR 92) million and resulted mainly from impairment testing and restructurings.

Newsprint Europe CGU in Paper division was not tested for impairment in 2017. Newsprint Europe CGU division was tested for impairment in 2016 due to further weakened long-term earnings expectations resulting from decline in the European paper markets. The recoverable amount was based on the value-in-use and amounted to EUR 233 million. The pre-tax discount rate used for impairment testing in 2016 was 6.8%. The group recorded an impairment charge of EUR 78 million in Newsprint Europe CGU in 2016.

Goodwill impairment testing

In 2017 the Goodwill testing did not result in impairment.

In 2016 the total goodwill impairment charge amounted to EUR 11 million and was fully related to Corrugated China operations in Packaging Solutions division. The main reason for the impairment is the challenging market situation and a change in the customer base. Stora Enso recognises goodwill only to the extent of its interest in the net assets acquired (the partial goodwill method). As such, the impairment of goodwill is fully allocated to the owners of the parent company. After the impairment no goodwill was left in Corrugated China CGU.

Groups of cash generating units containing goodwill

	Year Ended 31 December									
	2017					2016				
EUR million	Goodwill at Year End	Intangible Assets and Property, Plant and Equipment at Year End	Recoverable Amount at Year End	Impairment Charge	Pre-tax Discount Rate	Goodwill at Year End	Intangible Assets and Property, Plant and Equipment at Year End	Recoverable Amount at Year End	Impairment Charge	Pre-tax Discount Rate
Packaging Solutions - Europe	19	712	2 117	-	8.8%	19	671	1 529	-	10.0%
Packaging Solutions - Corrugated China	-	52	-	-	6.7%	-	56	56	11	8.0%
Biomaterials - Innovation and Nordic Operations	28	348	1 916	-	6.1%	32	343	769	-	7.5%
Wood Products - Central Europe	107	159	937	-	5.4%	104	160	713	-	6.8%
Paper - Newsprint and Book Paper	43	245	528	-	5.4%	43	261	542	-	6.8%
Paper - Uncoated Magazine Paper	40	263	492	-	5.4%	40	290	774	-	6.8%
Goodwill	**237**	**1 779**	**5 990**	**-**		**238**	**1 781**	**4 383**	**11**	

Segment impairments and impairment reversals, disposal gains and losses

	Year Ended 31 December	
EUR million	2017	2016
Consumer Board	-	-
Packaging Solutions	3	18
Biomaterials	1	-
Wood Products	-	-1
Paper	7	32
Other	11	4
Total (impairment/disposal loss +) / (reversal/disposal gain -)	**22**	**53**

The calculation of value-in-use is highly sensitive to discount rates, sales prices and costs. The Sensitivity Analysis table below summarises what effect a 1% change in the discount rate, 1% decrease in sales prices and 1% increase in costs would have had on the recoverable amounts of the groups of CGUs carrying the most of the group's total goodwill.

Goodwill testing sensitivity analysis, impact on recoverable amount

EUR million	Wood Products - Central Europe	Paper - Newsprint and Book	Paper - Uncoated Magazine Paper
1% increase in the discount rate	-178	-68	-66
1% annual decrease in the sales price	-145	-95	-66
1% annual increase in the costs	-132	-88	-60

Note 11 Intangible assets and property, plant and equipment

Accounting principles

Computer software development costs

The cost of development or acquisition of new software clearly associated with an identifiable and unique product that will be controlled by the group and has probable benefit exceeding its cost beyond one year and is recognised as an intangible asset and will be amortised over the expected useful life of the software between 3 to 10 years. Website costs are expensed as incurred.

Goodwill

Goodwill represents future economic benefits arising from assets that are not capable of being individually identified and separately recognised by the group on an acquisition. Goodwill is computed as the excess of the cost of an acquisition over the fair value of the group's share of the fair value of net assets of the acquired subsidiary at the acquisition date, and is allocated to those groups of cash generating units expected to benefit from the acquisition for the purpose of impairment testing. In compliance with IFRS 3, the cost of an acquisition is equal to the sum of the consideration transferred, the value of the non-controlling interest in the acquisition, and the fair value of the previously held interest in the acquired subsidiary. Goodwill arising on the acquisition of non-euro foreign entities is treated as an asset of the foreign entity denominated in the local currency and translated at the closing rate.

Goodwill is not amortised but tested for impairment on an annual basis, or more frequently if there is an indication of impairment. Gains and losses on the disposal of a group entity include any goodwill relating to the entity sold.

Goodwill arising from the acquisition of an equity accounted investment or joint arrangement is included in the carrying amount of the investment and is assessed for impairment as part of that investment. Any excess of the group's share of the net fair value over the cost of the acquisition, after reassessment, is recognised immediately in the income statement.

Intangible assets

Intangible assets are stated at their historical cost and amortised on a straight-line basis over their expected useful lives, which usually varies from 3 to 10 years and up to 20 years for patents. An adjustment is made for any impairment. Intangible items acquired must be recognised as assets separately from goodwill if they meet the definition of an asset, are either separable or arise from contractual or other legal rights, and their fair value can be measured reliably.

Intangible assets recognised separately from goodwill in acquisitions consist of marketing and customer-related or contract and technology-based intangible assets. Typical marketing and customer-related assets include trademarks, trade names, service marks, collective marks, certification marks, customer lists, order or production backlogs, customer contracts and the related customer relationships. The contract and technology-based intangible assets are normally licensing and royalty agreements or patented technology and trade secrets such as confidential formulas, processes or recipes. The fair value determination of customer contracts and related relationships is derived from expected retention rates and cash flow over the customers' remaining estimated lifetime. The value of trademarks is derived from a discounted cash flow analysis using the relief from royalty method.

Property, plant and equipment

Property, plant and equipment acquired by group companies are stated at their historical cost, augmented where appropriate by asset retirement costs. Assets arising on the acquisition of a new subsidiary are stated at fair value at the date of acquisition. Depreciation is computed on a straight-line basis, and adjusted for any impairment and disposal charges. The Consolidated statement of financial position value represents the cost deducted by received grants and subsidies and less the accumulated depreciation and any impairment charges. Interest costs on borrowings to finance the construction of these assets are capitalised as part of the cost during the construction period the requirements are fulfilled.

Land and water areas are not depreciated as these are deemed to have an indefinite life, but otherwise depreciation is based on the following expected useful lives:

Asset Class	Depreciation Years
Buildings, industrial	10-50
Buildings, office & residential	20-50
Groundwood mills	15-20
Hydroelectric power	40
Paper, board and pulp mills, main machines	20
Heavy machinery	10-20
Converting factories	10-15
Sawmills	10-15
Computers	3-5
Vehicles	5
Office equipment	3-5
Railway, harbours	20-25
Forest roads	10-35
Roads, fields, bridges	15-20

Ordinary maintenance and repair charges are written as expensed as incurred, but the costs of significant renewals and improvements are capitalised and depreciated over the remaining useful lives of the related assets. Retirements, sales and disposals of property, plant and equipment are recorded by deducting the cost and accumulated depreciation from the accounting records with any resulting terminal depreciation adjustments reflected in impairment charges in the Consolidated income statement. Capital gains are shown in other operating income.

Spare parts are accounted for as property, plant and equipment if they are major and used over more than one period, or if they are used only in connection with an item of property, plant and equipment. In all other cases, spare parts are carried as part of the inventory and recognised in profit or loss as consumed items.

Intangible assets

	Year Ended 31 December				
EUR million	**Computer Software**	**Other Intangible Assets**	**Assets in Progress**	**Goodwill**	**Total**
Acquisition Cost					
At 1 January 2016	225	297	-	1 196	1 718
Translation difference	-	-2	-	-3	-5
Reclassifications	3	8	-	-	11
Additions	9	3	-	-	12
Disposals[1]	-9	-131	-	-	-140
At 31 December 2016	**228**	**175**	**-**	**1 193**	**1 596**
Translation difference	-2	-9	-	-3	-14
Reclassifications	21	6	-	-	27
Additions	7	13	39	-	59
Disposals[1]	-5	-9	-	-	-14
At 31 December 2017	**249**	**176**	**39**	**1 190**	**1 654**
Accumulated Amortisation and Impairment					
At 1 January 2016	199	138	-	948	1 285
Translation difference	1	2	-	-4	-1
Disposals[1]	-9	-126	-	-	-135
Amortisation	9	9	-	-	18
Impairment	-	-	-	11	11
At 31 December 2016	**200**	**23**	**-**	**955**	**1 178**
Translation difference	-4	-	-	-2	-6
Disposals[1]	-5	-5	-	-	-10
Amortisation	10	8	-	-	18
Impairment	8	-	-	-	8
At 31 December 2017	**209**	**26**	**-**	**953**	**1 188**
Net Book Value at 31 December 2017	**40**	**150**	**39**	**237**	**466**
Net Book Value at 31 December 2016	**28**	**152**	**-**	**238**	**418**

[1] Company disposals are included in Disposals line. Company disposals are discussed in more detail in **Note 4** Acquisitions and disposals.

Property, plant and equipment

	Year Ended 31 December					
EUR million	**Land and Water**	**Buildings and Structures**	**Plant and Equipment**	**Other Tangible Assets**	**Assets in Progress**	**Total**
Acquisition Cost						
At 1 January 2016	410	3 404	14 077	450	794	19 135
Translation difference	23	31	-83	5	-17	-41
Reclassifications	-	21	410	9	-451	-11
Reclassifications to biological assets	-	-	-2	-	-	-2
Additions	1	281	339	5	-	626
Disposals[1]	-39	-195	-905	-27	-12	-1 178
At 31 December 2016	**395**	**3 542**	**13 836**	**442**	**314**	**18 529**
Translation difference	-33	-175	-421	-7	-30	-666
Reclassifications	-	5	97	1	-130	-27
Reclassifications to biological assets	-	-	-1	-	-	-1
Additions	1	20	190	3	287	501
Disposals[1]	-2	-43	-355	-11	-	-411
At 31 December 2017	**361**	**3 349**	**13 346**	**428**	**441**	**17 925**
Accumulated Depreciation and Impairment						
At 1 January 2016	39	2 164	10 956	370	8	13 537
Translation difference	-	6	-109	5	1	-97
Disposals[1]	-33	-175	-810	-27	-5	-1 050
Depreciation	-	85	389	12	-	486
Impairment	-	16	19	6	1	42
At 31 December 2016	**6**	**2 096**	**10 445**	**366**	**5**	**12 918**
Translation difference	-1	-96	-293	-7	-	-397
Disposals[1]	-	-42	-342	-10	-	-394
Depreciation	-	82	382	11	-	475
Impairments and reversals	5	-	4	-	4	13
At 31 December 2017	**10**	**2 040**	**10 196**	**360**	**9**	**12 615**
Net Book Value at 31 December 2017	**351**	**1 309**	**3 150**	**68**	**432**	**5 310**
Net Book Value at 31 December 2016	**389**	**1 446**	**3 391**	**76**	**309**	**5 611**

[1] Company disposals are included in Disposals line. Company disposals are discussed in more detail in **Note 4** Acquisitions and disposals.

Intangible assets and property, plant and equipment additions

Total capital expenditure for the year in Stora Enso Oyj and its subsidiaries amounted to EUR 560 (EUR 638) million. Details of ongoing projects and future plans are discussed in more detail in the Report of the Board of Directors.

Note 12 Biological assets

Accounting principles

The biological assets of Stora Enso consist of standing trees to be used as raw material in pulp and mechanical wood production and as bio fuels.

IAS 41 Agriculture standard requires that biological assets are shown in the Consolidated Statement of financial position at fair value. Group forests are thus accounted for at level 3 of fair value less the estimated point-of-sale costs at harvest, there being a presumption that fair values can be measured for these assets.

The valuation of forest assets is based on discounted cash flow models whereby the fair value of the biological assets is calculated using cash flows from continuous operations, that is, based on sustainable forest management plans taking into account growth potential. The yearly harvest from the forecasted tree growth is multiplied by wood prices and the cost of fertiliser and harvesting is then deducted. The fair value of the biological assets are measured as the present value of the harvest from one growth cycle based on the productive forestland, taking into consideration environmental restrictions and other reservations. Young standing timber less than two years old (less than three years in Montes del Plata) is considered to be an immature asset and is accounted at cost. At harvesting, biological assets are transferred to inventory.

Fair value is deemed to approximate the cost when little biological transformation has taken place or the impact of the transformation on the price is not expected to be material, which varies according to the location and species of the assets.

Stora Enso also ensures that the Group's share of the valuation of forest holdings in equity accounted investments and joint operations are consistent with Group accounting policies.

The Group has biological assets in its own subsidiaries in China, Brazil and Laos, as well as in joint operations in Brazil and Uruguay and in equity accounted investments in Finland, Sweden and Brazil.

The value of biological assets disclosed in the group Consolidated statement of financial position from subsidiary companies and from joint operations amounts to EUR 448 (EUR 489) million as shown below. The Group's indirect share of biological assets held by equity accounted investments amounts to EUR 2 906 (EUR 2 897) million.

Biological assets

	Year Ended 31 December	
EUR million	**2017**	**2016**
Subsidiaries and Joint Operations		
Fair Value at 1 January	**489**	**640**
Translation differences	-51	17
Change in fair value	-6	-120
Additions (cost based)	80	91
Harvesting	-57	-62
Other operative changes	-9	-79
Other changes	-	-
Reclassification from Property, plant and equipment	2	2
Fair Value of biological assets at 31 December	**448**	**489**
Equity accounted investments		
Bergvik Skog Ab (49.28%)	2 326	2 360
Tornator Oyj (41%)	562	515
Arauco Florestal Arapoti S.A. (20%)	18	22
Fair value of biological assets of Associated companies at 31 December	**2 906**	**2 897**

Subsidiaries and joint operations:

At the end of 2017, the fair value of the biological assets in Guangxi, China amounted to EUR 168 (EUR 174) million, which included young standing timber with a value of EUR 33 (EUR 36) million. The decrease is driven by FX movement, the local value increased by 3%. The discount rate of 8.6% (9.2%) used in the discounted cash flows (DCF) is determined using the weighted average cost of capital method. The amount of the land area is 80 (84) thousand hectares. As announced on 19 January 2017, Stora Enso is reconsidering its plans to build a chemical pulp mill in

Beihai, China. As a consequence of this change in the scope of operations, Stora Enso would reduce the area of its leased forest lands in the Guangxi region. The scope and schedule for the reduction of fibre base will be decided later. As a part of this process, all contracts will be evaluated and Stora Enso aims to have only land leased that is free of contractual defects.

Veracel Celulose S.A. (Veracel), a 50% joint operation company in Brazil, had biological assets fair valued at EUR 164 (EUR 202) million, of which Stora Enso's share was EUR 82 (EUR 101) million. The biological assets included young standing timber with a value of EUR 31 (EUR 22) million. The discount rate of 7.3% (7.9%) used in the DCF is determined using the weighted average cost of capital method. Stora Enso's share (50%) of the land area is 113 (114) thousand hectares.

Montes del Plata (MdP), a 50% joint operation company in Uruguay, had biological assets with a fair value of EUR 354 (EUR 380) million, of which Stora Enso's share was EUR 177 (EUR 190) million. The biological assets included young standing timber with a value of EUR 43 (EUR 41) million. The discount rate of 8.0% (8.0%) used in the DCF is determined using the weighted average cost of capital method. Stora Enso's share (50%) of the land area is 123 (123) thousand hectares.

Sensitivities of significant assumptions of a +/- 10% movement

	Wood market prices	Growth rate
Guangxi	+/-36	+/-18
Veracel	+/-7	+/-7
Montes del Plata	+18/-17	+/-6

At 31 December 2017 biological assets by value were located in China 38% (36%), Brazil 20% (22%), Uruguay 39% (39%) and other areas 3% (3%). The land area comes to 363 (366) thousand hectares of which 31% (30%) of the land is leased and 4% (5%) restricted. The harvested wood amounted to 4 (4) million m^3. The MdP and Veracel amounts are taken into account in the ownership share and number of hectares.

Equity accounted investments:

The Group has three equity accounted investments holding biological assets:

- Bergvik Skog Ab (Bergvik Skog), a 49.28% (49.00%) owned Swedish associate company, had biological assets with a fair value of EUR 4 719 (EUR 4 816) million, of which Stora Enso's share was EUR 2 326 (EUR 2 360) million. The fair value change of Bergvik is mainly due to FX effect. Wood sales margin had a slight, ordinary increasing effect on the fair value.
- Tornator Oyj (Tornator), a 41% owned Finnish associate company, had biological assets with a fair value of EUR 1 371 (EUR 1 257) million, of which Stora Enso's share was EUR 562 (EUR 515) million. The increase in fair value is due to a forest land purchases and within fair valuation increased harvesting volume had a positive impact. Sales prices and growing costs had a slight reducing impact on fair value.
- Arauco Florestal Arapoti S.A., the 20% owned southern Brazilian associate company, had biological assets with a fair value of EUR 90 (EUR 109) million, of which Stora Enso's share was EUR 18 (EUR 22) million.

For information about the amount of wood delivered to Stora Enso mills and share of wood sourced from plantations, please see Stora Enso's **Sustainability Report 2017**, section Forests, plantations, and land use. Sustainability Report 2017 will be published during week 9.

Note 13 Equity accounted investments

Accounting principles

Consolidation principles

Associated companies over which Stora Enso exercises significant influence are accounted for using the equity method, which involves recognising the Group's share of the equity accounted investment profit or loss for the year in the Consolidated income statement. The Group's interest in an associated company is carried in the Consolidated statement of financial position at an amount that reflects its share of the net assets of the associate.

The Group's share of results in equity accounted investments is reported in operating profit to reflect the operational nature of these investments, especially those in wood supply. There is no material goodwill in the Statements of financial position for equity accounted investments.

Principal equity accounted investments

			As at 31 December			
			Proportion of ownership interest/ voting rights held %		EUR million	
Company	**Reportable segment**	**Domicile and principal place of operations**	**2017**	**2016**	**2017**	**2016**
Bergvik Skog AB: forest	Other	Sweden	49.28/36.70[1]	49.00/36.70[1]	1 287	1 265
Tornator Oyj: forest	Other	Finland	41.00	41.00	267	246
Bulleh Shah Packaging (Private) Limited: packaging goods	Consumer Board	Pakistan	0.00[2]	35.00	-	34
Arauco Florestal Arapoti S.A.: plantation	Other[3]	Brazil	20.00	20.00	22	26
					1 576	1 571
Others					24	23
Carrying Value at 31 December					**1 600**	**1 594**

[1] The group's shareholding in Bergvik Skog AB is 49.28%, however, the voting rights are limited to 36.7%.

[2] Stora Enso divested its 35% shareholding in Bulleh Shah Packaging (Private) Limited: packaging goods in third quarter 2017

[3] Arauco Florestal Arapoti S.A.: plantation moved from Reportable segment Paper to Other in the beginning of third quarter 2017

Group share of equity accounted investment income statements

	Year Ended 31 December	
EUR million	**2017**	**2016**
Sales	279	297
Net operating expenses	-210	-200
IAS 41 valuation	33	136
Operating Profit	**102**	**233**
Net financial items	-28	-53
Net Profit before Tax	**74**	**180**
Income tax	-8	-24
Net Profit for the Year	**66**	**156**

All of the above companies are accounted for using the equity method in these Consolidated financial statements.

In September 2017, Stora Enso divested its 35% shareholding in the Pakistani packaging goods company Bulleh Shah Packaging (private) Ltd. for EUR 6 million. Related to the transaction Stora Enso recorded a loss of EUR 20 million in Consumer Board division for the third quarter results in 2017.

The average number of personnel in the equity accounted investments was 1 698 in 2017, compared with 2 797 in 2016.

A summary of the financial information in respect of the Group's material associates, Bergvik Skog AB and Tornator Oyj, is set out below. The Group's share of these associated companies is reported under segment Other and covers the majority of the Group's total share of results of equity accounted investments. The summarised financial information below represents amounts shown in the associate's financial statements prepared in accordance with IFRS.

Bergvik Skog AB

EUR million	2017	2016
Current assets	57	43
Non-current assets	4 969	5 074
Current liabilities	403	362
Non-current liabilities	991	1 111
Tax liabilities	1 034	1 072
Sales	243	234
Net profit for the year	111	127
Other comprehensive income	8	-6
Total comprehensive income	119	121
Dividends received from the associate during the financial year	7	44
Net assets of the associate	2 598	2 572
Proportion of the Group's ownership interest in Bergvik Skog AB	49.28%	49.00%
Goodwill	7	5
Carrying amount of the Group's interest in Bergvik Skog AB	**1 287**	**1 265**

In 2004, 56.7% of Stora Enso's Swedish forest holding company Bergvik Skog was divested to institutional investors leaving the Group with a minority shareholding of 43.26%. In May 2014 the Group spent SEK 891 million (EUR 97 million) to increase its shareholding in Bergvik Skog to 49%. As part of the acquisition the group recorded goodwill of EUR 5 million. In September 2017 Stora Enso AB purchased an additional 0.28% of the shareholding in Bergvik Skog AB, which also made EUR 2 million addition to goodwill which amounted to EUR 7 million.

In November 2017, Stora Enso announced that shareholders representing 98% of the owners in Bergvik Skog AB, a Swedish forest holding company, have agreed to initiate discussions, based on a non-binding letter of intent, aiming at structural changes in Bergvik Skog Group. Bergvik Skog's Swedish forest assets are owned by its subsidiaries Bergvik Väst AB and Bergvik Öst AB, representing approximately 83% and 17% respectively. As a result of the planned restructuring, Stora Enso would transform its current ownership of 49.28% in Bergvik Skog, to a direct holding of approximately 70% of the value of the forest assets in Bergvik Väst. Bergvik Skog is currently reported as equity accounted investment. As a result of the restructuring, Bergvik Väst would be consolidated as a subsidiary.

Stora Enso's shareholding in the company was valued at EUR 1 287 (EUR 1 265) million at the year-end in 2017. In 2017, the Group's share of Bergvik Skog's net profit was EUR 55 (EUR 62) million, including a forest valuation gain of EUR 26 (gain EUR 52) million.

Tornator Oyj

EUR million	2017	2016
Current assets	32	26
Non-current assets	1 478	1 355
Current liabilities	121	69
Non-current liabilities	586	579
Tax liabilities	151	132
Sales	102	97
Net profit for the year	78	173
Other comprehensive income	-1	5
Total comprehensive income	77	178
Dividends received from the associate during the financial year	11	12
Net assets of the associate	652	601
Proportion of the Group's ownership interest in Tornator Oyj	41.00%	41.00%
Carrying amount of the Group's interest in Tornator Oyj	**267**	**246**

Stora Enso's Finnish forest holdings were divested into an equity accounted investment, Tornator, in 2002. The Group's current 41% ownership is valued at EUR 267 (EUR 246) million at the year-end for 2017. In 2017, the Group's share of Tornator's net profit was EUR 32 (EUR 71) million, including a forest valuation gain of EUR 8 (gain EUR 83) million.

Aggregate information of equity accounted investments that are not individually material

	As at 31 December	
EUR million	**2017**	**2016**
PPE[1], goodwill and other intangible assets	28	74
Biological assets	18	22
Operative receivables:		
Non-current	-	-
Current	16	24
Inventories	1	17
Cash	7	9
Total Assets	**70**	**146**
Operative Liabilities:		
Non-current	4	5
Current	12	22
Debt:		
Non-current	1	18
Current	-	10
Tax liabilities	7	8
Total Liabilities	**24**	**63**
Net Equity in the Group Statement of Financial Position	**46**	**83**
Represented by		
Capital and Reserves	45	83
OCI	1	-
Equity Accounting Value	**46**	**83**
Equity Accounting Value for Bergvik Skog AB	1 287	1 265
Equity Accounting Value for Tornator Oyj	267	246
Total Equity Accounting Value	**1 600**	**1 594**

[1] PPE = Property, Plant and Equipment

Equity accounted investment company balances

	As at 31 December	
EUR million	**2017**	**2016**
Receivables from Equity Accounted Investments		
Non-current loan receivables	3	5
Trade receivables	3	3
Current loan receivables	-	-
Liabilities due to Equity Accounted Investments		
Trade payables	40	40

Equity accounted investment transactions

	Year Ended 31 December	
EUR million	**2017**	**2016**
Sales to equity accounted investments	53	53
Purchases from equity accounted investments	215	202

The Group engages in transactions with equity accounted investments such as sales and purchases of wood. All agreements are negotiated at arm's length and are conducted on terms that the Group considers customary in the industry and generally no less favourable than would be available from independent third parties.

Total loans including interest receivable to equity accounted investments at the year-end 2017 amounted to EUR 3 (EUR 5) million.

Note 14 Available-for-sale investments

Accounting principles

The Group classifies its investments into three categories: trading, held-to-maturity and available-for-sale. At the reporting date, the group held only available-for-sale investments. All available-for-sale investments are considered to be non-current assets, unless they are expected to be realised within twelve months.

Available-for-sale investments are initially recognised at fair value and subsequent gains and losses are booked to equity's fair valuation reserve in other comprehensive income (OCI) and, when they are sold, the accumulated fair value adjustments are then included in the Consolidated income statement. Available-for-sale investments are assessed for indicators of impairment at the end of each reporting period. A significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment. The part of the fair value reserve (OCI) represented by the impairment is transferred to the Consolidated income statement.

Summary of values

	Year Ended 31 December	
EUR million	**2017**	**2016**
Acquisition cost at 1 January		
Listed securities	4	4
Operative securities	121	123
Investments classified as available-for-sale	125	127
OCI in opening balance	170	32
Available-for-Sale Investments at 1 January	**295**	**159**
Translation difference	-1	-1
Additions	8	2
Change in fair values accounted for as OCI	39	140
Disposals	-	-10
Income Statement - gains and losses	-2	5
Carrying Amount at 31 December	**339**	**295**

Unrealised gains and losses on securities

	Year Ended 31 December	
EUR million	**2017**	**2016**
Net unrealised holding gains (OCI)	209	170
Cost	130	125
Fair Value	**339**	**295**
Net unrealised holding gains (OCI)	209	170
Deferred tax	-4	-8
Net Unrealised Holding Gains Shown in Equity as OCI	**205**	**162**
Change in Net Unrealised Holding Gains Shown in Equity as OCI	**43**	**135**

PVO shares

The Group holds a 15.6% (15.5%) interest in Pohjolan Voima Oy (PVO), a privately-owned group of companies in the energy sector that produces electricity and heat for its shareholders in Finland. Each subsidiary of the PVO group has its own class of shares that entitle the shareholder to the energy produced in proportion to its ownership of that class of share. The shareholders then have an obligation to cover the costs of production, which are generally lower than market prices. The holding is fair valued quarterly using an average of two methods: the discounted cash flow model and trading multiples. The valuation is categorised at level 3 in the fair value hierarchy.

The electricity prices in the model are based on Nordpool prices. Liquid future derivative prices are used for the available years in the model and thereafter increased by an inflation factor. The historical financial statements provide the basis for the cost structure for each of the power assets, which are adjusted by the inflation factor in future years. The discount rate of 3.43% used in the DCF is determined using the weighted average cost of capital method. The trading multiples are derived from a peer group of European companies operating power assets similar to PVO's. A +/- 5% change in the electricity price used in the DCF would change the valuation by EUR 38 million and EUR -38 million, respectively. A +/- 1% absolute change in the discount rate would change the valuation by EUR -32 million and EUR 42 million, respectively.

Other uncertainties in the valuation of PVO's share of Olkiluoto 3 nuclear power plant project relate to on-going arbitration proceedings between the plant supplier AREVA-Siemens Consortium and the plant owner Teollisuuden Voima Oyj (TVO). Stora Enso's indirect share of the capacity of Olkiluoto 3 is approximately 8.9%, through its PVO B2 shares. The possible outcome of the arbitration proceedings has not been taken into account in the valuation.

PVO shareholding at 31 December 2017

EUR million	Share Series	% Holding	Asset Category	Fair Value 2017	Fair Value 2016
PVO-Vesivoima Oy	A	20.6	Hydro	155	121
Teollisuuden Voima Oyj	B	15.7	Nuclear	148	114
Teollisuuden Voima Oyj	B2	14.8	Nuclear under construction	-	-
Other	C,C2,V,M	Various	Various	5	7
Total				**308**	**242**

The valuation in 2017 amounted to EUR 308 (EUR 242) million against cost value of EUR 116 (EUR 110) million, with the revaluation of EUR 192 (EUR 132) million being taken to other comprehensive income. The change in PVO's value is mainly caused by increase in electricity prices. No deferred tax is appropriate as under Finnish tax regulations holdings above 10% are exempt from tax on disposal proceeds.

For information on the amount of electricity generated, purchased and sold, please see Stora Enso's **Sustainability Report 2017**, section Materials, water, and energy. Sustainability Report 2017 will be published during week 9.

Principal available-for-sale investments

	As at 31 December 2017			
EUR million	**Holding %**	**Number of Shares**	**Acquisition Cost**	**Fair Value**
Packages Ltd, Pakistan - listed security		5 396 650	4	21
Total Listed Securities			**4**	**21**
Pohjolan Voima Oy - unlisted security	15.6	5 073 972	116	308
Others - unlisted securities			10	10
Total Operative Securities			**126**	**318**
Total Available-for-Sale Investments at 31 December 2017			**130**	**339**
Total Available-for-Sale Investments at 31 December 2016			**125**	**295**

The difference of EUR 209 (EUR 170) million between the initial fair value at acquisition and reporting date market value of the available-for-sale investments represents the OCI reserve as shown in the Statement of changes in equity.

Note 15 Other non-current assets

	As at 31 December	
EUR million	**2017**	**2016**
Prepaid expenses and accrued income	18	24
Tax credit	17	13
Barcelona disposal receivable	-	2
Other non-current operative assets	15	18
Total	**50**	**57**

Note 16 Inventories

Accounting principles

Inventories are reported at lower of cost and net realisable value with the cost determined by the first-in first-out (FIFO) method or, alternatively, by the weighted average cost where it approximates FIFO. The cost of finished goods and work in progress comprises raw material, direct labour, depreciation, other direct costs and related production overhead but excludes interest expenses. Net realisable value is the estimated selling price in the ordinary course of business, less the costs of completion and sale.

Where market conditions result in the manufacturing costs of a product exceeding its net realisable value, a valuation allowance is made. Valuation allowances are also made for old, slow moving and obsolete finished goods and spare parts. Such valuation allowances are deducted from the carrying value of the inventories in the Consolidated statement of financial position.

	As at 31 December	
EUR million	**2017**	**2016**
Materials and supplies	308	332
Work in progress	81	77
Finished goods	649	651
Spare parts and consumables	279	282
Other inventories	15	15
Advance payments and cutting rights	97	102
Obsolescence allowance - spare parts and consumables	-94	-98
Obsolescence allowance - finished goods	-10	-9
Net realisable value allowance	-4	-6
Total	**1 321**	**1 346**

EUR 15 (EUR 14) million of inventory write-downs have been recognised as an expense. EUR 18 (EUR 7) million have been recognised as a reversal of previous write-downs.

Note 17 Receivables

Accounting principles

Trade receivables
Trade receivables are recognised initially at fair value and subsequently at their anticipated realisable value, with an estimate made for doubtful receivables based on an objective review of all outstanding amounts at the year end. Losses relating to doubtful receivables are recorded in the Consolidated income statement within other operating expenses. Trade receivables are included in current assets under current operative receivables.

Stora Enso uses factoring arrangements as one of the working capital management tools. Sold trade receivables are derecognised once significant related risks and rewards of ownership have been transferred.

Loan receivables
Loan receivables are non-derivative financial assets with fixed or determinable payments that are not quoted on an active market. They are recorded initially at fair value and subsequently measured at amortised cost which is subject to regular and systematic review as for collectability. If any loan receivable is estimated to be unrecoverable, an allowance is made for the shortfall between the carrying amount and the present value of the expected cash flows. Interest income on loan receivables is included in financial income. Loan receivables with a maturity of less than 12 months are included in current assets under interest-bearing receivables and those with maturities greater than 12 months, in non-current loan receivables.

Current operative receivables

	As at 31 December	
EUR million	**2017**	**2016**
Trade receivables	993	922
Allowance for doubtful receivables	-28	-51
Prepaid expenses and accrued income	119	121
TRS Hedges	-	3
Other receivables	235	278
Total	**1 319**	**1 273**

As at 31 December 2017, EUR 121 (EUR 116) million of trade receivables were overdue, for which no allowance has been made. These relate to a number of countries and unrelated customers that have no recent history of default. The age analysis of these trade receivables, and the net of allowance for doubtful receivables, is as follows:

Age analysis of trade receivables, net of allowance for doubtful receivables

	As at 31 December	
EUR million	**2017**	**2016**
Less than 30 days overdue	61	44
31 to 60 days overdue	41	10
61 to 90 days overdue	1	48
91 to 180 days overdue	2	3
Over 180 days overdue	16	11
Total: Overdue Accounts	**121**	116
Trade Receivables within their credit terms	844	755
Total	**965**	**871**

Change in credit losses amounted to a gain of EUR 7 (loss of EUR 11) million due to changes in the estimates of credit losses. The allowance for doubtful receivables decreased by EUR 23 (a decrease of EUR 2) million – see **Note 24** Financial risk management for details of customer credit risk management. All allowances are made on an individual basis and are regularly reviewed for changes in the financial positions of customers. If the Group has concerns regarding the financial status of a customer, an advance payment or an irrevocable letter of credit drawn from a bank is required. At the year end, the letters of credit awaiting maturity totalled EUR 17 (EUR 37) million.

At 31 December 2017, allowances related to overdue trade receivables totalled EUR 28 (EUR 51) million. The age analysis of the receivables included in the allowance for doubtful receivables is shown in the following table.

Age analysis of doubtful accounts

	As at 31 December	
EUR million	**2017**	**2016**
Less than 90 days	-	2
91 to 180 days	-	3
Over 180 days	28	46
Total	**28**	**51**

Stora Enso has entered into factoring agreements to sell trade receivables to accelerate cash conversion. These agreements resulted in full derecognition of receivables of a nominal value of EUR 355 (EUR 368) million by the end of the year. The continuing involvement of Stora Enso in the sold receivables was estimated as being insignificant.

Interest-bearing receivables

	As at 31 December	
EUR million	**2017**	**2016**
Derivatives	65	41
Loans to equity accounted investments	3	5
Other loan receivables	67	7
Total	**135**	**53**
Current Assets: Receivable within 12 months	80	46
Non-current Assets: Receivable after 12 months	55	7
Total	**135**	**53**

Annual interest rates for loan receivables at 31 December 2017 ranged from 0% (0%) to 8% (8%). Current interest-bearing receivables did not include any accrued interest at 31 December 2017.

Note 18 Shareholders' equity

Accounting principles

Dividend and capital repayments

Any dividend or capital repayment proposed by the Board is not deducted from distributable shareholders' equity until approved by the shareholders at the Annual General Meeting.

At 31 December 2017 shareholders' equity amounted to EUR 6 008 (EUR 5 806) million, compared to the market capitalisation on Nasdaq Helsinki of EUR 10 422 (EUR 8 085) million. The market values of the shares were EUR 13.20 (EUR 10.40) for A shares and EUR 13.22 (EUR 10.21) for R shares.

The A shares entitle the holder to one vote per share, whereas R shares entitle the holder to one vote per ten shares with a minimum of one vote, though the accountable par of both shares is the same. A shares may be converted into R shares at any time at the request of a shareholder. At 31 December 2017 the company's fully paid-up share capital as entered in the Finnish Trade Register was EUR 1 342 million (EUR 1 342 million). The current accountable par of each issued share is EUR 1.70 (EUR 1.70).

At the end of 2017, Directors and Group Leadership Team members owned 1 150 (150) A shares and 458 526 (435 390) R shares representing 0.02% of the total voting rights of the company. Full details of Director and Executive interests are shown in **Note 7** Board and executive remuneration. A full description of company share award programmes is shown in **Note 21** Employee variable compensation and equity incentive schemes. However, none of these have any impact on the issued share capital.

Change in share capital and number of shares

	A shares	R shares	Total
At 1 January 2016	**176 532 090**	**612 087 897**	**788 619 987**
Conversion of A shares to R shares 15 Jan	-25 000	25 000	-
At 31 December 2016	**176 507 090**	**612 112 897**	**788 619 987**
Conversion of A shares to R shares 15 Feb	-20	20	-
Conversion of A shares to R shares 15 May	-750	750	-
Conversion of A shares to R shares 15 Aug	-40 000	40 000	-
Conversion of A shares to R shares 14 Sep	-20 000	20 000	-
Conversion of A shares to R shares 16 Oct	-34 000	34 000	-
Conversion of A shares to R shares 14 Dec	-20 000	20 000	-
At 31 December 2017	**176 392 320**	**612 227 667**	**788 619 987**
Number of votes as at 31 December 2017	**176 392 320**	**61 222 767**[1]	**237 615 087**
Share Capital at 31 December 2017, EUR million	**300**	**1 042**	**1 342**
Share Capital at 31 December 2016, EUR million	**300**	**1 042**	**1 342**

[1] R share votes are calculated by dividing the number of R shares by 10.

The issued shares by 16 March 2018 will represent the total shares eligible to vote at the forthcoming Annual General Meeting.

Note 19 Non-controlling interests

Accounting principles

Non-controlling interests are presented within the equity of the Group in the Consolidated statement of financial position. The proportionate shares of profit or loss attributable to non-controlling interests and to equity holders of the parent company are presented in the Consolidated income statement after the profit for the period. Transactions between non-controlling interests and Group shareholders are transactions within equity and are thus shown in the Statement of changes in equity. The measurement type of non-controlling interests is decided separately for each acquisition.

Non-controlling interests

	Year Ended 31 December	
EUR million	**2017**	**2016**
At 1 January	62	125
Disposals	-	-4
Share of profit for the period	-11	-56
Share of other comprehensive income	-3	-3
Dividends	-1	-
At 31 December	**47**	**62**

Principal non-controlling interests

		As at 31 December		
		2017	**2017**	**2016**
Company	**Principal Place of Business**	**Proportion of Ownership Interests Held by Non-controlling Interests, %**	**EUR million**	
Stora Enso Pulp and Paper Asia AB Group[1]	Sweden and China	See separate table below	37	54
Stora Enso Inpac Packaging Group	China	10.00	10	7
Stora Enso Huatai Paper Co Ltd	China	40.00	-5	-7
Others	-		5	8
			47	**62**

[1] Consist of non-controlling interests in Guangxi Integrated Project and Operations

Non-controlling interests in Stora Enso Pulp and Paper Asia AB Group

		As at 31 December 2017			As at 31 December 2016		
Company	**Principal Place of Business**	**Direct-% of NCI**	**Indirect-% of NCI**	**Total-% of NCI**	**Direct-% of NCI**	**Indirect-% of NCI**	**Total-% of NCI**
Stora Enso Pulp and Paper Asia AB	Sweden and China	5.79	-	5.79	5.79	-	5.79
Guangxi Stora Enso Forestry Co Ltd	China	5.00	5.50	10.50	5.00	5.50	10.50
Stora Enso (Guangxi) Packaging Company Ltd	China	15.00	4.92	19.92	15.00	4.92	19.92
Stora Enso (Guangxi) Forestry Company Ltd	China	15.00	4.92	19.92	15.00	4.92	19.92

In 2017 non-controlling interest in Stora Enso decreased by EUR 15 million primarily due to negative result in Stora Enso Pulp and Paper Asia AB Group. Net loss in Stora Enso Pulp and Paper Asia AB Group was EUR 75 (EUR 347) million. Net result improved by EUR 272 million compared to last year mainly due to the start-up of the Beihai consumer board mill in China.

On 31 March 2016, Stora Enso completed the divestment of its 80% shareholding in the Arapoti magazine paper mill in Paraná, Brazil, to Papeles Bio Bio, a Chilean paper producer. The final consideration for the shares was EUR 15 million. The transaction reduced the share of non-controlling interests in the Group by EUR 4 million.

Summarised financial information in respect of the subsidiaries that have material non-controlling interests is set out below.

Stora Enso Pulp and Paper Asia AB Group

EUR million	2017	2016
Non-current assets	939	1 007
Current assets	216	180
Shareholders' equity attributable to the owners of the parent	131	202
Non-controlling interests[1]	37	54
Total Equity	**168**	**256**
Non-current liabilities	475	553
Current liabilities	512	378
Sales	289	114
Net loss for the year	-75	-347
Attributable to:		
Owners of the parent	-61	-291
Non-controlling interests	-14	-56
Net Loss for the Year	**-75**	**-347**
Other comprehensive income	-13	-21
Total Comprehensive Income Attributable to:		
Owners of the parent	-71	-308
Non-controlling interests	-17	-60
Total Comprehensive Income	**-88**	**-368**
Net cash outflow from operating activities	-61	-110
Net cash outflow from investing activities	-81	-324
Net cash inflow from financing activities	140	279
Net Cash Outflow/Inflow	**-2**	**-155**

[1] No dividends were paid to non-controlling interests in 2017 or 2016.

Note 20 Post-employment benefits

Accounting principles

Employee benefits

The Group operates a number of defined benefit and contribution plans throughout the world, the assets of which are generally held in separate trustee administered funds. Such pension and post-retirement plans are generally funded by payments from employees and by the relevant group companies, taking into account the recommendations of independent qualified actuaries. Employer contributions to the defined contribution pension plans are charged to the Consolidated income statement in the year they relate to.

For defined benefit plans, accounting values are assessed using the projected unit credit method. Under this method, the cost of providing pensions is charged to the Consolidated Income Statement to spread the regular cost over the service lives of employees in accordance with the advice of qualified actuaries who carry out a full valuation of the plan every year in all major pension countries. The pension obligation is measured as the present value of the estimated future cash outflows using interest rates of highly rated corporate bonds or government securities, as appropriate, that match the currency and expected duration of the related liability.

The Group immediately recognises all actuarial gains and losses arising from defined benefit plans directly in equity, as disclosed in its Consolidated Statement of Comprehensive Income. Past service costs are identified at the time of any amendments to the plans and are recognised immediately in the Consolidated income statement regardless of vesting requirements. In the group's Consolidated statement of financial position, the full liability for all plan deficits is recorded.

The Group has established a number of pension and other benefit plans for its operations throughout the world, the cost of which amounted to EUR 166 (EUR 165) million in 2017, as shown in **Note 6** Personnel expenses. The majority of the plans are defined contribution schemes, the charge for which amounted to EUR 154 (EUR 153) million.

In accordance with their respective pension arrangements, Group Leadership Team members may retire at 65 years of age with pensions consistent with local practices in their respective home countries. The retirement age for other management teams in companies in the Stora Enso group follows local law and practices, though some management team members have the right to retire earlier, between 60 and 65 years. The retirement age for other staff either follows national retirement ages or is determined by local labour agreements. In the latter case, there may be certain pre-retirement liabilities accruing to the company to cover the income of the early retirees between the age at which they ceased working and the national retirement age.

Stora Enso's total defined benefit obligations for current and former members of staff amount to EUR 1 139 (EUR 1 223) million, though assets of EUR 762 (EUR 787) million have been put aside in various pension schemes to cover these liabilities. The net funding position of the defined benefit plans is shown in full in the Statement of Financial Position and amounted to EUR 377 million in 2017, a decrease of EUR 59 million on the previous year's liability of EUR 436 million. The decrease was mainly caused by experience gains in both assets and liabilities totalling EUR 48 million. Interest costs are entered under financial costs. The 2017 defined benefit expense in the Income Statement amounts to EUR 19 million and the actuarial gains recorded in other comprehensive income amount to EUR 61 million. The 2016 defined benefit expense in the Income Statement amounted to EUR 20 million and the actuarial losses recorded in other comprehensive income amounted to EUR 62 million.

Actuarial gains/losses recognised directly in equity

	Year Ended 31 December	
	Total Operations	
EUR million	**2017**	**2016**
Actuarial gains/losses	61	-62
Deferred tax thereon	-10	15
Total	**51**	**-47**

Group policy for funding deficits is intended to satisfy local statutory funding requirements for tax deductible contributions together with adjusting the discount factors used in the actuarial calculations for market rates. However, the emphasis of the Group is to provide defined contribution schemes for its post-employment benefits, thus all aspects of the provision and accounting for defined benefit schemes are evaluated. The net liability in the Group Statement of financial position reflects the actual deficits in the defined benefit plans. Details of the pension arrangements, assets and investment policies in the Group's main operating countries are shown below.

Finland

The Group funds its Finnish pension obligations mainly through defined contribution schemes, the charge in the Income Statement being EUR 72 (EUR 72) million. By contrast, the remaining obligations covered by defined benefit schemes resulted in a charge of EUR 1 (EUR 1) million excluding finance costs. Pension cover since 2001 has been organised entirely through local insurance companies. The total defined benefit obligation amounts to EUR 318 (EUR 342) million and the assets to EUR 294 (EUR 323) million, leaving a net liability of EUR 24 (EUR 19) million. As state pensions in Finland provide by far the greatest proportion of pensions, Group liabilities are proportionately much smaller than in comparable countries.

Plan assets in Finland are managed by insurance companies. Details of the exact structure and investment strategy surrounding plan assets are not available to participating employers as the assets actually belong to the insurance companies themselves. The assets are managed in accordance with EU regulations, and also national requirements, under which there is an obligation to pay guaranteed benefits irrespective of market conditions.

Germany

German pension costs amounted to EUR 7 (EUR 9) million, of which EUR 6 (EUR 8) million related to defined contribution schemes and EUR 1 (EUR 1) million to defined benefits excluding finance costs. The total defined benefit obligation is EUR 258 (EUR 284) million, nearly all of which is unfunded as total assets come to only EUR 7 (EUR 7) million. The net liability decreased from EUR 277 million to EUR 251 million. The decrease in net liability arose mainly from an increase in the discount rate and changes in experience. Defined benefit pension plans are mainly accounted for in the Statement of financial position through book reserves with some minor plans using insurance companies or independent trustees. Retirement benefits are based on years worked and salaries received during the pensionable service and the commencement of pension payments are linked to the national pension scheme's retirement age. Pensions are paid directly by the companies themselves to their former employees, this amounting to cash costs of EUR 0 (EUR 1) million; the security for the pensioners is provided by the legal requirement that the book reserves held in the Statement of financial position are insured up to certain limits.

Sweden

In Sweden, most blue-collar workers are covered by defined contribution schemes, the charge in the Income statement being EUR 56 (EUR 54) million, with defined benefit schemes covering mainly white-collar staff.

Total defined benefit obligations amounted to EUR 352 (EUR 378) million and the assets came to EUR 298 (EUR 295) million, leaving a net liability of EUR 54 million at the year end, compared with a net liability of EUR 83 million the year before. This reduction in net liability arose from an increase in the discount rate and changes in financial assumptions and experience. Stora Enso has undertaken to pay all local legal pension liabilities for the main ITP scheme to the foundation, thus the remaining liability relates to other small schemes.

The long-term investment return target for the foundation is a 3% real return after tax. Stora Enso's Swedish pension fund conducts an annual asset/liability study to optimise its risk parameters.

Other countries

Total defined benefit obligations in the remaining countries amounted to EUR 211 (EUR 219) million and the assets to EUR 163 (EUR 162) million. The net liability came to EUR 48 (EUR 57) million. Obligations and assets were material only in the United Kingdom, at EUR 145 (EUR 150) million and EUR 129 (EUR 127) million, respectively, leaving a net liability of EUR 16 (EUR 23) million at the end of 2017. The reduction in net liability arose from changes in actuarial assumptions.

Group

Net defined benefit obligation reconciliation

	Year Ended 31 December	
EUR million	**2017**	**2016**
Present Value of Defined Benefit Obligation		
Defined benefit obligation at 1 January	1 223	1 203
Translation difference	-17	-35
Interest on liabilities	20	28
Current service cost	13	12
Actuarial gains and losses on defined benefit obligation arising from changes in demographic assumptions	-3	-
Actuarial gains and losses on defined benefit obligation arising from changes in financial assumptions	-10	118
Actuarial gains and losses on defined benefit obligation arising from experience adjustments	-24	-19
Benefit payments	-63	-64
Net disposals/acquisitions	-1	-20
Other	1	-
Defined benefit obligation at 31 December	**1 139**	**1 223**
Fair Value of Plan Asset		
Fair value of plan asset at 1 January	-787	-825
Translation difference	13	33
Expected return on plan assets	-14	-20
Actuarial gain/loss on plan assets	-24	-37
Employer contributions	3	14
Benefit payments	47	47
Net disposals/acquisitions	-	1
Fair value of plan asset at 31 December	**-762**	**-787**
Net Defined Benefit Obligation	**377**	**436**

Amounts Recognised on the Statement of Financial Position – Defined Benefit Plans

	As at 31 December					
	Total Defined Benefit Plans		**Defined Benefit Pension Plans**		**Other Post-Employment Benefits**	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Present value of funded obligations	851	909	851	908	-	1
Present value of unfunded obligations	288	314	264	289	24	25
Defined benefit obligations (DBO)	1 139	1 223	1 115	1 197	24	26
Fair value of plan assets	762	787	762	786	-	1
Net Liability in Defined Benefit Plans	**377**	**436**	**353**	**411**	**24**	**25**

Amounts Recognised in the Income Statement

	Year Ended 31 December					
	Total Defined Benefit Plans		**Defined Benefit Pension Plans**		**Other Post-Employment Benefits**	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Operating costs						
Current service cost	13	12	12	12	1	-
Finance cost						
Net interest on net defined benefit liability	6	8	6	7	-	1
Cost recognised in Income Statement	**19**	**20**	**18**	**19**	**1**	**1**

Statement of Actuarial Gains and Losses

	Year Ended 31 December	
EUR million	**2017**	**2016**
Gain/loss on pension scheme assets	24	37
Gain/loss arising on pension scheme liabilities	37	-99
Total Gain/loss	**61**	**-62**

Defined Benefit Plans: Country Assumptions Used in Calculating Benefit Obligations

	Year Ended 31 December					
	Finland		**Germany**		**Sweden**	
	2017	**2016**	**2017**	**2016**	**2017**	**2016**
Discount rate %	1.4	1.2	1.5	1.2	2.5	2.2
Future salary increase %	2.5	2.6	2.5	2.5	2.7	2.5
Future pension increase %	1.8	1.5	1.8	1.8	1.8	1.6
Average current retirement age	64.0	63.9	63.0	63.0	65.0	65.0
Weighted average life expectancy	87.0	89.0	86.0	85.0	89.3	89.3

Sensitivity of the Defined Benefit Pension Obligation

	Impact on Defined Benefit Obligation		
	Change in assumption	**Increase in assumption**	**Decrease in assumption**
Discount rate	0.50%	Decrease by 6.7%	Increase by 7.5%
Salary growth rate	0.50%	Increase by 1.5%	Decrease by 1.3%
Pension growth rate	0.50%	Increase by 5.7%	Decrease by 5.3%

	Increase by 1 year in assumption	**Decrease by 1 year in assumption**
Life expectancy	Increase by 3.4%	Decrease by 3.4%

Interest rate risk: The obligations are assessed using market rates of high-quality corporate or government bonds to discount the obligations and are therefore subject to any volatility in the movement of the market rate. The net interest income or expense recognised in profit and loss are also calculated using the market rate of interest.

Mortality risk: In the event that members live longer than assumed, the obligations may be understated originally and a deficit may emerge if funding has not adequately provided for the increased life expectancy.

Duration of Pension Plans

Years	**Finland**	**Sweden**	**Germany**	**UK**
At 31 December 2016	10.0	15.8	13.5	18.5
At 31 December 2017	10.0	15.5	12.9	17.2

Defined Benefit Plan Summary by Country as at 31 December 2017

	As at 31 December 2017				
EUR million	**Finland**	**Germany**	**Sweden**	**Other**	**Total**
Present value of funded obligations	318	18	331	184	851
Present value of unfunded obligations	-	240	21	27	288
Defined benefit obligations (DBO)	318	258	352	211	1 139
Fair value of plan assets	294	7	298	163	762
Net liability in the defined benefit plans	24	251	54	48	377
Net Liability in the Balance Sheet	**24**	**251**	**54**	**48**	**377**
Represented by					
Defined benefit pension plans	24	251	54	24	353
Other post-employment benefits	-	-	-	24	24
Net Liability in the Balance Sheet	**24**	**251**	**54**	**48**	**377**

Defined Benefit Plan Summary by Country as at 31 December 2016

	As at 31 December 2016				
EUR million	**Finland**	**Germany**	**Sweden**	**Other**	**Total**
Present value of funded obligations	342	19	356	192	909
Present value of unfunded obligations	-	265	22	27	314
Defined benefit obligations (DBO)	342	284	378	219	1 223
Fair value of plan assets	323	7	295	162	787
Net liability in the defined benefit plans	19	277	83	57	436
Net Liability in the Balance Sheet	**19**	**277**	**83**	**57**	**436**
Represented by					
Defined benefit pension plans	19	277	83	32	411
Other post-employment benefits	-	-	-	25	25
Net Liability in the Balance Sheet	**19**	**277**	**83**	**57**	**436**

Plan Assets

	As at 31 December			
	2017		**2016**	
EUR million	**Value**	**%**	**Value**	**%**
Equity	261	34.2	268	34.0
Government bonds	40	5.3	82	10.4
Corporate bonds	211	27.7	258	32.8
Debt	251	33.0	340	43.2
Property	66	8.6	68	8.7
Cash	38	5.0	53	6.8
Others	146	19.2	58	7.3
Total Pension Fund Assets	**762**	**100.0**	**787**	**100.0**

Plan assets do not include any real estate or other assets occupied by the group or the Company's own financial instruments. The breakdown of Finnish pension assets EUR 294 (323) million is not disclosed separately as actual asset allocations can only be estimated based on known target values published by the insurance companies concerned.

The two main financial factors affecting group pension liabilities are changes in interest rates and inflation expectations, so the aim of asset investment allocations is to neutralise these effects and maximise returns.

In 2018 contributions of EUR 21 million are expected to be paid.

In 2017 reimbursements of EUR 3 (EUR 14) million were paid.

Note 21 Employee variable compensation and equity incentive schemes

Accounting principles

Share awards

The costs of all employee-related share-based payments are charged to the Consolidated Income Statement as personnel expenses over the vesting period. The share programmes are hedged using Total Return Swaps (TRS) which are settled with cash payments, allowing the company to receive cash compensation to partially offset any change in the share price between the grant and settlement dates.

The fair value of employee services received in exchange for share awards is accounted for in a manner that is consistent with the method of settlement. The group will withhold an amount from an employee's compensation to satisfy the employee's tax liability incurred as a result of the transaction. This is done by reducing the number of shares issued to the employee. This tax-related amount is accounted for as a cash-settled share-based compensation. The number of shares delivered to the employee is accounted for as an equity-settled transaction. The resulting cash-settled liability related to the expected tax to be paid is remeasured at each reporting date at its fair value using estimates of the number of share awards that are expected to be issued and the latest fair valuations by using the Stora Enso R share year-end closing price, adjusted for the present value of expected dividends, with all changes recognised immediately in the Income Statement. The equity-settled share awards (net of tax), are measured at the fair value of the equity instruments on the grant date, and are adjusted for the present value of expected dividends. The fair value of the equity-settled share-based payments determined on the grant date is expensed on a straight-line basis over the vesting period, based on the estimate of equity instruments that will eventually vest, with a corresponding increase in equity.

Short Term Incentive (STI) programmes

Salaries for senior management are negotiated individually. Stora Enso has incentive plans that take into account the performance, development and results of both business units and individual employees. This performance-based variable compensation system is based on profitability as well as on attaining key business targets.

Group Executives, as well as division and business unit management have STI programmes in which the payment is calculated as a percentage of the annual base salary with a maximum level ranging from 8% to 75%. Non-management employees participate in an STI programme with a maximum incentive level of 7%. All incentives are discretionary. These performance-based programmes cover most employees globally, where allowed by local practice and regulations. For the performance year 2017, the annual incentive programmes were based on financial targets as well as individually set key targets. The financial success metrics in the STI programme are: Operational EBITDA and Operative Working Capital to sales.

Long Term Incentive (LTI) programmes

Starting in 2004, the Board approved the implementation of two share-based programmes (Restrictive and Performance Share programmes). From 2005 to 2017, new share-based programmes have been launched each year. Since 2009, new long-term incentive programmes for executives have mainly been performance share programmes. The 2009 to 2013 Performance Share programmes vested in portions over three years, based on annually defined targets set by the Remuneration Committee. The 2014 to 2017 programmes have three year targets and vest in only one portion after three years. Previous programmes, launched in 2009 to 2011 vested up to an absolute maximum vesting level of 150% of the number of shares granted, provided that the result of the performance criterion exceeded the target. In programmes since 2012, the absolute maximum vesting level is 100% of the number of shares granted.

Three quarters (75%) of the opportunity under the 2014 to 2017 programmes are in Performance Shares, where shares will vest in accordance with performance criteria proposed by the Remuneration Committee and approved by the Board of Directors. The financial success metric in the 2017 Performance Share Plan is the 3-year Economic Value Added (EVA) for the Stora Enso Group. One quarter (25%) of the opportunity under the 2014 to 2017 programmes are in Restricted Shares, for which vesting is only subject to continued employment.

Outstanding restricted and performance share opportunities are shown below.

Share awards at 31 December 2017

	Estimated Delivery of Outstanding Restricted and Performance Share Awards at Year End			
Number of shares	**2018**	**2019**	**2020**	**Total**
2015 programme	1 232 596			1 232 596
2016 programme		1 036 286		1 036 286
2017 programme			1 152 042	1 152 042
Total	**1 232 596**	**1 036 286**	**1 152 042**	**3 420 924**

The costs of the Stora Enso Share-based Programmes are recognised as costs over the vesting period, which is the period between the grant and vesting. The total impact of share-based programmes in the Income statement amounted to an expense of EUR 10 (EUR 6) million, all related to restricted and performance share awards, of which an expense of EUR 3 (EUR 2) million relates to equity-settled share awards programmes. A year-end liability of EUR 11 (EUR 8) million is shown in non-current operative liabilities and is all related to the restricted and performance share awards.

The share programmes may be hedged using total return swaps (TRS) which are settled with cash payments, allowing the Company to receive cash compensation to partially offset any change in the share price between the grant and settlement dates. Group TRS instruments do not qualify for hedge accounting and therefore periodic changes to their fair value are recorded in the Income statement in operative costs alongside the share-based programme costs to which they relate.

At the year end, there were no TRS instruments outstanding (2 700 000 in 2016) covering underlying Stora Enso Oyj R shares and therefore the recorded net fair value of TRS contracts was EUR 0 (asset EUR 3) million. During 2017, a gain of EUR 2 (EUR 6) million coming from fair valuation changes in the TRS was recorded in the Income statement.

Note 22 Other provisions

Accounting principles

Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made. Environmental provisions for site reinstatement are made when a project starts production with the capitalised cost of the provision being depreciated over the useful life of the asset. Provisions are discounted back to their current net present value if the effect of the time value of money is material.

Environmental obligations

Environmental expenditures resulting from the remediation of an existing condition caused by past operations, and which do not contribute to current or future revenues, are expensed as incurred. Environmental liabilities are recorded when it is probable, based on current interpretations of environmental laws and regulations, that a present obligation has arisen and the amount of such liability can be reliably estimated.

Restructuring obligations

A restructuring provision is recognised in the period in which the Group becomes legally or constructively committed to the plan. The relevant costs are those that are incremental to, or incurred as a direct result of, the exit plan, or are the result of a continuing contractual obligation with no ongoing economic benefit, or represent a penalty incurred to cancel the obligation.

Other obligations

Other obligatory provisions are recognised regarding different legal or constructive obligations as guarantees to customers, ongoing lawsuits, claims or similar.

Other provisions

EUR million	Environmental	Restructuring	Other Obligatory	Total Provisions
Carrying Value at 1 January 2016	**91**	**55**	**14**	**160**
Translation difference	-2	-	4	2
Company disposed	-7	-6	-7	-20
Charge in Income Statement				
New provisions	11	13	1	25
Increase in existing provisions	17	1	3	21
Reversal of existing provisions	-1	-3	-3	-7
Payments	-9	-36	-2	-47
Carrying Value at 31 December 2016	**100**	**24**	**10**	**134**
Translation difference	-2	-3	-	-5
Charge in Income Statement				
New provisions	8	17	-	25
Increase in existing provisions	14	1	3	18
Reversal of existing provisions	-1	-2	-	-3
Payments	-11	-20	-4	-35
At 31 December 2017	**108**	**17**	**9**	**134**
Allocation between Current and Non-current Liabilities				
Current liabilities: Payable within 12 months	8	13	2	23
Non-current liabilities: Payable after 12 months	100	4	7	111
Total at 31 December 2017	**108**	**17**	**9**	**134**

Environmental obligation

Provisions for environmental remediation amounted to EUR 108 million at 31 December 2017, which was a net increase of EUR 8 million compared with 31 December 2016, mainly due to increase in dismantling provision of EUR 7 million related to a closed operation at Oulu Mill and needed coverage of an un-capped landfill in Imatra Mill of EUR 4 million. Other provision increases are related to closed operation sites and old landfill areas.

Details of the principal provisions are:

- Following an agreement between Stora Enso and the City of Falun, the Group is obliged to purify runoff from the Kopparberg mine before releasing the water into the environment. The provision at year end amounted to EUR 43 (EUR 47) million.
- The total environmental provision in Finland amounted to EUR 22 (EUR 11) million. The increase of EUR 11 million compared with 31 December 2016 is mainly caused by above mentioned Oulu and Imatra provisions. The largest provisions relate to the dismantling provision of EUR 12 (EUR 5) for a closed operation at Oulu Mill and to the cleaning of aerated water basin at closed Kemijärvi Pulp Mill of EUR 5 (EUR 6) million. Other environmental provisions include EUR 1 (EUR 1) million related to the site of the former Summa Mill.
- Skoghall Mill site contains ground pollutants that must be removed. The provision for this at year end amounted to EUR 15 (EUR 16) million.
- Hylte Mill and the Hylte Commune have a contract on the restoration and leakage water handling. This provision amounted to EUR 7 (EUR 5) million.
- Stora Enso Pulp AB has been removing mercury from the harbour basin at Skutskär for a number of years in co-operation with local authorities. In addition, the Company is obliged to upgrade an old landfill previously used by the mill to comply with revised environmental regulations. At year end Stora Enso Pulp AB had environmental provisions of EUR 6 (EUR 6) million.
- Baienfurt Mill real estate in Germany was divested during 2010 and there is a remaining environmental obligation related to landfills that were not disposed. This environmental provision amounted to EUR 5 (EUR 6) million.

Restructuring provisions

The Group has undergone major restructuring in recent years, from divestments to mill closures and administrative cost-saving programmes. New restructuring provisions by divisions are: Paper EUR 12 million, Consumer Board EUR 3 million, Wood Products EUR 1 million and Biomaterials EUR 1 million.

The liability at the end of 2017 for restructuring provisions amounted to EUR 17 (EUR 24) million and covered the costs of closing down operations, demolition, clearance and redundancy costs for reducing staff numbers.

The total cash payments made during the year in respect of established restructuring provisions amounted to EUR 20 (EUR 36) million.

In February 2017 Stora Enso announced a plan to permanently shut down paper machine 8 at Kvarnsveden Mill in Sweden with an annual capacity of 100 000 tonnes of uncoated magazine paper due to structural weakening of magazine paper demand in Europe. The increase in provision amounted to EUR 11 million.

In June 2016 Stora Enso announced the divestment of the Kabel Coated Mechanical Paper Mill in Germany to a German based investor group. The new provision amounted to EUR 2 million.

In September 2016 Packaging Solutions announced plans to consolidate manufacturing of corrugated packaging in Finland to improve profitability and competitiveness and to close Heinola Corrugated Mill permanently. The provision amounted to EUR 3 million.

Details of intangible asset and property, plant and equipment impairments relating to restructurings can be found in **Note 10** Depreciation, amortisation and impairment charges.

Other obligatory provisions

Other obligatory provisions amounted to EUR 9 million at 31 December 2017, which is a decrease of EUR 1 million compared with 31 December 2016.

Note 23 Operative liabilities

Non-current operative liabilities

	As at 31 December	
EUR million	**2017**	**2016**
Post-employment benefit provisions	377	436
Other provisions	111	114
Share-based payments	11	8
Other payables	41	53
Total	**540**	**611**

Current operative liabilities

	As at 31 December	
EUR million	**2017**	**2016**
Trade payables	1 337	1 239
Payroll and staff-related accruals	240	227
Accrued liabilities and deferred income	200	180
Current portion of provisions	23	20
Advances received	19	14
Other payables	92	114
Total	**1 911**	**1 794**

Note 24 Financial risk management

Risk management principles and process

Stora Enso is exposed to several financial market risks that the Group is responsible for managing under policies approved by the Board of Directors. The objective is to have cost-effective funding in Group companies and manage financial risks using financial instruments to reduce earnings volatility. The main exposures for the Group are interest rate risk, currency risk, funding risk and commodity price risk, especially for fibre and energy.

The Stora Enso Group Financial Risk Policy governs all financial transactions in Stora Enso. This policy and any future amendments take effect once they are approved by the Board of Directors and all policies covering the use of financial instruments must comply with it. The major financial market risks are detailed below. Group's joint operations companies operate under their own financial risk policies, which may not be fully similar to Group's policies.

Interest rate risk

Fluctuations in interest rates affect the interest expense of the Group. The Group's aim is to keep interest costs stable. The Group's aggregate duration should not exceed the average loan maturity, but should aim towards a longer duration. A duration above the average loan maturity is approved by the Board of Directors.

As of 31 December 2017, one percentage point parallel change up or down in interest rates would impact annual net interest expenses by EUR 5 (EUR 5) million, assuming that the duration and the funding structure of the Group remain constant throughout the year. This simulation calculates the interest effect of a 100 basis point parallel shift in interest rates on all floating rate instruments from their next reset date to the end of the year. In addition, all short-term loans maturing during the year are assumed to be rolled over on maturity to year end using the new higher interest rate.

The total Group floating rate net interest-bearing liability position, excluding cash and cash equivalents but including floating legs of interest rate swaps, amounts to some EUR 0.7 (EUR 0.7) billion. The average interest reset period for Group net interest-bearing liabilities, including all interest rate derivatives but excluding cash and cash equivalents, is some 4.2 (3.4) years. A one percentage point parallel change up or down in interest rates would also result in gains or losses of EUR 13 (EUR 15) million before taxes in Cash flow hedge reserve in OCI regarding interest rate swaps under cash flow hedge accounting. **Note 27** Derivatives summarises the nominal and fair values of the outstanding interest rate derivative contracts.

Currency transaction risk

The Group is exposed to currency risk arising from exchange rate fluctuations against its reporting currency, the euro. The major currency transaction risk is the impact of exchange rate fluctuations on the group Income statement, which is the effect of currency rates on expected future cash flows. The Group policy to mitigate this is to hedge 50% of the forecast major currency cash flows for 12 months.

The principal foreign exchange transaction exposure comprises both the geographical location of Stora Enso production facilities and the sourcing of raw material and sales outside the euro area, mainly denominated in Swedish crowns, US dollars and British pounds.

The table below presents the estimated net operative foreign currency exposure for the main currencies, for the next 12 months and the related hedges in place as at 31 December, retranslated using year end exchange rates. The net operative receivables and payable exposures, representing the balances as at 31 December, include foreign currency exposures generated by external and intercompany transactions, in line with the requirements of IFRS 7. However, in practice mainly external exposures have been hedged through currency hedges. A positive amount of exposure in the table represents an estimated future receivable of a foreign currency amount.

Operative foreign currency exposure

	As at 31 December 2017					As at 31 December 2016				
EUR million	**SEK**	**USD**	**GBP**	**BRL**	**CZK**	**SEK**	**USD**	**GBP**	**BRL**	**CZK**
Estimated annual net cash flow exposure	-960	1 260	360	-	-180	-870	1 290	320	-	-180
Cash flow hedges next 12 months	510	-630	-180	-	60	450	-660	-170	-	80
Estimated Annual Net Cash Flow Exposure, Net of Hedges	**-450**	**630**	**180**	**-**	**-120**	**-420**	**630**	**150**	**-**	**-100**
Hedging Percentage as at 31 December for Next 12 Months	**53%**	**50%**	**50%**	**-**	**33%**	**52%**	**51%**	**53%**	**-**	**44%**
Translation exposure in Income Statement[1]	**-150**	**-190**	**10**	**-120**	**-**	**-300**	**-230**	**10**	**-150**	**10**
Operative receivables and payables exposure	56	175	27	-17	-28	35	112	19	-8	-26
Currency hedges	50	-138	-33	-	-	64	-146	-24	-	-
Statement of Financial Position Exposure, Net of Hedges	**106**	**37**	**-6**	**-17**	**-28**	**99**	**-34**	**-5**	**-8**	**-26**
Estimated Annual Operative Exposure, Net of Hedges	**-494**	**477**	**184**	**-137**	**-148**	**-621**	**366**	**155**	**-158**	**-116**

[1] Includes unhedged sales, costs and depreciation invoiced or expensed in the domestic currency of non-euro based entities, retranslated using year end exchange rates.

The table below includes the estimated effect on annual Operating Profit of a strengthening in EUR versus SEK, USD, GBP and CZK by 5% and versus BRL by 10%, as reasonably possible changes in rates, measured against year end closing rates. A corresponding decrease in the exchange rates would have an approximately equal opposite impact. A negative amount in the table reflects a potential net loss in the Income statement or Equity and, conversely, a positive amount reflects a potential net gain. In practice, the actual foreign currency results may differ from the sensitivity analysis presented below since the Income Statements of subsidiaries with functional currencies other than the euro are translated into the Group reporting currency using the average exchange rates for the year, whereas the Statements of financial position of such subsidiaries, including currency hedges, trade receivables and payable, are translated using the exchange rates at the reporting date.

The calculation includes currency hedges and assumes that no changes other than a single currency exchange rate movement have taken place. The currency effects are based on estimated operative foreign currency flows for the next twelve months, hedging levels at the year end and the assumption that the currency cash flow hedging levels, translation exposure in Income statement and all other variables will remain constant during the next twelve months. Hedging instruments include foreign exchange forward contracts and foreign exchange options. Indirect currency effects with an impact on prices and product flows, such as a product becoming cheaper to produce elsewhere, have not been considered in this calculation.

Estimated currency effects of strengthening of EUR

	As at 31 December 2017					As at 31 December 2016				
EUR million	**SEK**	**USD**	**GBP**	**BRL**	**CZK**	**SEK**	**USD**	**GBP**	**BRL**	**CZK**
Currency change versus EUR	-5%	-5%	-5%	-10%	-5%	-5%	-5%	-5%	-10%	-5%
Effect on estimated annual net cash flow and translation exposure	56	-54	-19	12	9	59	-53	-17	15	9
Effect on hedging reserve before taxes as at year end[1]	-26	32	9	-	-3	-23	33	9	-	-4
EBIT impact as at year end[2]	-5	-2	-	2	1	-5	2	-	1	1
Estimated Annual EBIT Impact[3]	**25**	**-24**	**-10**	**14**	**7**	**31**	**-18**	**-8**	**16**	**6**

[1] The effect on hedging reserve (other comprehensive income) before taxes at year end is related to the fair value change in derivatives contracts qualifying as cash flow hedges of highly probable forecast cash flows.
[2] The Operating Profit impact as at year end represents the estimated currency effect related to operative payables and receivables, and the net of hedges.
[3] The estimated annual Operating Profit impact includes currency effects in respect of operative exposures in the Statement of Financial Position, forecast cash flows and related hedges and translation exposure in Income Statement.

The table below presents the financial foreign currency exposure and the related hedges in place as at 31 December for the main currencies. Net debt includes loan payables and related interest rate derivatives, net of loan receivables and cash and cash equivalents. The currency derivatives mainly hedge financial exposures in the Statement of financial position and from time to time they also forecast cash flows not qualifying under hedge accounting. These forecast cash flows are not included in the below table. A negative amount of exposure in the table represents a net payable of a foreign currency amount.

Additionally, the table includes the estimated effect on the Income statement of a strengthening in the EUR versus SEK, USD, CNY and PLN by 5% and versus BRL by 10%, as reasonably possible changes in rates, measured against year-end closing rates. A corresponding decrease in the exchange rates would have an approximately equal opposite impact. A negative amount in the table reflects a potential net loss in the Income statement and, conversely, a positive amount reflects a net potential gain. In practice, the actual foreign currency results may differ from the sensitivity analysis below as the exposure amounts may change during the year.

Financial foreign currency exposure and estimated currency effects in income statement

	As at 31 December 2017					As at 31 December 2016				
EUR million	**SEK**	**USD**	**CNY**	**PLN**	**BRL**	**SEK**	**USD**	**CNY**	**PLN**	**BRL**
Net debt excluding hedges	420	-347	472	161	-	655	-470	538	199	61
Currency hedges	-530	-28	-86	-	-	-754	-54	-96	-	-
Net Financial Exposure	**-110**	**-375**	**386**	**161**	**-**	**-99**	**-524**	**442**	**199**	**61**
Currency change versus EUR	-5%	-5%	-5%	-5%	-10%	-5%	-5%	-5%	-5%	-10%
Effect in the Income Statement	**6**	**19**	**-19**	**-8**	**-**	**5**	**26**	**-22**	**-10**	**-6**

Currency translation risk

Translation risk results from fluctuations in exchange rates affecting the value of Stora Enso's net foreign currency denominated assets and liabilities. Translation risk is reduced by funding assets, whenever economically possible, in the same currency as the asset.

The Statements of financial position of foreign subsidiaries, equity accounted investments and foreign currency denominated available-for-sale investments are translated into euros using exchange rates prevailing on the reporting date, thus exposing consolidated group equity to fluctuations in currency rates. The resulting translation differences, along with other movements such as the translation rate difference in the Income statement, are recorded directly in Shareholders' Equity, though these cumulative differences materialise through the Income statement on the disposal, in whole or in part, for the foreign entity. The next table shows the translation exposure on equity before and after hedges.

Translation risk and hedges: 2017

	As at 31 December							
EUR million	**Euro area**	**USD area[2]**	**Sweden**	**China**	**Poland**	**Brazil**	**Other**	**Total**
Translation Exposure on Equity	**2 011**	**1 242**	**1 372**	**400**	**306**	**391**	**286**	**6 008**
EUR/USD hedges[1]	292	-292	-	-	-	-	-	-
Translation Exposure after Hedges	**2 303**	**950**	**1 372**	**400**	**306**	**391**	**286**	**6 008**

[1] USD denominated bonds classified as hedges of investments in foreign assets.
[2] Includes the joint operation Montes del Plata in Uruguay, which has USD as its functional currency.

Translation risk and hedges: 2016

	As at 31 December							
EUR million	**Euro area**	**USD area[2]**	**Sweden**	**China**	**Poland**	**Brazil**	**Other**	**Total**
Translation Exposure on Equity	**2 104**	**1 326**	**879**	**480**	**267**	**462**	**288**	**5 806**
EUR/USD hedges[1]	332	-332	-	-	-	-	-	-
Translation Exposure after Hedges	**2 436**	**994**	**879**	**480**	**267**	**462**	**288**	**5 806**

[1] USD denominated bonds classified as hedges of investments in foreign assets.
[2] Includes the joint operation Montes del Plata in Uruguay, which has USD as its functional currency.

The table below shows the effect on consolidated equity of a strengthening in the euro against the US dollar, Swedish crown, Chinese renminbi, Polish zloty and Brazilian real at 31 December. A corresponding decrease in the exchange rates would have an approximately equal opposite impact. The calculation includes the effects of currency hedges of net investments in foreign entities and assumes that no changes take place other than a single currency exchange rate movement on 31 December each year. The exposures used in the calculations are the foreign currency denominated equity and the hedging levels at 31 December. The hedging instruments used may be foreign currency forward contracts, currency options and foreign currency denominated borrowings. Full details of actual CTA movements and hedging results are given in **Note 28** Cumulative translation adjustment and equity hedging.

Consolidated equity: Currency effects of strengthening of EUR before tax

	As at 31 December 2017			As at 31 December 2016		
EUR million	**Before Hedges**	**Hedges**	**Net Impact**	**Before Hedges**	**Hedges**	**Net Impact**
By 5% versus SEK	-69	-	-69	-44	-	-44
By 5% versus USD	-62	15	-47	-66	17	-49
By 5% versus CNY	-20	-	-20	-24	-	-24
By 5% versus PLN	-15	-	-15	-13	-	-13
By 10% versus BRL	-39	-	-39	-46	-	-46
Total Effect from Above	**-205**	**15**	**-190**	**-193**	**17**	**-176**

Liquidity and refinancing risk

Funding risk arises from the difficulty of obtaining finance for operations at a given point in time. Stora Enso's funding policy states that the average maturity of outstanding loans and committed credit facilities covering short-term borrowings should be at least four years. The policy further states that the group must have committed credit facilities to cover planned funding needs, the current portion of long-term debt, commercial paper borrowings and other uncommitted short-term loans.

Refinancing risk, or the risk that maturing debt is not refinanced in the market, is mitigated by Stora Enso's target of maintaining an even maturity profile of outstanding debt.

The table below shows Group contractual undiscounted interest-bearing financial liabilities, to be settled on a net cash basis, classified under principal headings based on the remaining period to contractual maturity at the reporting date. Forward rates were used at the point of estimation for contractual finance charges.

Contractual maturity repayments of interest-bearing liabilities, settlement net: 2017

EUR million	2018	2019	2020	2021	2022	2023+	Total
Bond loans	137	221	-	-	-	994	1 352
Loans from credit institutions	202	185	183	122	127	210	1 029
Financial lease liabilities	28	-	-	-	-	1	29
Other non-current liabilities	3	3	-	-	-	-	6
Non-current Debt including Current Portion	**370**	**409**	**183**	**122**	**127**	**1 205**	**2 416**
Less fair value adjustments to carrying amounts	3	7	4	3	3	8	28
Estimated contractual finance charges	98	82	63	58	51	310	662
Contractual Repayments on Non-Current Debt	**471**	**498**	**250**	**183**	**181**	**1 523**	**3 106**
Short-term borrowings, carrying amounts	525	-	-	-	-	-	525
Contractual finance charges	16	-	-	-	-	-	16
Bank overdrafts	4	-	-	-	-	-	4
Total Contractual Repayments at 31 December 2017	**1 016**	**498**	**250**	**183**	**181**	**1 523**	**3 651**

Contractual maturity repayments of interest-bearing liabilities, settlement net: 2016

EUR million	2017	2018	2019	2020	2021	2022+	Total
Bond loans	265	237	475	-	-	728	1 705
Loans from credit institutions	254	227	173	314	143	323	1 434
Financial lease liabilities	28	27	-	-	-	1	56
Other non-current liabilities	5	7	-	-	-	-	12
Non-current Debt including Current Portion	**552**	**498**	**648**	**314**	**143**	**1 052**	**3 207**
Less fair value adjustments to carrying amounts	-	5	4	4	3	11	27
Estimated contractual finance charges	125	109	93	59	50	352	788
Contractual Repayments on Non-Current Debt	**677**	**612**	**745**	**377**	**196**	**1 415**	**4 022**
Short-term borrowings, carrying amounts	452	-	-	-	-	-	452
Contractual finance charges	12	-	-	-	-	-	12
Bank overdrafts	4	-	-	-	-	-	4
Total Contractual Repayments at 31 December 2016	**1 145**	**612**	**745**	**377**	**196**	**1 415**	**4 490**

Financial transactions counterparty credit risk

Financial counterparty risk is Stora Enso's exposure on financial contracts arising from a deterioration in counterparties' financial health.

This risk is minimised by:

- entering into transactions only with leading financial institutions and with industrial companies that have a good credit rating;
- investing in liquid cash funds only with financial institutions or companies that have a minimum rating of BBB-, with at least 50% of liquidity investments in funds with a minimum rating of A-, using Standard and Poor's credit rating symbols;
- requiring parent company guarantees when dealing with any subsidiary of a rated company.

The Group Financial Risk Policy defines the limits for accepted counterparty risk, based on the tenor of financial contract and counterparty's credit rating.

At the year end in 2017, there were no significant concentrations of risk with respect to counterparties of derivative contracts, with the highest counterparty exposure being at EUR 5 (EUR 5) million and credit rating of A+ (A) using Standard and Poor's credit rating symbols.

Raw material and energy price risk

Group earnings are exposed to commodity and energy price volatility. Financial energy hedges are part of the total energy price risk management in the group, whilst commodity risks are measured and hedged if economically possible. A 10% movement in energy and raw material prices would result in a EUR 27 (EUR 34) million change in the fair value of energy and raw material hedging contracts. The majority of these fair value changes, after taxes, are recorded directly in Equity under Hedging Reserves, until the contracts mature and the result is entered in the Income statement. These estimates represent only the sensitivity of the financial instruments to market risk and not the Group exposure to raw material and energy price risks as a whole, since the actual purchases are not financial instruments within the scope of the IFRS 7 disclosure requirements. At end of 2017, the maturities of the energy and commodity contracts were between one month and seven years. In 2016 the maturities ranged from one month to six years.

The bulk of the Group energy price risk has been covered by entering into long-term physical fixed price purchase agreements. The Group also has a 15.6% holding, valued at EUR 308 (EUR 242) million, in PVO, a privately owned group of companies in the energy sector. The value of these shares is dependent on energy prices and discussed in more detail in **Note 14** Available-for-sale investments.

In addition, in an effort to mitigate the other commodity risk exposures, the Group is a significant shareholder in major forest companies in Finland and Sweden and so if prices increase for fibre in these countries, so do the profits from these Group interests.

Share price risk

The Group has certain investments in publicly traded securities (**Note 14** Available-for-sale investments). The market value of these equity investments was EUR 21 (EUR 42) million at the year end. Market value changes in these investments are recorded, after taxes, directly under Shareholders' Equity in the Available-for-Sale Reserve.

Customer credit risk

Customer credit risk is Stora Enso's exposure to contracts arising from deterioration in the financial health of customers. The Group uses various measures to reduce credit risks, including but not limited to letters of credit, prepayments and bank guarantees. The Group has also obtained export guarantees, covering both political and commercial risks, which are used in connection with individual customers outside the OECD area. Management considers that no significant concentration of credit risk with any individual customer, counterparty or geographical region exists for Stora Enso. The Age Analysis of Trade Receivables is given in **Note 17** Receivables.

Capital risk management

Stora Enso's debt structure is focused on capital markets, whereas banks are primarily used to provide back-up facilities. Group objectives when managing capital are to safeguard the ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders, as well as to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Group may, subject to shareholder approval as appropriate, vary the dividend paid to shareholders, buy its own shares on the market, return capital to shareholders, issue new shares or sell assets to reduce debt. Group strives to pay stable dividends linked to the long-term performance with the aim of distributing 50% of the net income over the cycle.

The Group monitors its capital on the basis of a target debt-to-equity ratio of 0.80 or less, and ensuring that net debt/ operational EBITDA ratio remain below 3, indicating a solid financial position, and financial flexibility. Operational EBITDA definition is included in the chapter on non-IFRS measures at the end of the Report of the Board of Directors. Key target ratios are shown below:

Capital structure

	As at 31 December	
EUR million	**2017**	**2016**
Interest-bearing liabilities	3 016	3 774
Interest-bearing assets	763	1 048
Interest-bearing Net Debt	**2 253**	**2 726**
Equity Attributable to Owners of the Parent	**6 008**	**5 806**
Operational EBITDA	**1 587**	**1 463**
Debt / Equity Ratio	**0.38**	**0.47**
Net Debt/ Operational EBITDA	**1.42**	**1.86**

In Montes del Plata joint operation and subsidiary Stora Enso (Guangxi) Packaging Company Ltd. have complied with financial covenants related to the debt-to-assets ratio during the reported years.

Note 25 Fair values

Accounting principles

Investments

The Group classifies its investments in marketable debt and equity securities, and investments in unlisted equity securities into three categories which are: trading, held-to-maturity and available-for-sale. Investments acquired principally for the purpose of generating a profit from short-term fluctuations in price are classified as trading investments and are therefore fair valued through the Consolidated income statement and presented as current assets. Investments with a fixed maturity, which the management has the intent and ability to hold to maturity, are classified as held-to-maturity, and are disclosed in non-current assets. Investments in listed and unlisted shares are classified as available-for-sale. Management determines the classification of its investments at the time of the purchase and re-evaluates such designation on a regular basis.

Fair value of financial instruments

The fair values of publicly traded derivatives, along with trading and available-for-sale securities, are based on quoted market prices at the reporting date; the fair values of interest rate swaps are calculated as the present value of the estimated future cash flows and the fair values of foreign exchange forward contracts are determined using forward exchange rates at the reporting date. The valuation principles for derivative financial instruments have been described in more detail in **Note 27** Derivatives.

In assessing the fair values of non-traded derivatives and other financial instruments, the Group uses a variety of methods and makes assumptions based on the market conditions at each reporting date. Quoted market prices or dealer quotes for identical or similar instruments are used for non-current debt. Other techniques, such as option pricing models and estimated discounted value of future cash flows, are used to determine fair values for the remaining financial instruments. The face values, less any estimated credit adjustments, for financial assets and liabilities with a maturity of less than one year are assumed to approximate their fair values. The fair values of financial liabilities for disclosure purposes are estimated by discounting the future contractual cash flows at the current market interest rates available to the Group for similar financial instruments.

Purchases and sales of financial instruments are recognised on the trade date, which is the date on which the group commits to purchasing or selling the financial instrument. Financial instruments are derecognised when the rights to receive or the cash flows from the financial instruments have expired or have been transferred and the Group has substantially transferred all risks, rewards and obligations of the ownership of the financial instrument asset or liability.

Fair value hierarchy

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 which have a significant effect on the recorded fair value are observable, either directly or indirectly;
- Level 3: techniques which use inputs which have a significant effect on the recorded fair values that are not based on observable market data.

See **Note 14** Available-for-sale investments for more information on Level 3 fair value measurement of available-for-sale investments.

Carrying amounts of financial assets and liabilities by measurement category: 2017

EUR million	Loans and Receivables	Financial Items at Fair Value through Income Statement	Hedging Derivatives	Available-for-Sale Investments	Carrying Amounts	Fair Value	Note
Financial Assets							
Available-for-sale	-	-	-	339	339	339	14
Non-current loan receivables	55	-	-	-	55	55	17
Trade and other operative receivables	965	-	-	-	965	965	17
Interest-bearing receivables	15	16	49	-	80	80	17
Cash and cash equivalents	607	-	-	-	607	607	
Total	**1 642**	**16**	**49**	**339**	**2 046**	**2 046**	

EUR million	Financial Items at Fair Value through Income Statement	Hedging Derivatives	Measured at Amortised Cost	Carrying Amounts	Fair Value	Note
Financial Liabilities						
Non-current debt	-	-	2 046	2 046	2 357	26
Current portion of non-current debt	-	-	370	370	370	26
Interest-bearing liabilities	4	32	560	596	596	26
Trade and other operative payables	20	-	1 576	1 596	1 596	23
Bank overdrafts	-	-	4	4	4	
Total	**24**	**32**	**4 556**	**4 612**	**4 923**	

Carrying amounts of financial assets and liabilities by measurement category: 2016

EUR million	Loans and Receivables	Financial Items at Fair Value through Income Statement	Hedging Derivatives	Available-for-Sale Investments	Carrying Amounts	Fair Value	Note
Financial Assets							
Available-for-sale	-	-	-	295	295	295	14
Non-current loan receivables	7	-	-	-	7	7	17
Trade and other operative receivables	870	3	-	-	873	873	17
Interest-bearing receivables	5	12	29	-	46	46	17
Cash and cash equivalents	953	-	-	-	953	953	
Total	**1 835**	**15**	**29**	**295**	**2 174**	**2 174**	

EUR million	Financial Items at Fair Value through Income Statement	Hedging Derivatives	Measured at Amortised Cost	Carrying Amounts	Fair Value	Note
Financial Liabilities						
Non-current debt	-	-	2 655	2 655	2 974	26
Current portion of non-current debt	-	-	552	552	552	26
Interest-bearing liabilities	7	50	506	563	563	26
Trade and other operative payables	23	-	1 468	1 491	1 491	23
Bank overdrafts	-	-	4	4	4	
Total	**30**	**50**	**5 185**	**5 265**	**5 584**	

In the previous tables, fair value is estimated to be equal to the carrying amount for short-term financial assets and financial liabilities such as trade receivables and payables due to their short time to maturity and limited credit risk. The fair value of non-current debt, considered as a level 2 fair value measurement, is estimated based on a discounted cash flow analysis in which the yield curves observable at commonly quoted intervals are used as a discount factor in the model.

In 2014, Stora Enso acquired 100% of the shares of the US-based company Virdia Inc. The transaction included potential pay-outs depending on the completion of specific technical and commercial milestones. The present value of the estimated pay-outs, considered as a level 3 fair value measurement, is estimated based on certain probability criteria and discounted cash flow analysis. At year end, the fair value amounted to EUR 20 (EUR 23) million and is presented in the above table under trade and other operative payables.

Fair value measurements recognised in the statement of financial position: 2017

	As at 31 December			
EUR million	**Level 1**	**Level 2**	**Level 3**	**Total**
Derivative Financial Assets				
Hedging derivatives	-	49	-	49
Derivatives at fair value through profit and loss	-	16	-	16
Available-for-Sale Investments				
Listed securities	21	-	-	21
Unlisted shares	-	-	318	318
Trade and Other Operative Assets				
Operative receivables through profit and loss	-	-	-	-
Total	**21**	**65**	**318**	**404**
Derivative Financial Liabilities				
Hedging derivatives	-	32	-	32
Derivatives at fair value through profit and loss	-	4	-	4
Trade and Other Operative Liabilities				
Operative payables through profit and loss	-	-	20	20
Total	**-**	**36**	**20**	**56**

Fair value measurements recognised in the statement of financial position: 2016

	As at 31 December			
EUR million	**Level 1**	**Level 2**	**Level 3**	**Total**
Derivative Financial Assets				
Hedging derivatives	-	29	-	29
Derivatives at fair value through profit and loss	-	12	-	12
Available-for-Sale Investments				
Listed securities	42	-	-	42
Unlisted shares	-	-	253	253
Trade and Other Operative Assets				
Operative receivables through profit and loss	-	3	-	3
Total	**42**	**44**	**253**	**339**
Derivative Financial Liabilities				
Hedging derivatives	-	50	-	50
Derivatives at fair value through profit and loss	-	7	-	7
Trade and Other Operative Liabilities				
Operative payables through profit and loss	-	-	23	23
Total	**-**	**57**	**23**	**80**

Reconciliation of levels 3 fair value measurement of financial assets

EUR million	**2017**	**2016**
Opening balance at 1 January	253	131
Losses/Gains recognised through income statement	-2	5
Gains recognised in Available-for-Sale Investments reserve	60	125
Additions	7	2
Disposals	-	-10
Closing Balance at 31 December	**318**	**253**

Note 26 Debt

Accounting principles

Debt

Debt is recognised initially at fair value, net of transaction costs incurred. In subsequent periods, it is stated at amortised cost using the effective interest method; any difference between proceeds, net of transaction costs, and redemption value is recognised in the Consolidated income statement over the period of the borrowings. Interest expenses are accrued for and recorded in the Consolidated income statement for each period.

Debt with an original maturity greater than 12 months is classified as non-current debt in the Consolidated statement of financial position, though repayments falling due within 12 months are presented in current liabilities under the current portion of non-current debt. Short-term commercial paper, bank and other interest-bearing borrowings for which the original maturity is less than 12 months are presented in current liabilities under interest-bearing liabilities.

Finance leases

Leases of property, plant and equipment for which the Group has substantially all the rewards and risks of ownership are classified as finance leases. Finance leases are capitalised at the commencement of the lease at the lower of the fair value of the leased property or the estimated present value of the minimum lease payments. Each lease payment is allocated between the capital liability and finance charges so as to achieve a constant interest rate on the outstanding finance balance. The corresponding rental obligations, and net of finance charges are included in interest-bearing liabilities with the interest element of the finance charge being taken onto the Consolidated income statement over the lease period. Property, plant and equipment acquired under finance leasing contracts are depreciated over the lesser of the useful life of the asset or lease period.

The below table includes a breakdown of the Group's interest-bearing liabilities and the related changes in the balances.

Interest-bearing liabilities

	As at 31 December	
EUR million	**2017**	**2016**
Bond loans	1 352	1 705
Loans from credit institutions	1 029	1 434
Finance lease liabilities	29	56
Other non-current liabilities	6	12
Non-current Debt including Current Portion	**2 416**	**3 207**
Short-term borrowings	525	452
Interest payable	35	54
Derivative financial liabilities (see **Note 25**)	36	57
Bank overdrafts	4	4
Total Interest-bearing Liabilities	**3 016**	**3 774**

EUR million	**2017**	**2016**
Carrying Value at 1 January	3 774	4 197
Proceeds of new long-term debt	425	368
Repayment of long-term debt	-1 034	-781
Change in short-term borrowings and interest payable	54	-50
Change in derivative financial liabilities	-21	-13
Translation differences and other	-182	53
Total Interest-bearing Liabilities	**3 016**	**3 774**

Borrowings have various maturities, details of which are set out in **Note 24** Financial risk management, the longest being in 2036, and have either fixed or floating interest rates ranging from 0.6% (0.6%) to 8.6% (8.6%). The majority of Group loans are denominated in euros and US dollars. At 31 December 2017 unused committed credit facilities were at EUR 600 (EUR 700) million. The EUR 600 million committed credit facility agreement with a syndicate of 13 banks matures in January 2023. The facility is used as a backup for general corporate purposes. In addition, Stora Enso has access to various long-term sources of funding up to EUR 950 (EUR 1 000) million mainly from Finnish pension funds.

During 2017, Stora Enso has successfully issued a new bond under its EMTN (Euro Medium Term Note) programme. The EUR 300 million ten-year bond pays a fixed coupon of 2.5% and matures in June 2027.

In June 2017, Stora Enso repurchased in a public tender fixed rate notes with a nominal value of EUR 83 million from the 2018 bond, and of EUR 216 million from the 2019 bond, issued in 2012.

In June 2016, Stora Enso repurchased in a public tender fixed rate notes with a nominal value of EUR 285 million from the 2018 bond, and of EUR 67 million from the 2019 bond, issued in 2012.

Including the previously mentioned repayments, Stora Enso's total repayments of EUR and SEK bond notes amounted to a nominal of EUR 609 (EUR, SEK and USD bond notes EUR 427) million during 2017.

In 2017, net interest-bearing liabilities decreased by EUR 473 million to EUR 2 253 million. Net interest-bearing liabilities are equal to total interest-bearing liabilities less total interest-bearing assets. Cash and cash equivalents net of overdrafts decreased by EUR 346 million to EUR 603 million at 31 December 2017.

Bond loans in non-current debt

Issue/ Maturity Dates	Description of Bond	Interest Rate %	Currency of Bond	Nominal Value Issued	Outstanding As at 31 December		Carrying Value As at 31 December	
					2017	**2016**	**2017**	**2016**
All Liabilities are Held by the Parent Company				**Currency million**			**EUR million**	
Fixed Rate								
1993-2019	Series C Senior Notes 2019	8.600	USD	50	50	50	44	47
2006-2036	Global 7.250% Notes 2036	7.250	USD	300	300	300	247	281
2012-2017	Euro Medium Term Note	5.750	SEK	500	-	480	-	50
2012-2018	Euro Medium Term Note	5.000	EUR	500	112	212	112	212
2012-2019	Euro Medium Term Note	5.500	EUR	500	178	428	178	427
2016-2023	Euro Medium Term Note	2.125	EUR	300	300	300	298	298
2017-2027	Euro Medium Term Note	2.500	EUR	300	300	-	298	-
Total Fixed Rate Bond Loans							**1 177**	**1 315**
Floating Rate								
2006-2018	Euro Medium Term Note	Euribor+0.96	EUR	25	25	25	25	25
2012-2017	Euro Medium Term Note	Stibor+3.90	SEK	2 200	-	2 060	-	215
2015-2025	Euro Medium Term Note	Euribor+2.25	EUR	125	125	125	125	125
2015-2027	Euro Medium Term Note	Euribor+2.35	EUR	25	25	25	25	25
Total Floating Rate Bond Loans							**175**	**390**
Total Bond Loans							**1 352**	**1 705**

Finance lease liabilities

At 31 December 2017 Stora Enso had a small number of finance leasing agreements for machinery and buildings for which capital costs of EUR 14 (EUR 21) million were included in property, plant and equipment and buildings; the depreciation and impairment thereon was EUR 7 (EUR 8) million. The aggregate leasing payments for the year amounted to EUR 28 (EUR 8) million, the interest element being EUR 1 (EUR 1) million.

Finance lease liabilities

	As at 31 December	
EUR million	**2017**	**2016**
Minimum Lease Payments		
Less than 1 year	29	29
1-2 years	-	28
2-3 years	-	-
3-4 years	-	-
4-5 years	-	-
Over 5 years	1	1
	30	**58**
Future finance charges	-1	-2
Present Value of Finance Lease Liabilities	**29**	**56**
Present Value of Finance Lease Liabilities		
Less than 1 year	28	28
1-2 years	-	27
2-3 years	-	-
3-4 years	-	-
4-5 years	-	-
Over 5 years	1	1
	29	**56**

Note 27 Derivatives

Accounting principles

Derivative financial instruments and hedging

Financial derivatives are initially recognised in the Consolidated statement of financial position at fair value and subsequently measured at their fair value at each reporting date, though the method of recognising the resulting gains or losses is dependent on the nature of the item being hedged. When derivative contracts are entered into, the Group designates them as either hedges of the exposure to changes in the fair value of recognised assets or liabilities (fair value hedges), hedges of forecast transactions or firm commitments (cash flow hedges), hedges of net investments in foreign entities or derivative financial instruments not meeting the hedge accounting criteria in accordance with IAS 39.

At the inception of a transaction, the Group documents the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. This process includes linking all financial instruments designated as hedges to specific assets and liabilities or to specific firm commitments or forecast transactions. The Group also documents its assessment, both at the hedge inception and on an ongoing basis, of whether the derivatives used in hedging transactions are highly effective in offsetting changes in fair value or cash flows of hedged items.

Fair value hedges

In case of fair value hedges, the Group uses either derivatives or borrowings for this purpose. The gains and losses on hedging instruments designated and qualifying as fair value hedges, and which are highly effective, are recorded in the Consolidated income statement, along with any changes in the fair value of the hedged assets or liabilities attributable to the hedged risk.

Cash flow hedges

Changes in the fair value of derivatives designated and qualifying as cash flow hedges, and which are effective, are recognised in cash flow hedges reserve within OCI, the movements of which are disclosed in the Consolidated statement of comprehensive income. The cumulative gain or loss of a derivative deferred in equity is transferred to the Consolidated Income Statement and classified as income or expense in the same period in which the hedged item affects the Consolidated income statement. In respect of hedges of exposures to foreign currency risk of future transactions resulting in the recognition of non-financial assets, the gains and losses deferred to cash flow hedges reserve within OCI are transferred from equity to be included in the initial acquisition cost of the non-financial assets at the time of recognition. The deferred amounts are ultimately recognised in the Income Statement through depreciation over the lifetime of those non-financial assets. The changes in the time value component of the currency options are classified as financial income and expense and not included in the hedge designation.

When a hedging instrument expires, or is sold, terminated or exercised, or has its designation revoked or no longer meets the criteria for hedge accounting under IAS 39, any cumulative gain or loss deferred in equity at that time remains in equity and is accounted for as an adjustment to income or expense when the committed or forecast transaction is ultimately recognised in the Consolidated income statement. However, if the predicted transaction is no longer expected to occur, the cumulative gain or loss reported in equity from the period when the hedge was effective is recognised in the Consolidated income statement immediately.

Net investment hedges

Hedges of net investments in foreign entities are accounted for similarly to cash flow hedges, and the Group uses either derivatives or borrowings for this purpose. If the hedging instrument is a derivative, any gain or loss thereon relating to the effective portion of the hedge is recognised in equity in CTA, as disclosed in the Consolidated statement of comprehensive income; the gain or loss relating to the ineffective portion is immediately recognised in the Consolidated income statement. In addition, exchange gains and losses arising on the translation of a borrowing that hedges such an investment are also recognised in CTA, any ineffective portion being immediately recognised in the Consolidated income statement.

Fair value through profit and loss derivatives

Certain derivative transactions, while providing effective economic hedges under Group risk management policies, do not qualify for hedge accounting under the specific rules in IAS 39 and therefore changes in the fair value of such non-qualifying hedge instruments together with any ineffectiveness of hedge-accounted instruments are accounted for at fair value in the Consolidated income statement. Fair value changes of derivative instruments relating to sales, purchases and staff benefits are presented under operating profit and specified in **Note 27** Derivatives and in **Note 6** Personnel expenses. Fair value changes from all other derivatives are recognised in the Consolidated income statement under financial items.

Valuation of derivatives

Derivative financial instruments are recorded in the Statement of financial position at their fair values defined as the amount at which the instrument could be exchanged in an orderly transaction between market participants at the measurement date. The fair values of such financial items have been estimated on the following basis:

- Currency option contract values are calculated using year-end market rates together with common option pricing models.
- The carrying amounts of foreign exchange forward contracts are calculated using forward exchange rates at the reporting date.
- The fair values of interest rate swaps are calculated using a discounted cash flow analysis.
- Commodity contract fair values are computed with reference to quoted market prices on futures exchanges or other reliable market sources.
- The fair values of Total Return (Equity) Swaps are calculated using year-end equity prices as well as year-end interest rates.

Shareholders' equity – other comprehensive income

Certain derivatives are designated as cash flow hedges and measured at fair value with the fair value movements recorded in the separate equity category of OCI: Cash Flow Hedges Reserve. The other component of OCI is the Available-for-Sale Investments Reserve representing the difference between the reporting date fair value of investments and their initial fair value at acquisition (see **Note 14** Available-for-sale investments).

Cash flow hedges

In the Group the estimated net amount of unrealised cash flow hedge gain net of taxes amounted to EUR 15 (EUR loss 11) million of which a gain of EUR 14 (EUR loss 23) million related to currencies and a gain of EUR 1 (EUR gain 12) million related to commodities. The unrealised gains and losses are expected to be recycled through the Income Statement within one to three years with the longest hedging contract maturing in 2027 (2027), however the majority are expected to mature in 2018. Any hedge ineffectiveness is presented as an adjustment to sales or to materials and services, depending on the underlying exposure, totalling EUR nil (EUR loss 2) million for commodity contract hedges and EUR loss 2 (EUR nil) million for currency hedges. Derivatives used in currency cash flow hedges are mainly forward contracts and options, with swaps mainly used in commodity hedges and interest rate cash flow hedges.

In the Beihai Mill project in Guangxi, China, the Group has hedged its exposures to the foreign currency risk of future transactions resulting in the recognition of non-financial assets. The gains and losses deferred to OCI cash flow hedges reserve are transferred from equity to be included in the initial acquisition cost of the non-financial assets at the time of recognition. During the year, the total amount removed from equity and included in the initial cost of non-financial assets amounted to EUR nil (EUR loss 4) million. At the year end, there were no hedges outstanding as the last hedges related to Beihai Mill matured during 2017.

In 2015, the Group entered into new interest rate swap derivatives with a total nominal value of EUR 150 million. The swaps have been designated as cash flow hedges of 2015 issued EUR bond notes maturing in 2025 and 2027 with hedge result being booked to Cash Flow Hedges Reserve in OCI. During 2017 the Group closed its non-hedge accounted equity swaps (TRS).

Equity accounted investments

Associate companies record hedges and pensions-related amounts directly in equity, and the Group also records its share of these amounts in equity in the "OCI of Equity Accounted Investments" classification.

OCI equity accounted investments

	Year Ended 31 December	
EUR million	**2017**	**2016**
Bergvik Skog AB	-14	-19
Total	**-14**	**-19**

Fair values of derivatives

Hedge gains and losses in financial items

	Year Ended 31 December	
EUR million	**2017**	**2016**
Non-qualifying Hedges		
Net losses on interest rate derivatives	-	-4
Net gains on currency derivatives	24	30
Net Gains in Financial Items	**24**	**26**

Hedge gains and losses in operating profit

EUR million	Year Ended 31 December 2017	2016
Cash Flow Hedge Accounted		
Currency hedges	9	8
Commodity contract hedges	-44	3
Total	**-35**	**11**
As adjustments to Sales	-39	16
As adjustments to Materials and services	4	-5
Realised from OCI through Income Statement	**-35**	**11**
Currency hedges ineffectiveness	-2	-
Commodity contract hedge ineffectiveness	-	-2
Net Losses/Gains from Cash Flow Hedges	**-37**	**9**
Non-qualifying Hedges		
Currency hedges	15	-9
Net Gains/Losses on Non-Qualifying Hedges	**15**	**-9**
Net Hedge Losses in Operating Profit	**-22**	**-**

In 2017 the Group ceased hedge accounting for one of its subsidiaries because the forecasted future transactions were no longer expected to occur. This resulted in a loss of EUR 2 (EUR loss 2) million being booked as operating profit and the loss being presented in the above table as ineffectiveness from cash flow hedges.

Fair values of derivative instruments

	As at 31 December			
EUR million	Positive Fair Values	Negative Fair Values	Net Fair Values	Net Fair Values
	2017			2016
Cash flow hedge accounted				
Currency forward contracts	19	-5	14	-9
Currency options	15	-9	6	-19
Commodity contracts	14	-13	1	15
Interest rate swaps	1	-5	-4	-7
Non-qualifying hedges				
Currency forward contracts	15	-3	12	5
Commodity contracts	1	-1	-	-
Equity swaps (TRS)	-	-	-	3
Total	**65**	**-36**	**29**	**-12**

Positive and negative fair values of financial instruments are shown under Interest-bearing Receivables and Liabilities and Non-current Debt with the exception of TRS, which is shown under Operative Receivables and Liabilities.

The presented fair values in the previous table include accrued interest and option premiums.

Nominal values of derivative financial instruments

	As at 31 December	
EUR million	**2017**	**2016**
Interest Rate Derivatives		
Interest rate swaps		
Maturity 6–10 years	192	181
Maturity over 10 years	-	25
Total	**192**	**206**
Foreign Exchange Derivatives		
Forward contracts	1 682	1 783
Currency options	1 362	1 525
Total	**3 044**	**3 308**
Commodity Derivatives		
Commodity contracts	282	319
Total	**282**	**319**
Total Return Swaps		
Equity swaps (TRS)	-	25
Total	**-**	**25**

Contractual derivatives maturity repayments gross settlement

	As at 31 December 2017		As at 31 December 2016	
EUR million	**2018**	**2019+**	**2017**	**2018+**
Currency Forwards and Options: Cash Flow Hedges				
Outflow	1 187	-	1 214	-
Inflow	1 205	-	1 190	-
Currency Forwards and Options: Fair Value in Income Statement				
Outflow	767	86	1 053	92
Inflow	777	81	1 054	81

The above table analyses the Group's derivative financial instruments to be settled on a gross basis into relevant maturity groupings based on the remaining contract period at the reporting date.

Contractual payments for net-settled derivative financial liabilities in the following maturity groupings were: EUR 28 (EUR 6) million within one year and EUR 4 (EUR 8) million within two to five years.

Financial impact of netting for instruments subject to an enforceable master netting agreement 2017

	Not offset in the Statement of Financial Position			
EUR million	**Gross amount of recognised financial instruments**	**Related liabilities (-) or assets (+) subject to Master Netting Agreements**	**Collateral received (-) or given (+)**	**Net Exposure**
Derivative assets	62	-37	-	25
Derivative liabilities	-37	37	-	-

Financial impact of netting for instruments subject to an enforceable master netting agreement 2016

	Not offset in the Statement of Financial Position			
EUR million	**Gross amount of recognised financial instruments**	**Related liabilities (-) or assets (+) subject to Master Netting Agreements**	**Collateral received (-) or given (+)**	**Net Exposure**
Derivative assets	40	-40	-	-
Derivative liabilities	-56	40	-	-16

The Group enters into derivative transactions under master netting agreements agreed with each counterparty. In case of an unlikely credit event, such as default, all outstanding transactions under the agreements are terminated and only a single net amount per counterparty is payable for settlement of all transactions. The agreements do not meet the criteria for offsetting in the Statement of financial position because offsetting is enforceable only on the occurrence of certain future events.

Note 28 Cumulative translation adjustment and equity hedging

Cumulative translation adjustment

	Year Ended 31 December	
EUR million	**2017**	**2016**
At 1 January		
CTA on net investment in non-euro foreign entities	-31	-155
Hedging thereof	1	12
Net currency losses/gains in equity	-30	-143
Tax on hedging	-2	-4
	-32	**-147**
CTA Movement for the Year Reported in OCI		
Restatement of opening non-euro denominated equity	-281	95
Difference in Income Statement translation	-5	1
Internal equity injections and dividends	-1	5
CTA release through the Income Statement	-1	23
	-288	**124**
Hedging of Net Investment for the Year Reported in OCI		
Hedging result	40	-11
Taxes	-8	2
	32	**-9**
At 31 December		
CTA on net investment in non-euro foreign entities	-319	-31
Hedging thereof (see below)	41	1
Cumulative net currency losses in equity	-278	-30
Tax on hedging	-10	-2
Net CTA in Equity	**-288**	**-32**
Hedging of Net Investment in Foreign Entities		
Hedging	41	1
Tax on hedging	-10	-2
Net Hedging Result in Equity	**31**	**-1**
Realised gains	45	45
Unrealised gains/losses	-14	-46
Total Gains	**31**	**-1**

The Group is currently hedging only its equity exposure to the US dollar. The main movements in CTA in 2017 were a loss of EUR 162 (gain of EUR 45) million related to the US dollar, a loss of EUR 63 (gain of EUR 125) million related to the Brazilian real, a loss of EUR 38 (loss of EUR 33) million related to the Swedish crown and a loss of EUR 27 (loss of EUR 27) million related to the Chinese renminbi. The most significant accumulated CTA balances are in Sweden, amounting to a loss of EUR 234 (EUR 196) million, in Brazil, amounting to a loss of EUR 191 (EUR 128) million and in the US dollar area, amounting to a gain of EUR 79 (EUR 241) million, in China, amounting to a gain of EUR 69 (EUR 97) million.

The release of cumulative translation adjustments to the Income statement amounted to a gain of EUR 1 (loss of EUR 23) million in 2017 and was mainly related to the disposal of Stora Enso's 35% minority holding in the equity accounted investment Bulleh Shah Packaging Ltd. (BSP) in Pakistan to the main owner Packages Ltd.

Amounts recognised in the statement of financial position - CTA and equity hedging

	As at 31 December					
	Cumulative Translation Adjustments (CTA)		Equity Hedges		Net CTA in the Statement of Financial Position	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Brazil	-191	-128	-	-	-191	-128
China	69	97	-	-	69	97
Czech Republic	33	26	-9	-9	24	17
Poland	-19	-34	17	17	-2	-17
Russia	-55	-45	-	-	-55	-45
Sweden	-234	-196	50	50	-184	-146
Uruguay	80	227	-17	-57	63	170
USA	-1	14	-	-	-1	14
Others	-1	9	-	-	-1	9
CTA before Tax	**-319**	**-31**	**41**	**1**	**-278**	**-30**
Taxes	-	-	-10	-2	-10	-2
Net CTA in Equity	**-319**	**-31**	**31**	**-1**	**-288**	**-32**

Amounts recognised in the statement of other comprehensive income - CTA and equity hedging

	As at 31 December					
	Cumulative Translation Adjustments (CTA)		Equity Hedges		Net CTA in the Statement of Financial Position	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Brazil	-63	125	-	-	-63	125
China	-27	-27	-	-	-27	-27
Czech Republic	7	-	-	-	7	-
Poland	15	-10	-	-	15	-10
Russia	-10	24	-	-	-10	24
Sweden	-38	-33	-	-	-38	-33
Uruguay	-147	39	40	-11	-107	28
USA	-15	6	-	-	-15	6
Others	-10	1	-	-	-10	1
CTA before Tax	**-288**	**124**	**40**	**-11**	**-248**	**113**
Taxes	-	-	-8	2	-8	2
Amounts recognised in OCI	**-288**	**124**	**32**	**-9**	**-256**	**115**

Hedging of net investment in foreign entities

Group policy for translation risk exposure is to minimise this by funding assets whenever possible and economically viable in the same currency, but if matching of the assets and liabilities in the same currency is not possible hedging of the remaining translation risk may take place. The gains and losses net of tax on all financial liabilities and instruments used for hedging purposes are offset in CTA against the respective currency movements arising from the restatement of the net investments at current exchange rates on the reporting date; the net amount of gains included in CTA during the period as shown in the previous table came to EUR 32 (losses of EUR 9) million.

Hedging instruments and unrealised hedge losses

	As at 31 December					
	Nominal amount (Currency)		Nominal amount (EUR)		Unrealised Losses (EUR)	
EUR million	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Borrowings						
USD area	350	350	292	332	-14	-46
Total Hedging			**292**	**332**	**-14**	**-46**

Note 29 Commitments and contingencies

Accounting principles

Guarantees

The guarantees entered into with financial institutions and other credit guarantors generally oblige the group to make payment in the event of default by the borrower. The guarantees have off-Balance-Sheet credit risk representing the accounting loss that would be recognised at the reporting date if the counterparties fail to perform completely as contracted. The credit risk amounts are equal to the contract sums assuming the amounts are not paid in full and are irrecoverable from other parties.

Operating Leases

Payments made under operating leases are expensed on a straight-line basis over the lease periods. When an operating lease is terminated before the expiry of the lease period, any obligatory payment to the lessor by way of penalty is recognised as an expense in the period in which termination takes place. Lease termination benefits are recognised on a discounted basis.

Commitments

	As at 31 December	
EUR million	**2017**	**2016**
On Own Behalf		
Mortgages	2	9
On Behalf of Equity Accounted Investments		
Guarantees	4	4
On Behalf of Others		
Guarantees	26	34
Other Commitments Own		
Operating leases in next 12 months	81	86
Operating leases after next 12 months	644	747
Pension liabilities	-	1
Other commitments	6	9
Total	**763**	**890**
Mortgages	2	9
Guarantees	30	38
Operating leases	725	833
Pension liabilities	-	1
Other commitments	6	9
Total	**763**	**890**

In 2017, the Group's commitments amounted to EUR 763 (EUR 890) million. In addition, the parent company Stora Enso Oyj has guaranteed the liabilities of many of its subsidiaries and joint operations up to EUR 2 073 (EUR 2 123) million as of 31 December 2017.

The Group leases office and warehouse space, cars, machinery and equipment under various non-cancellable operating leases, some of which contain renewal options. There were no leases deemed onerous at the end of 2017 and 2016. The future cost for contracts exceeding one year and for non-cancellable operating leasing contracts are:

Repayment schedule of operating lease commitments

	As at 31 December	
EUR million	**2017**	**2016**
Less than 1 year	81	86
1–2 years	71	73
2–3 years	63	66
3–4 years	54	59
4–5 years	38	53
Over 5 years	418	496
Total	**725**	**833**

The Group has rental commitments for up to 50 years, with the option to terminate them after 20 years, on approximately 84 000 (84 000) hectares of land contracted to date in China, as well as being obliged to pay for the standing trees on land it has contracted to rent. Future land rental payments reported under operating leases are estimated at EUR 486 (EUR 562) million for the plantations.

Stora Enso Oyj has 15-year time charter agreements for three special purpose vessels. The time charter agreements were during 2016 novated from Viking Supply Ships AB (formerly Rederi AB Trans-Atlantic) to SOL Ro Ro AB. The group's commitment amounted to EUR 54 (EUR 68) million for the remaining four years of the contracts at the end of 2017.

Capital expenditure commitments at the balance sheet date but not recognised in the balance sheet amounted to EUR 152 (EUR 171) million. These include the Group's share of direct capital expenditure contracts in joint operations. Commitments in relation to capital expenditure mainly relate to ongoing projects at Enocell, Heinola and Imatra Mills in Finland and Skutskär and Gruvön Mills in Sweden.

Contingent liabilities

Stora Enso has undertaken significant restructuring actions in recent years which have included the divestment of companies, sales 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 from 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.

Latin American Cases

Veracel

Fibria and Stora Enso each own 50% of Veracel, and the joint ownership is governed by a shareholder agreement. In May 2014, Fibria initiated arbitration proceedings against Stora Enso claiming that Stora Enso was in breach of certain provisions of the shareholder agreement. Fibria has estimated that the interest to be paid regarding the dispute should be approximately USD 54 (EUR 45) million. Stora Enso denied the claims. In December 2017 the arbitration panel delivered an award in favour of Stora Enso. Hence, Stora Enso does not plan to report further on the case.

In June 2017, Veracel received a tax infringement note referring to year 2012 with a total amount of BRL 224 (EUR 56) million including interest and fines. The dispute is limited to fiscal year 2012 for which the tax authority applied another transfer pricing method due to a different interpretation of a transition rule. Veracel acts in full compliance with Brazilian transfer pricing law and has filed an administrative defense against the tax note in July 2017. The total exposure at year end is BRL 228 (EUR 57) million considering interest until 31 December 2017. Stora Enso's share of the exposure is BRL 114 (EUR 29) million. No provisions have been recorded in Veracel's or Stora Enso's accounts for this tax dispute.

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 Finland

Roundwood claim

In December 2009, the Finnish Market Court fined Stora Enso for competition law infringements in the market for roundwood in Finland from 1997 to 2004. Stora Enso did not appeal against the ruling. In March 2011 Metsähallitus of Finland initiated legal proceedings against Stora Enso, UPM and Metsäliitto claiming compensation for damages allegedly suffered due to competition infringement. In its judgement rendered in June 2016, the Helsinki District Court dismissed Metsähallitus' claim for damages against Stora Enso, UPM and Metsäliitto. Metsähallitus has appealed the judgement and the case is pending in the Court of Appeal. Following reductions by Metsähallitus, the total amount of claims jointly and severally against Stora Enso, UPM and Metsäliitto is now approximately EUR 125 million and the secondary claim against Stora Enso is approximately EUR 68 million.

In addition, certain Finnish municipalities and private forest owners initiated similar legal proceedings against Stora Enso, UPM and Metsäliitto. In the fall of 2017, the Helsinki District Court dismissed the claims of 486 private forest owners and 32 municipalities. The total amount of pending claims jointly and severally against Stora Enso, UPM and Metsäliitto is approximately EUR 7 million and claims solely against Stora Enso is approximately EUR 3 million. Stora Enso denies that the plaintiffs suffered any damages whatsoever and will forcefully defend itself. No provisions have been made in Stora Enso's accounts for these lawsuits.

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. Stora Enso denies liability.

In a verdict in October 2017 the Environmental Court ruled in favour of Stora Enso. The insurance companies have appealed against the verdict. Concerning the case in the District Court of Falun a procedural dismissal in the first instance has been reversed by the Court of Appeal but Stora Enso has appealed to the Supreme Court seeking final dismissal.

Veracel's potential tax exposure arising from PIS/COFINS tax credits

In December 2011 Veracel Celulose SA (Veracel) received a tax audit report, in which the tax authority claimed that part of the PIS (social integration programme) and COFINS (contribution for the financing of social security) paid by Veracel on the purchase of raw materials and services, was not eligible for tax credit. Stora Enso and Veracel consider the claim unjustified and no provisions have been made in Stora Enso's or Veracel´s accounts for this matter. The dispute is still pending.

Note 30 Principal subsidiaries and joint operations

The following is a list of the Company's fifty principal operating subsidiary undertakings ranked by external sales. These companies along with the parent account for 98% (98%) of Group external sales. The principal country in which each subsidiary operates is the country of incorporation. The group's effective interest in the undertakings is 100% except where indicated, and is held in each case by a subsidiary undertaking except for those companies marked with "+" which are held directly by the parent company. Subsidiaries operating outside the euro area are indicated by "◊".

Subsidiary companies (Ranked by external sales)

		Country	Sales %	Consumer Board	Packaging Solutions	Biomaterials	Wood Products	Paper	Other
Stora Enso Oyj		**Finland**	**20.34**	•	•	•		•	•
Stora Enso Paper AB	◊	Sweden	7.66					•	
Stora Enso Skoghall AB	◊	Sweden	6.18	•					
Stora Enso International Oy[1]	+	Finland	4.75			•			
Stora Enso Oulu Oy[2]		Finland	4.29					•	
Stora Enso Amsterdam B.V.		Netherlands	3.85			•		•	
Stora Enso Fors AB	◊	Sweden	3.45	•					
Stora Enso Skog AB	◊	Sweden	3.15						•
Stora Enso Wood Products GmbH		Austria	2.85				•		
Stora Enso Veitsiluoto Oy[2]		Finland	2.83					•	
Stora Enso Poland S.A.	+/◊	Poland	2.74		•				
Stora Enso (Guangxi) Packaging Company Ltd. (80.1%)	◊	China	2.45	•					
Stora Enso Maxau GmbH		Germany	2.43					•	
Stora Enso Publication Papers Oy Ltd		Finland	2.41					•	
Stora Enso Langerbrugge NV		Belgium	2.30					•	
Stora Enso Ingerois Oy	+	Finland	2.03	•					
Sydved AB (66.7%)	◊	Sweden	1.63						•
Stora Enso Wood Products Oy Ltd	+	Finland	1.43				•		
Puumerkki Oy[3]		Finland	1.42				•		
Stora Enso Timber AB	◊	Sweden	1.40				•		
Stora Enso Sachsen GmbH		Germany	1.37					•	•
Stora Enso Eesti AS	+	Estonia	1.28				•		
OOO Stora Enso Packaging BB	◊	Russia	1.22		•				
Stora Enso Narew Sp.z.o.o.	+/◊	Poland	1.19		•				
Stora Enso Wood Products Zdirec s.r.o.	◊	Czech Republic	1.02				•		
Stora Enso Australia Pty Ltd	◊	Australia	1.00				•		
Stora Enso Packaging AB	◊	Sweden	0.91		•				
Stora Enso WP Bad St. Leonhard GmbH		Austria	0.88				•		
Dongguan Stora Enso Inpac Packaging Co. Ltd (90%)	◊	China	0.82		•				
Stora Enso Packaging Oy	+	Finland	0.82		•				
Stora Enso Huatai (Shandong) Paper Co Ltd (60%)	◊	China	0.80					•	
Stora Enso Pulp AB[1]	◊	Sweden	0.74			•			•
Stora Enso Inpac Packaging Co. Ltd (90%)	◊	China	0.71		•				
Stora Enso Timber Deutschland GmbH		Germany	0.64				•		
Stora Enso Bioenergi AB	◊	Sweden	0.59						•
Stora Enso Wood Products Planá s.r.o.	◊	Czech Republic	0.47				•		
Stora Enso Wood Products d.o.o. Koper		Slovenia	0.42				•		

Stora Enso Wood Products Sp.z.o.o.	◊	Poland	0.41				•		
Stora Enso Bois SAS		France	0.40				•		
Stora Enso North American Sales, Inc.	+/◊	USA	0.39	•					
AS Stora Enso Latvija		Latvia	0.36				•		
UAB Stora Enso Lietuva		Lithuania	0.30				•		
Stora Enso Timber DIY Products B.V.		Netherlands	0.25				•		
Stora Enso Timber UK Ltd	◊	UK	0.25				•		
Guangxi Stora Enso Forestry Co Ltd (89.5%)	◊	China	0.21	•					
VLAR Papier NV (65%)		Belgium	0.20					•	
Stora Enso (HK) Ltd	+/◊	Hong Kong	0.18				•		
Stora Enso (Guangxi) Forestry Company Ltd. (80.1%)	◊	China	0.18	•					
Stora Enso Packaging UAB		Lithuania	0.17		•				
Stora Enso Packaging SIA		Latvia	0.17		•				
DanFiber A/S (51%)	◊	Denmark	0.15					•	

[1] Stora Enso International Oy started its business operations in 2017. The sales of products from Enocell mill, Sunila mill and Stora Enso Pulp AB occur via the company.

[2] Stora Enso Oulu Oy and Stora Enso Veitsiluoto Oy started their business operations as individual companies in 2017. Before the change the mills were part of Stora Enso Oyj.

[3] Business operations of Puumerkki Oy were divested during 2017.

The following is a list of the Company's joint operations. The Company holds a 50% interest in joint operations and they are consolidated into the Group's financial statements. The countries operating outside the euro area are indicated by "◊". Sales of the joint operations occur via subsidiaries.

Joint operations

		Country	Consumer Board	Packaging Solutions	Biomaterials	Wood Products	Paper	Other
Montes del Plata (50%)	◊	Uruguay			•			
Veracel Celulose SA (50%)	◊	Brazil			•			

Note 31 Related party transactions

Balances and transactions between the Group and its subsidiaries and joint operations, which are classified as related parties, have been eliminated on consolidation and are not disclosed in this note.

The key management personnel of the Group are the members of the Group Leadership Team and the Board of Directors. The compensation of key management personnel is presented in **Note 7** Board and executive remuneration.

In the ordinary course of business, the Group engages in transactions on commercial terms with equity accounted investments and other related parties that are not any more favourable than would be available to other third parties – with the exception of Veracel and Pohjolan Voima Oy (PVO). Stora Enso intends to continue with transactions on a similar basis with its equity accounted investments further details of which are shown in **Note 13** Equity accounted investments.

The Group's principal subsidiary companies and joint operations are listed in **Note 30** Principal subsidiaries and joint operations.

Energy

The Group holds a 15.6% interest in Pohjolan Voima Oy (PVO), a privately owned group of companies in the energy sector that produces electricity and heat for its shareholders in Finland. Each subsidiary of the PVO group has its own class of shares that entitle the shareholder to the energy produced in proportion to its ownership of that class of share. Stora Enso is the second-largest shareholder in PVO, being entitled to a capacity share of 468 MWe and Seppo Parvi, as group representative, has been the Deputy Chairman of PVO's Board of Directors since 2015. Prices paid to PVO for electricity are based on production costs, which are generally lower than market prices and in 2017, amounted to EUR 34 (EUR 37) million. For information about the amount of electricity generated, purchased and sold, please see **Stora Enso's Sustainability Report 2017**, section Materials, water & energy. Sustainability Report 2017 will be published during week 9.

Financial arrangements

The Group borrows from or has financial arrangements with several financial institutions where certain members of the Stora Enso Board of Directors or Group Leadership Team also act as members of the Board of Directors, Supervisory Board or Executive Management Group of one or more of those bodies. All group borrowings and financial arrangements have been negotiated on arms-length terms and several have existed for a number of years and prior to the current Board membership.

In 2014, International Finance Corporation (IFC) agreed to invest CNY 356 million (EUR 46 million) in an equity stake in Stora Enso's Guangxi project, representing a 5% shareholding in the project. By the end of 2017, IFC has already invested CNY 245 million (EUR 31 million). Stora Enso's outstanding loan balances from IFC amounted to EUR 348 (EUR 436) million at year end. The funding is based at USD 6-month LIBOR plus margins ranging from +2.30% to +2.80%.

Research and development

Stora Enso conducts research and development in its own research centres and together with an external network. In addition, interests are held in the following research partners: Swetree Technologies AB, Cellutech AB, Combient AB, Amexci AB and Clic Innovation Ltd.

Paper for recycling

The Group owns non-controlling interests in several paper recyclers from which paper for recycling is purchased at market prices.

Forest assets and wood procurement

The Group has a 41% interest in Tornator with the remaining 59% being held mainly by Finnish institutional investors. Stora Enso has long-term purchase contracts with the Tornator Group for approximately 2 million cubic metres of wood annually at market prices, and in 2017 purchases of 2 (2) million cubic metres came to EUR 62 (EUR 65) million.

In 2017, the Group has a 49.28% interest in Bergvik Skog with the remaining 50.72% held mainly by institutional investors. The Group has long-term supply contracts with Bergvik Skog under which Bergvik Skog sells some 5 million cubic metres of wood annually to Stora Enso at market prices. In 2017, these purchases of 5 (5) million cubic metres amounted to EUR 106 (EUR 103) million and Group sales to Bergvik Skog amounted to EUR 39 (EUR 41) million, mainly for forest management services.

Stora Enso has a significant land leasing contract with its non-controlling interest partner Guangxi Forestry Group Co. Ltd. in China. The leases paid during 2017 amounted to EUR 16 (EUR 16) million.

Stevedoring

The Group owns 34.4% of the shares of Steveco Oy, a Finnish company engaged in loading and unloading vessels. The other shareholders in Steveco are UPM-Kymmene, Finnlines, Ahlström Capital and Myllykoski. The stevedoring services are provided by Steveco at market prices and in 2017 amounted to EUR 25 (EUR 25) million.

Note 32 Earnings per share and equity per share

Accounting principles

Basic earnings per share, applicable to the owners of the parent company, are calculated by dividing the net profit attributable to shareholders by the weighted average number of ordinary shares in issue during the year, excluding ordinary shares purchased by the group and held as treasury shares. Diluted earnings per share are calculated by adjusting the weighted average number of ordinary shares plus the diluted effect of all potential dilutive ordinary shares dilutive such as shares from share-based payments.

Earnings per share

	Year Ended 31 December	
	2017	**2016**
Net profit for the period attributable to the owners of the parent, EUR million	625	463
Total comprehensive income attributable to the owners of the parent, EUR million	494	679
Weighted average number of A and R shares	788 619 987	788 619 987
Weighted average number of share awards	1 403 673	1 268 485
Weighted diluted number of shares	790 023 660	789 888 472
Basic Earnings per Share, EUR	**0.79**	**0.59**
Diluted Earnings per Share, EUR	**0.79**	**0.59**
Total Recognised Income and Expense per Share, EUR	**0.63**	**0.86**

Equity per share

	As at 31 December	
	2017	**2016**
Shareholders' equity, EUR million	6 008	5 806
Market value, EUR million	10 422	8 085
Number of A and R shares	788 619 987	788 619 987
Share awards	1 469 133	1 338 213
Diluted number of shares	790 089 120	789 958 200
Basic Shareholders' Equity per Share, EUR	**7.62**	**7.36**
Diluted Shareholders' Equity per Share, EUR	**7.61**	**7.35**
Dividend per Share Paid/Declared, EUR	**0.41**	**0.37**
Market Value per Share, EUR		
A shares	13.20	10.40
R shares	13.22	10.21

Extract from the parent company Stora Enso Oyj financial statements

Accounting principles

The Parent Company Financial Statements are prepared according to Generally Accepted Accounting Principles in Finland (Finnish GAAP); see Group Consolidated Financial Statements **Note 1**, Accounting Principles. The main differences between the accounting policies of the Group and the Parent Company relate to:

Accounting of amortisation of capitalised goodwill
The valuation of financial assets, financial liabilities, financial instruments and securities
Accounting of post-employment Defined Benefit Plans
The presentation and accounting of deferred tax
Accounting of equity incentive schemes
Accounting of financial leases.

Comparability of the information for the financial period

On 1 May 2017, Stora Enso's paper business was transferred from the parent company to new companies to be established (Stora Enso Oulu Oy, Stora Enso Veitsiluoto Oy and Stora Enso Paper Oy). On 31 December 2017, the business transfer had the following effects: EUR -742.6 million on sales; -1 293 people on the number of personnel; EUR -200.9 million on tangible assets; and EUR -142.4 million on inventories.

On 1 April 2017, Stora Enso transferred the ownership and sales operations of the inventories of the Enocell and Sunila pulp mills to Stora Enso International Oyj.

Parent Company income statement

	Year Ended 31 December	
EUR million	**2017**	**2016**
Sales	2 913	3 453
Changes in inventories of finished goods and work in progress	-14	-9
Production for own use	1	1
Other operating income	188	174
Materials and services	-1 905	-2 167
Personnel expenses	-255	-318
Depreciation and value adjustments	-130	-145
Other operating expenses	-569	-741
Operating Profit	**229**	**248**
Net financial items	146	-73
Profit before Appropriations and Taxes	**375**	**175**
Appropriations	-10	-43
Net Profit for the Period	**365**	**132**

Parent Company statement of financial position

Assets

	As at 31 December	
EUR million	**2017**	**2016**
Fixed Assets and Non-current Investments		
Intangible assets	75	85
Tangible assets	805	926
Shares in Group companies	6 139	6 179
Other investments	1 756	782
	8 775	**7 972**
Current Assets		
Inventories	247	442
Long-term receivables	-	1
Short-term receivables	548	947
Deposit Group companies	816	-
Cash and cash equivalents	375	2 259
	1 986	**3 649**
Total Assets	**10 761**	**11 621**

Equity and Liabilities

	As at 31 December	
EUR million	**2017**	**2016**
Share capital	1 342	1 342
Share premium	3 639	3 639
Fair value reserve	1	-17
Invested non-restricted equity fund	633	633
Retained earnings	562	722
Net profit for the period	365	132
	6 542	**6 451**
Appropriations	**209**	**180**
Provisions	**26**	**17**
Non-current Liabilities	**1 378**	**1 752**
Current Liabilities	**2 606**	**3 221**
Total Equity and Liabilities	**10 761**	**11 621**

Parent Company cash flow statement

EUR million	Year Ended 31 December 2017	2016
Cash Provided by Operating Activities		
Net profit for the period	365	132
Appropriations	10	43
Depreciation and value adjustments	130	145
Unrealised foreign exchange wins and losses	52	-29
Other non-cash items	12	-6
Financial income and expenses	-146	73
Interest received	32	61
Interest paid net of amounts capitalised	-105	-122
Dividends received	201	133
Other financial items paid net	37	-116
Income taxes paid	-1	-1
Change in net working capital	-12	110
Net Cash Provided by Operating Activities	**575**	**423**
Net Cash from Investing Activities		
Capital expenditure	-203	-154
Proceeds from sale of fixed assets	3	3
Purchases of other investments	-7	-5
Investment in subsidiary shares	-87	-91
Proceeds from disposal of subsidiary shares	61	-
Proceeds from disposal of shares in other companies	2	11
Proceeds from long-term receivables net	-190	964
Net Cash Provided in Investing Activities	**-421**	**728**
Cash Flow from Financing Activities		
Proceeds from (payment of) long-term liabilities net	-362	-587
Proceeds from (payment of) short-term borrowings net	-546	827
Capital repayment / dividend per share paid/declared	-292	-260
Net Cash Used in Financing Activities	**-1 200**	**-20**
Net Increase (Decrease) in Cash and Cash Equivalents	**-1 046**	**1 131**
Translation adjustment	-7	5
Business transfers 1.5.	-16	-
Cash and cash equivalents at start of year	2 259	1 123
Cash and Cash Equivalents at Year End	**1 190**	**2 259**

The Board of Directors' Proposal for the distribution of dividend

The Parent Company distributable shareholders' equity on 31 December 2017 amounted to EUR 1 560 466 138.25, including the profit for the period of EUR 365 361 188.06. The Board of Directors proposes to the Annual General Meeting of the Company that the distributable funds be used as follows:

Dividend of EUR 0.41 per share from the distributable shareholders' equity to be distributed on 788 619 987 shares, not to exceed	EUR 323 334 194.67
Remaining in distributable shareholders' equity	EUR 1 237 131 943.58
Distributable shareholders' equity on 31 December 2017, total	EUR 1 560 466 138.25

There have been no material changes in the Parent Company's financial position since 31 December 2017. The liquidity of the Parent Company remains good and the proposed dividend does not risk the solvency of the Company.

Helsinki, 8 February 2018

Jorma Eloranta
Chairman

Hans Stråberg
Vice Chairman

Anne Brunila

Elisabeth Fleuriot

Hock Goh

Christiane Kuehne

Mikael Mäkinen

Richard Nilsson

Göran Sandberg

Karl-Henrik Sundström
CEO

Auditor's report

(Unofficial translation from the Finnish original)

To the Annual General Meeting of Stora Enso Oyj

Report on the Audit of Financial Statements

Opinion

We have audited the financial statements of Stora Enso Oyj (business identity code 1039050-8) for the year ended 31 December, 2017. The financial statements comprise the consolidated statement of financial position, income statement, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies, as well as the parent company's balance sheet, income statement, cash flow statement and notes to the financial statements.

In our opinion

- the consolidated financial statements give a true and fair view of the Group's financial performance and financial position in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

Our opinion is consistent with the additional report submitted to the Board of Directors' Financial and Audit Committee.

Basis for opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of Financial Statements section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In our best knowledge and understanding, the non-audit services that we have provided to the parent company and group companies are in compliance with laws and regulations applicable in Finland regarding these services, and we have not provided any prohibited non-audit services referred to in Article 5(1) of regulation (EU) 537/2014. The non-audit services that we have provided have been disclosed in note 5 to the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have also addressed the risk of management override of internal controls. This includes consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.

Key audit matter	How our audit addressed the key audit matter
Valuation of Biological Assets Refer to Note 1, Note 2 and Note 12 The fair value of Group's Biological assets through subsidiaries, joint operations and associates amounts to EUR 3 354 million as of December 31, 2017. The value of Biological assets is measured at fair value less costs to sell. The fair value is determined using discounted cash flows based on sustainable forest management plans taking into account the growth potential of one cycle. The one cycle varies depending on the geographic location and species. These discounted cash flows require estimates of growth, harvest, sales price and costs. Due to the level of judgment involved in the valuation of Biological Assets, complexity of the governance structure as well as the significance of biological assets to the Group's financial position, this is considered to be a key audit matter. This matter is a significant risk of material misstatement referred to in EU Regulation No 537/2014, point (c) of Article 10(2).	As part of our audit procedures, we have gained understanding over the management review and monitoring controls for interpretation of group policy and IAS 41 standard. We have tested management's controls and effectiveness of systems in place for the valuation of Biological assets directly owned by the subsidiary companies. We have assessed the key assumptions contained within the fair value calculations including sales price assumptions, growth assumptions and discount rates. We have used Deloitte specialists where applicable. We have performed analytic review of the results of the IAS 41 valuations to highlight outliers which warrant further procedures. We have assessed and tested the controls and procedures around management's recording of Joint Operations results, including impact of Biological assets valuation. As part of our audit procedures, we have assessed and tested the controls and procedures around management's recording of Forest associate results including impact of Biological assets valuation, as this has direct impact to Group's Equity accounted investments Balance Sheet line item. As part of our audit procedures, we have communicated with the auditors of the four largest associates and Joint Operations. As part of the communication, among other things we have gone through the key audit procedures performed. We have assessed the appropriateness of presentation in the consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter
Valuation of property, plant and equipment, goodwill and other intangible assets Refer to Note 2, Note 10 and Note 11 As at 31 December 2017, the Group has Goodwill of EUR 237 million, which is assessed at least annually for impairment, and EUR 5 539 million property, plant and equipment and other intangible assets, which are assessed when possible impairment indicators are identified. In 2017, an impairment of EUR 27 million for property, plant and equipment and other intangible assets was recorded at the Group. As at 31 December 2017, the value of Stora Enso Oyj's subsidiary shares amounted to EUR 6 139 million in the parent company's financial statements prepared in accordance with the Finnish Gaap. Under Finnish Gaap, an impairment is recorded when it is considered to be substantial and permanent. In 2017 impairment of subsidiary shares amounted to EUR 37 million. The assessment of the recoverable amount requires significant judgment, in particular relating to estimated cash flow projections and discount rates. Due to the level of judgment, market environment and significance to the Group's financial position, this is considered to be a key audit matter.	We have tested the controls and review procedures around identification of impairment indicators. As part of our audit procedures we have evaluated the robustness of budgeting process, which is basis for the valuations. We have critically evaluated management's methodologies in preparing impairment models and documented basis for key assumptions. We performed procedures on those Cash Generating Units where management has identified impairment indicators; or where the recoverable amount is close to carrying value. As part of our audit procedures we assessed the assumptions contained within the calculations including growth assumptions, discount rates and implications of industry changes. In addition, we have analysed earlier estimates against actual business development. We have used Deloitte specialists where applicable.

Key audit matter	How our audit addressed the key audit matter
Provisions and contingent liabilities Refer to Note 2, Note 22 and Note 29 As of 31 December 2017 the Group had environmental, restructuring and other provisions totalling EUR 134 million. In addition, the Group has disclosed significant open legal cases and other contingent liabilities in Note 29. The assessment of the existence of the present legal or constructive obligation, analysis of the probability of the related payment and analysis of a reliable estimate, requires management's judgement to ensure appropriate accounting or disclosures. Due to the level of judgement relating to recognition, valuation and presentation of provisions and contingent liabilities, this is considered to be a key audit matter.	As part of our audit procedures we have assessed management's processes to identify new possible obligations and changes in existing obligations for compliance with group policy and IAS 37 requirements. We have analysed significant changes from prior periods and obtain a detailed understanding of these items and assumptions applied. We have obtained legal representation letters on the main outstanding legal cases. As part of our audit procedures we have reviewed minutes of board meetings, including the sub-committees. We have held regular meetings with management and legal counsels. We have assessed the appropriateness of presentation of the most significant contingent liabilities in the consolidated financial statements.

Responsibilities of the Board of Directors and the Chief Executive Officer for the financial statements

The Board of Directors and the Chief Executive Officer are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Chief Executive Officer are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Chief Executive Officer are responsible for assessing the parent company's and the group's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

Auditor's responsibilities in the audit of financial statements

Our objectives are to obtain reasonable assurance on whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Chief Executive Officer's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit. We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Reporting Requirements

Information on our audit engagement

We were first appointed as auditors by the Annual General Meeting in 2008, and our appointment represents a total period of uninterrupted engagement of 10 years.

Other information

The Board of Directors and the Chief Executive Officer are responsible for the other information. The other information comprises information included in the report of the Board of Directors and in the Annual Report, but does not include the financial statements and our report thereon. We obtained the report of the Board of Directors prior to the date of the auditor's report, and the Annual Report is expected to be made available to us after the date of the auditor's report.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed, we conclude that there is a material misstatement in the information included in the report of the Board of Directors, we are required to report this fact. We have nothing to report in this regard.

Other opinions

We support that the financial statements should be adopted. The proposal by the Board of Directors regarding the treatment of distributable funds is in compliance with the Limited Liability Companies Act. We support that the Board of Directors of the parent company and the Chief Executive Officer should be discharged from liability for the financial period audited by us.

Helsinki, 8 February 2018

Deloitte Oy

Audit Firm

Jukka Vattulainen
Authorised Public Accountant (KHT)

Unaudited

Stora Enso in capital markets

Stora Enso ensures that all material information that has an impact on Stora Enso's share price is simultaneously available to the general public and financial community in order to ensure the right share price level in relation to the company's history, assets and future prospects. In its engagement with the capital markets, Stora Enso's Investor Relations aims to support the brand with accurate, consistent and credible financial communications.

Shares and shareholders

Shares and voting rights

The shares of Stora Enso Oyj (hereafter the "Company" or "Stora Enso") are divided into A and R shares, which entitle holders to the same dividend but different voting rights. Each A share and each ten R shares carry one vote at a shareholders' meeting. However, each shareholder has at least one vote.

On 31 December 2017, Stora Enso had 176 392 320 A shares and 612 227 667 R shares in issue, of which the Company held no A shares or R shares. The total number of Stora Enso shares in issue was 788 619 987 and the total number of votes was at least 237 615 087.

Share listings

Stora Enso shares are listed on the Nasdaq Helsinki and the Nasdaq Stockholm. Stora Enso shares are quoted in Helsinki in euros (EUR) and in Stockholm in Swedish crowns (SEK).

American Depositary Receipts (ADRs)

Stora Enso has a sponsored Level I American Depositary Receipts (ADR) facility. Stora Enso ADRs are traded over-the-counter (OTC) in the USA. The ratio between Stora Enso ADRs and R shares is 1:1, i.e. one ADR represents one Stora Enso R share. Citibank, N.A. acts as the depositary bank for the Stora Enso ADR programme. The trading symbol is SEOAY and the CUSIP number is 86210M106.

Share registers

The Company's shares are entered in the Book-Entry Securities System maintained by Euroclear Finland Oy, which also maintains the official share register of Stora Enso Oyj.

On 31 December 2017, 93 316 941 of the Company's shares were registered in Euroclear Sweden AB and 15 115 842 of the Company's R shares were registered in ADR form in Citibank, N.A.

Distribution by book-entry system, 31 December 2017

Number of shares	Total	A shares	R shares
Euroclear Finland Oy	680 187 204	165 297 663	514 889 541
Euroclear Sweden AB[1]	93 316 941	11 094 657	82 222 284
Citi administered ADRs[1]	15 115 842	-	15 115 842
Total	**788 619 987**	**176 392 320**	**612 227 667**

[1] Share registered in Euroclear Sweden and ADRs are both nominee registered in Euroclear Finland.

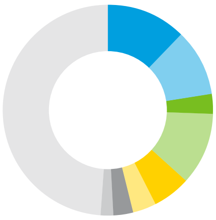
Ownership distribution, 31 December 2017

	% of shares	% of votes	% of shareholders
Solidium Oy[1]	12.3%	27.3%	0.0%
FAM AB[2]	10.2%	27.3%	0.0%
Social Insurance Institution of Finland (KELA)	3.2%	10.1%	0.0%
Finnish institutions (excl. Solidium and KELA)	11.1%	9.0%	2.8%
Swedish institutions (excl. FAM)	5.7%	4.9%	1.7%
Finnish private shareholders	3.8%	2.3%	44.6%
Swedish private shareholders	3.1%	2.2%	48.4%
ADR holders	1.9%	0.6%	1.6%
Under nominee names (non-Finnish/non-Swedish shareholders)	48.7%	16.3%	1.0%

[1] Entirely owned by the Finnish state.

[2] As confirmed to Stora Enso.

Ownership distribution, % of shares held



[1] Entirely owned by the Finnish state.

Share capital

On 31 December 2017, the Company's fully paid-up share capital entered in the Finnish Trade Register was EUR 1 342 million. The current accountable par of each issued share is EUR 1.70.

Conversion

According to the Articles of Association, holders of Stora Enso A shares may convert these into R shares at any time. The conversion of shares is voluntary. The conversions of a total of 114 770 A shares into R shares were recorded in the Finnish Trade Register during the year 2017.

Changes in share capital 2010–2017

	No. of A shares issued	No. of R shares issued	Total no. of shares	Share capital (EUR million)
Stora Enso Oyj, 1 Jan 2010	**177 152 481**	**612 386 018**	**789 538 499**	**1 342**
Conversion of A shares into R shares, Dec 2009–Nov 2010	-300	300	-	-
Stora Enso Oyj, 31 Dec 2010	**177 149 784**	**612 388 715**	**789 538 499**	**1 342**
Conversion of A shares into R shares, Dec 2010–Nov 2011	-1 012	1 012	-	-
Stora Enso Oyj, 31 Dec 2011	**177 148 772**	**612 389 727**	**789 538 499**	**1 342**
Conversion of A shares into R shares, Dec 2011–Nov 2012	-1 000	1 000	-	-
Stora Enso Oyj, 31 Dec 2012	**177 147 772**	**612 390 727**	**789 538 499**	**1 342**
Cancellation of shares owned by the Company, 15 May 2013		-918 512	788 619 987	-
Conversion of A shares into R shares, Dec 2012–Nov 2013	-51 568	51 568	-	-
Stora Enso Oyj, 31 Dec 2013	**177 096 204**	**611 523 783**	**788 619 987**	**1 342**
Conversion of A shares into R shares, Dec 2013–Nov 2014	-40 000	40 000	-	-
Stora Enso Oyj, 31 Dec 2014	**177 056 204**	**611 563 783**	**788 619 987**	**1 342**
Conversion of A shares into R shares, Dec 2014–Nov 2015	-524 114	524 114	-	-
Stora Enso Oyj, 31 Dec 2015	**176 532 090**	**612 087 897**	**788 619 987**	**1 342**
Conversion of A shares into R shares, Dec 2015–Nov 2016	-25 000	25 000	-	-
Stora Enso Oyj, 31 Dec 2016	**176 507 090**	**612 112 897**	**788 619 987**	**1 342**
Conversion of A shares into R shares, Dec 2016–Nov 2017	-114 770	114 770	-	-
Stora Enso Oyj, 31 Dec 2017	**176 392 320**	**612 227 667**	**788 619 987**	**1 342**

For more historical data about the share capital, please visit **storaenso.com/investors**

Stora Enso's activities in capital markets during 2017

Stora Enso's Investor Relations activities cover equity and fixed-income markets to ensure full and fair valuation of the Company, continual access to funding sources and stable bond pricing. Investors and analysts are met on a regular basis in Europe, North America, and parts of Asia and Latin America. In 2017, the IR team conducted several individual and group meetings with equity investors, whilst maintaining regular contact with equity research analysts at investment banks and brokerage firms. There were also meetings with fixed-income analysts and investors. In addition, Stora Enso arranged a webinar for ESG investors and analysts on its sustainability strategy and activities.

The group arranged site visits to mills in Finland, China, and Uruguay for the members of the investment community. In addition, visit to innovation centre in Stockholm and to Wood City in Helsinki were arranged. Senior management and IR personnel also gave presentations at equity and fixed-income investor conferences in Scandinavia, Continental Europe, the United Kingdom and North America. During the year, the group arranged three large group presentations for private investor in Sweden.

Stora Enso arranged Capital markets day (CMD) on 8 November 2017 in London. At the event, the CEO, CFO and the Divisional heads of Consumer Board, Packaging Solutions and Biomaterials gave their presentations, which were followed by break-out sessions with the CEO, CFO and divisional heads providing an opportunity for further discussion with the management. In addition, Renewable Packaging, Intelligent Packaging, Microfibrillated Cellulose (MFC), Biocomposites, and Carbon fibre were shown on demo stations during the event. The CMD was attended by sell-and-buy side analysts, equity and fixed income investors, and relationship bank representatives.

Shareholdings of other group-related bodies at 31 December 2017

E.J. Ljungberg's Education Foundation owned 1 780 540 A shares and 2 336 224 R shares, E.J. Ljungberg's Foundation owned 39 534 A shares and 101 579 R shares, Mr. and Mrs. Ljungberg's Testamentary Foundation owned 5 093 A shares and 13 085 R shares and Bergslaget's Healthcare Foundation owned 626 269 A shares and 1 609 483 R shares.

Shareholders

At the end of 2017, the Company had approximately 80 366 registered shareholders, including about 40 791 Swedish shareholders and about 1 248 ADR holders. Each nominee register is entered in the share register as one shareholder.

The free float of shares excluding shareholders with holdings of more than 5% of shares or votes is approximately 586 million shares, which is 74% of the total number of shares issued. The largest shareholder in the Company is Solidium Oy based in Finland.

Major shareholders as at 31 December 2017

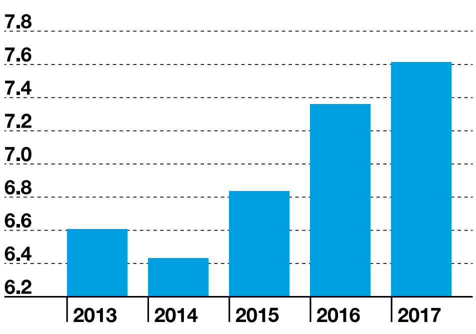
By voting power	A shares	R shares	% of shares	% of votes
1 Solidium Oy[1]	61 255 036	35 792 540	12.3%	27.3%
2 FAM AB[2]	63 123 386	17 000 000	10.2%	27.3%
3 Social Insurance Institution of Finland	23 825 086	1 279 062	3.2%	10.1%
4 Varma Mutual Pension Insurance Company	9 913 018	140 874	1.3%	4.2%
5 MP-Bolagen i Vetlanda AB, (Werner von Seydlitz dödsbo)	4 803 000	3 087 000	1.0%	2.2%
6 Ilmarinen Mutual Pension Insurance Company	3 492 740	15 231 189	2.4%	2.1%
7 Erik Johan Ljungberg's Education Foundation	1 780 540	2 336 224	0.5%	0.8%
8 Swedbank Robur Funds	-	10 454 540	1.3%	0.4%
9 The State Pension Fund	-	7 900 000	1.0%	0.3%
10 Bergslaget's Healthcare Foundation	626 269	1 609 483	0.3%	0.3%
11 Nordea Investment Funds	-	7 242 182	0.9%	0.3%
12 Unionen (Swedish trade union)	-	5 297 200	0.7%	0.2%
13 Keva (Local Government Pensions Institution)	-	5 251 101	0.7%	0.2%
14 SEB Investment Management	-	5 231 079	0.7%	0.2%
15 Investment Fund OP Suomi	-	4 253 482	0.5%	0.2%
Total	**168 819 075**	**122 105 956**	**37.0%** [3]	**76.1%** [3]
Nominee-registered shares	74 491 298	467 494 861	68.7% [3,4]	51.0% [3,4]

[1] Entirely owned by the Finnish State.
[2] As confirmed to Stora Enso.
[3] As some of the shareholdings on the list are nominee registered, the percentage figures do not add up to 100%.
[4] According to Euroclear Finland.

The list has been compiled by the Company on the basis of shareholder information obtained from Euroclear Finland, Euroclear Sweden and a database managed by Citibank, N.A (Citi). This information includes only directly registered holdings, thus certain holdings (which may be substantial) of shares held in nominee or brokerage accounts cannot be included. The list is therefore incomplete.

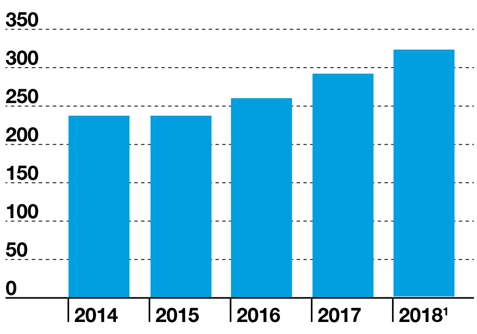
Equity per share

EUR



Distributed dividend

EUR million



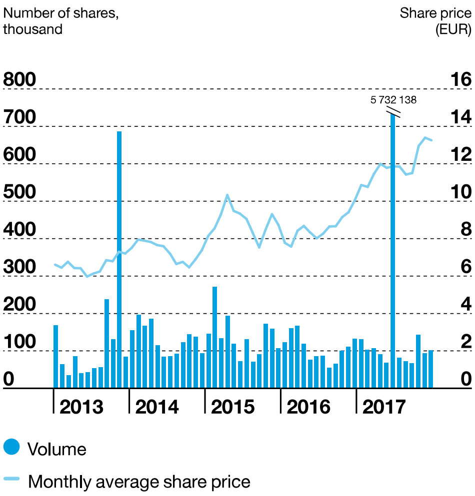
[1] Board of Director's proposal to the AGM for the distributed dividend.

Share price performance and volumes

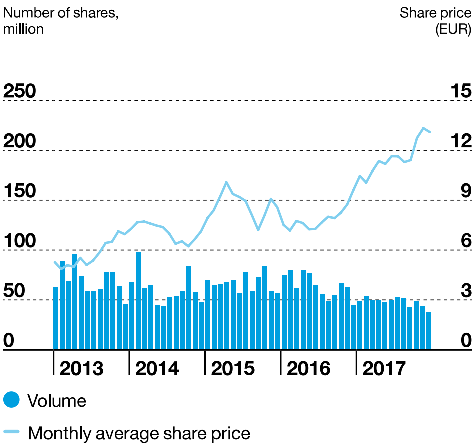
Helsinki

The Stora Enso R (STERV) share price increased by 30% during 2017 (22% increase in 2016). Over the same period, the OMX Helsinki Index increased by 6%, the OMX Helsinki Benchmark Index by 7% and the OMX Helsinki Basic Materials Index by 13%.

Helsinki, Stora Enso A



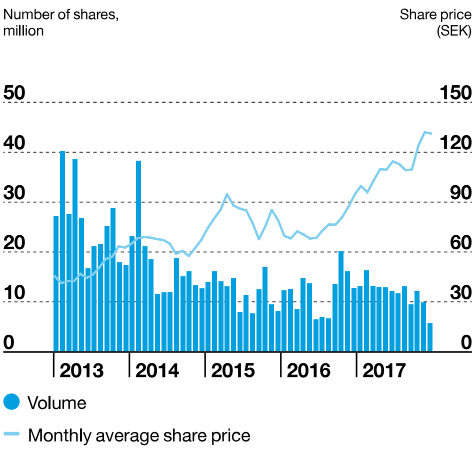
Helsinki, Stora Enso R



Stockholm

The Stora Enso R (STE R) share price increased during 2017 by 32% (28% increase in 2016). Over the same period, the OMX Stockholm 30 Index increased by 4% and the OMX Stockholm Basic Materials Index increased by 20%.

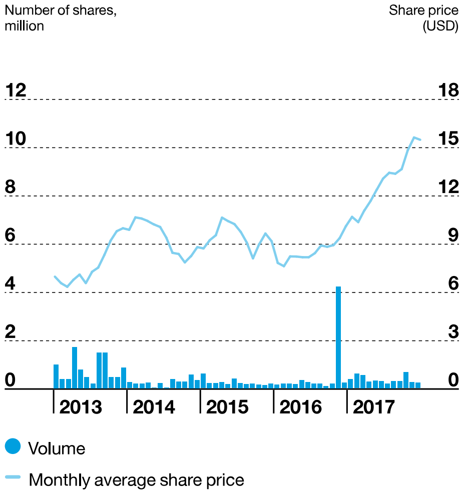
Stockholm, Stora Enso R



OTC

Stora Enso ADR (SEOAY) share price increased by 48% during 2017 (17% increase in 2016). Over the same period, the Standard & Poor's Global Timber and Forestry Index increased by 11%.

New York, Stora Enso ADR

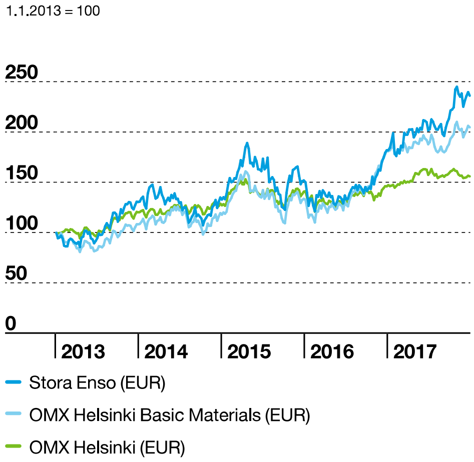


Share prices and volumes 2017

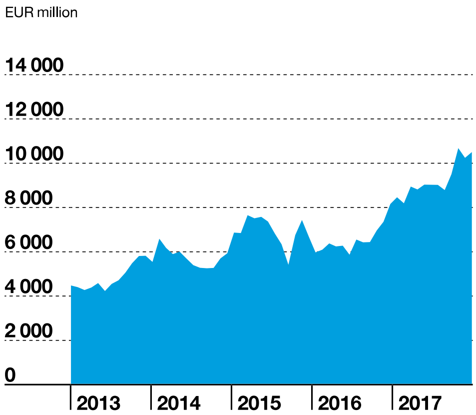
		Helsinki, EUR	Stockholm, SEK	OTC, USD
	A share	13.87	135.70	
High	R share	13.80	135.10	15.95
	A share	10.20	95.30	
Low	R share	9.56	90.65	10.02
	A share	13.20	130.0	
Closing, 31 Dec 2017	R share	13.22	129.5	15.78
	A share	27%	28%	
Change from previous year	R share	30%	32%	48%
	A share	6 768 170	2 041 449	
Cumulative trading volume, no. of shares	R share	571 717 014	140 626 449	4 341 440

The volume-weighted average price of R shares over the year was EUR 8.03 in Helsinki (EUR 7.88 in 2016), SEK 70.84 in Stockholm (SEK 76.63 in 2016) and USD 13.05 on the OTC in the USA (USD 9.66 in 2016). The percentage of R shares traded was 62.5% (58.2% in 2016) in alternative trading venues, 29.9% (35.0% in 2016) in Helsinki, 7.4% (6.5% in 2016) in Stockholm and 0.2% (0.3% in 2016) on the OTC in the USA. Total market capitalisation on the OMX Helsinki at year-end was EUR 10.4 billion (EUR 8.1 billion).

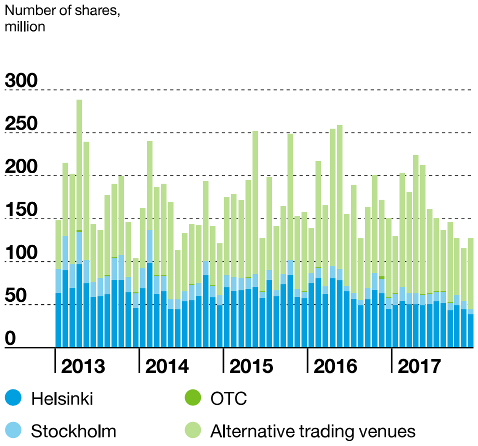
Stora Enso R Share vs Nasdaq Helsinki indices



Market capitalisation on Nasdaq Helsinki



Monthly R shares trading volumes



Alternative trading venues

Stora Enso shares can be traded outside Nasdaq Helsinki and Nasdaq Stockholm, where the shares are listed. During 2017, the largest alternative trading venues included Cboe BXE, Cboe CXE, Turquoise, and LSE. The alternative trading venues' market share of monthly turnover in Stora Enso shares varied between 52% and 72%. Of the alternative trading venues, Cboe BXE had the biggest share of the volume with 29% on an annual basis (BATS OTC had the biggest share of the volume in 2016 with 23%).

Stora Enso is included in at least the following indices

OMX INDICES	STOXX INDICES	FTSE INDICES	MSCI INDICES	SUSTAINABILITY INDICES
OMX Helsinki	STOXX Global 1800	FTSE RAFI All-World 3000	MSCI Finland	CDP's Climate A list
OMX Helsinki 25	STOXX Europe 600	FTSE RAFI Developed 1000	MSCI Europe	FTSE4 Good Index
OMX Helsinki Large Cap	STOXX Europe Mid 200	FTSE RAFI Europe	MSCI World	STOXX® Global ESG Leaders Indicies
OMX Helsinki Benchmark	STOXX Nordic	FTSE Finland 25 Index		ECPI EMU Ethical Equity index
OMX Helsinki Basic Materials	EURO STOXX			OMX GES Sustainability Nordic Index
OMX Helsinki Basic Resources	EURO STOXX Basic Materials			Ethibel Sustainability Index (ESI) Excellence Europe and Excellence Investment Register
OMX Helsinki Forestry & Paper	EURO STOXX Basic Resources			Euronext Vigeo - Europe 120
OMX Stockholm				MSCI ESG indices
OMX Stockholm Basic Materials				
OMX Stockholm Forestry & Paper				
OMX Nordic				
OMX Nordic Large Cap				

Read more about sustainability indeces in the **Sustainability Report** 2017.

In 2016, Stora Enso shifted its strategy regarding the provision of ESG information to its stakeholders. The aim is to keep sustainability information widely available on the group website to benefit and serve different stakeholders in equal manner. As a consequence, Stora Enso simultaneously reduces the number of sustainability index survey questionnaires in which it participates. The group is targeting its participation in those questionnaires and enquiries that it has assessed to be the most material. The Company continues with this chosen strategy also in 2018.

Trading codes and currencies

	Helsinki	Stockholm	OTC
A share	STEAV	STE A	-
R share	STERV	STE R	-
ADRs	-	-	SEOAY
Segment	Large Cap	Large Cap	-
Sector	Materials	Materials	-
Currency	EUR	SEK	USD
ISIN, A share	FI0009005953	FI0009007603	
ISIN, R share	FI0009005961	FI0009007611	
CUSIP	-	-	86210M106
Reuters			STERV.HE
Bloomberg			STERV FH Equity

Key share data 2008-2017, total operations (for calculations see Calculation of Key figures)

According to Nasdaq Helsinki	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Earnings per share, EUR	0.79	0.59	1.02	0.13	-0.07	0.61	0.43	0.97	-1.12	-0.85
– diluted, EUR	0.79	0.59	1.02	0.13	-0.07	0.61	0.43	0.97	-1.12	-0.85
– excl. IAC, EUR	0.89	0.65	1.24	0.40	0.40	0.33	0.63	0.79	0.19	0.19
Equity/share, EUR	7.62	7.36	6.83	6.43	6.61	7.32	7.45	7.87	6.50	7.09
Dividend and distribution/share, EUR	0.41[1]	0.37	0.33	0.30	0.30	0.30	0.30	0.25	0.20	0.20
Payout ratio, %	52	63	32	231	-429	49	70	26	-18	-24
Dividend and distribution yield, %										
A share	3.1	3.56	3.9	4.0	4.1	5.3	5.9	3.2	3.4	3.6
R share	3.1	3.62	3.9	4.0	4.1	5.7	6.5	3.3	4.1	3.6
Price/earnings ratio (P/E), excl. IAC										
A share	14.83	16.00	6.8	18.7	18.3	17.3	8.0	10.0	30.8	29.6
R share	14.85	15.71	6.8	18.6	18.3	15.9	7.3	9.7	25.7	29.1
Share prices for the period, EUR										
A share										
– closing price	13.20	10.40	8.40	7.48	7.31	5.70	5.03	7.90	5.85	5.63
– average price	11.93	8.50	8.87	7.29	6.82	6.15	7.73	6.47	5.03	7.48
– high	13.79	10.45	11.01	8.35	7.49	7.15	9.80	7.94	7.55	11.20
– low	10.26	6.56	6.70	5.73	5.42	5.10	4.70	5.30	2.82	5.16
R share										
– closing price	13.22	10.21	8.39	7.44	7.30	5.25	4.63	7.69	4.88	5.52
– average price	11.54	7.88	8.70	7.16	5.79	5.08	6.28	6.03	4.27	7.32
– high	13.75	10.28	10.95	8.38	7.54	5.95	8.99	7.79	6.16	10.44
– low	9.70	6.50	6.58	5.71	4.76	4.14	3.73	4.15	2.65	5.10
Market capitalisation at year-end, EUR million										
A share	2 328	1 836	1 483	1 324	1 295	1 010	891	1 400	1 036	997
R share	8 094	6 250	5 135	4 547	4 464	3 212	2 835	4 709	2 989	3 381
Total	10 422	8 085	6 618	5 871	5 756	4 222	3 726	6 109	4 025	4 378
Number of shares at the end of period, (thousands)										
A share	176 392	176 507	176 532	177 056	177 096	177 148	177 149	177 150	177 150	177 152
R share	612 228	612 113	612 088	611 564	611 524	612 391	612 389	612 389	612 388	612 386
Total	788 620	788 620	788 620	788 620	788 620	789 538	789 538	789 538	789 538	789 538
Trading volume, (thousands)										
A share	6 768	1 254	1 641	1 553	1 656	831	1 402	1 887	2 536	1 712
% of total number of A shares	3.8	0.7	0.9	0.9	0.9	0.5	0.8	1.1	1.4	1.0
R share	571 717	765 122	798 507	731 067	828 401	977 746	1 237 898	1 194 245	1 297 668	1 231 605
% of total number of R shares	93.4	125	130.5	119.5	135.5	159.7	202.1	195.0	211.9	201.1
Average number of shares (thousands)										
basic	788 620	788 620	788 620	788 620	788 620	788 620	788 620	788 619	788 620	788 620
diluted	790 024	789 888	789 809	789 210	788 620	788 620	788 620	788 619	788 620	788 620

[1] Board of Directors' proposal to the AGM for distribution of dividend.

IAC = Items affecting comparability

Read more about incentive programmes in **Note 21** and management interests in **Note 7**.

Debt investors

Funding strategy

Stora Enso's funding strategy is based on the Group's financial targets. Stora Enso should have access to sufficient competitively priced funding at any time to be able to pursue its strategy and achieve its financial targets. In order to achieve this, the emphasis is on capital markets funding. Stora Enso strives to build confidence and a track record with fixed-income investors by being informative and transparent.

The debt structure of Stora Enso is focused on capital markets, whereas banks are utilised primarily to provide back-up facilities. To balance exposures, funding is obtained in the currencies of the Group's investments and assets (primarily USD, EUR and SEK). Commercial paper markets are used for short-term funding and liquidity management.

Debt structure as at 31 December 2017

	EUR	USD	CNY	SEK
Public issues	EUR 112 million 2018 EUR 178 million 2019	USD 300 million 2036		
	EUR 300 million 2023			
	EUR 300 million 2027			
Private placements	EUR 175 million	USD 50 million		
Financial institutions	EUR 165 million	USD 845 million	CNY 1 107 million	
Pension commitment loans	EUR 2 million			
Debt Programmes and Credit Facilities				
Commercial paper programmes	Finnish Commercial Paper Programme EUR 750 million			Swedish Commercial Paper Programme SEK 10 000 million
EMTN (Euro Medium-Term Note programme)	EUR 4 000 million			
Back-up facility	EUR 600 million Sustainability linked Revolving Credit Facility 2023[1]			

[1] Undrawn committed credit facility EUR 600 million. Part of the pricing for the facility agreement is based on Stora Enso's Science Based Targets to combat global warming by reducing greenhouse gases, including CO_2.

Rating strategy

The present ratings and outlooks from Moody's and Standard & Poor's (S&P) are shown below.

Ratings as at 31 December 2017

Rating agency	Long/short-term rating	Valid from
Standard & Poor's	BB+ (stable)/ B	21 August 2017
Moody's	Ba2 (positive) / NP	4 August 2016

Stora Enso's goal is to ensure that rating agencies continue to be comfortable with Stora Enso's strategy and performance. The Company's strategy is to achieve liquidity well in line with the comfort level of the agencies. Review meetings are arranged with the Stora Enso management annually, and regular contact is maintained with the rating analysts.

Read more about: Debt and loans in **Note 26**.

Limited Assurance

Stora Enso as a taxpayer

Stora Enso's operations generate value through taxes for governments around the world. In 2017, Stora Enso paid more than EUR 1 billion into public sectors, including EUR 797 million in collected taxes.

Stora Enso aims to be transparent with respect to economic value generation. For this purpose, Stora Enso makes a voluntary commitment to openly provide details of the taxes paid by the Group to governments in its main countries of operation. This commitment to our stakeholders is fully in line with Stora Enso's values to 'Do what's right' and 'Lead'.

Stora Enso's tax policy

Stora Enso is committed to ensure that the Group observes all applicable tax laws, rules and regulations in all jurisdictions where it conducts its business activities. Stora Enso follows international transfer pricing guidelines and local legislation. In addition to our legal and regulatory requirements, our tax principles comply with our values. Furthermore, we seek to ensure that our tax strategy is aligned with our business and commercial strategy. We only undertake tax planning that is duly aligned to economic activity. This means that all tax decisions are made in response to commercial activity, and tax is only one of many factors that are taken into account when making business decisions.

As with any other business expense, however, we have an obligation to manage our tax costs as part of our financial responsibility to societies and shareholders. We are therefore willing to respond to tax incentives and exemptions granted by governments on reasonable grounds, and we currently have operations in countries that offer favourable tax treatments, where their location is also justified by sound commercial considerations.

Stora Enso has operations in the following locations that offer favourable tax treatments:

- The joint operation Montes del Plata operates a pulp mill in a Special Economic Zone in Uruguay.
- Stora Enso's two forestry companies in Guangxi, China are entitled to exemption from corporate income tax and value added tax on their sales, and our related industrial company will benefit from reduced tax rates until 2025.
- Stora Enso owns a dormant company in Luxembourg with equity of EUR 2 million, which is a remnant of a former legal structure.
- Stora Enso conducts business, mainly consisting of sales services, in the United Arab Emirates, Singapore and Hong Kong.
- For logistical and operational reasons, pulp from the group's joint operations in Brazil and Uruguay is traded via a pulp sourcing and marketing company based in the Netherlands.

For more detailed information see **www.storaenso.com/investors**.

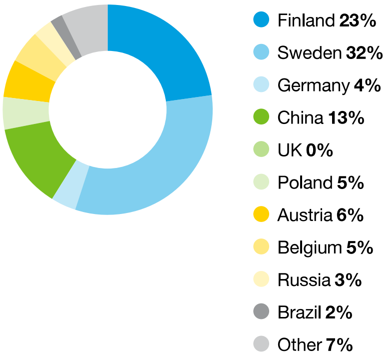
Our commitment to tax transparency is also reflected in our relationships with tax authorities and governments. We seek to work positively, proactively and openly with tax authorities on a global basis, aiming to minimise disputes and to build confidence wherever possible.

Stora Enso's tax footprint

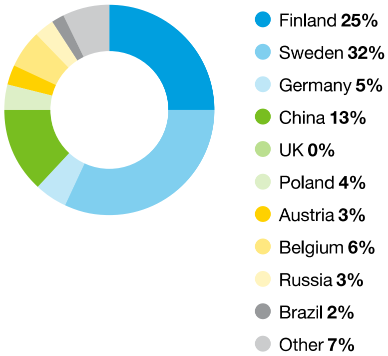
In 2017, Stora Enso paid EUR 1 236 (1 241) million in taxes to governments in countries where the Group has operations. A total of EUR 439 (452) million was paid directly by the Group (taxes borne) while EUR 797 (789) million was collected on behalf of governments (taxes collected).

Total taxes borne

2017

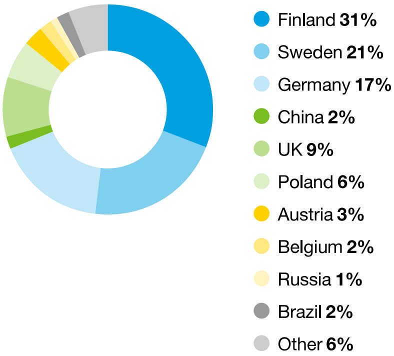


2016

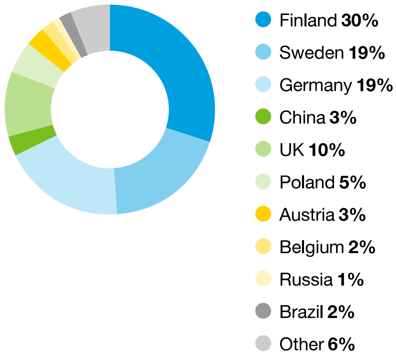


Total taxes collected

2017



2016



		Year Ended 31 December							
		Taxes borne							
		Corporate income tax		Employment taxes		Operational taxes		**Total**	
EUR million	Primary activity	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Finland	Production	0	0	90	97	13	15	103	112
Sweden	Production and sales	45	47	86	89	7	7	138	143
Germany	Production and sales	4	2	12	15	4	6	20	23
China	Production and sales	17	14	11	12	30	31	58	57
UK	Sales	0	0	1	1	0	0	1	1
Poland	Production and sales	11	7	5	5	7	5	23	17
Austria	Production and sales	13	2	12	12	0	0	25	14
Belgium	Production and sales	3	12	10	11	7	6	20	29
Russia	Production and sales	7	10	3	3	5	1	15	14
Brazil	Production	3	3	3	2	2	4	8	9
Other		10	8	16	16	2	9	28	33
Total		**113**	**105**	**249**	**263**	**77**	**84**	**439**	**452**

		Year Ended 31 December									
		Taxes collected								**Total taxes paid**	
		VAT & Similar[1]		Payroll taxes		Other taxes		**Total**			
EUR million	Primary activity	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Finland	Production	35	33	144	142	67	62	246	237	349	349
Sweden	Production and sales	77	70	85	83	0	0	162	153	300	296
Germany	Production and sales	110	116	26	33	0	0	136	149	156	172
China	Production and sales	9	9	11	12	0	0	20	21	78	78
UK	Sales	71	80	2	2	0	0	73	82	74	83
Poland	Production and sales	37	28	8	8	0	0	45	36	68	53
Austria	Production and sales	8	8	14	14	0	0	22	22	47	36
Belgium	Production and sales	7	9	8	9	1	0	16	18	36	47
Russia	Production and sales	10	10	2	1	0	0	12	11	27	25
Brazil	Production	3	3	3	2	7	8	13	13	21	22
Other		31	27	18	19	3	1	52	47	80	80
Total		**398**	**393**	**321**	**325**	**78**	**71**	**797**	**789**	**1 236**	**1 241**

[1] VAT, goods and services taxes and similar turnover related taxes

Stora Enso did not pay corporate income tax in Finland in 2017 because of tax losses carried forward from previous years. The tax losses of EUR 573 (801) million carried forward in Finland are the result of a number of factors including high closure and restructuring costs incurred over the past few years.

All companies within the scope of Stora Enso's tax footprint are consolidated or joint operations, which have been consolidated proportionally with Stora Enso's share amounting to at least 50%. Consolidation includes all companies that have either at least 10 employees or a turnover of EUR 5 million or above.

If a Stora Enso company was in a recovery position regarding VAT or energy taxation in a specific country, tax payments for this company have been reported at NIL.

Taxes borne include all tax and tax-like payments that Stora Enso has paid as own taxes. Tax-like payments include other forms of government revenue raised outside of the tax regime, such as payments for emission rights or social security payments.

Taxes collected include all tax and tax-like payments that Stora Enso has collected on behalf of the government, including e.g. payroll taxes as well as VAT and similar sales-related taxes paid by Stora Enso. The economic burden for such taxes ends up with the buyer or final consumer.

Stora Enso's tax footprint figures also reflect governmental incentives granted in the form of reduced tax rates or tax exemption, by reporting lower tax payments. However, governmental support is often granted in the form of subsidies, particularly in relation to energy consumption or favoured investments, which are not considered in our tax footprint calculations.

Unaudited

Capacities by mill in 2018

Consumer Board

Mill	Location	Grade	Capacity 1 000 t
Beihai	CHN	LPB, CKB, FSB, FBB	470
Fors	SWE	FBB	455
Imatra	FIN	SBS, FBB, LPB, Coated spec.	1 200
Ingerois	FIN	FBB	280
Skoghall	SWE	LPB, CUK	875
Total			**3 280**

Mill			
Skoghall (Forshaga)	SWE	Plastic coating	120
Imatra	FIN	Plastic coating	415
Total			**535**

Packaging Solutions

Mill	Location	Grade	Capacity 1 000 t
Heinola	FIN	SC fluting	300
Ostrołeka	POL	Testliner, PfR fluting, sack paper, wrapping paper	723
Varkaus	FIN	Kraftliner, white-top kraftliner	390
Total			**1 413**

Corrugated packaging	Grade	Capacity million m^2
Baltic states	Corrugated packaging	**143**
Kaunas		
Riga		
Tallinn		
Finland	Corrugated packaging	**150**
Heinola		
Lahti		
Kristiinankaupunki		
Poland	Corrugated packaging	**435**
Łódz		
Mosina		
Ostrołęka		
Tychy		
Russia	Corrugated packaging	**365**
Arzamas		
Balabanovo		
Balabanovo offset		
Lukhovitsy		
Sweden	Corrugated packaging	**275**
Jönköping		
Skene		
Vikingstad		
Total	Corrugated packaging	**1 368**

Inpac	Location	Grade	Capacity million pcs	Capacity million m^2
Gaobu, Dongguan	CHI	Consumer packaging	390	30
Jiashan, Zhejiang	CHI	Consumer packaging	145	20
Qian'an, Hebei	CHI	Consumer packaging	335	25
Wu Jin, Jiangshu[1]	CHI	Consumer packaging	30	5
Total			**900**	**80**

[1] New plant, investment on-going

Biomaterials

Mill	Location	Grade	Division	Capacity 1 000 t
Enocell	FIN	Short and long-fibre	Biomaterials	490
Skutskär	SWE	Short, long-fibre and fluff pulp	Biomaterials	540
Sunila	FIN	Long-fibre pulp	Biomaterials	375
Montes del Plata (50% share)	URU	Short-fibre pulp	Biomaterials	720
Veracel (50% share)	BRA	Short-fibre pulp	Biomaterials	575
Total				**2 700**

Chemical Pulp

Mill	Location	Grade	Division	Capacity 1 000 t
Heinola	FIN	Neutral Sulphite Semi-Chemical Pulp	Packaging Solutions	265
Kaukopää, Imatra	FIN	Short and long-fibre	Consumer Board	825
Nymölla	SWE	Short and long-fibre	Paper	350
Ostrołęka	POL	Long-fibre	Packaging Solutions	110
Oulu	FIN	Long-fibre	Paper	360
Skoghall	SWE	Long-fibre	Consumer Board	375
Tainionkoski, Imatra	FIN	Short and long-fibre	Consumer Board	195
Varkaus	FIN	Short and long-fibre	Packaging Solutions	310
Veitsiluoto	FIN	Short and long-fibre	Paper	380
Chemical Pulp Total (incl. Biomaterials)				**5 870**
of which market pulp[1]				2 250

[1] market pulp defined as dried pulp shipped out from the mill to external customers.

Deinked Pulp (DIP)

Mill	Location	Grade	Division	Capacity 1 000 t
Hylte	SWE	DIP	Paper	290
Langerbrugge	BEL	DIP	Paper	680
Maxau	GER	DIP	Paper	295
Ostrołęka	POL	Recycled fibre based pulp	Packaging Solutions	615
Sachsen	GER	DIP	Paper	430
Total				**2 310**

CTMP

Mill	Location	Grade	Division	Capacity 1 000 t
Beihai[1]	CHN	BCTMP	Consumer Board	210
Fors	SWE	CTMP	Consumer Board	185
Kaukopää	FIN	CTMP	Consumer Board	220
Skoghall	SWE	CTMP	Consumer Board	270
Total				**885**

[1] Ramping-up

Lignin

Mill	Location	Product	Division	Capacity 1 000 t
Sunila	FIN	Lignin	Biomaterials	50
Total Lignin				**50**

Xylose

Mill	Location	Product	Division	
Raceland[1]	USA	Xylose	Biomaterials	10
Total Xylose				**10**

1 Starting up

Wood Products

Mill	Location	Sawing Capacity 1 000 m^3	Further Processing Capacity 1 000 m^3	Pellet capacity 1 000 t	CLT capacity 1 000 m^3	LVL capacity 1 000 m^3
Ala	SWE	370	50	95	-	-
Alytus	LIT	200	90	-	-	-
Amsterdam	NLD	-	80	-	-	-
Bad St. Leonhard	AUT	350	105	-	80	-
Brand	AUT	440	260	-	-	-
Gruvön	SWE	370	150	100	-	-
Honkalahti	FIN	310	70	-	-	-
Imavere	EST	340	160	100	-	-
Impilahti	RUS	140	10	20	-	-
Kitee	FIN	260	110	25	-	-
Launkalne	LAT	190	20	-	-	-
Murow	POL	260	210	-	-	-
Nebolchi	RUS	180	45	40	-	-
Näpi	EST	47	160	14	-	-
Pfarrkirchen	GER	-	145	-	-	-
Planá	CZE	370	220	-	-	-
Uimaharju	FIN	240	20	-	-	-
Varkaus	FIN	150	10	-	-	70
Veitsiluoto[1]	FIN	200	-	-	-	-
Ybbs	AUT	610	440	-	90	-
Zdírec	CZE	550	220	75	-	-
Total		**5 577**	**2 575**	**469**	**170**	**70**

[1] Veitsiluoto Sawmill belongs to division Paper.

Paper

Mill	Location	Grade	Capacity 1 000 t
Anjala	FIN	Impr. news, book	435
Dawang	CHN	SC	140
Hylte	SWE	News	480
Kvarnsveden	SWE	SC, news, impr. news	550
Langerbrugge	BEL	SC, news, impr. news, dir.	555
Maxau	GER	SC	530
Nymölla	SWE	WFU	485
Oulu	FIN	WFC	1 080
Sachsen	GER	News, directory	310
Veitsiluoto	FIN	LWC, MWC, WFU	790
Total			**5 355**

Abbreviations used in the tables:

CLT	cross-laminated timber
CTMP	chemi-thermo-mechanical pulp
CUK	coated unbleached kraftboard
DIP	deinked pulp
FBB	folding boxboard
HWC	heavy-weight coated paper
LPB	liquid packaging board
LVL	laminated veneer lumber
LWC	light-weight coated paper
MWC	medium-weight coated paper
PfR	paper for recycling
SBS	solid bleached sulphate board
SC	super-calendered paper
WFC	wood free coated paper
WFU	wood free uncoated paper
WLC	white lined chipboard
WTL	white top liner

The formula: (Sum of net saleable production of two best consecutive months / Available time of these two consecutive months) x Available time of the year

Unaudited

Information for shareholders

Annual General Meeting (AGM)

Stora Enso Oyj's AGM will be held at 16.00 (Finnish time) on Wednesday 28 March 2018 at the Marina Congress Center, Katajanokanlaituri 6, Helsinki, Finland.

Nominee-registered shareholders wishing to attend and vote at the AGM must be temporarily registered in the Company's register of shareholders on the record date, 16 March 2018. Instructions for submitting notice of attendance will be given in the invitation to the AGM, which can be consulted on the Company's website at **storaenso.com/agm**.

AGM and dividend in 2018

16 March	Record date for AGM
28 March	Annual General Meeting (AGM)
29 March	Ex-dividend date
3 April	Record date for dividend
10 April	Dividend payment

Dividend

The Board of Directors proposes to the AGM that a dividend of EUR 0.41 per share be paid to the shareholders for the fiscal year ending 31 December 2017. The dividend payable on shares registered with Euroclear Sweden will be forwarded by Euroclear Sweden AB and paid in Swedish crowns. The dividend payable to ADR holders will be forwarded by Citibank, N.A. (Citi) and paid in US dollars.

Publication dates for 2018

9 February	Financial results for 2017
Week 9	Annual Report 2017
27 April	Interim Report for January–March
20 July	Half-year Report for January–June
26 October	Interim Report for January–September

Distribution of financial information

Stora Enso's **Annual Report 2017** consists of four reports: Progress Book, Sustainability Report, Financial Report, and Corporate Governance Report. You can find the highlights of the year, the online Financial Report and all reports as downloadable PDF files at **storaenso.com/annualreport**.

Progress Book and Corporate Governance Report are available in English, Finnish and Swedish. Sustainability Report and Financial Report are available in English. The official financial statements in Finnish and an unofficial Swedish translation, English and Swedish translations of the parent company financial statements, and the list of principal subsidiaries in English can be found on the Company's website at **storaenso.com/about/download-center**.

Interim Reports and **Half-year Reports** are published in English, Finnish and Swedish at **storaenso.com/press**.

Information for holders of American Depositary Receipts (ADRs)

The Stora Enso dividend reinvestment and direct purchase plan is administered by Citibank, N.A. The plan makes it easier for existing ADR holders and first-time purchasers of Stora Enso ADRs to increase their investment by reinvesting cash distributions or by making additional cash investments. The plan is intended for US residents only. Further information on the Stora Enso ADR programme is available at **citi.com/DR**.

Contact information for Stora Enso ADR holders

Citibank Shareholder Services
Computershare
P.O. Box 43077
Providence, Rhode Island 02940-3077
Email: **citibank@shareholders-online.com**

Toll-free number: (877)-CITI-ADR
Direct dial: (781) 575-4555

Contacts

Ulla Paajanen-Sainio
SVP, Investor Relations
Stora Enso Oyj
P.O. Box 309, FI-00101 Helsinki, Finland
Tel. +358 40 763 8767, **ulla.paajanen-sainio@storaenso.com**

storaenso.com
group.communications@storaenso.com

Stora Enso Oyj
P.O. Box 309
FI-00101 Helsinki, Finland
Visiting address: Kanavaranta 1
Tel. +358 2046 131

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

storaenso.com
group.communications@storaenso.com

Concept, design, and illustrations: Miltton Oy
Photography: Mattias Andersson, Mikko Huupponen, Tiina Nykänen, Niklas Palmklint, and Niklas Sandström

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.