METSÄ GROUP

FINANCIAL STATEMENTS
2016

Metsä

OUR GOOD RESULT-MAKING ABILITY CONTINUED

OUR BIOPRODUCT MILL WILL START UP IN

Q3/2017

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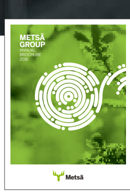
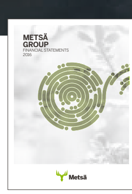
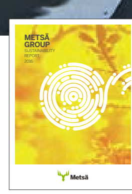
This publication and additional information is available online at www.metsagroup.com. Metsä Group's annual reporting consists of the following reports: Annual Brochure, Financial Statements, including the Corporate Governance statement, and Sustainability Report. In addition, Metsä Board and Metsä Fibre publish their own reports. Kindly send your feedback to communications@metsagroup.com or on social media @MetsaGroup.



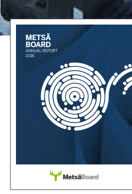
Metsä Group Annual Brochure 2016



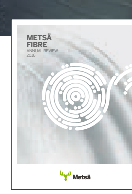
Metsä Group Financial Statements 2016



Metsä Group Sustainability Report 2016



Metsä Board Annual Report 2016



Metsä Fibre Annual Review 2016

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Metsä Group is a forerunner in sustainable bioeconomy utilising renewable wood from sustainably managed northern forests. Metsä Group focuses on wood supply and forest services, wood products, pulp, fresh fibre paperboards and tissue and cooking papers.

Metsä Group's sales totalled EUR 4.7 billion in 2016, and it employs approximately 9,300 people. The Group operates in some 30 countries. Metsäliitto Cooperative is the parent company of Metsä Group and is owned by approximately 104,000 Finnish forest owners.

The Carta Integra folding boxboard used for the cover of this Annual Brochure is manufactured at Metsä Board's Äänekoski mill. The surface layers of the three-layer folding boxboard are made from chemical pulp from Metsä Fibre's Äänekoski pulp mill, and the bleached mechanical pulp of the middle layer is manufactured at Metsä Board's Joutseno and Kaskinen mills. Carta Integra is made from pure fresh forest fibre. It is a fully coated paperboard, suitable for packaging and graphics end uses.

INVESTMENTS IN PROFITABLE GROWTH

The positive momentum within and around Metsä Group continues. We are investing in growth in a variety of ways. Our production capacity in pulp, paperboard and wood products is growing. All in all, Metsä Group's investments in 2015–2017 will amount to approximately EUR 2 billion, and 85 per cent of this relates to operations in Finland.

The new folding boxboard machine at the Husum mill in Sweden started up in February 2016 and it is running at good speed. The increased paperboard volume is directed predominantly at North America and at the global food service packaging segment. Construction of the extrusion coating line at Husum is underway and will be ready during the first half of 2017. This extrusion coating line will expand Metsä Board's range of paperboards suitable for food and food service packaging. The production of printing paper at the Husum mill and the entire Metsä Group came to an end in July 2016.

The construction of the new bioproduct mill started at Äänekoski in April 2015. This investment, valued at approximately EUR 1.2 billion, is the biggest in the history of Finland's forest industry. Pulp production at Äänekoski will grow to 1.3 million tonnes from the current 0.5 million. Metsä Fibre's position as the leading global supplier of softwood pulp continues to strengthen with customer demand for softwood pulp continuing to grow.

The world's first next-generation bioproduct mill allows for the integrated manufacture of new bioproducts, the resource-efficient use of side-streams, and the creation of a new type of bioeconomy ecosystem. The mill, with electricity self-sufficiency of 240 per cent, will increase the proportion of renewable energy in Finland's energy mix by around two percentage points. The focus during the initial stages of the project was on construction, and installation work started at the beginning of 2016. The project is progressing well – it is on schedule and in-line with the original budget. Commissioning of the first departments will begin during the first quarter of 2017, and the entire mill will start up in the third quarter.

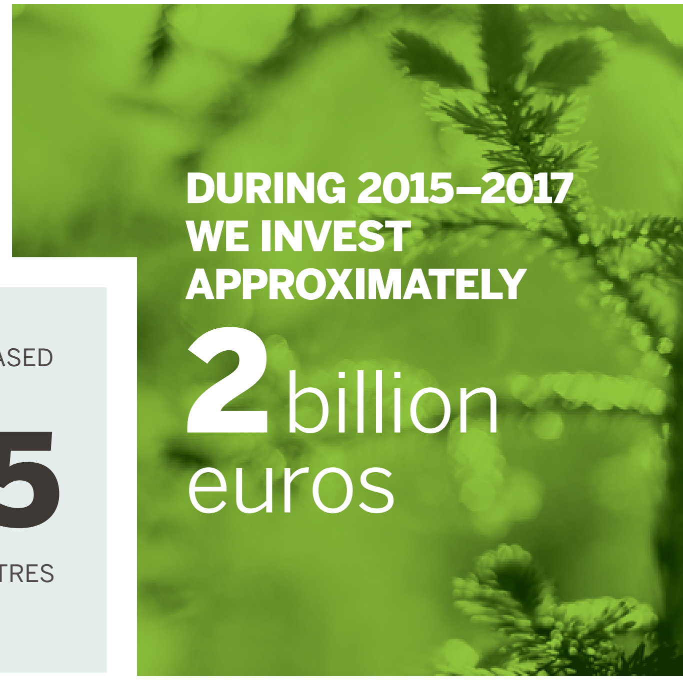
The bioproduct mill will have a strong positive impact on Finland's national economy. Over 70% of the products and services involved in this investment are of Finnish origin. With the increase in production, the value of annual exports will increase by approximately EUR 0.5 billion. Some 1,500 new jobs in Finland will be created in the mill's direct value chain. The annual employment impact during the construction phase is about 4,000 person-years.

In June 2016, we announced an investment programme of approximately EUR 100 million in our plywood and Kerto® LVL operations, which will enable us to better meet the growing demand globally for our products and improve our competitiveness. The programme includes investments in both Finland and Estonia, and it will be implemented in stages by the end of 2018. As a first stage of this programme we are expanding the production of the Kerto® LVL mill at Lohja, and in Estonia and we have signed a letter of intent on the purchase of land for a new plywood mill.

IN 2016 WE PURCHASED APPROXIMATELY

30.5

MILLION CUBIC METRES OF WOOD



PREMIUM WOOD RAW MATERIAL AT THE CORE OF THE BIOECONOMY

In 2016, we purchased approximately 30.5 million cubic metres of wood. Most of this was purchased in Finland from our owner-members, who have shown exemplary loyalty towards Metsä Group. The consistency of the wood supply is of utmost importance to us. We achieved a clear record in customer satisfaction among forest owners and entered more forest asset management agreements than any other previous years.

With the new bioproduct mill our annual use of wood fibre in Finland will increase by about 4 million cubic metres, i.e. by approximately 10 per cent. Our investment programme in the wood products industry will increase the annual consumption of timber wood in Finland by nearly 300,000 cubic metres. We are increasing the wood supply primarily in Finland, but we also operate in the entire Baltic Sea region, which gives us a degree of flexibility when necessary.

We are proactively developing services for forest owners. This is particularly visible in the use of electronic services and digitalisation. As a provider of electronic services, we are a pioneer in the forest industry, and new, interesting development projects are underway. The role of electronic trading was established last year. Approximately a fifth of all wood trade, and an even larger portion of the sales of forest management services, were carried out electronically.

Wood grown in northern regions is one of the world's most versatile raw materials. Resource-efficient processing into products creates considerable added value from the wood. Wood is nevertheless not a limitless resource in Finland, even though the growth of forests is accelerating. According to the National Resources Institute, Finland, pulpwood will be at full commercial use when our bioproduct mill achieves full operation in 2018, but there will still remain potential in other grades of wood. With the implementation of Finland's Energy and Climate Strategy, published in late 2016, other grades of wood – including energy wood – will also be nearing full use. Wood should not be directed between different forms of use with subsidy policies or other regulation; rather, the markets must guide the raw material to its most valuable use. When planning the adequacy of wood, all elements of sustainability must be accounted for – in other words, the economical, ecological and social perspectives. At the same time, the EU's energy and climate policies should not restrict the use of Finland's forests.

AMPLE OPPORTUNITIES FOR AN EVEN BETTER FUTURE

I want to thank our stakeholders for the past year. Metsä Group's starting position for 2017 is positive. We are among the best forest industry companies globally. We are continuing our long-term work to improve efficiency and productivity in all our business areas. Outside our home market of Europe, our focal areas for growth are in North America, Asia and Oceania. The high quality of our products is recognised around the world.

Metsä Group's year will culminate in the start-up of the bioproduct mill in the third quarter. The future is full of interesting opportunities for Metsä Group, a forerunner of the sustainable bioeconomy.

Kari Jordan

President and CEO

Metsä Group

REPORT OF THE BOARD OF DIRECTORS 2016

SALES AND RESULT

Metsä Group's sales in 2016 totalled EUR 4,657.9 (2015: 5,016.0 and 2014: 4,970.3).

The comparable operating result in 2016 was EUR 438.6 million (2015: 537.4 and 2014: 418.1), or 9.4 per cent (2015: 10.7 and 2014: 8.4) of sales. The decrease in sales and operating result in comparison to the previous year is primarily due to the lower market price and sales volumes of pulp, as well as the start-up phase of the new folding boxboard machine at Husum and the lower price of start-up volumes. In addition, the planned discontinuation of the remaining fine paper production had an impact on the decline of sales.

Items affecting comparability in 2016 totalled EUR +3.7 million (2015: +4.7 and 2014: -1.3). The major negative items were related to the shutdown of the wallpaper base machine at the Kyro mill and Metsä Tissue's decision to discontinue its operations in Russia. The biggest positive items consisted of the Metsä-Botnia Metsät Oy sales gain, the additional sales price received from the divestment of Metsä Board's Hallein mill, and the sales gain from the divestment of Metsä Wood's gluelaminated beam business.

Metsä Group's operating result (IFRS) was EUR 442.3 million (2015: 542.1 and 2014: 416.9). The share of the results of associated companies and joint ventures was EUR -1.1 million (2015: 11.2 and 2014: 16.4), financial income was EUR 4.2 million (2015: 5.2 and 2014: 6.5), exchange rate differences in financing were EUR -5.7 million (2015: -1.2 and 2014: 2.7), and financial expenses totalled EUR 79.1 million (2015: 89.0 and 2014: 112.6).

The result before taxes was EUR 360.6 million (2015: 468.4 and 2014: 329.9), and taxes including changes in deferred tax liabilities totalled EUR 80.7 million (2015: 112.6 and 2014: 69.7). The Group's effective tax rate was 22.4 per cent (2015: 24.0 and 2014: 21.1). The result for the financial period was EUR 279.9 million (2015: 355.7 and 2014: 260.3).

The return on capital employed was 10.2 per cent (2015: 13.7 and 2014: 11.1), and the return on equity was 11.2 per cent (2015: 15.9 and 2014: 13.0). The comparable return on capital employed was 10.2 per cent (2015: 13.6 and 2014: 11.4), and the comparable return on equity was 11.0 per cent (2015: 15.8 and 2014: 13.4). Metsä Group's bioproduct mill under construction at Äänekoski reduced the return on capital employed by 1.5 percentage points (0.6).

BALANCE SHEET AND FINANCING

Metsä Group's liquidity is excellent. Total liquidity at the end of December was EUR 1,801.4 million (2015: 1,952.6 and 2014: 1,725.0). This consisted of EUR 895.1 million (2015: 1,120.8 and 2014: 947.9) in liquid assets and investments, and EUR 906.3 million (2015: 831.8 and 2014: 777.1) in off-balance sheet committed credit facility agreements. In addition, the Group has EUR 501.2 million in off-balance sheet committed credit facility agreements related to the bioproduct mill investment at Äänekoski.

The Group's liquidity reserve is complemented by uncommitted commercial paper programmes and credit facilities amounting to EUR 160.8 million (2015: 161.0 and 2014: 173.3). The Group's equity ratio at the end of December was 43.9 per cent (2015: 43.2 and 2014: 37.9) and net gearing was 40 per cent (2015: 25 and 2014: 46). Interest-bearing net liabilities were EUR 1,032.6 million (2015: 609.6 and 2014: 938.2).

Net cash flow from operations amounted to EUR 347.8 million (2015: 796.0 and 2014: 617.3). EUR 126.2 million was tied up in working capital (2015: released 221.3 and 2014: released 198.6). Working capital was increased by the addition of EUR 84.4 million in trade and other receivables as well as the addition of EUR 90.3 million in inventories. Working capital was decreased by the addition of EUR 48.6 million in trade payables and other liabilities. In 2015, the introduction of new instruments for working capital financing, among others, reduced the amount of working capital.

The equity ratio of the parent company Metsäliitto Cooperative was 69.6 per cent at the end of December (2015: 67.8 and 2014: 63.0) and net gearing was -7 per cent (2015: 3 and 2014: 12).

During January–December 2016, Metsäliitto Cooperative's members' capital increased by a total of EUR 51.5 million (53.8). The value of participation shares grew by EUR 11.8 million (1.6), that of the additional shares A by EUR 26.6 million (33.1), and that of the additional shares B by EUR 13.1 million (19.1).

In February, Standard & Poor's Ratings Services raised Metsä Board's credit rating by one notch from BB to BB+. The rating outlook was raised from stable to positive.

In June, Metsä Board agreed on extending its current syndicated credit agreement by two years. Following the extension, the facility, which consists of a loan facility of EUR 150 million and a revolving credit facility of EUR 100 million, will mature in March 2020.

In June, the shareholders of Metsä Fibre made an equity investment totalling EUR 100 million in the bioproduct mill under construction. The share of Metsäliitto Cooperative was EUR 50.2 million, that of Metsä Board EUR 24.9 million, and that of Itochu Corporation EUR 24.9 million.

PERSONNEL

Metsä Group employed an average of 9,626 people in 2016 (2015: 10,117 and 2014: 10,775). At the end of December, the number of personnel in the Group was 9,300 (2015: 9,599 and 2014: 10,410), of whom 4,927 were based in Finland (2015: 5,122 and 2014: 5,131) and 4,373 were based abroad (2015: 4,477 and 2014: 5,279). Personnel turnover was 8.0 per cent (2015: 7.9 and 2014: 7.4), including natural reduction and other reduction, of which the voluntary employee turnover rate was 2 per cent.

The average duration of employment was 16.6 years (2015: 16.7 and 2014:16.8). Salaries and remuneration paid to Metsä Group's employees, including share-based payments, totalled EUR 416.4 million (2015: 463.8 and 2014: 469.6).

The parent company Metsäliitto Cooperative employed 1,934 people at the end of December (2015: 2,449 and 2014: 2,471). The parent company paid EUR 108.0 million in salaries and remuneration (2015: 108.8; 2014: 107.3).

Metsä Group promotes management practices based on its values by training managers, supervisors and employees to understand and comply with the Group's Code of Conduct and shared policies. Metsä Group's objective is to have all employees participate in the Code of Conduct training. By the end of 2016, the training had been taken by 96 per cent of white-collar employees (2015: 96 and 2014: 94) and 90 per cent of production workers (2015: 82). Of the entire personnel, 92 per cent had been trained by the end of 2016 (2015: 87 and 2014: 72).

Safety at work is Metsä Group's top priority. Systematic occupational safety work carried out in all business areas supports the continuous development of operations and achieving the Group's objectives. The aim is to reduce our lost-time accident frequency rate by 10 per cent each year. The long-term objective is zero accidents. In 2016, the lost-time accident rate decreased by 22 per cent from the previous year to 7.4 (2015: 9.5 and 2014: 11.2). During the review period, there was one traffic accident that led to the death of an employee at Metsä Forest's Podporozhye unit in Russia (2015: 1 and 2014: 0). Absence due to illness within the Group amounted to 3.9 per cent (2015: 3.9 and 2014: 3.7) of the theoretical regular working time.

In 2016, the personnel job satisfaction survey was conducted with a smaller sample than in the previous year. On a scale of 4–10, the Group-level result of the Organisation Functionality Survey was 8.4 (2015: 8.2 and 2014: 8.1). The study also provides a supervisor index, which was 8.4 (2015: 8.1 and 2014: 8.0). The study results will be used in work aiming to improve personnel's job satisfaction and well-being at work as well as their efficiency.

The Metsä Excellence programme aimed at young people with good potential was initiated as a new Group-level programme. The programme supports the development of diverse competence and thus promotes the filling of the Group's critical tasks largely internally. The Group's internal job rotation plays a key role in the programme.

Metsä Forest initiated a sizeable coaching programme concerning Finnish operations. The programme makes use of gamified elements and aims to improve, among other things, the customer experience, internal cooperation and operating methods. A quality, environmental and safety leadership model was also taken into use.

Metsä Wood renewed its management structure and adopted a process-based organisation model in 2016. Safety issues have been raised as an important development target in Metsä Wood, because safe working conditions are a prerequisite for the development of systematic production and industrial efficiency. The personnel are encouraged to make active safety observations.

In Metsä Fibre, the areas of personnel development include management and in-depth knowledge of the pulp process, for example. Competence surveys were conducted throughout the company. Based on the surveys, a development plan was prepared for each employee at Metsä Fibre.

Metsä Board continued the coaching begun in 2015 and aimed at supervisors, aiming to develop and harmonise leadership. The improvement of occupational safety and the harmonisation of occupational safety practices were accelerated with a project carried out at mills. Investments were made in the maintenance of working capacity by anticipating working capacity risks by way of early support discussions, for example.

Metsä Tissue decided to initiate a well-being at work development project, one of the central objectives of which is to change the amount of sick leave to a downward trend at all locations. Safety culture training aiming to improve occupational safety also began at all locations and the training will continue in 2017.

MEMBERS

At the end of December, Metsäliitto Cooperative had 104,037 members (2015: 116,290 and 2014: 121,941). The reduction in the number of members was the result of a project aiming to update the membership register, which included a review of the grounds for membership with regard to ownership of forestland and investments in participation shares. The forest area owned by members remained nearly unchanged, and members own approximately half of Finland's private forests.

INVESTMENTS

Metsä Group's capital expenditure totalled EUR 757.9 million (2015: 491.6 and 2014: 143.0). Approximately EUR 508 million of the investments related to the bioproduct mill at Äänekoski (2015: 355).

BUSINESS DEVELOPMENT

ÄÄNEKOSKI BIOPRODUCT MILL

In April 2015 Metsä Fibre announced that it will build a bioproduct mill in Äänekoski. The investment will be approximately EUR 1.2 billion.

The construction of Metsä Fibre's bioproduct mill at Äänekoski is progressing according to plan. The mill's leading principle was to expand the product range to include numerous new bioproducts. In February 2016, the development of the product concept progressed to implementation decisions for biogas and biocomposite. In May, Metsä Fibre decided to build a sulphuric acid plant in conjunction with the mill. The plant will further improve the bioproduct mill's environmental performance.

The bioproduct mill was 84 per cent complete at the end of 2016. The project's degree of Finnish content is more than 70 per cent. The mill will start up in the third quarter of 2017.

METSÄ WOOD'S INVESTMENT PROGRAMME

In June, Metsä Wood announced the launch of an investment programme of EUR 100 million in the plywood and Kerto® LVL operations. The investment programme will be carried out in phases and completed by the end of 2018.

A new birch veneer peeling and drying line will be built at Äänekoski, the production of which will be processed in a new plywood mill to be built in Estonia. Suolahti mill's current processing line for birch veneer will be transferred to Estonia. A preliminary agreement on the purchase of an industrial site in Pärnu, Estonia, was signed in October.

The customer test runs concerning the speciality veneer product planned for the Suolahti mill are already under-way. The annual production capacity of Lohja's Kerto® LVL mill will be increased by approximately 20,000 cubic metres as the oldest two production lines are replaced with a new one. Kerto line 1 was closed at the end of November, and the preparatory work for the investment in the new line commenced.

HUSUM MILL

Husum's investment programme was brought to a conclusion in 2016, and the new folding boxboard production line in Sweden started up in February. Technical problems in the finishing area of the new folding boxboard production line during the second and third quarters delayed customer deliveries. By the end of the year, the technical problems in the folding boxboard production line had been solved, and the average price of the order intake was at a good level.

During the third quarter the installation of the main equipment for the extrusion coating line began in Husum. The coating line will be commissioned in 2017, and its paperboard coating capacity will be approximately 100,000 tonnes per year. The investment value, approximately EUR 38 million, was allocated primarily to 2016.

DIVESTMENTS AND PRODUCTION ARRANGEMENTS

In June, Metsä Wood sold its ThermoWood operations in Kaskinen to Oy Lunawood Ltd.

Paper production in Metsä Group came to an end in July when fine paper production at Metsä Board's Husum mill ended.

In August, Metsä Fibre sold the entire share capital of Metsä-Botnia Metsät Oy to a fund managed by Dasos Capital Oy. Metsä-Botnia Metsät owns approximately 34,000 hectares of land and water areas.

In September, Metsä Board closed the wallpaper base machine at the Kyro mill, located in Hämeenkyrö, Finland. A folding boxboard machine with a capacity of 190,000 tonnes a year will remain at the mill.

In November, Metsä Wood sold its gluelaminated beam business located in Hartola, Finland, to Versowood Oy.

After the financial period, in January 2017, Metsä Wood sold its project business located in Pälkäne, Finland, to Lapwall Oy.

BUSINESS AREAS

On 1 November 2016, Metsä Group's Finnish sawmills transferred from the Wood Products Industry to the Group's Pulp Industry in a group internal transaction. As a result, the new name of the Pulp Industry segment is Pulp and Sawn Timber Industry. New historical figures have been calculated for the segments with regard to 2015 and 2016.

WOOD SUPPLY AND FOREST SERVICES

In 2016, the sales of Wood Supply and Forest Services, i.e. Metsä Forest, totalled EUR 1,534.4 million (2015: 1,518.1), and the comparable operating result was EUR 30.9 million (29.0).

In Finland, the supply of wood in 2016 was steady, and stumpage prices remained stable. The Finnish forest industry purchased approximately 44 million cubic metres of wood, equal to approximately 10 per cent more than in 2015. The weather conditions for harvesting were good throughout the year. In the Baltic Sea area, there was oversupply of birch pulpwood in 2016. The markets for softwood pulpwood and woodchips were fairly balanced. Demand for both softwood and birch logs was active throughout the year in the Baltic countries, Sweden and Russia. Towards the end of the year, demand for pine logs nevertheless grew slightly weaker. The oversupply of energy wood continued in the Baltic Sea area.

Metsä Forest's wood demand focused on spruce-intensive final fellings and summer-harvestable thinning stands. The majority of wood in Finland was purchased from the members of Metsäliitto Cooperative. The purchasing of energy wood continued to focus on crown wood.

Wood was harvested in Finland as targeted, and deliveries to customers' production units were carried out according to plan. In 2016, Metsä Forest delivered a total of approximately 30.5 million cubic metres (30.0) of wood to its customers. Approximately 84 per cent of this amount went to industries in Finland.

In 2016, Metsä Forest bought nearly 20 per cent of the wood it sourced from private forests electronically. In the sale of forest management services, the figure was about 25 per cent.

The gross sales of forest services grew in comparison to the previous year. Due to uncertainties related to the Act on the Financing of Sustainable Forestry, the sales of forest management services remained at the level of the previous year.

In the autumn, Metsä Forest adopted a new nature management measure, in which the trunk of some trees is cut at a height of 2–4 metres to leave a biodiversity stump. The measure is implemented in connection with fellings.

WOOD PRODUCTS INDUSTRY

In 2016, the sales of the Wood Products Industry, i.e. Metsä Wood, totalled EUR 481.6 million (2015: 533.6). The comparable operating result was EUR 38.7 million (27.9).

The delivery volumes and sales of Kerto® LVL products grew markedly, particularly due to deliveries to Northern Europe, Australia and North America. Demand for Kerto® LVL products was strong in other markets, too.

The delivery volumes and sales in both birch and softwood plywood products, on the other hand, decreased from the previous year. The market balance of plywood sheet products in Europe has been weakened by the increase in imports from outside the EU.

On 8 June 2016, Metsä Wood announced the launch of an approximately EUR 100 million investment programme related to the Kerto® LVL and plywood operations and the increase of production efficiency. The plan is to implement the programme in steps by the end of 2018.

On 1 November 2016, Metsä Group's Finnish sawmills were transferred from Metsä Wood to Metsä Fibre in an internal transaction of the Group. The transfer concerned the Vilppula, Lappeenranta, Renko, Merikarvia, Kyrö and Eskola sawmills, which have a total annual production volume of sawn timber of approximately 1.6 million cubic metres.

On 30 November 2016, Metsä Wood sold its gluelaminated beam business in Hartola, Finland, to Versowood Oy. The sale of the project business in Pälkäne, Finland, to Lapwall Oy took place after the review period, on 31 January 2017.

PULP AND SAWN TIMBER INDUSTRY

In 2016, the sales of the Pulp and Sawn Timber Industry, i.e. Metsä Fibre, totalled EUR 1,636.0 million (2015: 1,771.8). The demand and supply balance of long-fibre pulp remained good. In short-fibre pulp, an increase in supply brought prices down. The exchange rate of the US dollar in relation to the euro remained, on average, at the level of the previous year, even though it grew stronger towards the end of the year.

Metsä Fibre's comparable operating result was EUR 214.6 million (340.7). Metsä Fibre's sales and operating result decreased in comparison to the previous year. This was mainly due to the decrease in sales volumes and the dollar-denominated sales prices of pulp. The dollar-denominated market prices of softwood pulp decreased by 6 per cent and those of hardwood pulp by 11 per cent on average.

In 2016, the delivery volume of pulp was 2,274,000 tonnes, which is approximately 3.5 per cent less than in the corresponding period in the previous year (2,356,000). Softwood pulp accounted for 1,738,000 tonnes (1,783,000) and hardwood pulp for 536,000 tonnes (573,000) of sales. Pulp production amounted to 2,317,400 tonnes (2,352,600).

The investment in the bioproduct mill under construction at Äänekoski amounted to EUR 508 million in 2016. The most significant investments at the mills in operation included the new reception station for sawmill chips at the Kemi mill, the expansion of heat recovery for the drying machine at the Rauma mill, and the modification of the air system of the recovery boiler at the Kemi mill.

Metsä Group's sawmills in Finland transferred to Metsä Fibre in an internal group arrangement on 1 November 2016. The transfer was done to fully utilise the industrial synergies between pulp production and sawmilling.

In August, Metsä Fibre sold the entire share capital of Metsä-Botnia Metsät Oy to a fund managed by Dasos Capital Oy. Metsä-Botnia Metsät owns land and water areas totalling about 34,000 hectares. The long-term contracts on wood sales and forest management services between Metsä Group and Metsä-Botnia Metsät will remain in effect.

PAPERBOARD INDUSTRY

The sales of the Paperboard Industry, i.e. Metsä Board, were EUR 1,720.3 million (2015: 2,007.5). Sales declined due to a considerable decrease of paper deliveries. The operating result was EUR 132.3 million (199.0), and the comparable operating result was EUR 137.5 million (179.9). Items affecting comparability were EUR -5.2 million net and related primarily to the discontinuation of the wallpaper base business.

The operating result, particularly in the first half of the year, was weakened by the start-up of the new folding boxboard machine at Husum, which affected the production volumes of pulp and paperboard. A leak in the pulp mill's recovery boiler and technical problems in the finishing part of the new folding boxboard line delayed customer deliveries in the second and third quarters. The result for the financial period was also negatively impacted by the clearly lower price of the start-up volumes of Husum's folding boxboard and the fall in market pulp prices in comparison to the previous year. All in all, the profit development of Metsä Board's Finnish mills was stable. Five Finnish mills set new annual production records. Exchange rate fluctuations after hedging had a clearly positive total impact on the operating result of the financial period.

In January–December, the total delivery volume of Metsä Board's folding boxboard and white fresh fibre linerboards was 1,568,000 tonnes (1,404,000). The delivery volume of papers amounted to 35,000 tonnes (478,000). Deliveries of market pulp amounted to 500,000 tonnes (549,000). The volume of pulp deliveries declined due to the downtime attributable to the investment programme at Husum and the discontinued trading activity with Sappi.

Metsä Board's comparable return on capital employed was 8.1 per cent (11.3), and its comparable earnings per share were EUR 0.26 (0.34).

Metsä Board's equity ratio at the end of December was 48.2 per cent, and its net gearing ratio was 44 per cent (31 December 2015: 46.5 and 32, respectively).

TISSUE AND COOKING PAPERS

In 2016, the sales of Tissue and Cooking Papers, i.e. Metsä Tissue, totalled EUR 990.8 million (2015: 1,015.8), and the comparable operating result was EUR 63.1 million (55.1). The decline in sales was the result of the consumer business in Russia, which was discontinued in 2015, and the weakening exchange rates of the Norwegian krone, Polish zloty and British pound. The operating result improved due to a better product mix than in the previous year, increased efficiency, and lower production and transport costs.

Items affecting the comparability of the operating result in 2016 amounted to EUR -1.7 million net (2015: -13.5). The items related to the shutdown of the consumer business in Russia and the efficiency programme of the napkin business carried out in Germany.

Lambi gained allergy and asthma labels from the Finnish and Swedish allergy and asthma federations for its toilet papers and household towels in Finland and Sweden. Early in the year, Serla brought to the market an even longer-lasting white toilet paper, each roll of which contains 30 per cent more sheets than before. The sales of the new, three-ply Sensitive toilet paper products launched by Mola and Tento boosted the strengthening of market shares in Poland, Slovakia and the Czech Republic.

Katrin continued the launches of the new dispenser series in various market areas. The new dispensers gained recognition for their design and innovativeness. SAGA introduced the SAGA Baking Form – made from corrugated board and baking paper – to the Finnish market. The product does not contain any plastic or aluminium and is suitable for baking. It can be used in temperatures up to 220 °C and is entirely biodegradable.

In Germany, Metsä Tissue renewed the paper machine at the Raubach mill and commissioned a new warehouse in Kreuzau. The greaseproof paper machine at the Mänttä mill was renewed during the third quarter.

RESEARCH AND DEVELOPMENT

Metsä Group's research and development expenses totalled EUR 18.0 million (2015: 18.1 and 2014: 17.7), or 0.4 per cent of operating expenses (2015: 0.4 per cent and 2014: 0.4 per cent).

Metsä Forest rolled out a number of ICT applications that increase the efficiency of member services, wood trade and logistics. Examples include a mobile version of the wood trade and forest management service information system used by personnel and an application for directing forest management work aimed at subcontractors. A pilot project concerning an automated system for measuring the density of soil preparation was also carried out, and a decision to take it into use was made. Wood supply furthermore adopted a new nature management measure, in which some trunks are cut at a height of 2–4 metres to leave a high stump. The measure is implemented in connection with felling.

Metsä Wood focused on the further improvement of its products' fireproofing qualities and on basic research concerning the development of wood charring in various fire events. In addition, development work and customer tests were carried out in relation to a speciality product based on softwood veneer, and new Kerto® LVL usage applications were developed and existing applications improved. Examples include the Kerto-Ripa® floor element, a composite-adhesive floor element, a stiffening element for apartment building construction and the R90 fire-resistant Kerto-Ripa® element.

Development work at Metsä Fibre is guided by a three-year development plan for products and production processes. Process development aims for the continuous improvement of production efficiency and environmental performance. An example of this is the plant producing sulphuric acid from malodorous gases to be included in the bioproduct mill. With regard to application and scale, the plant is the first of its kind in the world. It is also an important step towards a closed chemical cycle at the mill.

Metsä Fibre's central development projects related to new bioproducts include the production of biogas, biofuel pellets and biocomposites, all of which have progressed to the implementation phase. In addition, Metsä Fibre advanced development projects related to new bioproducts, such as the exploitation of lignin as a biomaterial, a new method of processing pulp into textile fibres, and the further processing of bark.

Metsä Board is seeking growth in packaging paperboards by developing current and new products to ensure that the impact on the environment is minimal. The central objective of the R&D operations is to produce increasingly lightweight folding boxboards and linerboards, and to develop new products for the food service packaging segment.

In 2016, Metsä Board introduced to the market PE-coated paperboards suitable for food service packaging, produced in cooperation with external converters. The company's own extrusion coating line for PE-coated products will start up in 2017. Metsä Board is also developing other barrier solutions.

Product safety is given great significance in Metsä Board's growth areas, particularly in the food service packaging segments in the United States and Asia. Several development projects that improve Metsä Board's ability to serve customers in product safety issues were completed in 2016. Changing product safety legislation and increasingly strict hygiene requirements for products and mills have prompted Metsä Board to develop its operations continuously.

Customer- and consumer-driven product development at Metsä Tissue, which produces tissue and cooking papers, is one of the cornerstones of its strategy. During the year, Metsä Tissue introduced new tissue paper products to the market and launched the new Katrin dispensers.

Increased environmental awareness and an interest in well-being and health are examples of factors influencing Metsä Tissue's product development. The company's R&D is centralised at a technology centre in Germany.

Metsä Group actively took part in the research programmes and the design and guidance of CLIC Innovation Oy. Basic research is geared towards serving the operations of the Brussels-based Bio-Based Industries Joint Undertaking, a public-private partnership between the EU and the Bio-based Industries Consortium (bbi-europe.eu).

SUSTAINABILITY

Metsä Group is committed to promoting sustainability throughout the value chain. Sustainability management and objectives are viewed through the themes of products, wood and other raw materials, efficient production, environmental performance as well as influence on society. The operations are guided by the Group's Code of Conduct and sustainability principles, as well as 16 policies directing different areas.

Metsä Group supports sustainable and responsible forest management. The wood we use is 100 per cent traceable and always originates from sustainably managed forests. The goal is to keep the share of certified wood in our business above 80 per cent. Wood sourced from PEFC- and/or FSC-certified forests accounted for 86 per cent (2015: 86 per cent and 2014: 84 per cent) of the wood procured by Metsä Group.

Metsä Group takes the climate and environment in all its operations. To help mitigate climate change, the key aim is to reduce fossil CO_2 emissions in production by 30 per cent per product tonne from the 2009 level by 2020. As a result of investments and the development of operating methods, fossil CO^2 emissions had decreased by 35 per cent per product tonne by the end of 2016 (2015: 34 per cent and 2014: 36 per cent). Eighty-six per cent of the fuel used by Metsä Group is wood-based biofuels (2015: 86 per cent and 2014: 86 per cent).

Metsä Group's energy efficiency has improved by 6 per cent since 2009. The goal is to improve the energy efficiency of operations by 10 per cent by 2020. In addition to direct investments, improvements in energy efficiency are sought by developing working and operating methods.

Metsä Group's aim is to reduce process water consumption by 17 per cent per product tonne by 2020 from the 2010 level. In particular, the pulp business, which uses a lot of water in its processes, has made investments to enhance the recycling of water, among other things. As a result of systematic development work, the reduction in process water consumption was 13 per cent by the end of 2016 (2015: 15 per cent and 2014: 13 per cent).

Almost all of the Group's production units have an ISO 9001 quality system and an ISO 14001 environmental system in place, as well as a Chain of Custody system enabling reliable verification of the amount of certified wood in the products. In addition, a certified OHSAS 18001 occupational and product safety system and an ISO 50001 energy efficiency system are in place in several of the Group's production units.

No significant deviations resulting in considerable environmental impacts occurred in the Group's production units during the year under review. Emissions that clearly exceeded the permit limits numbered 4 in terms of emissions into water, and 2 in terms of emissions into the air.

The Group's subsidiaries also remain subject to environmental responsibilities related to former industrial activities at sites that have since been closed, sold or leased, and from decommissioned landfill sites. Financial provision for the cost of land rehabilitation work has been made in cases where it has been possible to measure the Group's liability for land contamination.

Since 2011, including the Supplier Code of Conduct in all new and renewed supplier contracts has been one of the sustainability targets. By the end of 2016, the Code of Conduct had been included in 579 contracts (2015: 519 and 2014: 335), covering 89 per cent of all procurement contracts (2015: 83 and 2014: 70).

RISK MANAGEMENT AND RISKS

Metsä Group's risk management is systematic and preventive, and it assesses and manages business-related risks, threats and opportunities. Risk management is governed by the risk management policy confirmed by the Board of Directors of Metsä Group's parent company Metsäliitto Cooperative and by Metsä Group's corporate governance system.

Metsä Group assesses strategic, operational, financial and liability risks as part of its continuing operations, and carries out risk assessments in connection with the annual planning and strategy process. The risk assessment of the annual planning process focuses on identifying sales and cost risks. In the risk assessment that is part of the strategy process, the business areas review risks related to the implementation of their business strategies. In addition, the Group's management team reviews the most significant risks as part of its management work. The results of the risk management process are reported to the Board of Directors and the Board's Audit Committee on a regular basis.

Risk assessments carried out in 2016 identified the following risks and uncertainties with a possible impact on Metsä Group's financial performance and ability to operate.

SITUATION OF THE GLOBAL ECONOMY AND THE EURO AREA

In the main market areas, demand for Metsä Group's wood products, pulp and paperboard follows the general economic development. Growth in the world economy and the euro area is expected to remain slow in 2017, and political changes are expected to increase uncertainty and risks associated with economic growth. The principal reasons for this are the economic policies in the aftermath of the US presidential election and the uncertainty that the United Kingdom's Brexit negotiations are creating in Europe. Metsä Group is also seeking growth outside its main market of Europe, particularly in North America and Asia, where the slowdown of and structural change in China's economy may also impact demand for Metsä Group's products and the markets' growth outlook.

The development of the world economy and the euro area are marked by uncertainty also in 2017, which may have a negative effect on demand for Metsä Group's products, profitability and possibly the availability and price of financing.

RESTRICTIONS ON INTERNATIONAL TRADE

Possible changes in the industrial and trade policies of leading industrialised countries may lead to increased trade restrictions and thereby subdue growth in the world economy. Increased protectionism may also have an effect on the demand for forest industry products and thereby the results of Metsä Group.

GEOPOLITICAL RISKS

There are several geopolitical risks and crises in the world, the development of which have far-reaching consequences on people's living conditions and regional security situations. These include climate change and regional conflicts, the repercussions of which are visible in the world as the migration of peoples and as terrorism based on extremism. The predictability of these risks is poor, and their effects may also emerge either very rapidly or over a long period of time. There have been, and will continue to be, international sanctions related to the management of these international crises, and they may also have a direct or indirect impact on the demand for forest industry products and, therefore, on Metsä Group's result.

RISKS ASSOCIATED WITH THE AVAILABILITY OF FINANCING

At Metsä Group, the main financial risks in business operations relate primarily to currencies, interest rates, liquidity and counterparty risks, and the use of derivative instruments. Financial risks are governed according to the financial policy confirmed by the Board of the Group's parent company, Metsäliitto Cooperative. The goal is to reduce uncertainty, improve predictability, balance cash flow and give business units time to adjust their operations to changed circumstances.

Metsä Group's access to capital and the price of capital are largely dependent on the conditions prevailing in the financial market and the Group's own financial position. The improvement of the Group's financial position and the sluggish financial market have had a positive effect on the Group's access to capital and price of financing. If access to capital or its price were to undergo considerable impairment, it could also have negative effects on the price and availability of the external capital required by the Group.

Metsä Group prepares for the refinancing risk by utilising a variety of financing sources, scheduling loans to have a balanced maturity profile and starting refinancing processes well before the loans mature. Metsä Group's liquidity is strong. At the end of 2016, the Group had credit facilities of approximately EUR 900 million. In addition, Metsä Group has approximately EUR 500 million in off-balance sheet committed credit facility agreements related to the bioproduct mill under construction at Äänekoski.

CYCLICAL NATURE OF OPERATIONS AND THE COMPETITIVE ENVIRONMENT

Metsä Group operates in a cyclical sector, where the balance of supply and demand considerably affects the price level of products. Any decrease in demand or increase in supply may have unfavourable effects on the market balance. Unfavourable economic trends or competitors' increased capacity may lower the prices of end products. On the other hand, capacity cuts by competitors or further consolidation in the industry may correspondingly lead to price increases. Large exchange rate fluctuations with long-term effects will also impact the market balance of forest industry products in the main market areas and the competitiveness of producers in Europe.

DEMAND AND MARKET PRICE OF PULP

Metsä Fibre's annual pulp production capacity will increase to approximately 3 million tonnes of bleached softwood and hardwood pulp once the bioproduct mill starts up in the third quarter of 2017. The result of the pulp segment has a significant impact on the profitability and business operations of Metsä Group as a whole. New mills starting up in the global pulp market may have a negative effect on market prices and thus an adverse effect on Metsä Group's entire business and results.

CREDIT AND OTHER COUNTERPARTY RISKS

The management of the credit risks involved in commercial activities is the responsibility of the business areas and the Group's centralised credit control. Credit control defines the internal credit limits set for customers and payment terms together with the company's business areas. The majority of credit risks are covered by insurance contracts made with credit insurance companies. Metsä Group's customer credit risk was at a normal level in 2016. Credit risks were reduced with enhanced credit control measures and processes.

The main principles of credit control are defined in the credit guidelines of the risk management policy confirmed by the Board of Directors of Metsä Group's parent company. The operational management of the Group and the business areas participate in the assessment of credit risk and in making final decisions on credit, if needed.

In money market investments, derivatives and loans, only counterparties that have been defined in the Group's financial policy, meet the creditworthiness criteria or have been separately designated by the Board's decision are approved.

BUSINESS DEVELOPMENT, GROWTH TARGETS AND NEW PRODUCTS

Metsä Group's business operations are developed by, among other things, investing in key customer accounts and adjusting sales strategies to generate new customer accounts. Growth targets have been set for some markets or product segments. In addition, there are ongoing business development investments that aim to expand the product portfolio and strengthen the Group's market position. Should the completion of these business development projects be delayed and production or commercial targets remain unrealised, it could have an adverse effect on the results of the business area in question and the Group.

PRICE RISKS AND AVAILABILITY OF PRODUCTION INPUTS

Significant or unforeseen changes in the price of Metsä Group's most important production inputs, such as wood, energy and chemicals, and problems with their availability, may reduce profitability and threaten the continuity of operations and the implementation of growth and development plans. Changes in exchange rates may also have an effect on the costs of some production inputs. The Group aims to hedge against these risks with long-term delivery agreements and related derivative agreements. In addition, a steep increase in transportation and other logistics costs may affect Metsä Group's profitability.

Moreover, any amendments in legislation, regulations or taxation related to the most important production inputs may result in significantly increased costs for Metsä Group.

LIABILITY RISKS

Metsä Group's business operations involve various types of liability risks arising from damage to third parties, such as general operational liability risks, contract risks, environmental risks and product liability risks. These risks are mitigated by way of efficient business processes, agreement training, management practices, quality control and transparent operations. Some of the operational liability risks have been hedged with insurance policies.

BUSINESS CONTINUITY RISKS

Large losses such as fires and machine breakdowns, major accidents, natural disasters, environmental damage, serious malfunctions in information systems, labour market disputes, delivery problems of the most important raw materials and disturbances in the logistics chain occurring in Metsä Group's production units may interrupt business operations in full or in part.

Interruptions in production or the supply chain may have an effect on the continuity of customer service and on delivery reliability. If such interruptions continue for a long period of time, the resulting financial losses may be very substantial and result in the permanent loss of customer relationships. Continuity and recovery plans have been drawn up in the business areas, mills and service operations, such as the Group's IT administration, in preparation for the realisation of these risks. The property and business interruption risks of production units are mainly covered through insurance policies.

SECURITY RISKS

Risks to Metsä Group's corporate security include shortcomings and neglect in personal and occupational safety, the management of financial misconduct, disinformation concerning the industry in general, cyber threats targeting the Group's operations, threats targeted at the supply chain, and the adequacy of internal control. Threat control by corporate security contributes to securing the Group's uninterrupted operations by developing and increasing the efficiency of the key operational processes that account for security. The guidelines, training and internal control related to the management of central threat factors are also developed continuously, and exercises on the management of crisis situations are organised on a regular basis.

PERSONNEL RISKS

Metsä Group pays special attention to the availability and retention of qualified personnel. The Group also prepares for risks related to generational shifts and other HR risks by means of management coaching, personnel development programmes, successor plans and the development of its employer image. The maintenance of working capacity, successor planning and having multi-skilled employees are also part of the management of personnel risks. The importance of working capacity risks is emphasised also from the perspective of pension reforms. Investments in cooperation with educational institutes and trainee programmes work towards ensuring the long-term availability of personnel.

CHANGES IN MEMBERS' CAPITAL AND ADDITIONAL MEMBERS' CAPITAL

A member of Metsäliitto Cooperative who wishes to cancel their membership is entitled to receive a refund of the contribution payment and the additional contribution payment. The member may also receive a refund of the additional contributions based on a written claim. Based on the cooperative's rules, the amount of members' capital and additional contributions that can be refunded is the equivalent of one third of the distributable funds in accordance with the latest balance sheet adopted by the Annual General Meeting. Refunds of members' capital which are larger than usual may have an adverse effect on Metsä Group's financial position.

PENDING DISPUTES

In March 2011, the state enterprise Metsähallitus filed a claim for damages at the District Court of Helsinki, demanding that Metsäliitto Cooperative and two other forest industry companies jointly pay compensation for alleged damage caused by prohibited cooperation with regard to prices in the raw wood market. The claim is related to the 3 December 2009 decision by the Market Court which states that the aforementioned companies have violated the act on competition restrictions in the raw wood market. In addition, some municipalities, parishes and a group of individuals in Finland have instituted similar proceedings. The total amount of all claims directed at Metsäliitto Cooperative and the other aforementioned companies jointly is approximately EUR 185 million, of which approximately EUR 59 million is directed at Metsäliitto Cooperative alone. The aforementioned proceedings are associated with interest, value added tax claims and legal process expenses. Metsäliitto Cooperative's view is that the claims for damages are unfounded, and the company has not recognised any provisions regarding them.

In February 2016, the Supreme Court issued a decision stating that a compensation claim filed by a private forest owner has partially expired. Based on the Supreme Court decision concerning the expiration, the total amount of the damage claims is expected to reduce slightly.

The Helsinki District Court dismissed in its ruling issued in June 2016 the claim for damages of EUR 159.4 million made by Metsähallitus against the defendant companies jointly and ruled that Metsähallitus is responsible for reimbursing the defendant companies for their legal expenses. Metsäliitto Cooperative's share of Metsähallitus' claim for damages in the district court was EUR 49.5 million. Metsähallitus has appealed the District Court's judgment at the Court of Appeal.

In May 2014, Metsäliitto Cooperative and Metsä Board demanded the District Court of Helsinki to revoke the judgment issued by the Arbitral Tribunal on 11 February 2014 that ordered Metsäliitto Cooperative and Metsä Board to pay a total of EUR 67 million in damages to UPM-Kymmene Corporation. In the judgment issued in June 2015, the District Court rejected the demands by Metsäliitto Cooperative and Metsä Board. Metsäliitto Cooperative and Metsä Board appealed the District Court's judgment at the Court of Appeal. The Court Of Appeal dismissed in its ruling issued in October 21, 2016 Metsäliitto Cooperative's and Metsä Board's demands for damages. The ruling by the Court of Appeal is not final.

In the autumn of 2015, the Finnish Tax Administration took a stand against the deductibility of certain losses in Metsä Board's 2014 taxation. Metsä Board has appealed against the decision issued by the Tax Administration, as the company believes the losses are deductible.

PREPARING FOR AND TRANSFERRING RISKS

Metsä Group prepares for risks by identifying and determining the people in charge of central risk management measures. Changes in key risks are monitored as part of business management. In terms of loss and damage risk, the Group engages in active risk management work with insurance companies, including regular risk assessments conducted at mills and in the supply chain. The Group's production units and service functions have also prepared for possible interruption and suspension situations by drawing up continuity and recovery plans. Metsä Group's crisis management plan directs management within the Group, business areas and units in crisis situations.

The Group's business areas carry part of the risks themselves, and risks exceeding the business area's risk tolerance have been selectively transferred to insurance companies, banks and other counterparties by means of insurance, derivative and other contracts. The most common loss risks are covered by the following comprehensive global insurance contracts:

- Property and business interruption insurance programme
- General third-party and product liability insurance
- General liability insurance for the management and administrative bodies
- Cargo insurance programme
- Credit insurance programme

NEAR-TERM OUTLOOK

Wood demand will be focused on regeneration and thinning sites to be harvested when the ground is unfrozen and, in terms of energy wood, crown wood.

Market demand for wood products is picking up, improving the order book for all sheet products in comparison to the previous year. Construction in the UK market is expected to remain at a good level.

Uncertainty and changes in the currency market will impact Metsä Fibre's operating environment. The global demand for pulp has continued to increase slightly, and there are no signs of considerable negative changes in the market conditions.

In sawn timber, demand in Asia will support the market balance of spruce sawn timber, but the oversupply in pine sawn timber will continue, particularly due to the market situation in North Africa.

Demand for premium fresh fibre paperboards is expected to remain good in both Europe and the Americas. The market prices of folding boxboard and white fresh fibre linerboard are expected to remain stable.

Metsä Board's paperboard deliveries in January–March 2017 are expected to grow from the previous quarter. The growth is supported by Husum's new folding boxboard production, marketed primarily to the Americas.

In the tissue and cooking paper markets, demand is expected to remain stable in all market areas. Demand for tissue paper is expected to increase particularly in eastern Central Europe, and demand for cooking papers is expected to grow in Asia.

Metsä Group's comparable operating result is in the first quarter of 2017 expected to be roughly at a similar level as in the last quarter of 2016.

PROPOSAL FOR INTEREST ON MEMBERS' CAPITAL

Metsäliitto Cooperative's Board of Directors has decided to propose that interest of 6.0 per cent (6.0 per cent in 2015) be distributed on the participation shares of the members for 2016. Interest of 5.5 per cent (5.5) is proposed for additional shares A, and interest of 2.5 per cent (3.0) for additional shares B.

The Board's proposal will be discussed in March by Metsäliitto Cooperative's Supervisory Board, which will issue a statement on the matter to the Representative Council convening in May.

THE BOARD OF DIRECTORS' PROPOSAL FOR THE DISTRIBUTION OF THE PROFIT

METSÄLIITTO COOPERATIVE

EUR		
At the disposal of the Representative Council		
result for the period		144,389,681.44
retained earnings from previous years		677,957,417.38
reserve for invested unrestricted equity		103,721.24
distributable funds total		822,450,820.06
The Board of Directors proposes,		
an interest of		
6.0% to be distributed on participation shares	12,355,213.46	
5.5% to be distributed on additional shares A	35,224,652.05	
2.5% to be distributed on additional shares B	3,960,890.32	51,540,755.83
to be retained in members' funds		770,910,064.23
Total		822,450,820.06

If the Representative Council approves the above proposal, the members' funds will be	
MEMBERS' FUNDS	
Members capital	
Participation shares	219,566,898.90
Additional shares A	657,376,597.80
Additional shares B	166,570,476.90
Due members' capital transferred to liabilities for the waiting period	-71,649,012.85
Reserve for invested unrestricted equity	103,721.24
General reserve I	3,939,904.28
General reserve II	67,401,740.00
Retained earnings	770,806,342.99
Members' funds total	1,814,116,669.26

There have been no material changes in Metsäliitto Cooperative's financial position after the end of the financial period. The liquidity of Metsäliitto Cooperative is good and according to the Board of Directors, the proposed distribution of the profit does not risk the solvency of the cooperative.

Espoo, 2 February 2017

Martti Asunta Chairman	Kari Jordan Vice Chairman President and CEO	Arto Hiltunen
Jussi Linnaranta	Leena Mörttinen	Juha Parpala
Timo Saukkonen	Mikael Silvennoinen	Antti Tukeva

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

EUR million	Note	1.1.-31.12.2016	1.1.-31.12.2015
SALES	3, 5	**4,657.9**	5,016.0
Change in stocks of finished goods and work in progress		**64.8**	-48.0
Other operating income	3, 6	**70.5**	95.7
Materials and services	3, 7	**-3,132.7**	-3,212.5
Employee costs	3, 7	**-626.3**	-678.2
Depreciation, amortisation and impairment charges	3, 8	**-244.3**	-258.2
Other operating expenses	3, 7	**-347.5**	-372.7
OPERATING RESULT		**442.3**	542.1
Share of results from associated companies and joint ventures		**-1.1**	11.2
Net exchange gains/losses	9	**-5.7**	-1.2
Other financial income	9	**4.2**	5.2
Interest and other financial expenses	9	**-79.1**	-89.0
RESULT BEFORE TAX		**360.6**	468.4
Income taxes	10	**-80.7**	-112.6
RESULT FOR THE PERIOD		**279.9**	355.7
OTHER COMPREHENSIVE INCOME	10, 21		
ITEMS THAT WILL NOT BE RECLASSIFIED TO PROFIT AND LOSS			
Items relating to adjustments of defined benefit plans		**-12.3**	19.5
Income tax relating to items that will not be reclassified		**3.1**	-5.6
Total		**-9.3**	13.9
ITEMS THAT MAY BE RECLASSIFIED SUBSEQUENTLY TO PROFIT AND LOSS			
Cash flow hedges		**17.2**	-0.1
Available for sale financial assets		**-26.7**	-30.6
Currency translation differences		**-14.0**	8.9
Share of comprehensive income of joint venture		**1.2**	-0.6
Income tax relating to items that may be reclassified		**0.5**	7.4
Total		**-21.8**	-15.0
OTHER COMPREHENSIVE INCOME, NET OF TAX		**-31.1**	-1.0
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD		**248.9**	354.7
RESULT ATTRIBUTABLE TO:			
Members of parent company		**182.6**	216.9
Non-controlling interest		**97.4**	138.8
		279.9	355.7
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:			
Members of parent company		**160.6**	221.1
Non-controlling interest		**88.2**	133.6
		248.9	354.7

The notes are an integral part of these financial statements.

CONSOLIDATED BALANCE SHEET

EUR million	Note	31.12.2016	31.12.2015
ASSETS			
NON-CURRENT ASSETS			
Goodwill	11	**517.6**	522.8
Other intangible assets	11, 33	**231.5**	234.5
Tangible assets	12, 33	**2,542.5**	2,059.0
Biological assets	13	**3.1**	13.4
Investments in associated companies and joint ventures	14	**42.1**	43.4
Available for sale investments	15	**200.1**	227.1
Other non-current financial assets	16	**18.4**	28.0
Deferred tax receivables	17	**37.9**	37.9
Derivative finacial instruments	28	**3.1**	
		3,596.2	3,166.1
CURRENT ASSETS			
Inventories	18	**767.2**	686.8
Accounts receivables and other receivables	19	**664.9**	635.6
Tax receivables based on the taxable income for the period		**14.3**	0.6
Derivative finacial instruments	28	**5.4**	4.9
Cash and cash equivalent	20	**895.1**	1,120.8
		2,346.8	2,448.7
ASSETS CLASSIFIED AS HELD FOR SALE	4	**2.8**	1.6
TOTAL ASSETS		**5,945.8**	5,616.4
MEMBERS' FUNDS AND LIABILITIES			
EQUITY ATTRIBUTABLE TO MEMBERS OF PARENT COMPANY			
Members' capital	21	**769.4**	745.7
Translation differences	21	**-10.9**	-2.7
Fair value and other reserves	21	**193.5**	197.4
Retained earnings		**989.6**	865.1
		1,941.6	1,805.6
NON-CONTROLLING INTEREST	14	**658.4**	611.3
TOTAL MEMBERS' FUNDS		**2,600.0**	2,416.9
NON-CURRENT LIABILITIES			
Deferred tax liabilities	17	**213.4**	225.6
Post employment benefit obligations	22	**83.9**	77.9
Provisions	23, 33	**20.2**	23.0
Borrowings	24	**1,265.3**	1,303.5
Other liabilities	25	**3.8**	4.4
Derivative financial instruments	28	**24.7**	17.9
		1,611.4	1,652.3
CURRENT LIABILITIES			
Provisions	23, 33	**5.0**	20.3
Current borrowings	24	**667.2**	442.3
Accounts payable and other liabilities	26	**1,030.2**	1,039.0
Tax liabilities based on the taxable income for the period		**9.0**	20.3
Derivative financial instruments	28	**21.1**	24.3
		1,732.5	1,546.2
LIABILITIES CLASSIFIED AS HELD FOR SALE	4	**1.9**	1.1
TOTAL LIABILITIES		**3,345.8**	3,199.5
TOTAL MEMBERS' FUNDS AND LIABILITIES		**5,945.8**	5,616.4

The notes are an integral part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN MEMBERS' FUNDS

EUR million	Note	Equity attributable to members of parent company: Members' capital	Translation differences	Fair value and other reserves	Retained earnings	Total	Non-controlling interest	Total
MEMBERS' FUNDS 1.1.2015		**719.1**	**-7.1**	**206.7**	**671.6**	**1,590.3**	**467.0**	**2,057.3**
Result for the period					216.9	216.9	138.8	355.7
Other comprehensive income, net after tax	10, 21		4.4	-11.8	11.6	4.2	-5.3	-1.0
TOTAL COMPREHENSIVE INCOME			**4.4**	**-11.8**	**228.5**	**221.1**	**133.6**	**354.7**
Transactions with owners								
Interest on members' capital and dividends paid	21				-35.3	-35.3	-48.3	-83.6
Change in members' capital	21	26.6		0.1	-3.0	23.6		23.6
Change in other equity	21, 29			-0.8		-0.8	56.8	56.0
Transfer from unrestricted to restricted equity	21			3.3	-3.3	0.0		0.0
Share based payments	31				6.2	6.2	0.8	7.0
Sold shares from non-controlling interest, which did not change the controlling right	14			0.0	0.3	0.3	1.5	1.9
MEMBERS' FUNDS 31.12.2015		**745.7**	**-2.7**	**197.4**	**865.1**	**1,805.6**	**611.3**	**2,416.9**
MEMBERS' FUNDS 1.1.2016		**745.7**	**-2.7**	**197.4**	**865.1**	**1,805.6**	**611.3**	**2,416.9**
Result for the period					182.6	182.6	97.4	279.9
Other comprehensive income, net after tax	10, 21		-8.2	-3.9	-9.8	-21.9	-9.1	-31.1
TOTAL COMPREHENSIVE INCOME			**-8.2**	**-3.9**	**172.8**	**160.6**	**88.2**	**248.9**
Transactions with owners								
Interest on members' capital and dividends paid	21				-38.0	-38.0	-68.9	-106.9
Change in members' capital	21	23.7		0.0	-10.5	13.2		13.2
Change in other equity	21, 29					0.0	24.9	24.9
Transfer from unrestricted to restricted equity	21					0.0		0.0
Share based payments	31				-0.4	-0.4	0.0	-0.4
Sold shares from non-controlling interest, which did not change the controlling right	14			0.0	0.7	0.7	2.8	3.5
MEMBERS' FUNDS 31.12.2016		**769.4**	**-10.9**	**193.5**	**989.6**	**1,941.6**	**658.4**	**2,600.0**

The notes are an integral part of these financial statements.

CONSOLIDATED CASH FLOW STATEMENT

EUR million	Note	2016	2015
CASH FLOW FROM OPERATING ACTIVITIES			
Result for the period		**279.9**	355.7
Adjustments to the result	29	**350.5**	387.2
Interest received		**3.0**	4.0
Interest paid		**-54.2**	-68.9
Dividends received		**1.6**	5.7
Other financial items, net		**8.6**	-11.9
Income taxes paid		**-115.5**	-97.3
Change in working capital	29	**-126.2**	221.3
NET CASH FLOW FROM OPERATING ACTIVITIES		**347.8**	796.0
CASH FLOW ARISING FROM INVESTING ACTIVITIES			
Acquisition of shares in subsidiaries, net of cash		**0.0**	0.0
Acquisition of other shares		**0.0**	-2.4
Investments in tangible and intangible assets		**-757.9**	-491.6
Proceeds from disposal of shares in subsidiaries, net of cash	4	**43.7**	-30.8
Proceeds from disposal of shares in associated companies and joint ventures		**0.1**	60.1
Proceeds from disposal of other shares		**0.3**	1.4
Proceeds from sale of tangible and intangible assets		**18.5**	9.4
Change in non-current receivables, net		**5.2**	-1.6
NET CASH FLOW ARISING FROM INVESTING ACTIVITIES		**-690.0**	-455.4
CASH FLOW ARISING FROM FINANCING ACTIVITIES			
Change in members' capital		**41.0**	50.9
Change in other equity	29	**24.9**	55.6
Increase in non-current liabilities		**361.6**	80.6
Decrease in non-current liabilities		**-197.2**	-259.8
Change in current liabilities, net		**-6.1**	1.3
Change in current interest-bearing receivables, net		**11.3**	-1.2
Interest on members' capital and dividends paid		**-120.2**	-94.9
NET CASH FLOW ARISING FROM FINANCING ACTIVITIES		**115.4**	-167.7
CHANGE IN CASH AND CASH EQUIVALENTS		**-226.8**	172.8
Cash and cash equivalents at beginning of period		**1,120.8**	947.9
Translation differences		**1.1**	-0.1
Change in cash and cash equivalents		**-226.8**	172.8
Cash and cash equivalents of assets classified as held for sale		**0.0**	0.2
CASH AND CASH EQUIVALENTS AT END OF PERIOD	20	**895.1**	1,120.8

The notes are an integral part of these financial statements.

NOTES TO THE ACCOUNTS

1. Accounting policies

The principal accounting policies to be adopted in the preparation of the consolidated financial statements are as follows.

MAIN OPERATIONS

Metsäliitto Cooperative and its subsidiaries comprise a forest industry group ("Metsä Group" or "Group"), which operations are organised into five business segments: Wood Supply and Forest Services, Wood Products Industry, Pulp and Sawn Timber Industry, Paperboard Industry and Tissue and Cooking Papers. The Group has manufacturing operations in 7 countries. Europe is the Metsä Group's main market area.

Metsä Group's parent company is Metsäliitto Cooperative. The parent company is domiciled in Helsinki and the registered address is Revontulenpuisto 2, 02100 Espoo, Finland.

A copy of the Annual Report can be obtained from website www.metsagroup.com or parent company's head office at Revontulenpuisto 2, 02100 Espoo, Finland.

The consolidated financial statements were authorised for issue by the Board of Directors on 2 February 2017. According to Finnish Cooperative Act the Representative Council has the possibility to accept or reject the financial statements in the Annual General Meeting after date of publication. The Annual General Meeting also has the possibility to decide to change the financial statements.

ACCOUNTING POLICIES AND MEASUREMENT BASES

Metsä Group's consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS), applying the IAS and IFRS standards and SIC and IFRIC interpretations that were effective and approved by the EU at the date of the financial statements 31 December 2016. International Financial Reporting Standards refer to the standards and their interpretations approved for use in the EU by the Finnish Accounting Act and the regulations set out pursuant to it in accordance with the procedure defined in the EU regulation (EC) no. 1606/2002. The notes to the consolidated financial statements also comply with the requirements of Finnish accounting and Community legislation supplementing the IFRS regulations.

The consolidated financial statements include the information needed for a bond issue.

The consolidated financial statements are presented in millions of euros unless otherwise mentioned.

These financial statements have been prepared based on original acquisition costs, excluding available-for-sale financial assets, financial assets to be recognised at fair value through profit and loss, hedged items in fair value hedging, biological assets and share-based business operations settled by means of cash which have been recognised at fair value.

GOING CONCERN

Management assesses that in foreseeable future the group has enough resources to continue as a going concern. The group has prepared the financial statements on a going concern basis.

NEW AND AMENDED STANDARDS APPLIED IN THE FINANCIAL YEAR ENDED

Metsä Group has from the beginning of year 2016 applied the following new and amended standards:

Amendment to IAS 1 **Presentation of Financial Statements: Disclosure Initiative.** The amendments clarify the guidance in IAS 1 in relation to applying the materiality concept, disaggregating line items in the balance sheet and in the income statement, presenting subtotals and to the structure and accounting policies in the financial statement. The amendments have not had a significant impact on the Group's consolidated financial statements.

Amendments to IFRS 11 **Joint Arrangements – Accounting for Acquisitions of Interests in Joint operations:** The amendments require business combination accounting to be applied to acquisitions of interests in a joint operation that constitutes a business. The amendments have not had any impact on the Group's consolidated financial statements.

Annual Improvements to IFRSs (2012–2014 cycle): The annual improvements process provides a mechanism for minor and non-urgent amendments to IFRSs to be grouped together and issued in one package annually. The cycle contains amendments to four standards. Their impacts vary standard by standard but are not significant.

PRINCIPLES OF CONSOLIDATION

SUBSIDIARIES

Subsidiaries include all companies (including structured entities) in which the Group has the right to control the principles of finances and operations. The Group controls the entity when it is exposed, or has right, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Business combinations are processed using the acquisition method. Consideration paid for the purchase of a subsidiary is determined as the fair value of paid assets, assumed liabilities and equity shares issued by the Group. The assigned consideration includes the fair value of an asset or liability arising as the result of a contingent consideration arrangement. Acquisition-related costs, excluding expenses incurred by the issuance of debt securities or equity securities, are recognised as expenses as they materialise. A paid consideration does not include transactions to be handled separately from the acquisition. The impact of these has been recognised though profit and loss in the acquisition. A possible contingent additional sales price has been measured at fair value at the time of acquisition and classified either as liability or equity. An additional sales price classified as liability is measured at fair value on the closing date of each reporting period and the resulting profit or loss is recognised through profit and loss. The additional sales price classified as equity is not measured again. Identifiable assets obtained in a business merger and assumed liabilities and conditional liabilities are valued at fair value at the date of acquisition. The holding of non-controlling shareholders in the target of the acquisition is recognised on an acquisition-specific basis either at fair value or an amount corresponding to the proportion of the net assets of the target of the acquisition held by non-controlling shareholders.

The combined amount by which the sum of a consideration paid, the fair value of the proportion of non-controlling shareholders, and the fair value of the previously owned proportion of the target exceed the fair value of the itemisable net assets is reported on the balance sheet as goodwill. If the combined amount of the consideration paid, the fair value of the proportion of non-controlling shareholders, and the fair value of the previously owned proportion is smaller than the fair value of the acquired net assets of a subsidiary, the difference is recognised through profit and loss.

Subsidiaries are consolidated in the consolidated financial statements in their entirety starting on the day on which the Group obtains control in them. The consolidation stops when the control ceases. Business transactions, receivables and liabilities between the Group companies and unrealised profits are eliminated. Unrealised losses are not eliminated if the loss arises from impairment. The accounting principles followed by subsidiaries have been amended to correspond to the principles followed by the Group if necessary.

In an acquisition that is completed gradually, the previous holding is valued at fair value and the generated gain or loss is recognised through profit and loss. When the Group loses its control in a subsidiary, the remaining investment is measured at the fair value of the date the control is lost and the subsequent difference is recognised through profit and loss. Furthermore, when the Group loses its control, it handles all amounts recognised in other items in the comprehensive income statement related to the subsidiary on the same basis as they should be handled if the Group had transferred the assets and liabilities in question directly.

The acquisitions prior to 1 January 2010 have been handled according to the standards in effect during that time.

TRANSACTIONS WITH NON-CONTROLLING SHAREHOLDERS

Business transactions with non-controlling shareholders are processed in the same way as those with Group shareholders. When shares are purchased from non-controlling shareholders, the difference between the consideration paid and the proportion of the net assets in the subsidiary purchased is recognised in equity. Also, profit or loss from sale of shares to non-controlling shareholders is recognised in equity.

JOINT OPERATIONS

A joint operation is a joint arrangement in which parties who have joint control in the arrangement have rights concerning the assets related to the arrangement and obligations concerning liabilities. "Joint control" means considering the control concerning the arrangement shared based on an agreement, and it prevails only when decisions concerning important operations require the unanimous approval of the parties sharing the control.

The Group consolidates in its financial statements its proportion of the assets, liabilities, income and expenses of the joint operation. The relevant assets, liabilities, income and expenses accounting items related to the Group's proportion of the joint operation are treated in accordance with IFRS.

The Group recognises the gains or losses caused by assets sold to a joint operation only in the extent of the proportion of the other parties to the joint operation. When such business transactions provide evidence of a decreased net realisation value of assets to be sold to the joint operation or an impairment loss concerning these assets, the Group recognises these losses in full.

The Group does not recognise its proportion of the gains and losses of the joint operation generated by assets the Group purchased from the joint operation until it sells the assets to a third party. When such business transactions provide evidence of a decreased net realisation value of assets to be purchased or an impairment loss concerning these assets, the Group recognises its proportion of these losses.

ASSOCIATED COMPANIES AND JOINT VENTURES

Associated companies include all companies in which the Group has considerable influence but no control. Usually, significant influence is based on a shareholding conferring 20–50% of the voting rights. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

Investments in associated companies and joint ventures are processed using the equity method, and they are initially recognised at cost. The Group's shares in associated companies and joint ventures also include the goodwill measured at the time of acquisition less any impairment.

The Group's share of profits or losses of associated companies and joint ventures is recognised in the income statement after the operating profit, and its proportion of changes in equity after the acquisition is recognised in other items of other comprehensive income. The book value of the investment is adjusted for changes accumulated after the acquisition. If the Group's share of associated companies' and joint ventures' losses is as large or larger than its share of the associated company and joint venture including any other unsecured receivables, the Group will not recognise additional losses unless it has commitments concerning the associated companies and joint ventures and it has not made payments on behalf of it.

A proportion corresponding to the Group's shareholding is eliminated from unrealised profits between the Group and its associated companies and joint ventures. Unrealised losses are also eliminated unless the transaction indicates an impairment of the value of the asset. The accounting principles followed by associated companies and joint ventures have been amended to correspond to the principles followed by the Group as necessary. Gains or losses due to the dilution effect when shareholdings in associated company and joint venture investments decreases are recognised in the income statement.

On the closing day of each reporting period, the Group assesses whether there are any indications of impairment of an investment made in an associated company or joint venture. If any such indications are detected, the Group tests the entire book value as one asset item by comparing the amount recoverable from it to its book value.

TRANSACTIONS IN FOREIGN CURRENCY

The figures concerning the profit and financial position of Group units are presented in the currency that is used in the primary operating environment of the unit in question. The consolidated financial statements are presented in euros, which is the parent company's functional and presentation currency.

Business transactions denominated in foreign currencies are recognised in the operating currency using the rate of the transaction date. Monetary items denominated in foreign currencies are translated into the functional currency using the rate of the closing date. Non-monetary items in foreign currencies recognised at fair value have been translated into the functional currency using the rate of the date on which the value was determined. Otherwise, non-monetary items have been recognised using the rate of the transaction date.

Any gains or losses resulting from transactions in foreign currencies, and from the translation of monetary items, are recognised under financial income and expenses with the exception of liabilities classified as hedges for net investment in a foreign entity, for which the currency gains and losses are entered for the part of hedge proven effective in the translation differences in other comprehensive income. In addition, the change in the fair value of a derivative hedge (currency forward contracts) proven effective is recognised in other comprehensive income, and only after the realisation of the forecasted sales transaction it is recognised in the income statement as an adjustment of the hedged sales.

More information on currency hedging is presented in "Derivative financial instruments and hedge accounting".

The income statements of Group companies whose reporting currencies are other than euro are translated into euros using average exchange rates for the reporting period, and their balance sheets at the exchange rates prevailing at the balance sheet date. Translation differences arising on translation and on applying the purchase method of consolidation are recognised in other comprehensive income. In conjunction with divestments of subsidiaries, either by selling or by dissolving, translation differences accumulated by the time of divestment are recognised in the income statement as part of the gain or loss from the divestment.

When making the transition to IFRS, translation differences that arose prior to 1 January 2004, which was the transition date to IFRS standards, were recorded in the Group's retained earnings according to the exemption under IFRS 1, and they are no longer entered in the income statement if the subsidiary is disposed of subsequently. From the transition date translation differences have been presented in members' funds as a separate item.

FINANCIAL ASSETS

Financial assets have been classified according to IAS 39 standard as follows: 1) Financial assets at fair value through profit or loss, 2) Held-to-maturity investments, 3) Loans and other receivables and 4) Available-for-sale financial assets. Categorisation depends on the purpose for which the assets were acquired and is made at the time they were originally recorded. Financial assets are initially recognised at fair value. Transaction costs are included in the fair value unless the item is measured at fair value through profit and loss. The transaction costs related to the items measured at fair value through profit and loss are recognised immediately to profit and loss. Financial assets are derecognised when the Group has lost the contractual right to receive cash flows or it has transferred substantially risks and rewards of ownership to outside the Group. Financial asset purchases and sales are recorded at the settlement date.

Financial assets at fair value through profit and loss include mainly quoted bonds and money market fund investments that are classified as held for trading. Financial assets held for trading have been recognised at fair value based on price quotations in the market. Unrealised and realised gains and losses due to changes in fair value are recognised immediately in the income statement during the financial period in which they are incurred. Derivatives not included in hedge accounting are also classified as financial assets held for trading. Their accounting principles and principles of determining their fair value are described in part "Derivative financial instruments and hedge accounting".

Held-to-maturity investments include those investments with a maturity more than six months with a specific date of maturity which the Group has full intention and ability to retain until the date of their maturity. The Group has no held-to-maturity investments. Loans and other receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and other receivables comprise external loans and other receivables including accounts receivables. Financial assets designated in these categories are carried at amortised cost using the effective interest method.

Available-for-sale financial assets are publicly quoted and unquoted shares. They are valued at fair value, or if fair value cannot be reliably determined, at cost less impairment. The fair values of publicly quoted shares are based on the share price at the date of the financial statements. If there are no quoted prices for available-for-sale financial assets, the Group applies different types of valuation in their valuation, such as recent transactions and discounted cash flow. In this valuation, information received from the market is usually used, and factors specified by the Group itself are used as little as possible. Changes in fair value are recognised under other comprehensive income and presented in the fair value reserve, taking the tax effect into account. Accumulated changes in fair value are transferred from equity to profit and loss as a correction of classification when the investment is divested or its value has impaired so that an impairment loss is to be recognised for the investment.

Cash and cash equivalents comprise short-term, highly liquid investments that are readily convertible to known amount of cash and which are subject to an insignificant risk of changes in value. According to treasury policy Metsä Group has classified short-term money market investments as cash and cash equivalents.

The Group assesses at each balance sheet date whether there is objective evidence of impairment of a financial asset or group of financial assets. Objective evidence of impairment of available-for-sale financial assets includes a significant or long-term decrease of the value of the investment under the acquisition cost. If the fair value of investments has substantially gone under acquisition cost and exceeded the period of time defined by the Group, it shall indicate that the value of the investment may be impaired. If there is evidence of impairment, the accumulated losses recognised in fair value reserve shall be transferred to profit and loss. Impairment losses of equity instruments classified as available for sale financial assets shall not be reversed through profit and loss.

The criteria for determining whether there is objective evidence of impairment of loans and other receivables include:

- significant financial problems of the issuer or debtor
- breach of contractual terms and conditions, such as defaults on interest or capital payments
- concessions given by the Group to the debtor due to its financial or legal reason related to its financial
- problems that it would not otherwise contemplate giving
- probability of the debtor's bankruptcy
- the financial asset in question no longer having an active market due to financial problems

Impairment testing of accounts receivables is described in more detail in part "Accounts receivables".

The amount of the impairment loss is determined as the difference between the carrying amount of the financial asset and the current value of the estimated cash flows of the financial asset discounted using the original effective interest rate (excluding any non-realised future credit losses). Impairment of financial assets has to be recorded if the carrying amount of the financial asset exceeds its recoverable amount. The carrying amount of the asset is decreased and the loss is recognised in the consolidated income statement. If the amount of the impairment loss decreases during a subsequent period and the decrease can be objectively linked to an event realised after the recording of the impairment (such as the debtor's credit rating improving), the impairment loss is always reversed in the other comprehensive income. For assets classified as held for sale investments the impairment loss is always reversed in the other comprehensive income.

FINANCIAL LIABILITIES

The Group has classified all financial liabilities under "Other liabilities". When a financial liability is entered in the accounts, it is measured at cost, which is equal to the fair value of the consideration received for it. Transaction costs are included in the original carrying amount of all financial liabilities. Subsequently, all financial liabilities are measured at amortised cost using the effective interest method. Derivative contracts for which hedge accounting is not applied are classified as "Financial liabilities at fair value through profit or loss".

DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGE ACCOUNTING

Derivative financial instruments are initially recognised in the balance sheet as fair value at cost and thereafter during their term-to-maturity revalued at their fair value at each reporting date. Gains and losses resulting from recognition at fair value are treated in accounting as required with regard to the intended use of the derivative in question. Derivatives are initially classified either as 1) Hedges of the exposure to changes in fair value of receivables, liabilities or firm commitments, 2) Hedges of the cash flow from a highly probable forecast transaction, 3) Hedges of a net investment in a foreign entity or 4) Derivatives to which it has been decided not to apply hedge accounting. Derivatives that do not qualify for hedge accounting are classified as financial assets or financial liabilities at fair value through profit or loss. When applying hedge accounting at the inception of a hedging relationship, the Group has documented the relationship between the hedged item and the hedging instruments as well as the hedging strategy observed. To meet the requirements of hedge accounting, the Group has also continuously carried out effectiveness testing to verify that changes in the fair value of the hedging instrument for each hedging relationship cover effectively enough, with respect to the hedged risk, any changes in the fair value of the hedged item.

Changes in the fair value of derivatives that meet the criteria for fair value hedging are recognised through profit and loss. Changes in the fair value of a hedged asset or liability item are presented similarly in terms of the hedged risk. Changes in the fair value of the effective portion of derivative instruments that meet the criteria for cash flow hedging are recognised directly in a hedging reserve in equity. The gains and losses recognised in equity are transferred to the income statement in the period in which the hedged item is recognised in the income statement. When the criteria for hedge accounting are no longer fulfilled, a hedging instrument matures or is sold or when the gain or loss accrued from hedging the cash flow remain in equity until the forecast transaction takes place. However, if the forecast hedged transaction is no longer expected to occur, the gain or loss accrued in equity is recognised immediately in the income statement.

The fair value of derivatives is disclosed in non-interest-bearing receivables or liabilities.

CURRENCY HEDGING

The Group has applied cash flow hedge accounting in accordance with IAS 39 to some of its hedges of foreign exchange risk. A separately defined portion of the highly probable forecasted cash flow from Metsä Fibre's, Metsä Board's, Metsä Wood's and Metsä Tissue's sales in USD, GBP, JPY, SEK, NOK and DKK is the object of hedge accounting. A change in the fair value of a derivative hedge (currency forward contracts) proven effective is recognised in other comprehensive income, and only after the realisation of the forecasted sales transaction it is recognised in the income statement as an adjustment of the hedged sales. Changes in the fair value of other currency derivatives to hedge foreign currency exposure are recognised under financial items in the income statement. The fair values of forward foreign exchange contracts are based on forward prices prevailing at the balance sheet date, and currency options are stated at market rates in accordance with the Black&Scholes model's fair value.

The hedging of a net investment in a foreign entity is accounted as cash flow hedge. Changes in the fair value of a derivative and loan hedge proven effective are recognised directly against the translation differences accumulated in members' funds. The ineffective portion of the hedge as well as the effect of the interest rate element of forward exchange contracts are recorded in financial income and expenses in the income statement.

INTEREST HEDGING

To hedge the fair value of separately defined loans with interest rate swaps, the Group has applied hedge accounting in accordance with IAS 39 as so-called fair value hedge. Changes in the fair value of both defined loans and derivative contracts that meet the criteria for effective hedge accounting are recognised in financial income and expenses in the income statement. The fair value of loans is calculated in respect of interest rate risk, but any changes in the company's credit risk premium have not been taken into account.

Moreover, to partly hedge its interest rate exposure, the Group has applied hedge accounting in accordance with IAS 39 to hedging of contractual cash flows of floating interest rates of loans as so-called cash flow hedge. A change in the fair value of derivative contracts (interest rate swaps) is recognised in other comprehensive income.

Interest rate derivatives, to which hedge accounting is not applied, are stated at their fair value, and changes in fair value are recognised under financial items in the income statement. The fair values of interest rate swaps and currency swaps are measured at the present value of future cash flows, with the calculation based on market interest rate yield curve.

COMMODITY RISK HEDGING

To partly hedge its electricity-, natural gas- , propane- and gas oil price risk exposure, the Group has applied hedge accounting in accordance with IAS 39 as so-called cash flow hedge. A separately defined portion of the highly probable forecast cash flow of Metsä Wood's, Metsä Fibre's, Metsä Board's and Metsä Tissue's electricity, natural gas, propane and logistics purchases in Finland, Sweden and Germany is the object of hedge accounting. Additionally hedge accounting is applied in hedging Metsä Fibre's, Metsä Board's and Metsä Tissue's pulp price risks as so-called cash flow hedge. A change in the fair value of a derivative hedge (forward electricity-, natural gas-, gas oil-, propane- and pulp contracts) proven effective is recognised in other comprehensive income, and only after the realisation of the forecasted electricity purchases, natural gas purchases, propane purchases and logistics purchases or pulp sales or pulp purchases it is recognised in the income statement as an adjustment of the hedged purchases or sales. The ineffective part of derivatives classified to hedge accounting or other derivatives hedging commodity price risk are recognised at market rates at the balance sheet date, and changes in fair value are recognised in the income statement under ”Other income and expenses”.

Embedded derivatives are valued at fair value, and changes in fair value are recognised under financial items in the income statement. The amount of embedded derivatives in Metsä Group is insignificant.

SEGMENT REPORTING

The Group's operating segments are comprised of the Group's business areas. The business areas produce different products and services, and they are managed as separate units.

The operating segments are reported uniformly with internal reporting submitted to the chief operational decision-maker. The President and CEO has been appointed as the chief operational decision-maker in charge of allocating resources to the operating segments and evaluating their performance.

The same accounting policies are applied in segment reporting as for the Group as a whole. Transactions between segments are based on market prices. All sales and other transactions between segments are eliminated on consolidation.

ITEMS AFFECTING COMPARABILITY

Exceptional and material items outside ordinary course of business are treated as items affecting comparability. The items are allocated to the segments. Typical items affecting comparability include material gains and losses on disposals of assets, impairments and impairment reversals in accordance with IAS 36 Impairment of Assets, restructuring costs and their adjustments as well as items arising from legal proceedings.

NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

An asset item or operation is classified as held for sale when the amount corresponding to its carrying value will be generated primarily from sale of the asset item. Classification as held for sale requires management to be committed to the plan to sell the asset and requires that the Group has initiated an active program to complete the plan. The asset must be available for immediate sale in its present condition and the sale should be expected within one year from the date of classification.

Asset items classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Asset items classified as held for sale are not depreciated or amortised after the classification.

A discontinued operation is one which the Group has disposed of or that is classified as held for sale and represents a separate major line of business or geographical area of operations. The profit or loss from discontinued operations after tax is shown as a separate item in the consolidated income statement.

REVENUE RECOGNITION

Sales include income from the sale of goods and services as well as raw materials and supplies adjusted for indirect taxes, discounts and other sales adjustment items. Sale of goods is recognised as income when the risks and rewards associated with the ownership of the goods are transferred to the buyer and the Group no longer has rights of possession or control on the goods. Usually, this refers to the moment at which the goods have been delivered to the customer in accordance with the agreed terms of delivery.

The Group's terms of delivery are based on the Incoterms 2010 delivery terms, a compilation of definitions of delivery terms published by the International Chamber of Commerce. The Group's most common delivery terms concerning sales are:

- D terms, according to which the Group has to deliver the products to the agreed destination. The sale is concluded at the moment of delivery to the buyer at the agreed destination at the agreed time.
- C terms, according to which the seller arranges and pays for transport to the agreed destination and certain other expenses. However, the Group's responsibility for the products ends after the products have been handed over to the carrier in accordance with the term used. The sale is concluded at the moment when the seller hands the goods over to the carrier for transport to the agreed destination.
- F terms, according to which the buyer arranges for the transport and is responsible for it. The sale is concluded when the products have been delivered to the buyer's carrier.

If local rules result in invoicing that deviates from the rules specified above, the impact of such income has been calculated and adjusted.

Revenue from the sale of services is recorded when the services have been rendered.

Income and expenses from long-term projects are recognised according to their degree of completion once the outcome of the project can be reliably estimated. The degree of a project's completion shall correspond to the share of its projected total cost represented by the work carried out up to the date of evaluation. Once it becomes probable that the total cost required to complete the project will exceed the total revenue gained from it, the expected loss is immediately recognised as an expense.

Dividend income is recognised when the right to receive a payment is established. Interest income is recognised by applying the effective interest rate method.

DELIVERY AND HANDLING COSTS

Costs arising from the delivery and handling of goods are recorded in materials and services in the income statement.

RESEARCH AND DEVELOPMENT EXPENDITURE

Research and development expenditure is recognised as an expense at the time it is incurred. Development expenditure is capitalised if it is probable that a development project will generate future economic benefit and the costs can be measured reliable. Capitalised development costs are amortised over their estimated useful lives. To date, Metsä Group has not capitalised any R&D expenditure.

BORROWING COSTS

Borrowing costs are generally recognised as an expense in the period in which they are incurred. When an item of property, plant and equipment is involved in a major and long-term investment project, the borrowing costs directly due to the acquisition and construction of the asset are included in the asset's acquisition cost.

INCOME TAXES

Tax expense in the income statement is comprised of the current tax and deferred taxes. Current tax and deferred tax that relates to items that are recognised in comprehensive income shall be recognised in comprehensive income. Income taxes are recorded on an accrual basis for the taxable income of each reporting unit, applying the tax rate in force in each country at that time. Taxes are adjusted for any taxes for previous periods.

Deferred tax assets and liabilities are calculated on all the temporary differences between the carrying amount and the tax base. Deferred tax liabilities are not recognised when the asset or liability in question is one that is originally entered at the carrying amount and does not concern the merging of business operations, and the recognition of such an asset or liability does not have an impact on the accounting result or taxable income at the date of the transaction. No deferred taxes are recognised for non-deductible goodwill, and no deferred taxes are recognised for undistributed profits of subsidiaries to the extent that the difference will not likely realise in the predictable future.

The most significant temporary differences result from depreciation on property, plant and equipment, fair value of available-for-sale financial assets and derivative instruments, defined benefit plans, unused tax losses and measurement at fair value in connection with acquisitions.

Deferred taxes have been calculated by applying the tax rates in force by the balance sheet date. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which a deductible temporary difference can be utilized.

INTANGIBLE ASSETS

GOODWILL

Goodwill arising from the merging of business operations is recognised to the amount by which the sum of the consideration paid, the share of non-controlling interest in the company and the previous holding exceed the fair value of the net assets to be acquired.

Goodwill is not depreciated but tested annually for impairment and always when there is an indication of a decrease in value. Goodwill is therefore allocated to cash-generating units for impairment testing. Goodwill is recognised at original acquisition cost less accumulated impairment losses.

OTHER INTANGIBLE ASSETS

Intangible assets are valued to their original acquisition cost in the balance sheet, in the case that acquisition cost can be determined reliably and it is probable, that the expected financial benefit from the asset will be to the benefit of the group.

Those intangible assets, which have a limited financial useful life, are booked by straight line depreciation as expenses impacting profit, according to their known or estimated financial useful life. Intangible assets, which have unlimited financial useful lives, are not depreciated, but tested yearly for decrease in value.

The residual value of an asset, the financial useful life and depreciation method are checked at least once at the end of the financial year and when necessary, adjustments are made to reflect changes in the expected financial benefit of the asset.

Depreciation for intangible assets begins, when the asset is ready for use, i.e. when it is in such a state, that it is able to function as intended by management. Depreciation bookings end, when an intangible asset is classified as for sale (or is included in a group classified as for sale) according to IFRS 5 standard Non-current Assets Held for Sale and Discontinued Operation.

EMISSION ALLOWANCES

The Group has received emission allowances in accordance with the European Union Emissions Trading System. Allowances are treated as intangible assets and are measured at fair value. Since allowances from governments are received without consideration, their acquisition cost is zero. Emission allowances are used simultaneously with the carbon dioxide emissions generated during their validity period. Surplus emission allowances are sold, and the earnings generated are recognised in other operating income.

If the emission allowances received free of charge are not sufficient to cover the amount of the emissions produced, the Group purchases additional allowances from the market. The allowances purchased are recognised in intangible rights at the fair value of the acquisition date.

The provision to fulfil the obligation to return the emission allowances is recognised at the fair value on the closing date of the reporting period if the emission allowances received free of charge and purchased are not sufficient to cover the amount of the actual emissions.

COMPUTER SOFTWARE

Expenditure on developing and building significant new computer software programs are recognised in the balance sheet as an intangible asset and amortised by using the straight-line-method over its estimated useful life, which is not to exceed seven years. Direct expenses to be capitalised include consultancy and expert advisory fees paid to outside parties, software licences obtained for the application, staff costs to the extent that they can be allocated directly to the project as well as other direct costs. Maintenance and operating expenditure related to computer software is recorded as an expense in the reporting period in which it has been incurred.

OTHERS

The cost of patents, licences and trademarks having a finite useful life is capitalised in the balance sheet under intangible assets and amortised on a straight-line basis over their estimated useful lives in 5–20 years.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is measured at acquisition cost less accumulated depreciation and impairment losses.

The acquisition cost includes costs that are directly incurred in the acquisition of an item of property, plant or equipment. The acquisition cost of an asset item of own manufacture includes material costs, direct expenses incurred through employment benefits as well as other direct expenses from preparing an item of property, plant or equipment for its intended purpose. External capital expenses resulting directly from the acquisition, construction or manufacture of an item of property, plant or equipment that meet the conditions are activated as part of the acquisition cost of property, plant and equipment.

If a piece of property, plant or equipment consists of several parts with differing useful lives, each part is handled as a separate item. In that case, the expenses related to replacing the part are activated, and any book value remaining at the time of the replacement is derecognised.

Spare parts, spare equipment and maintenance supplies are recognised in property, plant and equipment when they are in accordance with the definition of property, plant and equipment. Otherwise, such commodities are classified as inventories.

Environmental expenditures are capitalised if they have been incurred to prevent or reduce future damage or conserve resources and bring future economic benefits.

Subsequent expenses caused by additions to an item, replacing a part thereof with a new one, or the maintenance of an item is included in the book value of a tangible piece of property, plant or equipment only if it is likely that the future financial benefit related to the item will benefit the Group and the acquisition cost of the item can be reliably determined. Service expenses, i.e. repair and maintenance costs, are recognised through profit and loss when they are realised.

Property, plant and equipment is depreciated on a straight-line basis over the following estimated useful lives:

Buildings and constructions	20–40 years
Machinery and equipment	
Heavy power plant machinery	20–40 years
Other heavy machinery	15–20 years
Lightweight machinery and equipment	5–15 years
Other tangible assets	3–10 years

Land and water areas are not depreciated. The residual value of an asset, the financial useful life and depreciation method are checked at least once at the end of the financial year and when necessary, adjustments are made to reflect changes in the expected financial benefit of the asset.

Depreciation for tangible assets begins, when the asset is ready for use, e.g. when it is in such a location and state, that it is able to function as intended by management. Depreciation bookings end, when a tangible asset is classified as for sale (or is included in a group classified as for sale) according to IFRS 5 standard Non-current Assets Held for Sale and Discontinued Operation.

Gains and losses arising on the sale and decommissioning of items of property, plant and equipment are calculated as the difference between the net revenue obtained and the carrying amount. Capital gains and losses are included in other operating income and expenses in the income statement.

GOVERNMENT GRANTS

Government grants, such as government grants received related to acquisition of fixed assets, are booked as reductions to the book value of said fixed assets, when it is fairly certain, that the grants will be received and the Group fulfils the requirements for receiving such grants. The grants are recognised as income in the form of lower depreciation during the useful life of the asset. Grants, which are received as compensation for already incurred expenses, are booked in "other operating income" during the period, when the right to the grant emerges.

LEASES

Leases on property, plant and equipment for which the Group assumes substantially all the risks and rewards characteristic to ownership of the asset are classified as finance lease agreements. A finance lease agreement is recognised in the balance sheet at an amount equal at the inception of the lease to the fair value of the leased property or, if lower, at the present value of the minimum lease payments. The corresponding lease payment liability is recorded in interest-bearing liabilities under other non-current liabilities. An asset obtained on a finance lease is depreciated over the useful life of the asset or, if shorter, the lease term. Lease payments are split between financial expenses and a reduction in the lease liabilities during the lease term. The interest rate of the liability for each period left is formed to be equal.

Lease agreements in which the risks and rewards incident to ownership remain with the lessor are treated as other lease agreements (operating leases). Lease payments under an operating lease are recognised as an expense in the income statement on a straight-line basis over the lease term.

IMPAIRMENT OF ASSETS NOT INCLUDED IN FINANCIAL ASSETS

No depreciation or amortisation is recognised for assets with an indefinite useful life, such as goodwill; they are annually tested for impairment. Assets that are subject to depreciation or amortisation are always tested for impairment when events or changes in conditions indicate that it is possible that the monetary amount corresponding to the book value of the assets might not be recoverable.

The recoverable amount is the fair value of an asset less costs to sell or its value in use, whichever is higher. Value in use is the estimated future net cash flows, discounted to their present value, expected to be derived from the said asset or cash-generating unit. Both the cash flows and the discount rate are calculated after tax, meaning that the established discounted cash flows and values in use are before tax as set out in IAS 36. The discount rate used represents the market's view of the time value of money and special risks associated with the asset.

Asset items are grouped for impairment assessment to the lowest levels on which cash flows can be separately itemised (cash-generating units). An impairment loss is recognised if the carrying amount of the asset is higher than its recoverable amount. If the impairment loss concerns a cash-generating unit, it is first allocated to decrease the goodwill of the cash-generating unit and thereafter to decrease the other assets of the unit symmetrically. In connection with the recognition of the impairment loss, the useful life of the depreciated asset is re-evaluated. An impairment loss recognised for an asset other than goodwill is reversed if a change has taken place in the estimates used to determine the recoverable amount of the asset. However, the maximum reversal of an impairment loss amounts to no more than the carrying amount of the asset if no impairment loss had been recognised. An impairment loss recognised on goodwill is not reversed under any circumstances.

BIOLOGICAL ASSETS

Biological assets (growing trees) are measured at fair value less the estimated expenses from a sale. The fair value of a stand of trees, excluding young seedlings, is based on the present value of expected cash flows (revenue and expenses). The calculations take into account the future growth of the stand as well as the environmental protection-related limits on the forests. The calculation of income from fellings and silvicultural costs is based on the prevailing price level as well as the company's view of the future trend in prices and costs. Changes in the fair value of a stand of trees are included in operating result during the financial period. The measurement of Metsä Group's associated companies' biological assets is in line with the Group's accounting principles.

INVENTORIES

Inventories are measured at the lower of acquisition cost or net realisable value. The acquisition cost is determined using the FIFO (first-in, first-out) method or alternatively, the weighted average price method depending on the character of the inventories. The acquisition cost of completed products acquired comprises all purchase costs, including direct transport, handling and other expenses. The acquisition cost of finished and semi-finished products of own manufacture includes raw materials, expenses incurred in direct work performance and other direct expenses, as well as the systematically allocated portion of variable overheads of manufacturing and fixed overheads at the normal level of operation. The acquisition cost does not include expenses of external capital. The net realisation value is an estimated sales price received in regular business operations less the estimated expenses of finishing the product and the estimated expenses necessary to make the sale.

ACCOUNTS RECEIVABLES

Accounts receivables are measured at the expected net realisable value, which is the original invoicing value less estimated impairment provisions on the receivables. Provisions are set up case by case when there is a justifiable reason to assume that the Group will not receive payment for the invoiced amount according to the original terms.

EQUITY

In IFRS reporting, financial instruments are classified either as financial liabilities or equity instruments. Under the IFRIC 2 interpretation "Members' Shares in Co-operative Entities and Similar Instruments", shares for which the co-operative does not have an unconditional right to refuse redemption in accordance with the cooperative's rules are classified as financial liabilities. The rules of Metsäliitto Cooperative specify the maximum amount of members' capital that may be redeemed annually. The amount available for redemption of participation shares and additional shares corresponds to 1/3 of distributable funds confirmed in the most recent balance sheet. This amount is recognised as an interest-bearing financial liability in the financial statements.

PROVISIONS

A provision is recognised in the balance sheet when the Group has a legal or constructive obligation as a result of a past event and it is probable that settlement of the obligation will require a financial payment or cause a financial loss, and a reliable estimate can be made of the amount of the obligation. Where the effect of the time value of money is material, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation. If some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement is recorded in the balance sheet as a separate asset, but only if it is virtually certain that reimbursement will be received.

RESTRUCTURING

A restructuring provision is recorded for the financial period when the Group has incurred a legal or constructive obligation to make a payment. Termination payments are recorded when a detailed plan has been made of the restructuring and the Group has raised valid expectations in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

ENVIRONMENTAL OBLIGATIONS

Costs arising from environmental remediation which do not increase present or future revenue are recorded as expenses. Environmental liabilities are recorded in accordance with present environmental protection laws and regulations when it is probable that the obligation which has arisen and its amount can be estimated reasonably.

EMPLOYEE BENEFITS

PENSION BENEFITS

The Group has several arrangements concerning benefits following the termination of employment, including both defined benefit pension plans and defined contribution pension plans.

A defined contribution plan is a pension arrangement in which fixed contributions are made to a separate unit, and the Group does not have legal or constructive obligations to make additional contributions if the fund has insufficient funds to pay all benefits based on the performance of the current and previous financial years to all employees. All arrangements that do not meet these requirements are considered defined benefit plans.

A defined benefit plan usually defines the pension benefit that the employee will receive upon retiring and the benefit amount, which usually depends on one or more factors, including the employee's age, service years and salary level.

With the defined benefit plans, the current value on the end date of the obligations reporting period, less the fair value of the assets included in the arrangement, is recognised in the balance sheet as a liability. The amount of the obligation arising from the defined benefit plan is based on annual calculations by independent actuaries using the Projected Unit Credit Method. The current value of the obligation is determined using the interest rate equalling the interest of high-quality bonds issued by the companies as the discount rate for the estimated future cash flows. The bonds used in determining the interest rate have been issued in the same currency as the benefits to be paid, and their maturity is approximately the same as that of the corresponding pension obligation.

Actuarial gains and losses from experience verifications and changes in actuarial assumptions are recognised through items in other comprehensive income as a reimbursement or charge in equity for the period during which they have incurred.

Past service costs are recognised immediately through profit and loss.

In defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans that are mandatory, contractual or voluntary. Apart from these contributions, the Group does not have any other payment obligations. The contributions paid are recognised as personnel expenses when they fall due. Prepaid contributions are recognised in assets in the balance sheet to the extent that they can be recovered as reimbursements or deductions of future payments.

BENEFITS RELATED TO THE TERMINATION OF EMPLOYMENT

Benefits related to the termination of employment are paid when the Group terminates a person's employment contract before the regular retirement age or when a person agrees to resign voluntarily against such benefits. Benefits related to the termination of employment will be recognised at the earlier of the following points in time: (a) when the Group can no longer revoke its offer concerning said benefits, and (b) when it recognises the expense on a restructuring within the scope of IAS 37, which contains the payment of benefits related to the termination of employment. In the case of an offer made to promote voluntary resignation, the benefits related to the termination of employment are defined based on the number of persons expected to accept the offer. Benefits which fall due in more than 12 months after the end of the reporting period will be discounted at the current value.

PROFIT SHARING AND BONUS ARRANGEMENTS

A liability and expense to be recognised on profit sharing and bonus arrangements is based on the conditions of the profit sharing and bonus arrangements. A liability is recognised when the Group has an obligation based on an agreement or a constructive obligation has arisen on the basis of past practices.

SHARE BASED PAYMENT

Share-based incentive programmes in which the payments are made with equity instruments and cash have been established for the company's top executives. The equity instruments are valued at fair value on grant date and recognised as expense in income statement and equity evenly during the vesting period. Incentives granted in cash are valued at fair value at the balance date and recognised as expense in income statement and liability in balance sheet over the vesting period. The effect on profit of incentive programmes is presented under employee costs.

DIVIDENDS PAYABLE AND INTEREST PAID ON MEMBERS' CAPITAL

Dividends payable by the company are recognised as a decrease in equity in the period during which shareholders, in a general meeting, have approved the dividend for payment. Interest paid on members' capital is recognised as a decrease in equity in the period during which the representative council has approved the interest for payment. The share regarded as a financial liability of the interest on interest paid on members' capital has been recognised in interest expenses.

COMPARATIVE FIGURES

When necessary, comparative figures have been recalculated to conform to changes in presentation.

ADOPTION OF NEW AMENDED STANDARDS AND INTERPRETATIONS APPLICABLE IN FUTURE FINANCIAL YEARS

Metsä Group has not yet adopted the following new or amended standards and interpretations already issued by the IASB. The Group will adopt them as of the effective date of each standard or interpretation or, if the date is other than the first day of the financial year, from the beginning of the subsequent financial year.

* Not yet endorsed for use by the European Union as of 31 December 2016.

IFRS 15 Revenue from Contracts with Customers (effective for financial years beginning on or after 1 January 2018): The new standard replaces current IAS 18 and IAS 11 -standards and related interpretations. In IFRS 15 a five-step model is applied to determine when to recognise revenue, and at what amount. Revenue is recognised when (or as) a company transfers control of goods or services to a customer either over time or at a point in time. The standard introduces also extensive new disclosure requirements.

The Group has assessed the impact on the revenue recognition amount and timing of IFRS 15 Revenue from Contracts with Customers standard in a dedicated project during the financial year. The project reviewed material product and customer groups identified in Group's goods and services sales. The main principles of the standard and their effects on the Group are explained below:

Identifying performance obligation: The standard requires identification of the performance obligations included in a sales contract and the allocation of contractual transaction price to these obligations. Performance obligations arising from the Group's sales contracts are mainly order driven customer deliveries related to sale of goods. Services have mostly an ancillary role in the Group's business, or they complement deliveries of goods. The changes to identification of performance obligations prescribed in the standard do not have an effect on the current accounting policies applied to performance obligation identification by the Group.

Determining and allocating the transaction price: Transaction price is the amount the Group expects to receive in exchange for a fulfilled performance obligation. From this amount, the Group deducts the collected Value Added Taxes and Sales taxes. The prices received by the Group are divided into a fixed and a variable part, and they do not include a financial component. The variable part comprises different discounts based on, among other things, payment terms and purchased quantities, and is allocated by the Group as deductions from sales revenue in line with estimates of the extent of the discount the customer is deemed entitled to. During a financial year, the presentation of the effect of a variable price component can be based on management's judgement of discount drivers, e.g. the sales quantity reached with a given customer during the year. The Group's sales contracts contain mostly obligations solely related to deliveries of goods, to which the allocation of the transaction price is uncomplicated. IFRS 15 does not change the principles applied by the Group to the determination or allocation of the transaction price.

Revenue recognition: According to the standard, revenue is recognised in the period, during which the customer assumes control of the delivered goods. Of the criteria for transfer of control provided in the standard, the transfer of risks and rewards related to the sold goods applies best to the Group's business operations concentrating on sale of goods. Consequently, the delivery terms applied by the Group in its sales contracts determine the point of time, in which the contractual goods are deemed to have been transferred to the customer. The revenue recognition principles and delivery terms applied by the Group are described in more detail above under section Revenue recognition, and the adoption of IFRS 15 does not give rise to changes to them.

The Group will adopt IFRS 15 Revenue from Contracts with Customers in the financial year commencing on 1 January 2018. The adoption will have no impact on the principles applied by the Group to the amount and timing of revenue recognition.

Amendments to IFRS 15 – Clarifications to IFRS 15 Revenue from Contracts with Customers* (effective for financial years beginning on or after 1 January 2018). The impact assessment of the clarifications has been included in the IFRS 15 impact assessment described above.

IFRS 9 Financial Instruments* (effective for financial years beginning on or after 1 January 2018): IFRS 9 replaces the existing guidance in IAS 39. The new standard includes revised guidance on the classification and measurement of financial instruments, including a new expected credit loss model for calculating impairment on financial assets, and the new general hedge accounting requirements. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39. Classification and valuation of Group's financial instruments will change, but changes are assessed not to have a material impact on consolidated financial statements. Measurement of impairments will also change, but the change is not deemed to have a significant effect on measurement of accounts receivables and other financial assets. Changes in hedge accounting require revisions in documentation, but they will ease the application of hedge accounting to some extent.

IFRS 16 Leases* (effective for financial years beginning on or after 1 January 2019): The new standard replaces the current IAS 17 -standard and related interpretations. IFRS 16 requires the lessees to recognise the lease agreements on the balance sheet as a right-of-use assets and lease liabilities. The accounting model is similar to current finance lease accounting according to IAS 17. There are two exceptions available, these relate to either short term contacts in which the lease term is 12 months or less, or to low value items i.e. assets of value USD 5 000 or less. The lessor accounting remains mostly similar to current IAS 17 accounting. The Group has started a project to assess the impact of the standard.

Amendments to IAS 7 Statement of Cash Flows – Disclosure Initiative* (effective for financial years beginning on or after 1 January 2017). The changes were made to enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flow and non-cash changes. The amendments have an impact on the disclosures in consolidated financial statements.

Amendments to IAS 12 Income Taxes – Recognition of Deferred Tax Assets for Unrealised Losses* (effective for financial years beginning on or after 1 January 2017). The amendments clarify that the existence of a deductible temporary difference depends solely on a comparison of the carrying amount of an asset and its tax base at the end of the reporting period, and is not affected by possible future changes in the carrying amount or expected manner of recovery of the asset. The amendments have no significant impact on Group's consolidated financial statements.

Amendments to IFRS 2 Sharebased payments – Clarification and Measurement of Sharebased Payment Transactions* (effective for financial years beginning on or after 1 January 2018). The amendments clarify the accounting for certain types of arrangements. Three accounting areas are covered: measurement of cash-settled share-based payments; classification of share-based payments settled net of tax withholdings; and accounting for a modification of a share-based payment from cash-settled to equity-settled. It is not yet possible to estimate the effect of the amendments on consolidated financial statements.

IFRIC 22 Interpretation Foreign Currency Transactions and Advance Consideration* (effective for financial years beginning on or after 1 January 2018). When foreign currency consideration is paid or received in advance of the item it relates to – which may be an asset, an expense or income – IAS 21 The Effects of Changes in Foreign Exchange Rates is not clear on how to determine the transaction date for translating the related item. The interpretation clarifies that the transaction date is the date on which the company initially recognises the prepayment or deferred income arising from the advance consideration. For transactions involving multiple payments or receipts, each payment or receipt gives rise to a separate transaction date. The interpretation has no significant impact on Group's consolidated financial statements.

Annual Improvements to IFRSs (2014–2016 cycle)* (effective for financial years beginning on or after 1 January 2017 for IFRS 12 and on or after 1 January 2018 for IFRS 1 and IAS 28). The annual improvements process provides a mechanism for minor and non-urgent amendments to IFRSs to be grouped together and issued in one package annually. The cycle contains amendments to three standards. Their impacts vary standard by standard but are not significant.

Other new or amended standards or interpretations are not assessed to have an impact on consolidated financial statements.

2. Key accounting estimates applied in the financial statements and judgements used in the accounting principles.

Preparing IFRS-compliant financial statements requires the use of certain key accounting estimates. In addition, it requires the management to use its judgement in applying the accounting principles. The estimates made and judgement-based decisions are continuously evaluated, and they are based on prior experience and other factors, such as expectations concerning future events. The expectations are considered to be reasonable, taking the circumstances into account. The topics that are associated with key assumptions and estimates in terms of consolidated financial statements and areas that require significant discretion are described below.

IMPAIRMENT TESTING

The Group annually tests goodwill, intangible assets in progress and intangible assets with infinite useful lives for impairment. Testing for impairment is carried out for other long-term assets if there are indications that the value of the assets might be impaired. The recoverable amounts of cash-generating units are based on calculations of value in use. These calculations require that estimates are made. In 2016 no impairment losses were recognised in the testings. A sensitivity analysis of the substantial assumptions used in the impairment testing and the impact of changes in them on the amount of impairment is presented in Note 8.

BIOLOGICAL ASSETS

Most of the biological assets in the Group belong to associated companies. The Group also has some direct possessions. Biological assets (growing trees) are measured at fair value less the estimated expenses of making a sale. The fair value of a stand of trees, excluding young seedlings, is based on the present value of expected cash flows. The calculation of fair value is based on the future growth of the stand, the fellings, the price development and the interest used for discounting. Changes in the fair value of a stand of trees of the direct possessions are included in operating result. Changes in the fair value of a stand of trees of the associated companies are included in "Share of results from associated companies and joint ventures." The biological assets are presented in Note 13.

FINANCIAL INSTRUMENTS AT FAIR VALUE

A fair value is determined for financial instruments not traded on an open market using valuation methods. Discretion is used in selecting the various methods and making assumptions based primarily on the market conditions prevailing at the end date of each reporting period. The greatest item at fair value not traded on an open market is the investment in Pohjolan Voima shares, reported under available-for-sale financial assets. Their price is determined based on realised transactions and an analysis of discounted cash flows. The carrying amount of Pohjolan Voima shares on 31 December 2016 amounted to EUR 192.5 million. The carrying amount of Pohjolan Voima Oy shares as of 31 December 2016 is estimated to change by EUR 8.6 million should the rate used for discounting the cash flows change by 10 percent from the rate estimated by management. The carrying amount of shares is estimated to change by EUR 40.0 million should the energy prices used for calculating the fair value differ by 10 percent from the prices estimated by management. Available-for-sale assets are presented in Note 15.

IMPAIRMENT OF EQUITY INVESTMENTS CLASSIFIED AS AVAILABLE-FOR-SALE FINANCIAL ASSETS

The question when the value of available-for-sale equity investments is impaired is solved according to the guidelines of IAS 39. This requires the use of significant judgement, e.g., in terms of for how long and to what extent the fair value of the investment has been lower than the acquisition cost. In addition, it is necessary to estimate the financial position of the investment object regarding the near-future outlook of the business operations, such as the profitability of the industry and sector, to find out whether there is objective proof of impairment. Should it be considered that the reduction of the fair value to below the acquisition cost is entirely or partially significant and prolonged, an additional after tax loss of EUR 122.6 million would be recognised in the financial statements for 2016 when the changes in fair value associated with impaired available-for-sale financial assets of Pohjolan Voima Oy recognised under equity would be charged to the income statement.

INVENTORIES

The Group regularly reviews its inventories for situations where the inventories exceed their real value, contain downgraded items or their market value falls below the acquisition cost, and records a deduction item that reduces the carrying amount of the inventories in the case of such deductions. For the purpose of this review, the management must make estimates of the selling prices from which the estimated cost of completion and the costs necessary to make the sale have been deducted. Any changes in these estimates might lead to an adjustment in the carrying amount of the inventories in future periods. Metsä Group's balance sheet included inventories amounting to EUR 767.2 million on 31 December 2016. Inventories are presented in Note 18.

ACCOUNTS RECEIVABLES

Accounts receivables are recognised according to the original invoiced amount less any impairment and refunds due to returns. Impairment losses are recognised on a case-by-case basis and based on previous experience when there is objective proof that the receivable cannot be collected in full. If the customers' financial position weakens so that it affects their solvency, further impairment losses might need to be recognised for future periods. The Group's balance sheet at 31 December 2016 included accounts receivables amounting to EUR 544.5 million and impairment losses recorded for accounts receivables amounting to EUR 0.3 million. Accounts receivables are presented in Note 19.

PENSION PLANS

The present value of the pension obligations depends on various factors that are determined using various actuarial assumptions. The discount rate is also included in the assumptions used in determining the net expenditure (or income) arising from pension plans. Changes in these assumptions have an effect on the carrying amount of the pension obligations.

The appropriate discount rate is determined at the end of each year. This is a rate that is used in determining the current value of the future cash flows estimated to be required to fulfil the pension obligations. In determining the appropriate discount rate, the interest rates of long-term treasury notes or similar instruments are taken into consideration. Other key assumptions concerning pension obligations are based on the current market conditions. Pension plans are presented in Note 22.

PROVISIONS

A provision is recorded when the Group has a legal or constructive obligation as a result of a previous event and it is probable that the liability for payment will realise. The provisions are determined based on previous experience. Termination payments are recorded when a detailed plan has been made of the restructuring and the Group has raised valid expectations in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it. Provisions amounted to EUR 25.2 million on Metsä Group's balance sheet at 31 December 2016. Provisions are presented in Note 23.

INCOME TAXES

The management's judgement is required for determining the taxes based on the result for the period, deferred tax assets and liabilities and the extent to which deferred tax assets are recorded. The Group's balance sheet at 31 December 2016 includes deferred tax receivables of EUR 12.0 million recognised for confirmed losses. The Group is subject to income taxation in several countries. Estimating the total amount of income taxes at the level of the entire Group requires significant judgement. The final amount of tax is uncertain in terms of several business operations and calculations. The Group forecasts future tax audits and recognises liabilities based on estimates on whether further taxes will need to be paid. If the associated final tax differs from the originally recorded amounts, the difference has an effect on both the tax receivables and liabilities based on the taxable income for the period and deferred tax receivables and liabilities in the period during which they are observed. Income taxes are presented in Note 10 and deferred taxes in Note 17.

CONTINGENT LIABILITIES FROM LEGAL DISPUTES AND CLAIMS

The management's assessment is required in measuring and recognising the provisions related to ongoing legal proceedings. A provision is recognised when, as a result of an earlier event, the Group has a legal or actual obligation, the realisation of a payment obligation is likely, and the amount of the obligation can be reliably estimated. Due to the course of legal proceedings being difficult to foresee, the actual cost of the proceedings may differ considerably from the original estimate. Contingent liabilities arising from legal disputes and claims are presented in Note 30.

3. Segment information

The Group's operating segments are comprised of the Group's business areas. The business areas produce different products and services, and they are managed as separate units.

The operating segments are reported uniformly with internal reporting submitted to the chief operational decision-maker. The President and CEO has been appointed as the chief operational decision-maker in charge of allocating resources to the operating segments and evaluating their performance.

The accounting principles for the segment information are equal to those of the Group. All intra-segment transactions are based on market prices. Intra-segment sales and other transactions between segments are eliminated on consolidation.

The segment's performance is evaluated based on the operating result.

Segment assets and liabilities are capital items directly used by the segments in their business operations or items that based on reasonable ground can be allocated to the segment. Unallocated capital items consist of tax and financial items and other common group items. Investments consist of additions of tangible and intangible assets used over a longer period than one year.

REPORTING SEGMENTS

Metsä Group's Finnish sawmills became part of the Group's Pulp Industry in a group internal transaction on 31 October 2016. Until then, the sawmills had been a part of the Group's Wood Products Industry, except the Russian sawmill Svir, which already was part of the Pulp Industry. Following the transaction the new name for Metsä Group's Pulp Industry is Pulp and Sawn Timber Industry. The segments' figures have been recalculated.

WOOD SUPPLY AND FOREST SERVICES

The wood supply and forest services segment provides premium wood and wood energy for Metsä Group's production units and other customers. It offers owner-members of the parent company, Metsäliitto Cooperative, comprehensive services in wood trade and forest and nature management.

WOOD PRODUCTS INDUSTRY

The wood products industry segment provides competitive and environmentally friendly wood products for construction, industry and distribution partners. The products are manufactured from premium and renewable northern wood raw material.

PULP AND SAWN TIMBER INDUSTRY

The pulp and sawn timber industry segment is one of the world's leading manufacturers of pulp, sawn timber and other bioproducts. Metsä Fibre's main products, bleached softwood and birch pulps, have been developed for manufacturing paperboards, tissue and printing paper, as well as speciality paper. Metsä Fibre has four pulp mills and six sawmills in Finland and one sawmill in Russia. The company's new next-generation bioproduct mill in Äänekoski will start up in the third quarter of 2017.

PAPERBOARD INDUSTRY

Metsä Board is Europe's leading producer of folding boxboard and white fresh forest fibre linerboard. Its lightweight paperboards are designed for consumer, retail and food service packaging, above all. The pure fresh forest fibre used by the company is a renewable raw material from northern forests. Metsä Board's global sales network serves brand owners, converters and merchant customers.

TISSUE AND COOKING PAPERS

The tissue and cooking papers segment provides comfort to the everyday lives of consumers, end users and customers. It is one of Europe's leading suppliers of tissue paper products to households and industrial consumers and the leading supplier of cooking papers in the world. The company's main brands are Lambi, Serla, Mola, Tento, Katrin and SAGA.

OTHER OPERATIONS

Other operations include the Metsä Group head office functions, the company Metsä Group Treasury Oy and the holding function of Metsäliitto Cooperative as well as a share of Metsätapiola's real estates.

The Group has not aggregated segments when identifying the reporting segments.

SEGMENTS 2016

EUR million	Wood Supply and Forest Services	Wood Products Industry	Pulp and Sawn Timber Industry	Paperboard Industry	Tissue and Cooking Papers	Other operations	Eliminations	Group total
External sales	407.3	460.8	1,148.5	1,651.7	989.5	0.1	0.0	4,657.9
Internal sales	1,127.1	20.7	487.4	68.6	1.3	4.9	-1,710.0	0.0
Sales total	1,534.4	481.6	1,636.0	1,720.3	990.8	5.0	-1,710.0	4,657.9
Operating result	30.9	40.0	220.8	132.3	61.3	0.0	-42.9	442.3
Items affecting comparability	0.0	1.3	6.2	-5.2	-1.7	-0.1	3.2	3.7
Operating result, comparable	30.9	38.7	214.6	137.5	63.1	0.1	-46.2	438.6
Share of results from associated companies and joint ventures								-1.1
Finance costs, net								-80.6
Income taxes								-80.7
Result for the period								279.9
Assets	274.4	191.5	1,556.8	1,959.8	866.3	225.1	-227.8	4,846.2
Investments in associated companies and joint ventures								42.1
Assets classified as held for sale						2.8		2.8
Unallocated assets								1,054.7
Total assets								5,945.8
Liabilities	207.0	74.8	360.6	365.4	289.8	103.9	-227.8	1,173.6
Liabilities classified as held for sale						1.9		1.9
Unallocated liabilities								2,170.2
Total liabilities								3,345.8
Investments in tangible and intangible assets	5.1	18.0	553.4	133.5	37.6	10.1		757.9
Depreciation	3.4	13.6	67.3	95.8	39.5	2.1	15.6	237.3
Impairment charges			5.0	6.6	0.2		-4.8	7.0
Personnel, average	884	1,599	1,291	2,588	2,776	488		9,626

Segment's assets = intangible and tangible assets, investments in associated companies and joint ventures, inventories, accounts receivables and other non-interest-bearing receivables (excl. interest and tax items)
Segment's liabilities = accounts payable, advance payments and other non-interest-bearing liabilities (excl. interest and tax items)

ITEMS AFFECTING COMPARABILITY IN OPERATING RESULT 2016

EUR million	Wood Supply and Forest Services	Wood Products Industry	Pulp and Sawn Timber Industry	Paperboard Industry	Tissue and Cooking Papers	Other operations	Eliminations	Group total
Sales profits in other operating income		2.0	11.7	10.9				24.5
Change in inventories		0.0		-1.2				-1.2
Employee costs				-5.2	2.7			-2.5
Share of results from associated companies and joint ventures				1.8			-1.8	0.0
Depreciation		-0.1		-0.1				-0.3
Impairment charges			-5.0	-8.5			5.0	-8.5
Reversal of impairment charges								0.0
Other operating expenses		-0.6	-0.5	-2.7	-4.4	-0.1		-8.3
Total	0.0	1.3	6.2	-5.2	-1.7	-0.1	3.2	3.7

WOOD PRODUCTS INDUSTRY: operating result includes a gain totalling EUR 1.7 million due to the sale of Metsä Wood's gluelaminated beam business in Hartola. Other operating expenses include additional costs of EUR 0.4 million in relation to the divestment of Metsä Wood France S.A.S. in 2015.

PULP AND SAWN TIMBER INDUSTRY: operating result includes a gain of EUR 11.7 million from the divestment of the entire share capital of Metsä-Botnia Metsät Oy. Impairment charges include a goodwill impairment of EUR 5.0 million related to the internal Metsä Group transfer of the sawmills to Pulp and Sawn Timber Industry. Other operating expenses include costs of EUR 0.5 million due to the transfer of the sawmills.

PAPERBOARD INDUSTRY: other operating income include sales of assets from Metsä Board's Kyro mill wallpaper base business and an earn-out received from the sale of subsidiary receivables in connection with the sale of M-real Hallein GmbH in 2011. The receivables had been treated as a reversal of previously recognised disposal loss. Change in inventories include a cost impact of EUR 1.2 million from the valuation of Metsä Board's Kyro mill wallpaper inventory to net realisable value.

Employee costs of EUR 5.2 million affecting comparability consist of restructuring costs arising from Metsä Board's Simpele mill, Belgian sales office and Kyro board and wallpaper mill. Share of results from associated companies and joint ventures includes a disposal gain of EUR 1.8 million from the sale of Metsä-Botnia Metsät Oy. Impairment charges include EUR 8.5 million due to the discontinued wallpaper base production at Metsä Board Kyro mill.

Other operating expenses include EUR 1.5 million related to the discontinued wallpaper base production as well as EUR 1.1 million from the sale of Alrec Boiler Oy, a structured entity previously consolidated to Metsä Board accounts as a subsidiary.

TISSUE AND COOKING PAPERS: employee costs include unused EUR 2.7 million relating to the reversion of restructuring provisions in Metsä Tissue's napkin business in Germany. Other operating expenses include cost impact of EUR 4.4 million arising from translation differences due to the discontinuing of Metsä Tissue's operations in Russia.

Metsä Board's share, EUR 1.8 million, of the divestment of Metsä-Botnia Metsät Oy, has been eliminated on Group level. The goodwill impairment of EUR 5.0 million, related to the transfer of the sawmills to the Pulp and Sawn Timber Industry has also been eliminated on Group level. The goodwill arised in a Group internal arrangement in 1998.

SEGMENTS 2015

EUR million	Wood Supply and Forest Services	Wood Products Industry	Pulp and Sawn Timber Industry	Paperboard Industry	Tissue and Cooking Papers	Other operations	Eliminations	Group total
External sales	386.9	516.4	1,166.1	1,932.7	1,014.9	-1.0	0.0	5,016.0
Internal sales	1,131.3	17.2	605.6	74.8	0.9	5.2	-1,835.0	0.0
Sales total	1,518.1	533.6	1,771.8	2,007.5	1,015.8	4.1	-1,835.0	5,016.0
Operating result	29.0	6.5	340.7	199.0	41.6	21.8	-96.5	542.1
Items affecting comparability	0.0	-21.4	0.0	19.2	-13.5	20.5	0.0	4.7
Operating result, comparable	29.0	27.9	340.7	179.9	55.1	1.3	-96.5	537.4
Share of results from associated companies and joint ventures								11.2
Finance costs, net								-84.9
Income taxes								-112.6
Result for the period								355.7
Assets	223.8	208.2	1,028.7	1,889.5	896.3	261.7	-221.5	4,286.8
Investments in associated companies and joint ventures								43.4
Assets classified as held for sale						1.6		1.6
Unallocated assets								1,284.6
Total assets								5,616.4
Liabilities	177.9	74.6	322.5	441.2	300.2	102.5	-221.5	1,197.3
Liabilities classified as held for sale						1.1		1.1
Unallocated liabilities								2,001.1
Total liabilities								3,199.5
Investments in tangible and intangible assets	6.0	12.2	255.7	175.0	29.4	13.3		491.6
Depreciation	3.5	15.7	74.5	103.4	38.4	2.0	15.1	252.6
Impairment charges		3.3		0.1	2.1		0.2	5.6
Personnel, average	909	1,749	1,313	2,851	2,805	490		10,117

Segment's assets = intangible and tangible assets, investments in associated companies and joint ventures, inventories, accounts receivables and other non-interest-bearing receivables (excl. interest and tax items)
Segment's liabilities = accounts payable, advance payments and other non-interest-bearing liabilities (excl. interest and tax items)

ITEMS AFFECTING COMPARABILITY IN OPERATING RESULT 2015

EUR million	Wood Supply and Forest Services	Wood Products Industry	Pulp and Sawn Timber Industry	Paperboard Industry	Tissue and Cooking Papers	Other operations	Eliminations	Group total
Sales profits in other operating income		1.7	0.0	17.5	0.2	20.8	0.0	40.2
Change in inventories		-12.4						-12.4
Employee costs	0.0			-0.4	-7.5			-7.9
Impairment charges		-3.3		-0.4	-1.6			-5.2
Reversal of impairment charges				0.3				0.3
Other operating expenses		-7.4		2.1	-4.6	-0.3		-10.2
Total	0.0	-21.4	0.0	19.2	-13.5	20.5	0.0	4.7

WOOD PRODUCTS INDUSTRY: The items affecting operating result are due to the sale of Metsä Wood France S.A.S.

PAPERBOARD INDUSTRY: Operating result includes sales profits of EUR 17.5 million due to the sale of Metsä Board Gohrsmühle mill. Other operating expenses include a reversed provision of EUR 2.6 million made for the closure of Metsä Board's Alizay mill in France.

TISSUE AND COOKING PAPERS: The employee costs include a provision of EUR 7.0 million due to the reorganisations in Germany. Impairment charges include an impairment loss of EUR 1.6 million due to Metsä Tissue's Russian operations and to the closure of one production line in Düren, Germany.

OTHER OPERATIONS: The operating profit includes the gain of EUR 20.8 million from the sale of the shares (30.13% of the share capital) in Finsilva Oyj.

In addition, an impairment of EUR -2.3 million has been recognised in financial expenses associated with Metsä Fibre's and Metsä Board's shares in the shareholder loan granted to Pohjolan Voima in the OL4 project.

GEOGRAPHICAL SEGMENTS

The sales of geographical segments are presented based on the location of the customer. Segment assets and investments are presented based on geographical location of the assets.

GEOGRAPHICAL SEGMENTS

	SALES		NON-CURRENT ASSETS		INVESTMENTS	
EUR million	2016	2015	2016	2015	2016	2015
Finland	765.1	848.4	2,770.3	2,387.6	616.7	306.7
Germany	519.2	661.5	132.9	123.8	18.9	17.9
Great Britain	389.8	502.3	26.0	35.8	0.7	1.4
Sweden	215.7	231.5	480.3	430.2	112.2	155.8
Italy	213.5	249.8	0.1	0.1	0.0	0.0
France	181.0	243.4	0.0	0.1	0.0	0.1
Poland	135.0	147.7	71.4	77.5	3.2	5.9
Other EU countries	648.4	637.4	53.4	55.0	4.7	2.3
Norway	141.5	131.7	0.0	0.0	0.0	0.0
Russia	102.3	104.6	20.0	17.5	1.4	1.4
Other Europe	201.5	126.0	0.0	0.1	0.0	0.0
China	426.8	356.2	0.3	0.1	0.0	0.0
USA	249.2	243.9	0.5	0.4	0.1	0.1
Other countries	468.9	531.6	0.0	0.0	0.0	0.0
TOTAL	4,657.9	5,016.0	3,555.2	3,128.2	757.9	491.6

PERSONNEL AT YEAR END

	2016	2015
Finland	4,927	5,122
Sweden	1,280	1,341
Germany	1,142	1,180
Great Britain	484	485
Poland	480	457
Russia	339	371
Slovakia	315	312
Baltic countries	73	75
Other Europe	167	176
Other countries	93	80
Total	9,300	9,599

INFORMATION ON MOST IMPORTANT CUSTOMERS

Group's income from one customer did not exceeded 10 per cent of the Group's total income in 2016 or 2015.

4. Acquisitions, assets classified as held for sale and disposed operations

ACQUISITIONS OF SUBSIDIARIES AND JOINT VENTURES

No acquisitions of subsidiaries or joint ventures were made in 2016 or 2015.

ASSETS CLASSIFIED AS HELD FOR SALE

Assets classified as held for sale include in 2016 and 2015 apartments and parking places of Asunto Oy Tapiolan Jalava, Asunto Oy Tapiolan Pyökki and Asunto Oy Tapiolan Saarni not sold. The apartments not sold have been recognised at book value and the parking places not sold at fair value less costs of sale. In 2016 an impairment loss of EUR 0.2 million was recognised for parking places not sold (0.2).

ASSETS CLASSIFIED AS HELD FOR SALE

EUR million	Note	2016	2015
Tangible assets	12	2.8	1.6
Total assets		2.8	1.6
Borrowings	24	1.9	1.1
Accounts payables and other payables		0.0	0.0
Total liabilities		1.9	1.1

DISPOSED OPERATIONS

DISPOSED SUBSIDIARIES, BUSINESSES AND JOINT VENTURES

Metsä Board sold its share in Alrec Boiler Oy on 27 June 2016. The sale generated a loss of EUR 1.1 million and an overall cash flow impact of EUR -5.5 million, of which EUR -2.7 million was presented in cash flow from financing activities.

Metsäliitto Cooperative sold on 9 June 2016 Metsä Wood's ThermoWood operations to Oy Lunawood Ltd. The ThermoWood production factory is located in Kaskinen. The sale generated a sales gain of EUR 2.7 million and a positive cash flow of EUR 6.8 million.

Metsä Fibre sold on 15 August 2016 the entire share capital of Metsä-Botnia Metsät Oy to a fund managed by Dasos Capital Oy. Metsä-Botnia Metsät Oy owns approximately 34,000 hectares of land and water areas. A sales gain before tax of EUR 11.7 million/after tax of EUR 7.1 million was recognised from the sale. The positive cash flow generated was EUR 24.4 million.

On 30 November 2016 Metsäliitto Cooperative sold Metsä Wood's gluelaminated beam business located in Hartola, Finland, to Versowood Oy. From the sale of the business a gain of EUR 1.7 million was recognised. The sale generated a positive cash flow of EUR 3.0 million.

In September 2011 Metsä Board sold its holdings in its Austrian subsidiary M-real Hallein GmbH. An additional sales price (earn-out) of EUR 4.4 million related to the included subsidiary receivables was paid to Metsä Board in November 2016. The additional sales price is presented in the cash flow statement as a proceed from disposal of shares in subsidiaries.

On 21 May 2015 Metsä Board sold 100 per cent of its shareholdings in Metsä Board Zanders GmbH including all liabilities related to the company, to a holding company wholly owned by mutares AG and its partner company. Metsä Board Zanders include the operations of the Gohrsmühle mill in Bergisch Gladbach, Germany. A sales gain of EUR 17.5 million was recognised from sale as well as a negative cash flow impact of EUR 38.2 million.

METSÄ BOARD ZANDERS GMBH

EUR million	Note	2015
Tangible and intangible assets	11, 12	5.5
Deferred tax receivables	17	10.9
Inventories		30.7
Accounts receivables and other receivables		49.6
Cash and cash equivalents		3.0
Total assets		99.7
Non-controlling interest		0.0
Pensions	22	93.6
Provisions	23	2.1
Borrowings		0.0
Accounts payables and other payables		23.8
Total liabilities		119.5
Net assets		-19.8
Consultant fees paid		1.2
Selling price		-1.2
Profit on disposal		17.5
Cash and cash equivalents received		-34.0
Consultant fees paid		-1.2
Cash and cash equivalents of disposed subsidiary		-3.0
Net cash flow arising on disposal		-38.2

Metsäliitto Cooperative agreed on 31 December 2014 on the sale of the entire share capital of Metsä Wood's UK-based pole business subsidiary Burt Boulton & Haywood Ltd (BBH) to ScanPole Ltd, a subsidiary of Iivari Mononen Oy. The transaction was completed on 2 February 2015. A sales loss of EUR 0.2 million was recognised from the disposal of the operation and a positive cash flow of EUR 4.2 million was generated.

Metsä Cooperative sold the entire share capital of Metsä Wood's French timber upgrading company Metsä Wood France S.A.S. to mutares AG on 5 October 2015. When the preliminary understanding was reached on 25 June 2015, the assets and liabilities of the company were classified as held for sale and valued at fair value less cost of sale. As a result, an impairment of EUR 21.8 million was recognised. In 2015 a sales profit of EUR 0.4 million was recognised on the sale and a negative cash flow of EUR 5.9 million was generated from the sale. In 2016 additional expenses of EUR 0.4 million was recognised due to the sale of Metsä Wood France S.A.S.

During 2016 and 2015 Metsäliitto Cooperative sold holdings in Asunto Oy Tapiolan Jalava, Asunto Oy Tapiolan Pyökki, Asunto Oy Tapiolan Saarni and Kiinteistö Oy Tapiolan Jalopuupysäköinti. At the end of 2016 Metsäliitto Cooperative's share in Asunto Oy Tapiolan Jalava is 0.51%, in Asunto Oy Tapiolan Pyökki 2.37%, in Asunto Oy Tapiolan Saarni 7.33% and in Kiinteistö Oy Tapiolan Jalopuupysäköinti 19.36%. Sales profits of EUR 6.2 million (5.5) were recognised for the sales and a positive cash flow of EUR 8.4 million was generated (9.1).

DISPOSED OPERATIONS TOTAL

EUR million	Note	2016	2015
Tangible and intangible assets	11, 12	**17.0**	18.4
Biological assets	13	**12.1**	0.0
Deferred tax receivables	17	**0.3**	11.3
Inventories		**3.5**	35.9
Accounts receivables and other receivables		**0.1**	53.5
Cash and cash equivalents		**8.0**	5.7
Total assets		**40.9**	124.7
Non-controlling interest		**0.0**	0.0
Deferred tax liabilities	17	**1.8**	0.0
Pensions	22	**0.0**	93.8
Provisions	23	**0.0**	2.9
Borrowings		**13.7**	9.5
Accounts payables and other payables		**1.8**	34.2
Total liabilities		**17.3**	140.4
Net assets		**23.7**	-15.7
Translation differences and consultant fees paid		**0.5**	2.3
Selling price		**49.4**	9.8
Profit on disposal before tax		**25.2**	23.2
Income tax		**-4.5**	
Profit after tax		**20.7**	23.2
Cash and cash equivalents received		**49.4**	-23.0
Consultant fees paid		**-0.4**	-2.2
Cash and cash equivalents of disposed subsidiaries		**-8.0**	-5.7
Amortisation of non-current liabilities		**-2.7**	0.0
Net cash flow arising on disposals		**43.7**	-30.8

5. Long-term projects

Only the Building Products business line in the Group's segment Wood Products Industry deals with long-term projects. Group sales include EUR 13.6 million (7.3) in income from long-term projects.

The income statement included EUR 1.5 million income from long-term projects in progress (1.4). The balance sheet included EUR 0.0 million in advance payments from long-term projects in progress (0.3).

6. Other operating income

EUR million	2016	2015
Gains on disposals	**40.8**	54.3
Rental income	**3.8**	4.4
Service revenue	**10.7**	10.5
Government grants	**1.8**	9.5
Sales of scrap and waste	**0.7**	2.9
Other operating income	**12.7**	14.2
Total	**70.5**	95.7

In 2016 the most significant gains on disposals were the gain of EUR 11.7 million related to the sale of shares in Metsä-Botnia Metsät Oy, the sales gains of EUR 6.5 million from the sale of shares in Asunto Oy Tapiolan Jalava, Asunto Oy Tapiolan Pyökki and Asunto Oy Tapiolan Saarni, and an earn-out of EUR 4.4 million received from the sale of subsidiary receivables in connection with the sale of M-real Hallein GmbH in 2011. The receivables had been treated as a reversal of previously recognised disposal loss. Significant gains were also the sales profit of EUR 2.7 million from the sale of Metsä Wood's ThermoWood operations, Metsä Board's sales gains of EUR 2.6 million from emission allowances, Metsä Wood's sales profit of EUR 2.0 million from the gluelaminated base business as well as gains on electricity certificates for EUR 1.6 million sold by Metsä Board Sverige.

In 2015 the most significant gains on disposals were the gain of EUR 20.8 million related to the sale of shares in Metsäliitto Cooperative's associated company Finsilva Oyj (30.13 per cent of the share capital), the sale of Metsä Board Gohrsmühle mill for EUR 17.5 million as well as the sales gains of EUR 5.9 million from the sale of shares in Asunto Oy Tapiolan Jalava and Asunto Oy Tapiolan Pyökki, Metsä Board's property sales for EUR 3.4 million and electricity certificates for EUR 1.9 million sold by Metsä Board Sverige.

Government grants concern the subsidies of training, healthcare and R&D expenses and energy subsidies.

7. Operating expenses

EUR million	2016	2015
Materials and services		
Materials, consumables and goods		
Purchases	**2,176.7**	2,184.9
Change in inventories	**-50.1**	4.2
External services		
Logistics expenses	**649.5**	672.4
Other external services	**356.6**	350.9
Materials and services, total	**3,132.7**	3,212.5
Employee costs		
Wages and salaries	**407.5**	440.6
Share-based payments	**8.9**	23.3
Social security costs		
Pension costs		
Defined contribution plans	**3.4**	3.7
Defined benefit plans	**59.9**	60.8
Other employee costs	**146.7**	149.9
Total	**209.9**	214.3
Employee costs total	**626.3**	678.2
Other operating expenses		
Rents and other property costs	**44.9**	52.2
Purchased services	**162.0**	173.9
Losses on fixed asset disposals	**2.7**	1.3
Other operating expenses	**137.9**	145.3
Other operating expenses total	**347.5**	372.7

External services include production related services and logistics expenses of sold products. Other operating expenses include among others energy costs, marketing and commercial costs and administration costs.

Information on share-based payments is presented in Note 31 and renumeration paid to top management in Note 32.

Change in inventories include in 2016 a cost impact of EUR 1.2 million from the valuation of Metsä Board's Kyro mill wallpaper inventory to net realisable value.

Employee costs of EUR 5.2 million consist of restructuring costs arising from Metsä Board's Simpele mill, Belgian sales office and Kyro board and wallpaper mill. Employee costs also include unused EUR 2.7 million relating to the reversion of restructuring provisions in Metsä Tissue's napkin business in Germany.

Other operating expenses include in 2016 additional costs of EUR 0.4 million in relation to the divestment of Metsä Wood France S.A.S. in 2015 and costs of EUR 0.5 million due to the internal Metsä Group transfer of the sawmills to Pulp and Sawn Timber Industry. Furthermore other operating expenses include cost impacts of EUR 1.5 million from the shutdown of the wallpaper business at Metsä Board Kyro mill as well as a loss of EUR 1.1 million from the sale of Alrec Boiler Oy's shares, a structured entity previously consolidated to Metsä Board accounts as a subsidiary.

Other operating expenses also include cost impact of EUR 4.4 million arising from translation differences due to the discontinuing of Metsä Tissue's operations in Russia.

The employee costs include in 2015 a provision of EUR 7.0 million due to Metsä Tissue's reorganisations in Germany.

The sale of Metsä Wood France S.A.S. in 2015 increased other operating expenses by EUR 7.4 million. In 2015 other operating expenses also include a non-recurring income from a reversed provision of EUR 2.6 million made for the closure of Metsä Board's Alizay mill in France and a non-recurring expense of EUR 4.4 million mainly due to Metsä Tissue's Russian operations.

Research and development costs in 2016 were EUR 18.0 million (18.1)

PRINCIPAL AUDITOR'S FEES

The principal auditor is KPMG Oy Ab.

The audit fees are paid for the audit of the annual and quarterly financial statements for the group reporting purposes as well as the audit of the local statutory financial statements. Tax consultancy fees are fees paid for tax consultancy services and tax planning.

PRINCIPAL AUDITOR'S FEES

EUR million	2016	2015
Audit fees	**1.1**	1.1
Tax consulting fees	**0.0**	0.0
Other fees	**0.0**	0.0
Total	**1.2**	1.2

In 2016 fees paid to other auditors than KPMG were EUR 0.4 million (0.3).

8. Depreciation, amortisation and impairment charges

EUR million	2016	2015
Depreciation and amortisation		
Other intangible assets	**17.9**	17.5
Buildings	**35.0**	38.7
Machinery and equipment	**181.7**	193.6
Other tangible assets	**2.8**	2.8
Total	**237.3**	252.6
Impairment charges		
Goodwill	**0.0**	0.4
Other intangible assets	**0.0**	0.7
Land and water	**0.0**	0.2
Buildings	**2.2**	0.7
Machinery and equipment	**4.7**	3.5
Other tangible assets	**0.0**	0.2
Total	**7.0**	5.6
Total	**244.3**	258.2
Impairments of goodwill by segments		
Pulp and Sawn Timber Industry	**5.0**	0.0
Paperboard Industry	**0.0**	0.4
Eliminations	**-5.0**	0.0
Total	**0.0**	0.4
Impairments of tangible and other intangible assets by segments		
Wood Products Industry	**0.0**	3.3
Paperboard Industry	**6.6**	-0.3
Tissue and Cooking Papers	**0.2**	2.1
Other operations	**0.2**	0.2
Total	**7.0**	5.3
Impairments total	**7.0**	5.6

Impairment charges in 2016 include a goodwill impairment of EUR 5.0 million related to the internal Metsä Group transfer of the sawmills to the Pulp and Sawn Timber Industry. The goodwill impairment has been eliminated on Group level. The goodwill arised in a Group internal arrangement in 1998.

Impairment charges in Paperboard Industry include EUR 8.5 million due to the discontinued wallpaper base production at Metsä Board Kyro mill as well as a reversed impairment of EUR 2.0 million due to the sale of a paper machine at Metsä Board's Husum mill.

Impairments in Wood Products Industry include in 2015 an impairment of EUR 3.3 million due to the sale of Metsä Wood France S.A.S.

In addition, impairment losses in 2015 include an impairment loss of EUR 2.1 million due to Metsä Tissue's Russian and Polish operations and to the closure of one production line in Düren, Germany.

IMPAIRMENT OF ASSETS

TESTING PRINCIPLES

The accounting values of asset items or cash generating units (CGU) are evaluated for possible value depreciation. Cash generating units are reporting segments or smaller units to which a utility value can be defined to. If there are indications of value depreciation of an asset item or CGU, or if the unit's accounting value includes or it has been allocated goodwill, it is evaluated how much money the asset item or CGU can accumulate. The sum is the utility value based on the cash flow against the asset item or CGU, or its net sales price.

The goodwill impairment test results are evaluated by comparing the recoverable amount (V) with the carrying amount of the CGU (B) as follows:

	RATIO		
V	0–5%	>	B
V	5–10%	>	B
V	10–15%	>	B
V	15–20%	>	B
V	20–50%	>	B
V	50%–	>	B

PULP AND SAWN TIMBER INDUSTRY

Metsä Group carries out a full impairment test of Pulp and Sawn Timber Industry at least once a year, during the last quarter based on the situation of 30 September. In addition, a sensitivity analysis is made each quarter. Should the sensitivity analysis indicate impairment, a full test will be initiated. The Audit Committee reviews the result of the sensitivity analysis or impairment test.

Metsä Fibre is the cash generating unit in the segment Pulp and Sawn Timber Industry, including goodwill and fair value allocations made by Metsä Group.

Metsä Group's Finnish sawmills became part of the Group's Pulp Industry in a group internal transaction on 31 October 2016. Until then, the sawmills had been a part of the Group's Wood Products Industry, except the Russian sawmill Svir, which already was a part of the Pulp Industry. Following the transaction the new name for Metsä Group's Pulp Industry is Pulp and Sawn Timber Industry.

In 2016 testing all accumulated utility values are based on the cash flow against the asset or CGU. The recoverable cash flows of the CGUs are based on five-year projections and on consequent cash flows growing at a fixed annual growth rate.

The essential testing assumptions are Metsäliitto management's estimates and projections as well as market forecasts. The key factors affecting the projections are development of market pulp prices, exchange rates, delivery volumes and cost of wood and energy. The cash flow against the asset or CGU is also substantially affected by the discount rate used.

For the situation on 30 September 2016 and for previous goodwill impairment tests the cash flows consequent to the 5-year projected cash flows are based on a 2 per cent fixed annual growth rate. Average values for the key assumptions (price, volume, variable costs) during the projection period have been used as initial point for the cash flows following the forecast period. The fixed costs are based on the projected costs for the fifth year.

The discount rate used is Metsä Fibre's Weighted Average Cost of Capital (WACC). Both the cash flows and the discount rate are calculated after tax, which means that the established discounted cash flows and utility values are before tax as set out in IAS 36. For testing carried out on 30 September 2016, the WACC after taxes was 5.59 per cent (5.3).

The goodwill allocated to the CGU Pulp and Sawn Timber Industry as of 30 September 2016 and the testing result as of 30 September 2016:

CASH GENERATING UNIT	GOODWILL, EUR MILLION	TEST RESULT (V-B)/B
Pulp and Sawn Timber Industry	389.8	over 50%

Changes in key assumptions should be very remarkable before the carrying amount would exceed the recoverable amount. The discount rate used should be 11.3 per cent after tax or the average pulp price about 10 per cent lower than the price estimated by an independent expert.

PAPERBOARD INDUSTRY/METSÄ BOARD

Metsä Board carries out a full impairment test at least once a year, during the last quarter based on the situation of 30 September. In addition, a sensitivity analysis is made each quarter. Should the sensitivity analysis indicate impairment, a full test will be initiated. The Audit Committee reviews the sensitivity analysis or impairment testing results quarterly.

In 2016 the cash generating units are Folding boxboard, Liner and Market Pulp. The units are the same as in 2015, except for Kyro Paper which was closed at the end of September.

In 2016 testing all accumulated utility values are based on the cash flow against the asset or CGU. The cash flow that the CGUs under testing can accumulate is based on five-year forecasts and the evenly-growing cash flows that follows them.

The essential testing assumptions are Metsä Board management's estimates and projections as well as third party forecasts. The key factors affecting the projections are development of average board prices, delivery volumes, foreign exchange rates, and capacity utilisation rates, the cost development of key raw materials such as wood, pulp, chemicals and energy, the development of personnel costs and other fixed costs as well as the discount rate. The most significant key factors regarding the estimates are similar to those used in 2015 testing.

Metsä Board's share of the cash flow, accounting value and the goodwill recognised in "Investments in associated companies and joint ventures" of Metsä Fibre, EUR 45.2 million, is allocated to CGUs in proportion to their pulp purchases.

For the situation on 30 September 2016 and for previous goodwill impairment tests the cash flows consequent to the 5-year projected cash flows are based on a 2 per cent fixed annual growth rate. Average values for the key assumptions (price, volume, variable costs) during the projection period have been used as initial point for the cash flows following the forecast period. The fixed costs are based on the projected costs for the fifth year.

The discount rate used is Metsä Board's Weighted Average Cost of Capital (WACC). When calculating WACC the cost of debt takes into account market based view on Metsä Board's risk premium. Both the cash flows and the discount rate are calculated after tax, which means that the established discounted cash flows and utility values are before tax as set out in IAS 36. For testing carried out, the WACC after taxes was 5.38 per cent (5.09) and for Metsä Fibre 5.59 per cent (5.31). Management's view is that the risk factors regarding future cash flows do not differ materially from one CGU to another.

The most important CGUs of Metsä Board, the goodwill allocated to them as of 30 September 2016 as well as their testing result as of 30 September 2016:

CASH GENERATING UNIT	GOODWILL, EUR MILLION	TEST RESULT (V-B)/B
Folding boxboard [1)]	30.2	over 50%
Liner [1)]	27.3	over 50%
Market Pulp [1)]	not allocated	over 50%
Total	57.6	

1) The amount includes the goodwill from Metsä Board's holding in Metsä Fibre, EUR 45.2 million, which is shown in "Investments in associated companies and joint ventures" in the balance sheet

TISSUE AND COOKING PAPERS/METSÄ TISSUE

Metsä Tissue's goodwill has been tested as per 30 September 2016. In testing, all accumulated utility values are based on the cash flow against the asset or CGU.

In testing Metsä Tissue's goodwill the reporting segments have been used as cash generating units. The segments are: Consumer Nordics, Consumer Continental, Away-from-Home and Baking & Cooking.

In calculating the utility values, the management's approved budgets and estimates for the next three years have been used. The cash flows consequent to the three-year projected cash flows have been extrapolated based on the estimated average growth rate for the business area, which is estimated to continue at the level of 1–2 per cent.

The discount rate used is Metsä Tissue's Weighted Average Cost of Capital (WACC). When calculating WACC the cost of debt takes into account market based view on Metsä Tissue's risk premium. Both the cash flows and the discount rate are calculated after tax, which means that the established discounted cash flows and utility values are before tax as set out in IAS 36. For testing carried out on 30 September 2016 the WACC after taxes was 5.4 per cent (5.3). Management's view is that the risk factors regarding future cash flows do not differ materially from one CGU to another.

The most important CGUs of Metsä Tissue, the goodwill allocated to them as well as their testing result as of 30 September 2016:

CASH GENERATING UNIT	GOODWILL, EUR MILLION	TEST RESULT (V-B)/B
Away-from-Home	48.7	over 50%
Consumer Continental	29.2	over 50%
Consumer Nordics	52.2	over 50%
Baking & Cooking	3.4	over 50%
Total	133.5	

The test result is substantially (>50%) above in all cash generating units. Changes in key assumptions should be very remarkable before the carrying amount would exceed the recoverable amount.

9. Financial income and expenses

EUR million	2016	2015
Exchange differences		
Commercial items	**1.5**	13.9
Hedging/hedge accounting not applied	**-7.9**	-13.8
Others	**0.7**	-1.2
Exchange differences total	**-5.7**	-1.2
Other financial income		
Interest income on loans, other receivables and cash and cash equivalents	**4.1**	5.2
Dividend income	**0.1**	0.1
Other financial income total	**4.2**	5.2
Interest and other financial expenses		
Valuation of financial assets and liabilities		
Gains and losses on financial assets or liabilities at fair value through profit or loss (held for trading)	**-0.1**	0.0
Gains/losses from changes in value of financial assets	**0.0**	-2.4
Gains/losses from changes in value of liabilities	**0.0**	1.0
Gains/losses on derivatives (hedge accounting not applied)	**0.6**	1.2
Gains/losses on hedging instrument in cash flow hedges	**0.3**	0.0
Gains/losses on hedging instrument in fair value hedges	**0.0**	-1.1
Fair value adjustments of hedged item in fair value hedges	**0.0**	0.9
Total	**0.8**	-0.3
Interest expenses from financial liabilities carried at amortised cost using the effective interest method	**-72.8**	-82.0
Other financial expenses	**-7.1**	-6.7
Interest and other financial expenses total	**-79.1**	-89.0
Financial income and expenses total	**-80.6**	-84.9

In 2015 an impairment of EUR -2.3 million has been recognised in financial expenses associated with Metsä Fibre's and Metsä Board's shares in the shareholder loan granted to Pohjolan Voima in the OL4 project. In addition value adjustments include in 2015 an income of a TEKES loan of EUR 1.0 million not demanded to be paid back.

10. Income taxes

EUR million	2016	2015
Income taxes for the financial period	**-83.3**	-91.3
Income taxes for previous periods	**0.2**	-10.4
Change in deferred taxes	**2.7**	-10.6
Other	**-0.2**	-0.2
Total	**-80.7**	-112.6

In the autumn of 2015, the Finnish Tax Administration took a stand against the deductibility of certain losses in Metsä Board's 2014 taxation. The company recognised EUR 9.5 million in previously unrecognised income taxes in its result for 2015. Metsä Board has appealed against the decision issued by the Tax Administration, as the company believes the losses are deductible.

INCOME TAX RECONCILIATION

EUR million	2016	2015
Result before taxes	**360.6**	468.4
Computed tax at Finnish statutory rate	**72.1**	93.7
Difference between Finnish and foreign rates	**1.8**	-4.3
Tax exempt income	**-4.3**	-7.1
Non-deductible expenses	**9.5**	23.1
Impairment of goodwill	**0.0**	0.1
Restatement of deferred taxes from previous years	**1.9**	-3.8
Previous years tax losses used during the period	**-2.3**	-3.0
Unrecognised deferred tax receivables from tax losses	**0.1**	4.5
Share of profit from associated companies and joint ventures	**0.3**	-2.1
Income taxes for previous periods	**-0.2**	10.4
Other	**1.8**	1.1
Income tax expense	**80.7**	112.6
Effective tax rate, %	**22.4**	24.0

TAXES INCLUDED IN OTHER COMPREHENSIVE INCOME 2016

EUR million	Before tax	Tax effect	After tax
Items that will not be reclassified to profit and loss			
Items relating to adjustments of defined benefit plans	-12.3	3.1	-9.3
Items that may be reclassified subsequently to profit and loss			
Cash flow hedges	17.2	-4.1	13.1
Available for sale financial assets	-26.7	5.3	-21.4
Currency translation differences	-14.0	-0.8	-14.8
Share of other comprehensive income of joint venture	1.2	0.0	1.2
Total	-22.3	0.5	-21.8

TAXES INCLUDED IN OTHER COMPREHENSIVE INCOME 2015

EUR million	Before tax	Tax effect	After tax
Items that will not be reclassified to profit and loss			
Items relating to adjustments of defined benefit plans	19.5	-5.6	13.9
Items that may be reclassified subsequently to profit and loss			
Cash flow hedges	-0.1	0.5	0.4
Available for sale financial assets	-30.6	6.1	-24.5
Currency translation differences	8.9	0.8	9.7
Share of other comprehensive income of joint venture	-0.6	0.0	-0.6
Total	-22.4	7.4	-15.0

11. Intangible assets

INTANGIBLE ASSETS 2016

EUR million	Goodwill	Other intangible assets	Construction in progress	Total
Acquisition cost, 1 Jan.	522.8	502.7	10.0	1,035.4
Translation differences	-5.2	0.4	0.0	-4.8
Increase	0.0	12.6	3.7	16.3
Decrease	0.0	-30.0	0.0	-30.0
Transfers between items	0.0	6.1	-5.4	0.7
Acquisition cost, 31 Dec.	517.6	491.7	8.3	1,017.6
Accumulated depreciation and impairment charges, 1 Jan.	0.0	-278.2	0.0	-278.2
Translation differences	0.0	-0.3	0.0	-0.3
Accumulated depreciation on deduction and transfers	0.0	27.9	0.0	27.9
Depreciation for the period	0.0	-17.9	0.0	-17.9
Accumulated depreciation and impairment charges, 31 Dec.	0.0	-268.5	0.0	-268.5
Book value, 1 Jan. 2016	522.8	224.5	10.0	757.3
Book value, 31 Dec. 2016	517.6	223.2	8.3	749.0

Metsä Group's Finnish sawmills became part of the Group's Pulp and Sawn Timber Industry in a group internal transaction 31 October 2016. The intangible assets were transferred at book value and therefore the Group's reported acquisition costs of the intangible assets and the accumulated depreciation decreased by EUR 4.3 million.

INTANGIBLE ASSETS 2015

EUR million	Goodwill	Other intangible assets	Construction in progress	Total
Acquisition cost, 1 Jan.	520.3	510.6	12.6	1,043.6
Translation differences	2.8	-0.2	0.0	2.7
Increase	0.0	5.8	5.9	11.7
Decrease	0.0	-22.5	0.0	-22.5
Transfers between items	0.0	8.9	-8.5	0.4
Acquisition cost, 31 Dec.	523.2	502.7	10.0	1,035.8
Accumulated depreciation and impairment charges, 1 Jan.	0.0	-282.5	0.0	-282.5
Translation differences	0.0	0.1	0.0	0.1
Accumulated depreciation on deduction and transfers	0.0	22.4	0.0	22.4
Depreciation for the period	0.0	-17.5	0.0	-17.5
Impairment charges	-0.4	-0.7	0.0	-1.1
Accumulated depreciation and impairment charges, 31 Dec.	-0.4	-278.2	0.0	-278.5
Book value, 1 Jan. 2015	520.3	228.2	12.6	761.1
Book value, 31 Dec. 2015	522.8	224.5	10.0	757.3

Impairment charges in 2015 include a goodwill impairment of EUR 0.7 million due to the sale of Metsä Wood France S.A.S.

GOODWILL ALLOCATED TO SEGMENTS

EUR million	2016	2015
Wood Supply and Forest Services	**2.4**	2.4
Wood Products Industry	**0.7**	5.9
Pulp and Sawn Timber Industry	**3.9**	3.9
Paperboard Industry	**12.4**	12.4
Tissue and Cooking Papers	**134.5**	139.5
Other operations	**390.4**	390.4
Eliminations	**-26.7**	-31.7
Total	**517.6**	522.8

Metsä Group's Finnish sawmills became part of the Group's Pulp and Sawn Timber Industry in a group internal transaction on 31 October 2016. Impairment charges of EUR 5.0 million related to the internal transfer has been eliminated on Group level. The goodwill arised in a Group internal arrangement in 1998.

Other operations include goodwill of EUR 389.8 million related to the Metsä Fibre acquisition and EUR 0.6 million related to the acquisition of Metsä Tissue. In testing goodwill these amounts have been allocated to Pulp and Sawn Timber Industry and Tissue and Cooking Papers.

Development expenditure has not been capitalised in Metsä Group.

In addition, intangible assets include development costs of important computer software as well as patents, licenses and brands.

12. Tangible assets

TANGIBLE ASSETS 2016

EUR million	Land and water areas	Buildings	Machinery and equipment	Other tangible assets	Construction in progress	Total
Acquisition cost, 1 Jan.	67.5	1,180.0	5,074.5	108.3	428.3	6,858.7
Translation differences	-1.0	-4.2	-57.3	-0.3	-4.8	-67.5
Increase	1.9	5.0	157.8	2.0	580.7	747.4
Decrease	-2.4	-58.8	-119.9	-7.0	0.0	-188.1
Transfers between items	0.0	29.2	146.0	0.9	-176.8	-0.7
Assets classified as held for sale	-2.0	-2.6	-0.2	0.0	0.0	-4.8
Acquisition cost, 31 Dec.	64.1	1,148.6	5,200.9	103.9	827.4	7,344.9
Accumulated depreciation and impairment charges 1 Jan.	-7.2	-728.2	-3,974.5	-89.7	0.0	-4,799.6
Translation differences	0.0	4.2	45.0	0.3	0.0	49.5
Accumulated depreciation on deduction and transfers	0.0	52.3	114.9	7.0	0.0	174.2
Depreciation for the period	0.0	-35.0	-181.7	-2.8	0.0	-219.5
Impairment charges	0.0	-2.2	-4.7	0.0	0.0	-7.0
Accumulated depreciation and impairment charges 31 Dec.	-7.2	-709.0	-4,001.0	-85.2	0.0	-4,802.5
Book value, 1 Jan. 2016	60.3	451.8	1,100.1	18.5	428.3	2,059.0
Book value, 31 Dec. 2016	56.9	439.6	1,199.9	18.6	827.4	2,542.5

Assets classified as held for sale in 2016 include Pulp and Sawn Timber's land and water areas as well as Other operations' unsold apartments and parking lots of Asunto Oy Tapiolan Saarni.

Impairment charges in 2016 include EUR 8.5 million due to the discontinued wallpaper base production at Metsä Board Kyro mill as well as a reversed impairment of EUR 2.0 million due to the sale of a paper machine at Metsä Board's Husum mill.

Metsä Group's Finnish sawmills became part of the Group's Pulp and Sawn Timber Industry in a group internal transaction 31 October 2016. The tangible assets were transferred at book value and therefore the Group's reported acquisition costs of the tangible assets and the accumulated depreciation decreased by EUR 141.1 million.

TANGIBLE ASSETS 2015

EUR million	Land and water areas	Buildings	Machinery and equipment	Other tangible assets	Construction in progress	Total
Acquisition cost, 1 Jan.	83.9	1,425.9	5,756.7	149.6	59.9	7,476.0
Translation differences	0.5	2.5	31.0	0.3	2.6	36.8
Increase	0.2	5.6	58.1	3.4	413.8	481.0
Decrease	-17.1	-265.1	-803.9	-45.4	-1.6	-1,133.1
Transfers between items	0.2	12.5	32.8	0.4	-46.3	-0.4
Assets classified as held for sale	-0.1	-1.4	-0.1	0.0	0.0	-1.6
Acquisition cost, 31 Dec.	67.5	1,180.0	5,074.5	108.3	428.3	6,858.7
Accumulated depreciation and impairment charges 1 Jan.	-18.1	-941.0	-4,553.9	-131.8	0.0	-5,644.9
Translation differences	0.0	-2.6	-25.0	-0.2	0.0	-27.8
Accumulated depreciation on deduction and transfers	11.1	254.7	801.6	45.3	0.0	1,112.6
Depreciation for the period		-38.7	-193.6	-2.8	0.0	-235.1
Impairment charges	-0.2	-0.7	-3.5	-0.2	0.0	-4.5
Accumulated depreciation and impairment charges 31 Dec.	-7.2	-728.2	-3,974.5	-89.7	0.0	-4,799.6
Book value, 1 Jan. 2015	65.8	484.9	1,202.7	17.8	59.9	1,831.2
Book value, 31 Dec. 2015	60.3	451.8	1,100.1	18.5	428.3	2,059.0

Assets classified as held for sale also include apartments and parking places of Asunto Oy Tapiolan Pyökki not sold by the end of December 2015.

Impairment charges include impairment of EUR 2.6 million due to the sale of Metsä Wood France S.A.S. Impairment charges also include an impairment loss of EUR 2.5 million due to Metsä Tissue's operations in Russia and Poland and to the closure of one production line in Düren, Germany.

Pledges and mortgages for loans from financial institutions, pension loans and other liabilities amounted to EUR 372.5 million (385.3). Commitments and contingencies are described in more detail in Note 30.

TANGIBLE ASSETS INCLUDE ASSETS ACQUIRED UNDER FINANCE LEASE AGREEMENTS AS FOLLOWS:

EUR million	Land and water areas	Buildings	Machinery and equipment	Total
Acquisition cost 1 Jan. 2016	0.0	16.4	56.0	72.4
Accumulated depreciation	0.0	-9.3	-41.3	-50.6
Book value, 31 Dec. 2016	0.0	7.1	14.8	21.8

EUR million	Land and water areas	Buildings	Machinery and equipment	Total
Acquisition cost 1 Jan. 2015	0.0	19.4	49.2	68.7
Accumulated depreciation	0.0	-10.8	-38.8	-49.6
Book value, 31 Dec. 2015	0.0	8.7	10.4	19.1

Additions in tangible assets in 2016 include assets of EUR 4.8 million acquired under finance lease agreements (0.1).

In 2016 borrowing costs of EUR 6.2 million (2.4) were capitalised. The average interest rate used was 5.72 per cent (4.20), which represents the costs for the loan used to finance the projects.

13. Biological assets

Biological assets (growing trees) are measured at fair value less the estimated expenses of a sale. The fair value of a stand of trees, excluding young seedlings, is based on the present value of expected cash flows (revenue and expenses). The change in fair value is recognised yearly as income/cost in the income statement.

Biological assets are fair value categorised at Level 3 because fair value is based on company estimates and not market data. At the end of 2016 the Group had forest assets mainly in Finland.

Metsä Group has long-term forest lease agreements in Russia and Latvia. The agreements have not been recognised in the balance sheet, because their price or fixed price determination basis is not defined in the agreements. The price is determined by the government usually once a year or, in some cases, more frequently. In practice, the price follows the auction prices for short-term felling rights. Long-term felling rights are primarily used for ensuring the availability of wood.

Most of the Group's biological assets belong to associated companies in Finland. Therefore the amount of the biological assets in the balance sheet is small.

EUR million	2016	2015
At 1 Jan.	13.4	11.8
Purchases during the period	0.2	0.2
Sales during the period	-0.1	0.0
Harvested during the period	-0.5	-1.1
Gains/losses arising from changes in fair values	2.2	2.6
Sold businesses	-12.1	0.0
31.12.	3.1	13.4

On 15 August 2016, Metsä Fibre sold the entire share capital of Metsä-Botnia Metsät Oy to a fund managed by Dasos Capital Oy. Metsä-Botnia Metsät owns approximately 34,000 hectares of land and water areas.

The Group has two associated companies that own biological assets. The Group owns 19.8 per cent of Finsilva Oyj, which in 2016 had forest assets to a fair value of EUR 258.8 million (270.4). The Group's share of this is EUR 51.2 million (53.5). The Group also owns 25 per cent of Suomen Metsäsijoitus Oy, which had forest assets to a fair value of EUR 17.7 million (19.1). The Group's share of this is EUR 4.4 million (4.8).

On 27 May 2015 Metsäliitto Cooperative sold 30.13 per cent of Finsilva Oyj's shares.

14. Group structure

SUBSIDIARIES AND JOINT OPERATIONS

METSÄLIITTO COOPERATIVE	Country	Group's holding, %
SUBSIDIARIES		
Kumpuniemen Voima Oy	Finland	53.97
Metsa Forest Latvia SIA	Latvia	100.00
Metsä Board Corporation [1]	Finland	41.83
Metsä Fibre Oy	Finland	60.61
Metsä Forest Eesti AS	Estonia	100.00
Metsä Forest Sverige AB	Sweden	100.00
Metsä Group Services Sp. z.o.o.	Poland	100.00
Metsä Group Treasury Oy	Finland	100.00
Metsä Tissue Corporation	Finland	91.00
Metsä Wood Deutschland GmbH	Germany	100.00
Metsä Wood Eesti AS	Estonia	100.00
Metsä Wood Holland B.V.	The Netherlands	100.00
Metsä Wood Ibérica S.L.U.	Spain	100.00
Metsä Wood Schweiz AG	Switzerland	100.00
Metsä Wood UK Holdings Ltd	Great Britain	100.00
Metsä Wood UK Ltd	Great Britain	100.00
Metsä Wood USA Inc.	USA	100.00
Mittaportti Oy	Finland	100.00
OOO Metsa Forest Podporozhye	Russia	100.00
OOO Metsa Forest St. Petersburg	Russia	100.00
Punkavoima Oy [2]	Finland	34.67

JOINT OPERATIONS		
Asunto Oy Tapiolan Jalava	Finland	0.51
Asunto Oy Tapiolan Pyökki	Finland	2.37
Asunto Oy Tapiolan Saarni	Finland	7.33
Asunto Oy Tapiolan Tammi	Finland	48.98
Kiinteistö Oy Metsätapiola	Finland	48.98
Kiinteistö Oy Metsätapiolan Pysäköinti	Finland	48.96
Kiinteistö Oy Tapiolan Jalopuupysäköinti	Finland	19.36
Lohjan Biolämpö Oy [3]	Finland	46.00

1) Holding 61.49% by number of votes.
2) According to shareholder agreement all of the heat produced by Punkavoima Oy is distributed to mills owned by Metsäliitto Cooperation. Important operations are controlled by Metsäliitto Cooperative.
3) The primary goal for the arrangement is to produce energy to the parties and the liabilities of the arrangement are actually paid from the cash flow arising from the produced energy bought.

METSÄ FIBRE GROUP	Country	Group's holding, %
SUBSIDIARIES		
Metsä Fibre GmbH	Germany	100.00
Metsä Fibre S.r.l.	Italy	100.00
OOO Metsä Svir	Russia	100.00
Oy Silva Shipping Ab	Finland	100.00
ZAO Petrovles Podporozhye	Russia	100.00

METSÄ BOARD GROUP	Country	Group's holding, %
SUBSIDIARIES		
Metsa Board (Middle East & North Africa) Ltd	Cyprus	100.00
Metsa Board Americas Corporation	USA	100.00
Metsa Board Australia and New Zealand Pty Ltd	Australia	100.00
Metsa Board Hong Kong Ltd	Hong Kong	100.00
Metsa Board Ibéria S.A.	Spain	100.00
Metsa Board IBP (HK) Ltd	Hong Kong	100.00
Metsa Board IBP China Ltd	China	100.00
Metsa Board Italia S.r.l.	Italy	100.00
Metsa Board Middle East & Africa DMCC	United Arab Emirates	100.00
Metsa Board Shanghai Ltd	China	100.00
Metsa Board Singapore Pte Ltd	Singapore	100.00
Metsa Board UK Ltd	Great Britain	100.00
Metsä Board Benelux n.v./s.a	Belgium	100.00
Metsä Board CZ s.r.o.	Czech Republic	100.00
Metsä Board Deutsche Holding GmbH	Germany	100.00
Metsä Board Deutschland GmbH	Germany	100.00
Metsä Board France S.A.S.	France	100.00
Metsä Board Hungary Kft.	Hungary	100.00
Metsä Board IBP Deals Americas Ltd	USA	100.00
Metsä Board International Oy	Finland	100.00
Metsä Board Kemi Oy	Finland	100.00
Metsä Board Netherlands B.V.	The Netherlands	100.00
Metsä Board NL Holding B.V.	The Netherlands	100.00
Metsä Board Nordic A/S	Denmark	100.00
Metsä Board Nordic AB	Sweden	100.00
Metsä Board Polska Sp. Z.o.o.	Poland	100.00
Metsä Board Reinsurance AG	Switzerland	100.00
Metsä Board Schweiz AG	Switzerland	100.00
Metsä Board Sverige AB	Sweden	100.00
M-real Hellas Ltd	Greece	51.00
M-real UK Holdings Ltd	Great Britain	100.00
M-real UK Services Ltd	Great Britain	100.00
OOO Metsä Board	Russia	100.00
OOO Peterbox	Russia	100.00
Oy Hangö Stevedoring Ab	Finland	100.00
JOINT OPERATIONS		
Äänevoima Oy [2]	Finland	56.25
Ääneverkko Oy [2]	Finland	56.25

1) The primary goal for the arrangement is to produce energy to the parties and the liabilities of the arrangement are actually paid from the cash flow arising from the produced energy bought.

METSÄ TISSUE GROUP	Country	Group's holding, %
SUBSIDIARIES		
Dambi AB	Sweden	100.00
Metsa Tissue Czech s.r.o.	Czech Republic	100.00
Metsa Tissue Krapkowice Sp. z.o.o.	Poland	100.00
Metsa Tissue Poland Sp. z.o.o.	Poland	100.00
Metsa Tissue Slovakia s.r.o.	Slovakia	100.00
Metsa Tissue Ukraine LCC	Hungary	100.00
Metsä Tissue A/S	Denmark	100.00
Metsä Tissue AB	Sweden	100.00
Metsä Tissue AS	Norway	100.00
Metsä Tissue GmbH	Germany	100.00
Metsä Tissue Hungary Kft.	Hungary	100.00
Metsä Tissue Immobilienverwaltungs GmbH	Germany	100.00
Metsä Tissue Ltd	Great Britain	100.00
OOO Metsä Tissue	Russia	100.00
JOINT OPERATIONS		
Katrinefors Kraftvärme AB [1]	Sweden	50.00

1) The primary goal for the arrangement is to produce energy to the parties and the liabilities of the arrangement are actually paid from the cash flow arising from the produced energy bought.

Changes in holdings of subsidiaries and joint operations in Note 4.

NON-CONTROLLING INTEREST'S SHARES

Principal non-controlling interest's shares	Country	Non-controlling interest Holding, % 2016	2015	Non-controlling interest Share of result, EUR million 2016	2015	Non-controlling interest Share of equity, EUR million 2016	2015
Metsä Fibre Group	Finland	**39.39**	39.29	**69.4**	92.9	**412.8**	378.3
Metsä Board Group [1]	Finland	**58.17**	57.76	**25.2**	43.9	**213.1**	202.6
Metsä Tissue Group	Finland	**9.00**	9.00	**2.7**	2.0	**31.8**	29.6
Other subsidiaries				**0.0**	0.0	**0.8**	0.8
				97.4	138.8	**658.4**	611.3

1) Non-controlling interest's holding by votes 38.51% (38.37).

BUSINESS TRANSACTIONS WITH NON-CONTROLLING INTEREST

In March 2016 Metsä Group used 0.41% of its B-shares in Metsä Board according to the share incentive scheme. After the share-based payments the Group's holding in Metsä Board is 41.83%. As a consequence the non-controlling interest increased by EUR 2.8 million and the retained earnings increased by EUR 0.7 million.

In February 2015 Metsä Group used 0.29% of its B-shares in Metsä Board according to the share incentive scheme. After the share-based payments the Group's holding in Metsä Board is 42.24%. As a consequence the non-controlling interest increased by EUR 1.6 million and the retained earnings increased by EUR 0.3 million.

SUMMARY OF FINANCIAL INFORMATION OF SUBSIDIARIES WITH A SUBSTANTIAL NON-CONTROLLING INTEREST

	Metsä Fibre Group 2016	2015	Metsä Board Group 2016	2015	Metsä Tissue Group 2016	2015
Sales	**1,351.0**	1,444.6	**1,720.3**	2,007.5	**990.8**	1,015.8
Result for the period	**160.9**	249.6	**90.4**	137.3	**27.6**	20.1
Non-controlling interest's share of the result	**69.4**	92.9	**25.2**	43.9	**2.7**	2.0
Total comprehensive income for the period	**152.0**	265.0	**84.0**	127.8	**30.2**	18.6
Non-controlling interest's share of the total comprehensive result	**60.5**	93.5	**24.8**	38.1	**3.0**	1.9
Dividends paid to non-controlling interest	**32.9**	24.9	**35.2**	22.7	**0.8**	0.7
Non-current assets	**1,437.4**	914.1	**1,367.7**	1,327.8	**635.5**	647.4
Current assets	**498.7**	613.9	**826.5**	892.3	**370.7**	375.4
Non-current liabilities	**432.7**	152.6	**567.5**	725.9	**426.1**	445.4
Current liabilities	**338.8**	316.9	**574.2**	465.3	**262.5**	280.6
Net assets	**1,164.7**	1,058.5	**1,052.5**	1,028.9	**317.6**	296.8
Net cash flow from operating activities	**170.4**	385.3	**77.0**	246.7	**87.5**	78.8
Net cash flow arising from investing activities	**-660.2**	-250.3	**-143.2**	-207.2	**-36.7**	-28.9
Net cash flow arising from financing activities	**489.0**	-294.8	**60.6**	-43.7	**-50.4**	-51.0
Change in cash and cash equivalents	**-0.8**	-159.7	**-5.5**	-4.2	**0.3**	-1.1

The numbers are presented before Metsä Group eliminations. The subgroup's internal items are eliminated. The numbers have been consolidated according to the group's segment reporting.

ASSOCIATED COMPANIES AND JOINT VENTURES

EUR million	2016	2015
INVESTMENTS IN ASSOCIATED COMPANIES AND JOINT VENTURES		
At 1 Jan	**43.4**	77.7
Share of results	**-1.1**	11.2
Dividends received	**-1.5**	-5.6
Decreases	**0.0**	-39.3
Translations differences	**1.2**	-0.6
At 31 Dec	**42.1**	43.4
AMOUNTS IN INCOME STATEMENT		
Associated companies	**-0.6**	11.1
Joint ventures	**-0.5**	0.1
Total	**-1.1**	11.2

EUR million	2016	2015
AMOUNTS IN BALANCE SHEET		
Associated companies	**31.6**	33.7
Joint ventures	**10.4**	9.7
Total	**42.1**	43.4

On 27 May 2015 Metsäliitto Cooperative sold 30.13 per cent of Finsilva Oyj's shares.

Unamortised amount of goodwill for associated companies at 31 December 2016 include goodwill of EUR 1.3 million (1.3) from ZAO HK Vologodskie Lesopromyshlenniki.

INFORMATION ON PRINCIPAL ASSOCIATED COMPANIES

EUR million	Business	Country	Holding, % 2016	2015
Finsilva Oyj	Forest	Finland	19.8	19.8

SUMMARY OF FINANCIAL INFORMATION OF PRINCIPAL ASSOCIATED COMPANIES

EUR million	2016	2015
FINSILVA OYJ		
Sales	**19.1**	19.9
Result for the period	**-2.1**	37.2
Dividends received from associated company	**1.3**	5.4
Non-current assets	**288.1**	299.8
Current assets	**10.2**	11.1
Non-current liabilities	**155.7**	158.0
Current liabilities	**4.6**	6.1
Net assets	**137.9**	146.8
Reconciliation of financial information against book value in group balance sheet:		
Group's share of net assets	**27.3**	29.0
Book value of associated company in balance sheet	**27.3**	29.0

Finsilva Oyj is consolidated according to the equity method. The summary is prepared in accordance with IFRS.

The group has no other principal associated companies.

SUMMARY OF FINANCIAL INFORMATION OF OTHER THAN PRINCIPAL ASSOCIATED COMPANIES

EUR million	2016	2015
Group's share of results	**-0.2**	0.5
Book value in group balance sheet	**4.4**	4.7

JOINT VENTURES

The group has no principal joint ventures.

15. Available for sale investments

EUR million	2016	2015
Listed companies	**0.0**	0.1
Other companies	**200.1**	227.0
Total	**200.1**	227.1

Available for sale financial assets consist of listed and unlisted shares. The fair value of listed shares is based on public quotation for shares at the balance sheet date.

The most important shareholding of non-quoted companies consists of a 3.6 per cent stake in Finnish energy company Pohjolan Voima Oy, that produces electricity and heat for its shareholders in Finland. Pohjolan Voima trades with its shareholders at prices based on production costs, which generally are lower than the market prices.

The Group controls some 5.2 per cent of the electricity produced by Olkiluoto nuclear power plant (through Pohjolan Voima's B-shares, OL1 and OL2), some 6.6 percentage proportion in Meripori coal-fired power plant (through C2 shares). The Group also controls some 84.0 per cent of the energy produced by Hämeenkyron Voima Oy (through Pohjolan Voima's G10 shares). In addition Metsä Group also has some 2.0 percentage proportion (through Pohjolan Voima B2 shares) in Olkiluoto 3, a nuclear power plant under construction.

The ownership in Pohjolan Voima Oy is measured at fair value quarterly by using the weighted average of discounted cash flow method and the valuation based on earlier transactions. The WACC used was 2.06 per cent (2.72) and for the Olkiluoto 3 under construction 4.06 per cent (5.72). 12 months rolling averages have been used for the energy price estimates, which evens out the short-term energy price fluctuations. The changes in fair value less deferred tax calculated with Finnish tax rate are recorded in fair value reserve in equity. The acquisition value of shares in Pohjolan Voima Oy is EUR 43.1 million (43.1) and the fair value EUR 192.5 million (219.2). The fair value of nuclear power shares was EUR 180.4 million (203.0), coal-fired power shares (C2-shares) EUR -5.4 million (-5.1), hydroelectric power shares (A-shares) EUR 5.4 million (9.1) and G10-shares EUR 12.0 million (12.0).

The shareholder agreement of Pohjolan Voima prevents free selling of shares with others than shareholders. A sensitivity analysis of the most significant assumptions to the book value of Pohjolan Voima Oy is presented in Note 2.

Other unlisted shares, of which the fair value cannot be reliably measured, have been valued at acquisition cost less impairment charges.

16. Other non-current financial assets

EUR million	2016	2015
Non-current financial assets at fair value through profit and loss		
1.1.	**5.8**	5.3
Increases	**0.0**	0.9
Decreases	**-5.7**	0.0
Change in fair value	**-0.2**	-0.3
31.12.	**0.0**	5.8
Interest-bearing loan receivables		
From associated companies and joint ventures	**2.1**	2.1
From others	**3.5**	3.5
Total	**5.6**	5.6
Non-interest-bearing receivables		
Defined benefit pension plans (Note 22)	**12.2**	16.0
From others	**0.6**	0.5
Total	**12.9**	16.5
Other non-current financial assets, total	**18.4**	28.0

17. Deferred taxes

RECONCILIATION OF DEFERRED TAX ASSETS AND LIABILITIES IN 2016

EUR million	1.1.2016	Charged in income statement	Charged in other items of comprehensive income	Translation differences	Acquisitions/ disposals	31.12.2016
Deferred tax assets in balance sheet						
Pension obligations and other provisions	**15.6**	-2.0	1.9	0.0	0.0	**15.5**
Intercompany margins	**10.7**	-3.2	0.0	0.0	0.0	**7.5**
Available for sale financial assets recognised at fair value	**0.0**	0.0	2.5	0.0	0.0	**2.5**
Unused tax losses and tax credit	**7.0**	5.1	0.0	0.1	0.0	**12.3**
Financial instruments	**19.3**	-0.4	-3.3	0.3	0.0	**15.9**
Other temporary differences	**8.3**	0.6	0.0	0.0	-0.3	**8.6**
Deferred tax assets total	**61.0**	0.2	1.1	0.3	-0.3	**62.3**
Netting against liabilities	**-23.1**	-6.3	4.8	0.2	0.0	**-24.4**
Deferred tax assets in balance sheet	**37.9**	-6.1	5.9	0.5	-0.3	**37.9**
Deferred tax liabilities in balance sheet						
Pension obligations	**3.5**	-0.1	-1.0	-0.4	0.0	**2.1**
Appropriations and untaxed provisions	**137.0**	2.3	0.0	-1.7	-0.1	**137.6**
Acquired net assets and biological assets recognised at fair value	**68.2**	-3.6	0.0	0.0	-1.7	**62.8**
Available for sale financial assets recognised at fair value	**33.4**	0.0	-2.9	0.0	0.0	**30.5**
Financial instruments	**2.3**	-1.7	0.8	0.5	0.0	**1.9**
Hedge of net investments in foreign operations	**0.0**	0.8	0.0	-0.8	0.0	**0.0**
Other temporary differences	**4.3**	-0.3	0.0	-1.1	0.0	**2.9**
Deferred tax liabilities total	**248.7**	-2.5	-3.1	-3.6	-1.8	**237.8**
Netting against assets	**-23.1**	-6.3	4.8	0.2	0.0	**-24.4**
Deferred tax liabilities in balance sheet	**225.6**	-8.8	1.8	-3.4	-1.8	**213.4**

RECONCILIATION OF DEFERRED TAX ASSETS AND LIABILITIES IN 2015

EUR million	1.1.2015	Charged in income statement	Charged in other items of comprehensive income	Translation differences	Acquisitions/ disposals	31.12.2015
Deferred tax assets in balance sheet						
Pension obligations and other provisions	**30.9**	-1.1	-3.1	-0.3	-10.9	**15.6**
Intercompany margins	**9.0**	1.7	0.0	0.0	0.0	**10.7**
Unused tax losses and tax credit	**28.5**	-19.7	0.0	-1.3	-0.4	**7.0**
Financial instruments	**18.0**	-0.5	0.2	1.6	0.0	**19.3**
Other temporary differences	**8.0**	0.6	-1.7	1.3	0.0	**8.3**
Deferred tax assets total	**94.5**	-19.0	-4.6	1.3	-11.3	**61.0**
Netting against liabilities	**-29.7**	7.6	-1.0	0.0	0.0	**-23.1**
Deferred tax assets in balance sheet	**64.8**	-11.4	-5.6	1.3	-11.3	**37.9**
Deferred tax liabilities in balance sheet						
Pension obligations	**0.6**	0.6	2.2	0.1	0.0	**3.5**
Appropriations and untaxed provisions	**139.6**	-3.5	0.0	1.0	0.0	**137.0**
Acquired net assets and biological assets recognised at fair value	**75.3**	-7.1	0.0	0.0	0.0	**68.2**
Available for sale financial assets recognised at fair value	**39.5**	0.0	-6.1	0.0	0.0	**33.4**
Financial instruments	**0.9**	0.9	0.5	0.0	0.0	**2.3**
Hedge of net investments in foreign operations	**0.0**	-0.1	0.0	0.1	0.0	**0.0**
Other temporary differences	**4.4**	0.8	-1.0	0.0	0.0	**4.3**
Deferred tax liabilities total	**260.3**	-8.4	-4.3	1.1	0.0	**248.7**
Netting against assets	**-29.7**	7.6	-1.0	0.0	0.0	**-23.1**
Deferred tax liabilities in balance sheet	**230.6**	-0.8	-5.3	1.1	0.0	**225.6**

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax relates to the same taxation authority.

At 31 December 2016 the net operating loss carry-forwards amounted to EUR 56.8 million (39.0) for which EUR 12.0 million (7.0) tax assets have been recognised. The net operating loss carry-forwards derive mainly from Finland, Sweden and Germany. In addition net operating loss carry-forwards derive from Slovakia, Russia and USA. The management estimates that the companies in the future will generate taxable income from which the losses can be deducted.

The operating loss carry-forwards for which deferred tax assets have not been recognised due to uncertainty of the utilisation of these loss carry-forwards amounted to EUR 573.7 million (573.8). The net operating loss carry-forwards derive mainly from Finland, Germany, France, Poland and Russia. The deferred tax assets for these non-recognised loss carry-forwards amounted to EUR 130.5 million (130.4) at 31 December 2016.

The Group had loss carry-forwards of EUR 630.6 million at 31 December 2016. Of these EUR 182.1 million do not expire. Some EUR 274.9 million of the losses will expire in 2017–2021 and EUR 173.6 million later.

18. Inventories

EUR million	2016	2015
Inventories		
Raw materials and consumables	319.8	295.0
Work in progress	24.1	26.8
Finished goods and goods for sale	398.4	336.6
Advance payments	24.8	28.3
Total	767.2	686.8

The cost of inventories recognised as expense to lower the carrying amount to equal the net realisable value was EUR 3.7 million (4.8). The expense is included in materials and services.

19. Accounts receivables and other receivables

EUR million	2016	2015
Interest-bearing loan receivables		
Loans from associated companies and joint ventures	0.0	0.8
From others	1.2	4.2
Total	1.2	5.0
Accounts receivables and other non-interest-bearing receivables		
From associated companies and joint ventures		
Accounts receivables	4.3	3.7
Other receivables	0.7	0.0
Prepayment and accrued income	0.1	0.1
	5.1	3.8
From others		
Accounts receivables	544.5	522.9
Loan receivables	0.2	0.6
Other receivables	66.7	63.3
Prepayment and accrued income	47.2	40.0
	658.6	626.8
Total	663.7	630.6
Accounts receivables and other receivables, total	664.9	635.6

DOUBTFUL ACCOUNTS RECEIVABLES

ACCOUNTS RECEIVABLES ARE RECORDED NET OF THE FOLLOWING ALLOWANCES FOR DOUBTFUL ACCOUNTS:

EUR million	2016	2015
At 1 Jan.	3.0	5.4
Increases	0.8	0.7
Decreases	-2.5	-3.1
At 31 Dec.	1.3	3.0

EUR 0.3 million (0.7) of credit loss was recognised during 2016.

AGEING ANALYSIS OF ACCOUNTS RECEIVABLES

EUR million	2016	2015
Not overdue	488.6	490.5
Overdue		
less than 30 days	51.6	30.0
between 31–60 days	3.8	1.3
between 61–90 days	0.9	0.2
between 91–180 days	-1.0	1.4
more than 180 days	0.5	-0.5
At 31 Dec.	544.5	522.9

20. Cash and cash equivalents

EUR million	2016	2015
Financial assets at fair value through profit and loss	97.2	62.3
Current investments	486.4	414.8
Cash at bank and in hand	311.4	643.7
Total	895.1	1,120.8

21. Members' capital

CHANGES IN MEMBERS' CAPITAL

EUR million	Participation shares	Additional shares A	Additional shares B	Total
Members' capital at 1 Jan. 2016	156.2	474.1	115.4	745.7
Paid-in members' capital	11.4	33.1	20.5	65.0
Transfers from interests to members' capital	1.6	29.0		30.6
Equity bonus		1.6		1.6
Refund of members' capital	-1.2	-37.0	-7.4	-45.6
Transfers to current interest-bearing liabilities	-6.1	-16.1	-5.6	-27.8
Members' capital at 31 Dec. 2016	161.9	484.7	122.8	769.4
Members' capital at 1 Jan. 2015	158.1	458.1	103.0	719.1
Paid-in members' capital	6.4	23.1	25.3	54.8
Transfers from interests to members' capital	1.7	26.4		28.0
Equity bonus		1.4		1.4
Refund of members' capital	-6.5	-17.8	-6.2	-30.5
Transfers to current interest-bearing liabilities	-3.4	-17.1	-6.7	-27.2
Members' capital at 31 Dec. 2015	156.2	474.1	115.4	745.7

TRANSFERS TO CURRENT INTEREST-BEARING LIABILITIES

EUR million	Participation shares	Additional shares A	Additional shares B	Total
31.12.2016	57.7	172.7	43.8	274.1
Change	-6.1	-16.1	-5.6	-27.8
31.12.2015	51.6	156.6	38.1	246.3
Change	-3.4	-17.1	-6.7	-27.2
31.12.2014	48.2	139.6	31.4	219.1

FAIR VALUE AND OTHER RESERVES

EUR million	**2016**	**2015**
Fair value reserve	**25.1**	29.1
Revaluation reserve	**1.2**	1.2
Restatement reserve	**94.9**	94.9
General reserves	**71.3**	71.3
Reserves stipulated by the rules	**0.1**	0.1
Reserve for invested unrestricted equity	**0.9**	0.9
Total	**193.5**	197.4

MEMBERS' CAPITAL

The par value of a participation share is 1 euro. The subscription price of a participation share is equivalent to its par value, unless otherwise decided by the Representative Council or the Board of Directors, authorised by the Representative Council. A member's obligation to acquire participation shares is determined according to the area and location of their forestland, with no single member being obligated to acquire more than 30,000 participation shares.

The Board of Directors may decide to issue shares other than participation shares to members. Such shares are called additional shares. A member may acquire additional shares only if their participation shares have been paid in full. The Cooperative may have additional shares A, additional shares B and additional shares C. The minimum number of additional shares A is 1 and the maximum quantity is 900 million. The minimum number of additional shares B is 1 and the maximum quantity is 300 million. The minimum number of additional shares C is 1 and the maximum quantity is 100 million. Metsäliitto Cooperative has no additional shares C issued for the moment. The par value of an additional share is 1 euro. The interest payable on additional shares may differ from the interest payable on participation shares and from that paid on other types of additional shares. The Board of Directors decides on the issuance, the grounds for issuance, the subscription price and the payment of additional shares, as well as other conditions related to their issuance. The Board of Directors may also decide on issuing additional shares held by Metsäliitto.

A member may subscribe for additional shares A at the net amount of the sales price received from Metsäliitto for wood trade. The member may also subscribe for additional shares A at the amount of the interest on members' capital paid to the member by Metsäliitto. However, the subscription is only possible within the limits of the maximum quantity of additional shares A.

At the beginning of 2012, Metsäliitto Cooperative launched a new investment product, Equity Bonus, in which a member can subscribe for additional shares A worth 1 euro in a combined issue in accordance with the share issue terms, at a price decided by the Board of Directors in any given year. New additional shares A are offered for subscription on income from wood trade or the interest on members' capital. The maximum amount of the combined issue fund unit is EUR 100 million.

A member may subscribe for any quantity of additional shares B. However, the subscription is only possible within the limits of the maximum quantity of additional shares B.

Surplus may be distributed to the members. Interest or other returns from Metsäliitto's surplus may be distributed to the members. Funds may also be distributed to the members in other ways in accordance with Chapter 16, section 1 of the Cooperatives Act. The Representative Council decides on the distribution of funds and the grounds for distribution.

One third of the distributable funds shown on the most recently adopted balance sheet may be used for returning participation and additional shares.

TRANSLATION DIFFERENCES

Translation differences include translation differences arising on translation of subsidiaries in other currencies than euro and gains and losses arising on hedging of net investments in these subsidiaries, when requirements of hedge accounting have been fulfilled.

FAIR VALUE RESERVE

The reserve include the effective portion of fair value based on hedge accounting applied to interest, currency and commodity derivatives and the fair value change of available for sale financial assets less deferred tax.

REVALUATION RESERVE

Revaluation of land and bonds in non-current assets are recognised in the revaluation reserve.

REVALUATION SURPLUS

The revaluation surplus include the fair value of the previous holdings in Metsä Fibre which arised from the allocation of fair value of the acquired Metsä Fibre shares in 2009.

LEGAL RESERVE AND RESERVES STIPULATED BY THE ARTICLES OF ASSOCIATION/RULES

Legal reserve and reserves stipulated by the Articles of Association have been created and accumulated as a result of resolution by the Annual General Meeting of shareholders/representatives.

RESERVE FOR INVESTED UNRESTRICTED EQUITY

The reserve for invested unrestricted equity includes other investments in equity and the share issue price to a sum especially decided not to be recognised in the share capital.

INTEREST ON MEMBERS' CAPITAL

After balance sheet day the Board of Directors has proposed that an interest of EUR 51.5 million (50.4) be distributed on paid-in members' capital. Financial costs regarding the interest on members' capital was recognised to a sum of EUR 13.3 million (11.3).

OTHER COMPREHENSIVE INCOME, NET OF TAX 2016

EUR million	Equity attributable to members of parent company Translation differences	Fair value and other reserves	Retained earnings	Total	Non-controlling interest	Total
Items relating to adjustments of defined benefit plans			-12.6	-12.6	0.2	-12.3
Income tax relating to items that will not be reclassified			2.8	2.8	0.3	3.1
Cash flow hedges						
Currency flow hedges						
gains and losses recorded in equity		-9.8		-9.8	-6.2	-16.0
transferred to adjust sales		5.0		5.0	1.6	6.5
Interest flow hedges						
gains and losses recorded in equity		-9.4		-9.4	-5.6	-15.0
transferred to adjust financial items				0.0		0.0
Commodity hedges						
gains and losses recorded in equity		9.4		9.4	12.8	22.2
transferred to adjust purchases		14.0		14.0	5.4	19.4
Total		9.2		9.2	8.0	17.2
Available for sale investments						
gains and losses of fair valuation		-13.5		-13.5	-13.1	-26.6
transferred to other operating income		0.0		0.0	0.0	-0.1
Total		-13.6		-13.6	-13.1	-26.7
Translation differences	-12.5			-12.5	-5.3	-17.8
Net invest hedge	3.8			3.8		3.8
Share of comprehensive income of joint venture	1.2			1.2		1.2
Total	-7.5		0.0	-7.5	-5.3	-12.8
Income tax relating to items that may be reclassified	-0.8	0.4		-0.3	0.8	0.5
Other comprehensive income, net of tax	-8.2	-3.9	-9.8	-21.9	-9.1	-31.1

OTHER COMPREHENSIVE INCOME, NET OF TAX 2015

EUR million	Equity attributable to members of parent company Translation differences	Fair value and other reserves	Retained earnings	Total	Non-controlling interest	Total
Items relating to adjustments of defined benefit plans			15.4	15.4	4.0	19.5
Income tax relating to items that will not be reclassified			-3.9	-3.9	-1.7	-5.6
Cash flow hedges						
Currency flow hedges						
gains and losses recorded in equity		-11.2		-11.2	-12.2	-23.4
transferred to adjust sales		18.8		18.8	19.5	38.3
Interest flow hedges						
gains and losses recorded in equity		2.6		2.6	1.8	4.5
transferred to adjust financial items		0.0		0.0	0.0	0.0
Commodity hedges						
gains and losses recorded in equity		-21.4		-21.4	-16.8	-38.1
transferred to adjust purchases		10.3		10.3	8.3	18.6
Total		-0.9		-0.9	0.8	-0.1
Available for sale investments						
gains and losses of fair valuation		-14.2		-14.2	-16.1	-30.3
transferred to other operating income		-0.1		-0.1	-0.2	-0.3
Total		-14.3		-14.3	-16.3	-30.6
Translation differences	8.0		0.0	8.0	4.7	12.7
Net invest hedge	-3.8			-3.8		-3.8
Share of comprehensive income of joint venture	-0.6			-0.6		-0.6
Total	3.7		0.0	3.7	4.7	8.4
Income tax relating to items that may be reclassified	0.8	3.4		4.2	3.3	7.4
Other comprehensive income, net of tax	4.4	-11.8	11.6	4.2	-5.3	-1.0

22. Retirement benefit obligations

The Group has several arrangements concerning benefits following the termination of employment, including both defined benefit pension plans and defined contribution pension plans.

PENSION AND OTHER POST-EMPLOYMENT BENEFITS

EUR million	2016	2015
Liabilities in balance sheet		
Defined benefit pension plans	**80.9**	74.1
Defined contribution pension plans	**3.0**	3.8
Total	**83.9**	77.9
Defined benefit pension plans		
In balance sheet	**80.9**	74.1
Surplus of funded plans in assets	**-12.2**	-16.0
Total	**68.6**	58.1

DEFINED BENEFIT PENSION PLANS

The Group's most significant defined benefit pension plans are in Germany, Great Britain, Finland and Sweden.

The Group has several additional defined benefit pension plans in Germany. The arrangements grant old-age pensions, disability pensions and family pensions exceeding the statutory pension security to eligible employees, officials, senior management and former owners of the local company. The retirement age is usually 65 years, and the amount of pension depends on the length of service. Officials and senior management are required to have a service history of 25 to 30 years to receive a full pension. With employees, all service years after the age of 18 are taken into consideration. Some of the pension arrangements are closed. The defined benefit plans in Germany are unfunded.

The defined benefits plans in Great Britain guarantee participants of the plan a pension the amount of which is based on the length of service and the salary in the most recent working years. The arrangement is closed to new members. The assets in the arrangement have been invested in funds that are managed in accordance with local guidelines and practice. Funds administered by third parties pay the benefits to the eligible recipients. The Group actively participates in the operations of the foundation's investment committee.

In Finland, the Group has additional pension arrangements that are regarded as defined benefit plans. Metsäliitto Employees' Pension Foundation grants old-age pensions, disability pensions and family pensions exceeding the statutory pension security to some of its officials. New members are no longer accepted to the Pension Foundation. The Pension Foundation's assets have been invested in property, Group company shares and participations as well as other quoted shares. In addition, the Pension Foundation has promissory note receivables from the Group and bank deposits. The members of the Group's Executive Management Team have a separate benefit-based pension agreement with a retirement age of 62. The level of pension is 60 per cent of the total salary under the Employees' Pensions Act, calculated on the basis of the five-year period preceding retirement. If the employment relationship with Metsä Group ends before retirement age, a member of the Executive Management Team is entitled to a paid-up policy. The new pension law in Finland has no impact on the Group's defined benefit pension liabilities because the stipulated retirement age has not been compensated with additional pensions.

The defined benefit pension plan in Sweden concerns officials born 1978 or earlier. The arrangement grant old-age pensions, family pensions and disability pensions. The amount of pension depends on the salary in which the future salary increases, length of service, promotions and other important factors like changes on the labour market are considered. The defined benefit plans in Sweden are unfunded. The obligation has a guarantee liability.

The Group has also defined benefit plans in Belgium, Italy, Norway, Slovakia and Switzerland.

AMOUNTS RECOGNISED IN BALANCE SHEET

EUR million	2016	2015
Present value of funded obligations	**167.1**	168.7
Fair value of plan assets	**-164.5**	-171.6
Total	**2.6**	-3.0
Present value of unfunded obligations	**66.0**	61.1
Total	**68.6**	58.1
Net liability in balance sheet	**68.6**	58.1

CHANGES IN DEFINED BENEFIT OBLIGATIONS 2016

EUR million	Present value	Fair value of plan assets	Total
1.1.2016	229.7	-171.6	58.1
Current service cost	3.4	0.0	3.4
Administrative costs	0.0	0.0	0.0
Interest expense (+) or interest income (-)	6.2	-5.3	0.9
Past service cost	0.0	0.0	0.0
Income (-) and losses from settlement	-0.1	0.0	-0.1
Total amount recognised in profit and loss	9.6	-5.2	4.3
Remeasurements in other comprehensive income			
The return on plan assets, excl. amounts included in interest	0.0	-17.6	-17.6
Gains (-) and losses (+) from change in demographic assumptions	0.2	0.0	0.2
Gains (-) and losses (+) from change in financial assumptions	31.7	0.0	31.7
Experience gains and losses	-2.7	0.0	-2.7
Total remeasuments in other comprehensive income	29.1	-17.6	11.5
Translation differences	-14.3	15.7	1.4
Contribution			
Employers	0.0	-3.5	-3.5
Plan participants	0.0	-0.1	-0.1
Payments from plans			
Benefit payments	-12.9	9.9	-2.9
Settlements	-8.0	7.9	-0.1
Acquired/sold businesses	0.0	0.0	0.0
31.12.2016	233.1	-164.5	68.6

In 2016 the defined benefit pension plan in Holland was changed to a defined contribution pension plan, which reduced the defined benefit obligations and assets of the Group by EUR 7.8 million due to settlements.

CHANGES IN DEFINED BENEFIT OBLIGATIONS 2015

EUR million	Present value	Fair value of plan assets	Total
1.1.2015	323.9	-151.9	172.0
Current service cost	4.3	0.0	4.3
Administrative costs	0.0	0.0	0.0
Interest expense (+) or interest income (-)	6.4	-4.9	1.5
Past service cost	-0.6	0.0	-0.6
Income (-) and losses from settlement	-0.1	0.0	0.0
Total amount recognised in profit and loss	10.0	-4.8	5.2
Remeasurements in other comprehensive income			
The return on plan assets, excl. amounts included in interest	0.0	-10.6	-10.6
Gains (-) and losses (+) from change in demographic assumptions	3.8	0.0	3.8
Gains (-) and losses (+) from change in financial assumptions	-14.8	0.0	-14.8
Experience gains and losses	2.3	0.0	2.3
Total remeasuments in other comprehensive income	-8.7	-10.6	-19.3
Translation differences	6.1	-6.1	0.0
Contribution			
Employers	0.0	-4.2	-4.2
Plan participants	0.0	-0.1	-0.1
Payments from plans			
Benefit payments	-10.4	6.1	-4.3
Settlements	0.5	0.0	0.5
Acquired/sold businesses	-91.6	0.0	-91.6
31.12.2015	229.7	-171.6	58.1

On 21 May 2015, Metsä Board sold 100% of its shareholdings in Metsä Board Zanders GmbH including all liabilities related to the company, to a holding company wholly owned by mutares AG and its partner company.

DEFINED BENEFIT PENSION PLANS AND PLAN ASSETS BY COUNTRY IN 2016

EUR million	Germany	Great Britain	Finland	Sweden	Other countries	Total
Present value of obligations	39.2	99.9	57.1	24.8	12.2	233.1
Fair value of plan assets	0.0	-107.9	-48.8		-7.8	-164.5
Total	39.2	-8.1	8.3	24.8	4.4	68.6

DEFINED BENEFIT PENSION PLANS AND PLAN ASSETS BY COUNTRY IN 2015

EUR million	Germany	Great Britain	Finland	Sweden	Other countries	Total
Present value of obligations	37.9	96.5	53.7	21.1	20.5	229.7
Fair value of plan assets	0.0	-110.6	-45.0	0.0	-16.1	-171.6
Total	37.9	-14.1	8.7	21.1	4.5	58.1

SIGNIFICANT ACTUARIAL ASSUMPTIONS 2016

	Germany	Great Britain	Finland	Sweden	Other countries
Discount rate, %	1.20–1.93	2.70	0.38–1.93	2.3	1.02–2.10
Salary growth rate, %	3.0	2.3	0.0–2.0	3.0	1.00–2.25
Pension growth rate, %	1.75–1.80	2.9–3.7	1.60–2.05	1.5	0.85–2.00
Life expectancy, years					
Retiring at the end of the reporting period					
Male	21.4	21.9–22.8	21.4	22.0	17.2–21.3
Female	25.7	23.9–24.8	25.4	24.0	23.0–24.4
Retiring 20 years after the end of reporting period					
Male	24.1	23.2–24.1	23.7	23.6	17.2–23.5
Female	28.2	25.4–26.3	28.1	25.5	23.0–26.8

SIGNIFICANT ACTUARIAL ASSUMPTIONS 2015

	Germany	Great Britain	Finland	Sweden	Other countries
Discount rate, %	1.88–2.32	3.90	0.91–2.32	2.88	1.86–3.00
Salary growth rate, %	3.0	2.0	0.0–2.0	3.0	2.19–3.00
Pension growth rate, %	2.0	2.6–3.4	1.50–1.85	1.5	1.55–2.00
Life expectancy, years					
Retiring at the end of the reporting period					
Male	21.3	22.2–23.0	21.4	20.0	20.5–21.3
Female	25.6	24.4–24.9	25.4	24.0	24.1–24.5
Retiring 20 years after the end of reporting period					
Male	24.0	23.6–24.4	23.7	23.0	22.7–23.5
Female	28.1	25.9–26.4	28.0	25.0	26.0–26.8

Assumptions on mortality rate are based on guidance by actuaries on the basis of published statistics in each region and on experience. The assumptions are used to calculate the average life expectancy for people retiring at the age of 65.

SENSITIVITY OF BENEFIT OBLIGATION TO CHANGES IN ESSENTIAL WEIGTED ASSUMPTIONS 2016

		Impact on benefit obligation	
	Change of assumption	Increase	Decrease
Discount rate, %	0.5%	7.4% decrease	7.9% increase
Increase in salary growth rate	0.5%	1.0% increase	0.9% decrease
Increase in pension growth rate	0.5%	6.3% increase	6.1% decrease
		Increase in assumption one year	Decrease in assumption one year
Life expectancy		3.8% increase	3.8% decrease

SENSITIVITY OF BENEFIT OBLIGATION TO CHANGES IN ESSENTIAL WEIGTED ASSUMPTIONS 2015

		Impact on benefit obligation	
	Change of assumption	Increase	Decrease
Discount rate, %	0.5%	6.9% decrease	7.9% increase
Increase in salary growth rate	0.5%	1.5% increase	1.2% decrease
Increase in pension growth rate	0.5%	5.9% increase	5.5% decrease
		Increase in assumption one year	Decrease in assumption one year
Life expectancy		3.5% increase	3.5% decrease

The aforementioned sensitivity analyses are based on a situation where all other assumptions remain unchanged when one assumption changes. In practice, this is not probable, and changes in some assumptions may correlate with each other. The sensitivity of a defined benefit obligation to changes in significant actuarial assumptions has been calculated using the same method as is used in calculating the pension obligation entered in the balance sheet. The sensitivity analysis has been carried out using the same methods and assumptions as in the previous period.

PLAN ASSETS IN 2016

EUR million	Quoted	Unquoted	Total	%
Equity instruments	4.9	0.2	5.1	3.1
Debt instruments	0.5	16.0	16.5	10.0
Property	0.0	8.6	8.6	5.2
Qualifying insurance policies	0.0	1.3	1.3	0.8
Cash and cash equivalents	1.4	0.0	1.4	0.9
Investments funds	113.9	0.0	113.9	69.2
Funds in insurance companies	0.0	17.7	17.7	10.8
Total	120.7	43.9	164.5	100.0

PLAN ASSETS IN 2015

EUR million	Quoted	Unquoted	Total	%
Equity instruments	5.0	0.2	5.2	3.0
Debt instruments	1.2	16.1	17.3	10.1
Property	0.0	6.2	6.2	3.6
Qualifying insurance policies	0.0	8.9	8.9	5.2
Cash and cash equivalents	2.8	0.0	2.8	1.6
Investments funds	114.4	0.0	114.4	66.6
Funds in insurance companies	0.0	16.8	16.8	9.8
Total	123.4	48.2	171.6	100.0

Assets included in the pension arrangements include Metsäliitto Cooperative's participations at a fair value of EUR 0.2 million (0.2) and Metsä Board Corporation's A- and B -shares with a fair value of EUR 2.7 million (2.7).

Defined benefit plans expose the Group to several different risks, the most considerable being as follows:

VOLATILITY OF ASSETS

Liabilities arising from the arrangements have been calculated using a discount rate based on the return on bonds issued by the companies. If the return on assets included in the arrangement is less than this return, deficit is generated. The Group works to reduce investment risk by diversifying the assets in the arrangement to different asset types, such as shares, properties and government and corporate bonds. A considerable portion of the assets included in the arrangement in Great Britain consists of shares that are expected to provide a better long-term return than corporate bonds, although in the short-term they generate volatility and risks.

CHANGES IN BOND YIELDS

A decrease in corporate bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plans' bond holdings.

INFLATION RISK

The majority of the plans' benefit obligations are linked to inflation, and higher inflation will lead to higher liabilities (although, in most cases, caps on the level of inflationary increases are in place to protect the plan against extreme inflation). The majority of the plans' assets are either unaffected by (fixed interest bonds) or loosely correlated with (shares) inflation, meaning that an increase in inflation will also increase the deficit.

LIFE EXPECTANCY

The majority of the arrangement obligations is related to producing lifetime benefits for members, so the expected increase in life expectancy will increase the arrangement obligations.

The contribution made to defined benefit plans following the termination of employment is expected to be EUR 6.2 million in the 2017 financial period.

The weighted average duration of the defined benefit obligation is 15.7 years (15.8).

23. Provisions

EUR million	Restructuring	Environmental obligations	Other provisions	Total
1.1.2016	20.4	15.0	7.8	43.3
Translation difference	-0.4	0.0	0.0	-0.4
Increases	0.8	3.2	1.7	5.7
Decreases	-14.3	-0.1	-3.3	-17.7
Unused amounts reversed	-3.1	-1.9	-0.6	-5.7
31.12.2016	3.4	16.2	5.6	25.2

EUR million	2016	2015
Non-current	20.2	23.0
Current	5.0	20.3
Total	25.2	43.3

Of the restructuring provisions' unused amounts reversed, EUR 2.7 million relates to the reversion of provisions made for the efficiency programme of Metsä Tissue's napkin business in Germany.

Of the increases in provisions made for environmental obligations, EUR 2.4 million relates to the landscaping of Metsä Tissue's landfill, and of the reversions of unused environmental provisions, EUR 1.4 million relates to the inspections of Metsä Fibre's landfill provisions.

The non-current portion will mostly be paid before the end of 2025.

24. Borrowings

INTEREST-BEARING FINANCIAL LIABILITIES

EUR million	BOOK VALUE 2016	BOOK VALUE 2015
NON-CURRENT INTEREST-BEARING FINANCIAL LIABILITIES		
Bonds	228.8	396.6
Loans from financial institutions	777.8	652.7
Pension loans	90.6	123.2
Finance lease liabilities	17.4	30.1
Other liabilities	150.9	100.8
Total	1,265.3	1,303.5

EUR million	BOOK VALUE 2016	BOOK VALUE 2015
CURRENT INTEREST-BEARING FINANCIAL LIABILITIES		
Current portion of long-term debt	**389.5**	193.9
Current loans	**3.7**	2.1
Other liabilities	**274.1**	246.3
Total	**667.2**	442.3
Assets classified as held for sale	**1.9**	1.1
Interest-bearing financial liabilities, total	**1,934.5**	1,746.8

INTEREST-BEARING FINANCIAL ASSETS

EUR million	BOOK VALUE 2016	BOOK VALUE 2015
NON-CURRENT INTEREST-BEARING FINANCIAL ASSETS		
Financial assets at fair value through profit and loss	**0.0**	5.8
Loan receivables	**5.6**	5.6
Total	**5.6**	11.5
CURRENT INTEREST-BEARING FINANCIAL ASSETS		
Financial assets at fair value through profit and loss	**97.2**	62.3
Loan receivables	**1.2**	5.0
Current investments at amortised cost	**486.4**	414.8
Cash at bank and in hand	**311.4**	643.7
Total	**896.3**	1,125.8
Interest-bearing financial assets, total	**901.9**	1,137.3
Interest-bearing net liabilities, total	**1,032.6**	609.6

BONDS

EUR million	Interest, %	2016	2015
2004–2020	9.000	**15.3**	15.3
2012–2017	5.125	**158.4**	159.7
2014–2019	4.000	**213.5**	221.7
		387.2	396.6

Metsä Tissue Oyj has an outstanding debenture loan of EUR 155 million of which EUR 15.3 million is held by investors outside the Group. The maturity date of the loan is 30 April 2020.

Metsäliitto Cooperative has an outstanding bond of EUR 175 million. The interest rate of the bond is 5.125% and the maturity date is 29 November 2017. The bond ranks senior and is unsecured. There are typical restrictions on change of control and pledges in the terms and conditions of the loan.

Metsä Board Corporation has an outstanding bond of EUR 225 million. The interest rate of the bond is 4.0% and the maturity date is 13 March 2019. The bond ranks senior and is unsecured. There are typical restrictions on mergers, demergers, change of control and pledges in the terms and conditions of the loan. Original limitations on additional indebtedness and asset disposals are not applicable since the company ratings have been upgraded above limits set in the terms and conditions.

MATURITY OF FINANCE LEASE LIABILITIES

EUR million	2016	2015
MINIMUM LEASE PAYMENTS		
Not later than 1 year	**18.1**	4.8
1–2 years	**3.6**	17.1
2–3 years	**3.0**	2.2
3–4 years	**2.4**	3.1
4–5 years	**1.7**	1.3
Later than 5 years	**7.9**	8.1
Total	**36.7**	36.5
Future finance charges	**1.7**	2.2
Present value of minimum lease payments	**35.0**	34.4
Present value of minimum lease payments		
Not later than 1 year	**17.7**	4.2
1–2 years	**3.3**	16.5
2–3 years	**2.7**	1.9
3–4 years	**2.2**	2.9
4–5 years	**1.5**	1.2
Later than 5 years	**7.5**	7.6
Total	**35.0**	34.4

The most significant finance lease agreements concern Metsä Board's Äänevoima Oy's power plants. Äänevoima's contract periods vary between 10 and 15 years. All finance lease liabilities will be due in 2017 at the latest. These leases contain renewal and purchase options.

25. Other non-current liabilities

EUR million	2016	2015
NON-INTEREST BEARING NON-CURRENT LIABILITIES TO OTHERS		
Advance payments	**2.2**	1.1
Accounts payable	**0.0**	0.1
Other liabilities	**0.0**	0.5
Accruals and deferred income	**1.5**	2.6
Total	**3.8**	4.4

26. Accounts payable and other liabilities

EUR million	2016	2015
NON-INTEREST BEARING CURRENT LIABILITIES TO ASSOCIATED COMPANIES		
Accounts payable	**3.6**	5.3
Accruals and deferred income	**1.0**	1.3
Total	**4.6**	6.6
NON-INTEREST BEARING CURRENT LIABILITIES TO OTHERS		
Advance payments	**20.9**	18.4
Accounts payable	**600.1**	620.7
Other liabilities	**43.2**	54.3
Accruals and deferred income	**361.4**	339.0
Total	**1,025.6**	1,032.4
Accounts payable and other liabilities, total	**1,030.2**	1,039.0

27. Management of financial risks

The financial risks associated with business operations are managed in accordance with the financial policy endorsed by the Board of Directors and the senior management of the Group. The policy defines focal instructions on the management of foreign currency, interest rate, liquidity and counterparty risks, and for the use of derivative financial instruments. Correspondingly, commodity risks are managed according to the Group's commodity risk policy. The purpose is to protect the company against major financial and commodity risks, to balance the cash flow and to allow the business units time to adjust their operations to changing conditions.

Metsä Group Treasury Oy is specialized in finance and functions as the Group's internal bank. Metsäliitto Cooperative´s holding is 100 per cent of the company. Financial operations have been centralised to Metsä Group Treasury, which is in charge of managing the Group companies' financial positions according to the strategy and financial policy, providing necessary financial services and acting as an advisor in financial matters.

FOREIGN CURRENCY RISK

The foreign currency exposure of Metsä Group consists of the risks associated with foreign currency flows, translation risk of net investments in foreign entities and economic currency exposure. Most of the Group's costs are incurred in the euro zone and to some extent in Sweden, but a significant part of the sales is in other currencies. Sales may therefore vary because of changes in exchange rates, while production costs remain unchanged. Product prices are also often quoted in currencies other than the home currency. The foreign currency transaction exposure is consisting of foreign currency denominated sales revenue and costs. The exposure is including foreign currency denominated balance sheet exposure consisting of accounts receivable and accounts payable and a quarter share of the annual contracted or estimated net currency cash flow.

The main currencies of the Group's foreign currency transaction exposure are the US dollar, the British pound and the Swedish krona. The share of dollar is 58 per cent, share of pound is 8 per cent and share of Swedish krona is 21 per cent. A strengthening of the dollar and the pound has a positive impact on the financial result and a weakening a negative impact. A weakening of the Swedish krona has a positive impact on the result of the Group. Other significant currencies are AUD, CAD, DKK, NOK, PLN and RUB. The share of Russian rouble of the direct Group currency transaction exposure is only 2.8 per cent. The hedging policy is to keep the balance sheet exposure and a quarter of annual cash flow of contracted or estimated currency flows consistently hedged. The hedging level can, however vary between 0–12 months as the financial policy has defined separate risk mandates for deviating from the norm hedging. The Board of Directors of each Group company decides on significant changes in the hedging level if they see a reason to deviate from the norm set out in the financial policy. The amount of currency-specific hedging depends on current exchange rates and market expectations, on the interest rate differences between the currencies and the significance of the exchange rate risk for the financial result of the Group. The transaction exposure is mainly hedged by forward transactions but also by the use of foreign currency loans and currency options.

Hedge accounting in accordance with IAS 39 is applied to hedging of part of the currency transaction exposure, which allows fair value changes of hedges designated to hedge accounting to be recognized in other comprehensive income. At the end of the reporting period, the foreign exchange flow position had been hedged 6.3 months on average (2015: 3.2). During the reporting period, the hedging level has varied between 3 and 7 months (3–5). The dollar's hedging level was 7.0 months (2.6), of which the portion of hedge accounting was 4.3 months (2.6). The Swedish krona's hedging level was 6.5 months (4.4), of which the portion of hedge accounting was 4.5 months (3.4). The pound's hedging level was 5.5 months (4.5), of which the portion of hedge accounting was 2.5 months (1.8). Hedges allocated to hedge accounting have been used to hedge the portion of highly probable forecast sales of the currency transaction exposure. At the end of the reporting period on average 151 per cent of the norm determined in the hedging policy was hedged (77).

The translation risk of a net investment in a foreign entity is generated from the consolidation of the equity of subsidiaries and associated companies outside the euro area into euros in the consolidated financial statements. According to the financial policy, 0–100 per cent (0–100) of equity should be hedged. The translation risk of equity has been hedged by using forward transactions and hedge accounting in accordance with IAS 39 is applied, which allows the exchange gains and losses of effective hedging to be recognized in other comprehensive income. During the reporting period, on average 1 per cent (9) of the equity position was hedged and at the end of the reporting period 0 per cent (9). During 2016 last equity hedges have matured and equity hedging has for the time been abandoned.

The Group applies the Value-at-Risk method to assess the risk of its open foreign currency positions. The VaR is calculated on the deviation from the balance sheet exposure plus the quarter of annual foreign currency exposure hedge norm defined in the financial policy. A 99% confidence level on one month period is applied to the VaR risk figure, i.e., the VaR indicates that with a 1% probability the market value of the open foreign currency position depreciates more than the amount of the risk figure in a month. The risk mandates regarding hedging decisions have been defined by restricting the company management's powers by linking them to maximum currency-specific hedging level changes and to a VaR limit. Possible strategic decisions which exceed the policy risk limits are made by the Board of Directors. The total amount of limits set for the Group companies´ foreign currency risk is EUR 23.0 million (25.5) and the sum of VaR figures of the Group companies is at the end of the reporting period EUR 17.7 million (3.9). Average during the period has been EUR 6.5 million (5.5).

HEDGING OF FOREIGN EXCHANGE TRANSACTION EXPOSURE

	EXPOSURE, NET		HEDGING, MONTHS	
	EUR	Hedging	31.12.	Average
USD	1,253	-729	7.0	4.8
GBP	181	-83	5.5	4.5
SEK	-453	245	6.5	5.6
NOK	85	-40	5.7	5.1
DKK	64	-22	4.0	4.0
Other long	69	-20	3.4	3.9
Other short	-61	3	0.6	1.0
Total 2016	2,165	-1,140	6.3	4.8
Total 2015	1,878	-509	3.2	3.7

HEDGING OF NET INVESTMENTS IN A FOREIGN ENTITY

	EQUITY EXPOSURE		HEDGING, %	
	EUR	Hedging	31.12	Average.
GBP	74	0	0.0	11.0
SEK	435	0	0.0	0.0
Others	110	0	0.0	0.0
Total 2016	620	0	0.0	1.0
Total 2015	670	-59	9.0	9.0

INTEREST RATE RISK

The interest rate risk is related mainly in the interest bearing receivables and loans, working capital financing and currency hedging. The most significant currencies in risk management are the euro, the US dollar, the British pound and the Swedish krona. Also the loans not yet raised for Äänekoski bioproduct mill investment and related interest rate swaps are included in the Group interest rate exposure. The objective of the interest rate risk policy is to minimise the negative impact of interest rate changes on the Group's and group companies' result and the financial position, and to optimise financing costs within the framework of risk limits. The effect of interest rate changes on financial costs depends on the average interest fixing time of interest bearing assets and liabilities, which is measured in the Group by duration. As duration is lengthening the rise of interest rates affects more slowly the interest expenses of financial liabilities. The maturity of the loan portfolio can be influenced, e.g., by adjusting between floating-rate and fixed-rate loans and by using interest rate derivatives. The Group uses in its interest rate risk management interest rate swaps, interest rate futures and interest rate options.

The average interest duration norm based on the Group's financial policy is twelve months. The duration can, however, deviate from the hedging policy norm so that the decision of a deviation exceeding four months has to be made by the Board of Directors. The average duration of loans was 33.9 months (2015: 32.4) at the end of the year. During the reporting period duration has varied between 31 and 36 months (16–34). At the end of 2016, an increase of one per cent in interest rates would decrease interest rate costs of the next 12 months by EUR 0.1 million (decrease of 3.3).

Metsä Group is exposed to a risk of change in the value of derivatives due to a change in market prices when using interest rate derivatives, since according to IAS 39 derivatives must be valued to their fair value in the balance sheet. However, the partial application of hedge accounting will balance the effects of changes in the market value of derivatives on the financial result of the Group. The Group is applying fair value hedge accounting in accordance with IAS 39 to fixed-rate loans which have been converted by interest rate swaps to floating-rate financing. In addition, the Group is applying cash flow hedge accounting in accordance with IAS 39 to the major part of the interest rate swaps by which floating-rate financing has been converted to fixed-rate financing. The gross nominal volume of interest rate derivatives at the time of financial statements is EUR 932.9 million (1,044.2). Of the derivatives portfolio, EUR 928.3 million (966.0) is allocated to hedge accounting, and the portion of derivatives recognized in the balance sheet through profit or loss is EUR 4.6 million (78.2). The maturity of interest rate swap contracts varies between 1–14 years (1–15).

INTEREST RATE RISK

	2016	2015
Loan amount, EUR mill.	**1,658**	1,499
Duration, months	**33.9**	32.4
Average interest rate, %	**3.5**	3.8
Interest rate sensitivity, EUR mill.	**-0.1**	-3.3

Interest rate sensitivity is an estimate of the effect of an interest rate change of one per cent on net interest cost based on year-end exposure. Duration includes committed credit facilities and attached interest rate swaps of EUR 501 million related to Metsä Fibre's bioproduct mill. These are also included in the re-pricing structure of loans. Interest rate risk exposure does not include the part of Metsäliitto Cooperative subscribed capital that is booked as short-term interest-bearing liability.

RE-PRICING STRUCTURE OF LOANS

EUR mill.	TOTAL
1–4/2017	**313**
5–8/2017	**415**
9–12/2017	**6**
2018	**225**
2019	**330**
2020	**124**
>2021	**746**
Total	**2,159**

COMMODITY RISK

In the hedging of commodity risks the Group applies risk management policies defined separately for each selected commodity. According to the policy, the management of commodity risks with regard to financial hedges is accomplished centralized by Metsä Group Treasury based on the strategy and risk management policy approved by Board of Directors of Metsä Group companies. So far the commodity hedging policy has been applied to the management of the price risks of electricity, natural gas, gas oil and pulp and also transactions related to Emission allowances have been managed by Metsä Group Treasury.

Metsä Group's target in managing the electricity price risk is to balance the effect of changes in the price of electricity on the Group's result and financial position. The main principle is to hedge the electricity purchase exposure, which consists of the difference of factory-specific electricity consumption estimates and power plant production shares in the possession of the Group. With regard to Metsä Board and Metsä Tissue Finnish and Swedish electricity procurement, the hedge strategy is implemented in cooperation with Metsä Group Energy service unit centralized through Metsä Group Treasury. The hedges of electricity price risk in Central Europe are implemented according to instructions and by Metsä Group Energy in co-operation with local production units by physical contracts. Metsä Board, Metsä Tissue and Metsä Wood hedge the electricity price risk actively by setting the hedging norm at 80, 40, 20, 10 and 10 per cent share of the estimated net position during the first, second, third, fourth and fifth successive 12-month periods respectively. Hedge accounting in accordance with IAS 39 has been applied to electricity hedging. Consequently the fair value of hedges allocated to hedge accounting is recognized in other comprehensive income and only after the realisation of electricity purchases in the income statement as an adjustment of the purchases. Metsä Fibre is not hedging its electricity or natural gas exposure.

Approximately a quarter of mills' purchase of fuel is based on natural gas. In Finland the hedging of natural gas price risks has so far been done with physical, fixed-price contracts. Since the beginning of 2016 the prices of natural gas in Finland have been bound to crude oil prices (Brent), coal price applied in Europe (API2) and the energy price index. In Central Europe the prices of natural gas are fixed to market prices of natural gas. Metsä Tissue has carried out financial hedges of natural gas in Germany and is applying hedge accounting according to IAS 39. Additionally Metsä Group is hedging the price risk of propane and butane purchases as financial hedges and IAS 39 hedge accounting is applied. The hedging strategy of natural gas, propane and butane is based on a risk policy according to which Metsä Group Energy makes the hedging decisions with the support of Metsä Group Treasury, and the Board of Directors of Group companies make significant strategic decisions.

Approximately 27 per cent (27) of electricity hedges have been carried out by using physical supply contracts and 73 per cent (73) as so-called financial hedges by using electricity derivatives. All financial hedges have been designated to hedge accounting at the end of the year. About 88 per cent (82) of natural gas price risk hedges have been carried out by using physical supply contracts and 12 per cent (18) as so-called financial hedges.

Metsä Group has continued gas oil price risk hedging related to logistics costs (sea freights) based on prepared risk management policy with financial hedges and IAS 39 hedge accounting is applied.

According to the pulp price risk hedging policy a Group company may selectively hedge its price risk either by financial hedges through Metsä Group Treasury or fixed-price physical contracts. Hedge accounting in accordance with IAS is applied within the pulp price risk management. Metsä Tissue has used pulp price risk hedges during 2016 and there are valid price risk hedges at the end of 2016.

HEDGING OF ELECTRICITY PRICE RISK, 31.12.

GWh	2016	2015
Electricity exposure, net 2017	1,231.0	1,383.0
Electricity hedging 2017	1,355.0	1,465.0
Hedging, at end of year (%)	110	106

Electricity price risk is hedged based on defined risk management policy on a time horizon of four years either by physical contracts or by financial contracts. The table is applying only to the hedging of electricity price risk of the following year. The net electricity exposure has been calculated by taking into account the own and associated companies' electricity production.

LIQUIDITY RISK

Liquidity risk is defined as the risk that funds and available funding become insufficient to meet business needs, or costs that are incurred in arranging the necessary financing are unreasonable high. Liquidity risk is monitored by estimating the need for liquidity needs 12–24 months ahead and ensuring that the total liquidity available will cover a main part of this need. According to the financial policy, the liquidity reserve must at all times cover 100 per cent of the Group's liquidity requirement for the first 12 months and 50–100 per cent of the following 12–24 months liquidity requirement. The objective is that at the most 20 per cent of the Group's loans, including committed credit facilities, is allowed to mature within the next 12 months and at least 25 per cent of the total debt must have a maturity in excess of four years. When the financial markets are functioning normally from the Group's point of view, the target is to avoid keeping extra liquidity as liquid funds and instead maintain a liquidity reserve as committed credit facilities outside the balance sheet.

The cornerstone of liquidity risk management is to manage the Group's operative decisions in such a way that targets concerning indebtedness and sufficient liquidity reserve can be secured in all economic conditions. Liquidity risk is also managed by diversifying the use of capital and money markets to decrease dependency on any single financing source. The optimisation of the maturity structure of loans is also emphasized in financial decisions. The Group is using short-term working capital financing related to account receivables and account payables.

Metsä Board agreed in June 2016 on the extension of its syndicated credit facility by two years. The facility consisting of a EUR 150 million term loan facility and a EUR 100 million revolving credit facility will after the amendment mature in March 2020. The financing package for the Metsä Fibre bioproduct mill project was originally including Itochu share holder loan in total EUR 900.0 million, of which EUR 50,0 million was raised until the end of 2015. During 2016 loans of EUR 268.8 million have been raised, a credit facility of EUR 80.0 million has been cancelled and there are there are still unraised loans of EUR 501.2 million.

Metsä Group's liquidity has remained strong. The available liquidity was EUR 1,801.4 million (1,952.6) at the end of the reporting period, of which EUR 895.1 million (1,120.8) was liquid funds and investments and EUR 906.3 million (831.8) committed credit facilities. In addition, the Group has EUR 501.2 million (925.0) in off-balance sheet committed credit facility agreements related to the bioproduct mill investment in Äänekoski. The Group had also at its disposal short-term, uncommitted commercial paper programmes and credit lines amounting to EUR 160.8 million (161.0). At the end of 2016, the liquidity reserve covers fully the forecasted financing need of 2017 and 2018. 15 per cent (8) of long-term loans and committed facilities fall due in a 12 month period and 24 per cent (27) have a maturity of over four years. The average maturity of long-term loans is 3.3 years (2.9). The share of short-term financing of the Group's interest bearing liabilities is 14 per cent (14).

COUNTERPARTY RISK

Financial instruments carry the risk that the Group may incur losses should the counterparty be unable to meet its commitments. The Group is managing this risk by entering into financial transactions only with most creditworthy counterparties and within pre-determined limits. During the reporting period, credit risks of financial instruments did not result in any losses. The financial counterparty risk is limited by the fact that the liquidity reserve is partially maintained in the form of committed credit facilities, although the strengthened liquidity position has increased the counterparty risk during the last years. Cash and cash equivalents and other investments have been spread to several banks and commercial papers of several institutions. Counterparty limits have been revised during the year by taking into account the needs of the company and the view on the financial position of the used counterparties. Derivatives trading is regulated by the standardised ISDA contracts made with the counterparties.

The Group's accounts receivable carry a counterparty risk that the Group may incur losses should the counterparty be unable to meet its commitments. Credit risk attached to accounts receivable is managed on the basis of the credit risk management policies approved by operative management. Credit quality of customers is assessed at regular intervals based on the customers' financial statements, payment behaviour, credit agencies and credit ratings agencies. Individual credit limits are reviewed at least annually. Letters of Credits, bank and parent company guarantees and Credit insurance are used to mitigate credit risk according to management decisions. Credit limits are approved according to credit risk management policy with approval limits of varying values across the Group. Operative management reviews and sets all major credit limits which are not supported by credit insurance and/or other security according to Credit Risk Management Policies.

The portion of overdue client receivables of all sales receivables of Metsä Group is at the time of financial statements 10.2 per cent (6.2), of which 0.0 per cent (0.3) is overdue between 90–180 days and 0.1 per cent (0.0) over 180 days. Additionally Metsä Group implements regular impairment tests for customer accounts receivables. Credit loss impairment is booked when a customer enters legal bankruptcy, or becomes past due for more than 6 months (180 days) without a valid payment plan or other valid reasons. The specification of doubtful receivables is in the Notes no. 19.

The geographical structure of the accounts receivable is diversified and is reflecting the external sales structure presented in the Segment information. Largest sources of credit risk exist in United Kingdom, Germany, Finland, Italy, Poland, Sweden, USA, France, Hong Kong and China. Top ten countries represent around 63 per cent of (68) external customer receivables. The share of largest individual customer (individual companies or groups of companies under common ownership) credit risk exposure of the Group at the end of 2016 was about 4 per cent (6) of total accounts receivable. About 25 per cent (26) of accounts receivable was owed by ten largest customer groups (individual companies or groups of companies under common ownership). At the end of 2016, the main part of trade receivables of Metsä Group were covered by credit insurance or other security, such as letters of credit.

MANAGING THE CAPITAL

Terms capital and capital structure are used to describe investments made in the company by its owners and retained earnings (together equity) and debt capital (liabilities) as well as the relation between them. In managing its capital structure, the Group aims at maintaining an efficient capital structure that ensures the Group's operational conditions in financial and capital markets in all circumstances despite the fluctuations typical to the sector. Certain central target values, which correspond to standard requirements set by financing and capital markets, have been defined for the capital structure. The Group's capital structure is regularly assessed by the Group's Board of Directors and its Audit Committee.

The Group monitors the development of its capital structure through key ratios that describe net gearing and equity ratio. The objective of the Group on long term basis is to maintain its net gearing ratio at the maximum level of 100 per cent and equity ratio at the minimum level of 40 per cent (temporary deviations allowed).

KEY RATIOS DESCRIBING THE CAPITAL STRUCTURE ON 31.12.2016 AND 31.12.2015 WERE THE FOLLOWING:

EUR million	2016	2015
Net gearing ratio, %	40	25
Equity ratio, %	43.9	43.2
Interest-bearing liabilities	1,934.5	1,746.8
- interest-bearing financial assets	901.9	1,137.3
Interest-bearing net liabilities	1,032.6	609.6
Members' funds	1,941.6	1,805.6
+ non-controlling interest	658.4	611.3
Total	2,600.0	2,416.9
Total assets	5,945.8	5,616.4
- advanced payments received	23.2	19.5
Total	5,922.6	5,596.9

The debt financing of Metsä Group was at the end of 2016 arranged so that Metsä Board, Metsä Fibre and Metsä Tissue each had required loans to cover the financial needs of the sub-Groups formed by them and that the loans of the companies in question were independent of each other. Likewise Metsäliitto Cooperative had separately arranged financing to cover the financial needs of the parent company and Metsä Forest and Metsä Wood.

The financing for the Metsä Fibre bioproduct mill project was originally in total EUR 750 million and consisted of several financing arrangements. In addition, the company signed a EUR 150 million shareholder loan agreement with Itochu Corporation. The debt financing for the bioproduct mill project consists of a EUR 400 million Finnvera guaranteed loan, a EUR 200 million loan from European Investment Bank (EIB) and EUR 70 million loan guaranteed by Swedish export credit agency EKN. EUR 80 million loan from commercial banks has been cancelled. The financial covenants related to the financing are in line with Metsä Fibre´s and whole Metsä Group´s loan agreement covenants.

In Metsä Group`s certain financial contracts financial covenants have been set regarding financial performance and capital structure. Other covenants in the Group's loan agreements are customary terms and conditions including for example a negative pledge, restrictions on major asset disposals, limitations on subsidiary indebtedness, restrictions on changes of business and mandatory prepayment obligations upon a change of control of the Group. All Group companies have been in compliance with its covenants during the accounting periods 2016 and 2015.

In case Metsäliitto Cooperative or any of its subsidiaries could not meet its obligations as defined by the above mentioned key ratios and in order to avoid a breach of contract that could have an adverse effect on the company's financial position, it would need to renegotiate its financial arrangements, payback its loans or get its debtors to give up their claims to meet these obligations.

MARKET RISK SENSITIVITY 31.12.

			IMPACT ON EQUITY EXPOSURE AND ANNUAL TRANSACTION EXPOSURE							
	Impact on financial assets and liabilities		Impact on net equity of foreign entities		Impact on net equity of foreign entities incl. hedging		Impact on annual transaction exposure (cash flow)		Impact on annual transaction exposure (cash flow) incl. hedging	
EUR mill.	**2016**	**2015**	**2016**	**2015**	**2016**	**2015**	**2016**	**2015**	**2016**	**2015**
INTEREST RATE RISK (100 BP RISE IN INTEREST RATES)										
Effect on profit	-0.2	-1.3					0.1	3.3	39.6	41.0
Effect on other change in equity	39.7	39.0								
COMMODITY RISK (ELECTRICITY PRICE +20%)										
Effect on profit							-5.5	-4.8	8.3	5.9
Effect on other change in equity	13.8	10.7								
FX RISK (USD -10%)										
Effect on profit	10.1	-7.0					-125.3	-105.9	-52.4	-83.1
Effect on other change in equity	44.1	23.2	-0.1	-0.2	-0.1	-0.2				
FX RISK (GBP -10%)										
Effect on profit	2.8	1.5					-18.1	-21.1	-9.9	-13.3
Effect on other change in equity	3.7	9.2	-7.4	-8.5	-7.4	-2.6				
FX RISK (SEK -10%)										
Effect on profit	-2.5	0.9					45.3	33.5	20.8	21.1
Effect on other change in equity	-16.7	-9.4	-43.5	-48.1	-43.5	-48.1				

Items with "+" sign = positive effect = increase of assets/decrease of liabilities/increase of cash flow
Items with "-" sign = negative effect = decrease of assets/increase of liabilities/decrease of cash flow

IFRS 7 requires an entity to disclose a sensitivity analysis for each type of market risk to which the entity is exposed at the reporting date, showing how profit or loss and equity would have been affected by changes in the relevant risk variable that were reasonably possible at that date. The Group has recognised interest rates, electricity prices and foreign exchange rates as its key market risks and has set 1 per cent interest rate rise, 20 per cent rise in electricity price and 10 per cent weakening of USD, GBP and SEK as reasonably possible risk variables. These currencies represent nearly 80 per cent of the Group´s annual transaction exposure. The nature of the market price risk is relatively linear so that the size of effects of opposite market price changes do not essentially differ from the presented figures. The scenarios have been calculated by using regular principles of calculating market values of financial instruments described in the Group Accounting policies. Figures at the reporting date reflect quite well the average market risk conditions throughout the reporting period.

Additionally the Group is presenting figures describing the effects of the risk variables to its equity exposure and annual transaction exposure (cash flow) to present a broader picture about market risks of interest rates, electricity prices and foreign exchange rates. Annual cash flows are based on estimates, but not existing commercial contracts. The weakening of USD and GBP has a negative impact on annual cash flow and the weakening of SEK has a positive impact. Hedges reduce this impact depending on hedging strategy. The impact on net equity of foreign entities is arising from the consolidation of subsidiaries to the Group consolidated accounts. The rise of electricity price has a negative impact on cash flow. As according to hedging policy the electricity price risk of the nearest year has mostly been hedged, the impact including hedges remains minor. When the cash flow of the nearest year and all electricity hedges have been taken into account, the calculatory impact is slightly positive.

MATURITY OF REPAYMENT AND INTEREST PAYMENT OF FINANCIAL LIABILITIES 31 DECEMBER 2016

EUR million	BOOK VALUE	2017	2018	2019	2020	2021	2022–
Bonds and debentures	387.2						
Instalments		-158.4		-213.5	-15.3		
Interest payment		-18.2	-10.0	-10.0	-1.4		
Loans from financial institutions	893.2						
Instalments		-115.4	-157.4	-238.9	-187.6	-36.0	-157.9
Interest payment		-16.8	-13.1	-7.9	-4.4	-2.9	-7.0
Pension loans	138.6						
Instalments		-48.0	-32.6	-32.6	-25.3		
Interest payment		-5.6	-3.6	-2.2	-0.7		
Finance lease liabilities	35.0						
Instalments		-17.7	-3.3	-2.7	-2.2	-1.5	-7.5
Interest payment		-0.5	-0.3	-0.2	-0.2	-0.1	-0.4
Other non-current interest-bearing liabilities	200.8						
Instalments		-49.9					-150.9
Interest payment		-9.8	-9.1	-9.1	-9.2	-9.1	-41.1
Non-current interest-bearing liabilities, total	1,654.8						
Instalments in 2017	-389.5						
In balance sheet, total	1,265.3						
Instalments		-389.5	-193.3	-487.8	-230.4	-37.5	-316.3
Interest payment		-50.8	-36.2	-29.5	-15.9	-12.2	-48.5
Current interest-bearing liabilities	277.8						
Instalments		-277.8					
Interest payment		-13.3					
Liabilities classified as held for sale	1.9						
Instalments		-1.9					
Accounts payable and other liabilities	1,043.0						
Instalments		-1,039.2	-3.8	0.0	0.0		
Total liabilities	2,977.5						
Instalments		-1,708.4	-197.1	-487.8	-230.4	-37.5	-316.3
Interest payment		-64.1	-36.2	-29.5	-15.9	-12.2	-48.5
Guarantees agreements	25.7	-11.0	-0.7	-6.1	-0.3	-0.2	-7.4
Derivative financial instrument liabilities							
Interest rate swaps		-6.8	-7.6	-5.2	-4.1	-2.6	1.7
Currency derivatives		-1,415.8					
Commodity derivatives		-0.8	-0.1	-0.1	0.0		
Total	45.8	-1,423.4	-7.6	-5.4	-4.1	-2.6	1.7
Derivative financial instrument assets							
Currency derivatives		1,395.6					
Commodity derivatives		5.4	2.0	-0.3	1.4		
Total	8.5	1,400.9	2.0	-0.3	1.4	0.0	0.0
Derivative financial instrument net of cash		-22.5	-5.6	-5.7	-2.7	-2.6	1.7

MATURITY OF REPAYMENT AND INTEREST PAYMENT OF FINANCIAL LIABILITIES 31 DECEMBER 2015

EUR million	BOOK VALUE	2016	2017	2018	2019	2020	2021–
Bonds and debentures	396.6						
Instalments			-159.7		-221.7	-15.3	
Interest payment		-18.7	-18.7	-10.4	-10.4	-1.4	
Loans from financial institutions	712.6						
Instalments		-59.9	-101.3	-282.4	-211.3	-13.3	-44.4
Interest payment		-14.7	-12.9	-8.0	-2.0	-1.2	-5.2
Pension loans	250.3						
Instalments		-127.0	-32.6	-32.6	-32.6	-25.3	
Interest payment		-9.1	-5.1	-3.6	-2.2	-0.7	
Finance lease liabilities	34.4						
Instalments		-4.2	-16.5	-1.9	-2.9	-1.2	-7.6
Interest payment		-0.6	-0.5	-0.3	-0.2	-0.1	-0.5
Other non-current interest-bearing liabilities	103.5						
Instalments		-2.7	-49.9				-50.9
Interest payment		-3.7	-3.7	-3.0	-3.0	-3.1	-15.2
Non-current interest-bearing liabilities, total	1,497.3						
Instalments in 2016	-193.9						
In balance sheet, total	1,303.5						
Instalments		-193.9	-360.1	-316.9	-468.5	-55.0	-103.0
Interest payment		-46.8	-41.0	-25.4	-17.8	-6.5	-20.9
Current interest-bearing liabilities	248.5						
Instalments		-248.5					
Interest payment		-11.3					
Liabilities classified as held for sale	1.1						
Instalments		-1.1					
Accounts payable and other liabilities	1,063.7						
Instalments		-1,059.3	-4.3				-0.1
Total liabilities	2,810.5						
Instalments		-1,502.7	-364.3	-316.9	-468.5	-55.0	-103.1
Interest payment		-58.2	-41.0	-25.4	-17.8	-6.5	-20.9
Guarantees agreements	28.8	-18.7	-4.7	-0.7	-0.1	0.0	-4.6
Derivative financial instrument liabilities							
Interest rate swaps		-5.3	-2.5	-1.1	0.1	-0.1	-0.1
Currency derivatives		-1,151.4					
Commodity derivatives		-21.8	-7.7	-2.7	-2.4	0.1	
Total	42.2	-1,178.5	-10.2	-3.8	-2.2	0.0	-0.1
Derivative financial instrument assets							
Currency derivatives		1,155.6					
Commodity derivatives		0.4					
Total	4.9	1,156.0	0.0	0.0	0.0	0.0	0.0
Derivative financial instrument net of cash		-22.5	-10.2	-3.8	-2.2	0.0	-0.1

MATURITY ANALYSIS OF CASH FLOW HEDGE ACCOUNTING

Result of the hedging instrument is booked to the income statement at the realisation of the cash flow. Contractual maturities of hedging instruments equals to the hedged cash flow.

31.12.2016

Periods when the forecasted cash flows are expected to occur	Highly probable foreign currency cash flows	Contractual interest cash flows	Highly probable commodity cash flows
Q 1	299.4	-1.1	-20.9
Q 2	256.1	-3.1	-20.8
Q 3	82.9	-1.4	-20.1
Q 4	11.5	-3.0	-20.0
Total in 2017	649.8	-8.6	-81.8
2018	0.3	-7.6	-21.8
2019		-5.7	-13.8
2020		-5.1	-9.6
2021		-4.4	
2022–		-11.4	
Cash flows total	650.0	-42.9	-127.0
Total nominal values of derivatives directed to hedge accounting	650.0	928.3	127.0

31.12.2015

Periods when the forecasted cash flows are expected to occur	Highly probable foreign currency cash flows	Contractual interest cash flows	Highly probable commodity cash flows
Q 1	189.8	-2.2	-32.1
Q 2	105.4	-2.9	-31.9
Q 3	47.5	-2.5	-31.3
Q 4	16.9	-2.9	-31.2
Total in 2016	359.5	-10.5	-126.5
2017		-8.5	-30.0
2018		-6.4	-12.3
2019		-4.4	-9.3
2020		-3.8	-2.1
2021–		-10.1	
Cash flows total	359.5	-43.7	-180.1
Total nominal values of derivatives directed to hedge accounting	359.5	966.0	180.1

28. Fair values of financial assets and liabilities

FINANCIAL ASSETS AND LIABILITIES CLASSIFIED ACCORDING TO IAS 39 AND FAIR VALUES

EUR million	Note	Fair value through profit and loss	Available for sale financial assets	Loans and other receivables	Derivatives at hedge accounting	Amortised cost	Book value	Fair value
FINANCIAL ASSETS 31.12.2016								
Available for sale investments	15		200.1				200.1	200.1
Other non-current financial assets	16			18.4			18.4	18.4
Accounts receivables and others	19			661.9			661.9	661.9
Cash and cash equivalent	20	97.2		797.9			895.1	895.1
Derivative financial instruments	28	0.1			8.3		8.5	8.5
Total		97.4	200.1	1,478.1	8.3	0.0	1,784.0	1,784.0
FINANCIAL LIABILITIES 31.12.2016								
Non-current interest-bearing liabilities	24					1,265.3	1,265.3	1,293.5
Other non-current liabilities	25					1.5	1.5	1.5
Current interest-bearing liabilities	24					667.2	667.2	677.3
Accounts payable and others	26					920.1	920.1	920.1
Derivative financial instruments	28	10.8			35.0		45.8	45.8
Liabilities classified as held for sale	4					1.9	1.9	1.9
Total		10.8	0.0	0.0	35.0	2,856.2	2,902.0	2,940.3

EUR million	Note	Fair value through profit and loss	Available for sale financial assets	Loans and other receivables	Derivatives at hedge accounting	Amortised cost	Book value	Fair value
FINANCIAL ASSETS 31.12.2015								
Available for sale investments	15		227.1				227.1	227.1
Other non-current financial assets	16	5.8		22.2			28.0	28.0
Accounts receivables and others	19			633.9			633.9	633.9
Cash and cash equivalent	20	62.3		1,058.5			1,120.8	1,120.8
Derivative financial instruments	28	4.0			1.0		4.9	4.9
Total		72.1	227.1	1,714.5	1.0	0.0	2,014.7	2,014.7
FINANCIAL LIABILITIES 31.12.2015								
Non-current interest-bearing liabilities	24					1,303.5	1,303.5	1,344.3
Other non-current liabilities	25					4.4	4.4	4.4
Current interest-bearing liabilities	24					442.3	442.3	446.8
Accounts payable and others	26					921.0	921.0	921.0
Derivative financial instruments	28	-1.5			43.6		42.2	42.2
Liabilities classified as held for sale	4					1.1	1.1	1.1
Total		-1.5	0.0	0.0	43.6	2,672.2	2,714.4	2,759.7

Accounts receivables and other receivables do not include advance payments, deferred taxes or periodisations of employee costs (Note 19). Accounts payable and other financial liabilities do not include advance payments, deferred tax liabilities or periodisations of employee costs (Note 26).

In Metsä Group all interest-bearing liabilities are valued in the balance sheet at amortised cost based on effective interest method. Interest-bearing financial assets are classified according to IAS 39. Fair values are based on present value of cash flow of each liability or assets calculated by market rate. The discount rates applied are between 0.0–6.0 per cent (1.0–3.4). Of interest-bearing liabilities 34 per cent (33) is subject to variable rates and the rest to fixed rates. The average interest rate of interest-bearing liabilities at the end of 2016 was 3.5 per cent (3.8). The fair value of accounts and other receivables and account payables and other liabilities are not essentially deviating from the carrying amounts in the balance sheet.

FAIR VALUE HIERARCHY OF FINANCIAL ASSETS AND LIABILITIES

2016

EUR million	Note	Level 1	Level 2	Level 3	Total
FINANCIAL ASSETS BOOKED AT FAIR VALUE					
Available for sale financial assets	15	0.0		200.1	200.1
Current financial assets through profit and loss at fair value	20	91.0	6.2		97.2
Derivative financial assets	28	7.7	0.8		8.5
FINANCIAL LIABILITIES BOOKED AT FAIR VALUE					
Derivative financial liabilities	28	1.0	44.8		45.8
FINANCIAL ASSETS NOT BOOKED AT FAIR VALUE					
Cash and cash equivalent	20		797.9		797.9
FINANCIAL LIABILITIES NOT BOOKED AT FAIR VALUE					
Non-current interest-bearing financial liabilities	24		1,293.5		1,293.5
Current interest-bearing financial liabilities	24		677.3		677.3

2015

EUR million	Note	Level 1	Level 2	Level 3	Total
FINANCIAL ASSETS BOOKED AT FAIR VALUE					
Non-current financial assets through profit and loss at fair value	16		5.8		5.8
Available for sale financial assets	15	0.1		227.0	227.1
Current financial assets through profit and loss at fair value	20	62.3			62.3
Derivative financial assets	28		4.9		4.9
FINANCIAL LIABILITIES BOOKED AT FAIR VALUE					
Derivative financial liabilities	28	34.5	7.6		42.2
FINANCIAL ASSETS NOT BOOKED AT FAIR VALUE					
Cash and cash equivalent	20		1,058.5		1,058.5
FINANCIAL LIABILITIES NOT BOOKED AT FAIR VALUE					
Non-current interest-bearing financial liabilities	24		1,344.3		1,344.3
Current interest-bearing financial liabilities	24		446.8		446.8

FINANCIAL ASSETS MEASURED AT FAIR VALUE BASED ON LEVEL 3

EUR million	2016	2015
Opening balance	**227.0**	256.8
Total gains and losses in profit and loss	**0.1**	0.7
Total gains and losses in other comprehensive income	**-26.6**	-30.3
Purchases	**0.0**	0.9
Settlements	**-0.3**	-1.0
Closing balance	**200.1**	227.0

Assets have been categorised according to paragraphs 27 A and 27 B in IFRS 7 Financial Instruments: Disclosures

Level 1 Fair value is based on quoted prices in active markets
Level 2 Fair value is based on inputs observable for the asset either directly or indirectly
Level 3 Fair value is based on company estimates and not on market data

Fair value measurement of available for sale investments is described in Note 15.

The fair values of electric power, natural gas, propane and gas oil derivatives are measured on the basis of publicly quoted market prices (Level 1). The fair values of currency forwards and options are determined on the basis of market prices at the closing date of the reporting period. The fair values of interest rate swaps are measured applying a method based on the present value of future cash flows, supported by market interest rates at the closing date of the reporting period and other market inputs (Level 2). The fair value of financial instruments not traded in an active market is determined using various measurement methods. Discretion is used in choosing the methods and making assumptions based primarily on the market conditions prevailing at the closing date of the reporting period (Level 3).

The accounting policies include a more detailed description of the recognition and measurement principles applied.

DERIVATIVES

31.12.2016

EUR million	Nominal value	Assets	Liabilities	Fair value total	Fair value hedges	Cash flow hedges	Equity hedges	Derivatives, hedge accounting not applied
Interest rate swaps	932.9		24.6	-24.6		-24.1		-0.4
Interest rate derivatives, total	932.9	0.0	24.6	-24.6	0.0	-24.1	0.0	-0.4
Currency forward agreements	1,395.6		18.3	-18.3		-9.9		-8.5
Currency option agreements	151.8		1.9	-1.9				-1.9
Currency derivatives, total	1,547.3	0.0	20.3	-20.3	0.0	-9.9	0.0	-10.4
Electricity derivatives	104.0	4.9	0.1	4.9		4.9		
Pulp derivatives	37.7	0.8		0.8		0.8		
Oil derivatives	13.5	0.6		0.6		0.4		0.1
Other commodity derivatives	11.4	2.2	0.9	1.3		1.3		
Commodity derivatives, total	166.6	8.5	1.0	7.5	0.0	7.3	0.0	0.1
Derivatives total	2,646.8	8.5	45.8	-37.3	0.0	-26.7	0.0	-10.7

31.12.2015

EUR million	Nominal value	Assets	Liabilities	Fair value total	Fair value hedges	Cash flow hedges	Equity hedges	Derivatives, hedge accounting not applied
Interest rate swaps	1,044.2		7.3	-7.3		-9.1		1.8
Interest rate derivatives, total	1,044.2	0.0	7.3	-7.3	0.0	-9.1	0.0	1.8
Currency forward agreements	1,151.1	4.4	0.3	4.1		-0.4	1.0	3.5
Currency option agreements	176.3	0.1		0.1				0.1
Currency derivatives, total	1,327.4	4.6	0.3	4.3	0.0	-0.4	1.0	3.7
Electricity derivatives	80.4		21.6	-21.6		-21.6		
Pulp derivatives	66.6	0.4		0.4		0.4		
Oil derivatives	18.7		7.2	-7.2		-7.2		
Other commodity derivatives	24.7		5.7	-5.7		-5.7		
Commodity derivatives, total	190.4	0.4	34.5	-34.2	0.0	-34.2	0.0	0.0
Derivatives total	2,562.1	4.9	42.2	-37.2	0.0	-43.7	1.0	5.4

29. Notes to consolidated cash flow statement

EUR million	2016	2015
Adjustments to the result		
Taxes	80.7	112.6
Depreciation, amortisation and impairment charges	244.3	258.2
Biological assets	-1.7	-1.4
Share of profit from associated companies and joint ventures	1.1	-11.2
Gains and losses on sale of non-current financial assets	-34.1	-51.0
Finance costs, net	80.6	84.9
Pension liabilities and provisions	-20.4	-4.9
Total	350.5	387.2
Change in working capital		
Change in inventories	-90.3	60.7
Change in accounts receivables and other receivables	-84.4	66.7
Change in accounts payable and other liabilities	48.6	94.0
Total change	-126.2	221.3

CHANGE IN OTHER EQUITY

In 2016, change in other equity include the equity investment in Metsä Fibre Oy. In 2015, change in other equity include cash less transaction charges that the Group received from Metsä Board's share issue.

30. Commitments and contingencies

PENDING DISPUTES

In March 2011, the state enterprise Metsähallitus filed a claim for damages at the District Court of Helsinki, demanding that Metsäliitto Cooperative and two other forest industry companies jointly pay compensation for alleged damage caused by prohibited cooperation with regard to prices in the raw wood market. The claim is related to the 3 December 2009 decision by the Market Court which states that the aforementioned companies have violated the act on competition restrictions in the raw wood market. In addition, some municipalities, parishes and a group of individuals in Finland have instituted similar proceedings. The total amount of all claims directed at Metsäliitto Cooperative and the other aforementioned companies jointly is approximately EUR 185 million, of which approximately EUR 59 million is directed at Metsäliitto Cooperative alone. The aforementioned proceedings are associated with interest, value added tax claims and legal process expenses. Metsäliitto Cooperative's view is that the claims for damages are unfounded, and the company has not recognised any provisions regarding them.

In February 2016, the Supreme Court issued a decision stating that a compensation claim filed by a private forest owner has partially expired. Based on the Supreme Court decision concerning the expiration, the total amount of the damage claims is expected to reduce slightly.

The Helsinki District Court dismissed in its ruling issued in June 2016 the claim for damages of EUR 159.4 million made by Metsähallitus against the defendant companies jointly and ruled that Metsähallitus is responsible for reimbursing the defendant companies for their legal expenses. Metsäliitto Cooperative's share of Metsähallitus' claim for damages in the district court was EUR 49.5 million. Metsähallitus has appealed the District Court's judgment at the Court of Appeal.

In May 2014, Metsäliitto Cooperative and Metsä Board demanded the District Court of Helsinki to revoke the judgment issued by the Arbitral Tribunal on 11 February 2014 that ordered Metsäliitto Cooperative and Metsä Board to pay a total of EUR 67 million in damages to UPM-Kymmene Corporation. In the judgment issued in June 2015, the District Court rejected the demands by Metsäliitto Cooperative and Metsä Board. Metsäliitto Cooperative and Metsä Board appealed the District Court's judgment at the Court of Appeal. The Court Of Appeal dismissed in its ruling issued in October 21, 2016 Metsäliitto Cooperative's and Metsä Board's demands for damages. The ruling by the Court of Appeal is not final.

In the autumn of 2015, the Finnish Tax Administration took a stand against the deductibility of certain losses in Metsä Board's 2014 taxation. Metsä Board has appealed against the decision issued by the Tax Administration, as the company believes the losses are deductible.

During the past few years companies belonging to Metsä Group have acted as sellers in many share transactions giving normal seller's securities. It is not impossible that demands against these companies are made regarding the given securities and that these securities could result in extra costs for the companies.

CONTINGENT LIABILITIES

EUR million	2016	2015
For own liabilities		
Liabilities secured by pledges		
Loans from financial institutions	**297.6**	232.7
Pension loans	**34.6**	108.9
Other liabilities		2.1
Pledges granted	**433.1**	464.5
Liabilities secured by floating charges		
Loans from financial institutions	**15.7**	20.1
Floating charges	**2.8**	5.9
Liabilities secured by real estate mortgages		
Loans from financial institutions	**33.7**	40.8
Pension loans	**87.1**	124.3
Real estate mortgages	**368.5**	381.4
Liabilities secured by chattels mortgages		
Loans from financial institutions	**0.3**	0.5
Chattels mortgages	**4.0**	4.0
Other commitments on own behalf		
Pledges granted	**0.0**	0.0
Guarantees and commitments	**19.9**	22.9
Other lease commitments	**78.7**	56.8
Pension liabilities	**0.3**	0.3
On behalf of associated companies and joint ventures		
Guarantee liabilities	**0.8**	1.0
On behalf of others		
Guarantee liabilities	**5.0**	4.8
Total		
Pledges	**433.2**	464.5
Mortgages	**375.3**	391.2
Guarantees and commitments	**25.7**	28.8
Other lease commitments	**78.7**	56.8
Pension liabilities	**0.3**	0.3
Total	**913.2**	941.6

Pledges granted are shares in subsidiaries and other shares as well as bank assets securing the Nord-Pool liabilities.

OTHER LEASE COMMITMENTS

The Group leases various offices and warehouses under non-cancellable operating lease contracts. Some contracts are renewable at the end of the lease period.

THE FUTURE COSTS FOR NON-CANCELLABLE OPERATING LEASE CONTRACTS ARE AS FOLLOWS:

EUR million	2016	2015
Payments due in following 12 months	**19.4**	19.1
Payments due in following 1–5 years	**36.9**	28.8
Payments due later than 5 years	**22.4**	8.9
Total	**78.7**	56.8

INVESTMENT COMMITMENTS

EUR million	2016	2015
Payments due in following 12 months	**335.3**	409.9
Payments due later	**20.0**	165.7
Total	**355.3**	575.6

31. Share-based payments

The Group had two incentive schemes during the review period: Share incentive scheme 2011 which the Board of Directors adopted on 15 December 2010 and share incentive scheme 2014 which the Board of Directors adopted on 6 February 2014. The schemes have been adopted as spurring and motivating arrangements for key personnel. The effect of the share incentive schemes on net result 2016 was EUR 8.9 million (23.3), including an item of EUR 3.6 million recognised in equity (7.1).

SHARE INCENTIVE SCHEME 2011

The arrangement offers the target group an opportunity to receive Metsä Board Corporation's B shares in three earning periods of three calendar years each as a reward for achieving the targets set for the periods' earning criteria. The earning periods cover the calendar years 2011–2013, 2012–2014 and 2013–2015. The reward granted under the share incentive scheme is determined by the achievement of the targets set for the earning criteria by the end of the April following the earnings period. In addition to the shares, the reward includes a cash portion, which covers the taxes and tax-like charges resulting from the reward to the key employees. The reward will not be paid if the person's employment terminate before the end of the earnings period. In addition, the person must continue to own the shares for at least two years following the end of the earnings period.

Based on the realisation of the criteria of the earnings period 2013–2015, 1,477,760 Metsä Board Corporation B shares and a cash portion to cover the taxes and tax-like charges incurred from the bonus were paid at the time of the transfer. As a result of Metsä Board Corporation's share issue realised in 2015, the allocation amounts of the 2013–2015 earnings period were increased to match the position of the shareholder on the issue date.

The Group changed the terms of the incentive scheme in 2016 and set an upper limit for the bonuses to be paid. The limit is proportional to the person's salary. The portion exceeding the upper limit will be delayed and paid fully in cash as the limit in coming years allows this.

SHARE INCENTIVE SCHEME 2014

The arrangement offers the target group an opportunity to receive Metsä Board Corporation's B shares in three earning periods of three calendar years each as a reward for achieving the targets set for the periods' earning criteria. The earning periods cover the calendar years 2014–2016, 2015–2017 and 2016–2018. The reward granted under the share incentive scheme is determined by the achievement of the targets set for the earning criteria by the end of the April following the earnings period. In addition to the shares, the reward includes a cash portion, which covers the taxes and tax-like charges resulting from the reward to the key employees. The reward will not be paid if the person's employment terminate before the end of the earnings period. In addition, the scheme includes a two-year commitment period. If the employment relationship of a key employee ends during the commitment period, the key employee should, as a rule, return the transferred shares to the company without consideration.

As a result of Metsä Board Corporation's share issue realised in 2015, the allocation amounts of the earning periods of the share incentive scheme 2014 were increased to match the position of the shareholder on the issue date.

The Group changed the terms of the incentive scheme in 2016. An upper limit for the bonuses to be paid was set for the earning periods 2014–2016 and 2015–2017. The limit is proportional to the person's salary. The portion exceeding the upper limit will be delayed and paid fully in cash as the limit in coming years allows this. For the earning period 2016–2018 an upper limit proportional to the person's salary was set and the portion exceeding the limit will be cut and not paid at all.

Basic information regarding the share incentive schemes 2011 and 2014:

	SHARE INCENTIVE SCHEME 2011	SHARE INCENTIVE SCHEME 2014
Maximum number of shares	2,550,000	6,098,750
Criteria	Equity ratio, ROCE, EBIT-factor	Equity ratio, ROCE, EBIT-factor
Number of key persons (31.12.2016)	48	56
Share price at grant date, EUR *	2.47	4.91
Fair value at end of financial period, EUR million		49.9
Expense 2016, share-based payment, EUR million	0.0	8.9
Expense 2016, share-based payment, settled as equity, EUR million	0.5	3.2
Liabilities, share-based payment, at the end of financial period, EUR million	1.3	14.2
Amounts 1 Jan, 2016 **		
Outstanding at the beginning of period	2,055,492	6,825,482
Changes during the period		
Shares granted	0	1,340,415
Shares forfeited	11,588	154,035
Shares exercised	1,477,760	0
Shares expired	566,145	0
Amounts 31 Dec, 2016		
Outstanding at the end of period	0	5,635,264

*) The fair value of the share-settled part at exercise date was the market price of Metsä Board's B share less any estimated consensus dividend paid before the payment of the reward. Share issues are also recognised according to the share issue coefficients. The fair value of the cash-settled part is estimated on every balance sheet date until the end of incentive period. The fair value of share-based payment is recognised to the amount based on best possible estimate of the reward, which is believed to be granted.

**) The amounts in the table reflect net amounts, i.e. the number of shares to be given based on share-based payment. In addition the incentive scheme includes an amount paid in cash to cover taxes and tax-related costs arising from the bonus.

32. Related party transactions

The Group's related parties include associated companies and joint ventures as well as the Metsäliitto Employees' Pension Foundation. Also the members of the Board of Directors, the members of the Group Executive Management Team and the President and CEO as well as their close family members are considered as related parties.

Principal subsidiaries and joint operations as well as associated companies and joint ventures are presented in Note 14.

TRANSACTIONS WITH ASSOCIATED COMPANIES AND JOINT VENTURES

EUR million	2016	2015
Sales	**9.8**	9.4
Purchases	**86.5**	90.4
Non-current receivables	**1.0**	1.0
Accounts receivables and other receivables	**3.3**	3.7
Accounts payable and other liabilities	**6.0**	6.6

The Metsäliitto Employees' Pension Foundation is a separate legal unit, which grants to some of the officials supplementary defined benefit pension security and manages the assets of the foundation. The Pension Foundation owns 0.1% of Metsä Board Corporation. The Pension Foundation has also invested EUR 0.2 million in Metsäliitto Cooperative's shares. In 2016 and 2015 the Group did not pay any contributions to the Pension Foundation. The Pension Foundation has granted loans of EUR 15.4 million (15.4) to the Group.

REMUNERATION PAID TO TOP MANAGEMENT

Top management consists of the members of the Supervisory Board, Board of Directors and Group Executive Management Team including the President and CEO.

REMUNERATION PAID TO TOP MANAGEMENT

EUR million	2016	2015
Salaries and fees	**6.7**	6.4
Share-based payments	**7.2**	4.7
Pension costs (benefit- and contribution based)	**2.3**	2.1
Total	**16.1**	13.1

REMUNERATION PAID TO THE MEMBERS OF THE SUPERVISORY BOARD

	Salaries and fees		Pension benefits	
EUR	2016	2015	2016	2015
Järvinen Hannu, Chairman	**64,850**	59,000	**11,608**	10,325
Paajanen Juha, Vice Chairman	**27,350**	28,400	**5,059**	5,396
Members total	**133,800**	158,400		
Total	**226,000**	245,800	**16,667**	15,721

REMUNERATION PAID TO THE MEMBERS OF THE BOARD OF DIRECTORS

	Salaries and fees		Pension benefits	
EUR	**2016**	**2015**	**2016**	**2015**
Asunta Martti, chairman	**96,540**	94,540	**17,281**	16,545
Jordan Kari, vice chairman	**0**	0	**0**	0
Aminoff Mikael	**53,550**	52,600	**9,585**	9,205
Hiltunen Arto	**65,200**	61,800	**11,671**	10,815
Mörttinen Leena (from 1.1.2016)	**52,450**	0	**10,175**	
Parpala Juha	**53,350**	52,600	**10,350**	9,994
Saukkonen Timo	**53,350**	52,900	**10,228**	10,051
Silvennoinen Mikael	**69,900**	61,800	**12,512**	10,815
Tukeva Antti	**57,750**	54,000	**10,337**	9,450
Total	**502,090**	430,240	**92,140**	76,875
Former member of the Board of Directors				
Jääskeläinen Saini	**900**	52,000	**161**	9,100
Total	**502,990**	482,240	**92,301**	85,975

The reward system of the management comprises a fixed monthly salary, a bonus determined on the basis of the task's effect on earnings, the management's pension benefits, share ownership system for the executive management team and a share-based incentive scheme for executives.

The share-based incentive scheme for the executives and the share ownership system for the Group Executive Management Team are presented in Note 31.

Pursuant to the President and CEO's contract, the Board of Directors may decide that the President and CEO receives a bonus based on the profit, cash flow and personal performance, corresponding to nine months' salary.

The companies in Metsä Group paid the President and CEO Kari Jordan a total of EUR 5,023,867 (3,955,430) in salaries, fees and other benefits in 2016. The salary with fringe benefits paid by Metsäliitto Cooperative amounted to EUR 1,122,530 (1,111,432), the bonus to EUR 740,510 (784,078) and the share reward to EUR 3,036,122 (1,937,617). The other Group companies paid to the President and CEO a total of EUR 124,704 (122,304) in salaries, fees and other benefits.

The maximum bonus paid to other members of the Group Executive Management Team employed by Metsäliitto Cooperative can vary, according to the task's effect on earnings, between the amounts corresponding to the person's 6–7 months' wages. The criteria of the share incentive scheme are the earning requirements of the Group level and of its own area of responsibility.

The companies in Metsä Group paid their members of the Executive Management Team (excluding the President and CEO) a total of EUR 2,801,726 (2,660,678) in salaries with fringe benefits, EUR 1,137,063 (956,874) in bonuses and EUR 4,140,041 (2,726,787) in share rewards.

The term of notice of the President and CEO is six months. When the contract of the President and CEO is terminated by the Board, The President and CEO is entitled to a severance pay corresponding to 24 months' total salary. No severance compensation is paid if the contract is terminated by the President and CEO. The terms of notice of other members of the Group Executive Management Team is six months. For other members of the Group Executive Management Team, the period of additional severance compensation varies from six to eighteen months in case of severance due to other reasons than member related.

President and CEO Kari Jordan has a separate pension agreement with a retirement age of 60. The Board of Directors of Metsäliitto Cooperative and Kari Jordan have agreed in May 2015 that Jordan will continue in his position beyond 9 March 2016, when he reaches the age of retirement (60) determined in his contract. The President and CEO's maximum level of pension is 60 per cent of the total salary under the Employees' Pension Act, calculated on the basis of the five-year period preceding retirement.

The expenses of the President and CEO's defined benefit pension plans were EUR 0.2 million (0.3) and the expenses of the defined contribution plans were EUR 0.4 million (0.3)

Other members of the Executive Management Team have a separate benefit-based pension agreement with a retirement age of 62. The level of pension is 60% of the total salary under the Employees' Pensions Act, calculated on the basis of the five-year period preceding retirement. If the employment relationship with Metsä Group ends before retirement age, he/she is entitled to a paid-up policy. At the end of 2016 a benefit-based pension agreement was paid to the President and CEO and 6 members of the Executive Management Team.

The expenses of the defined benefit pension plans of other members of the Group Executive Management Team were EUR 1.0 million (0.6) and the expenses of the defined contribution plans were EUR 0.7 million (0.7)

There are no loan receivables, guarantees or other liabilities from the members of the Group Executive Management Team.

33. Environmental affairs

Only additional identifiable costs that are primarily intended to prevent, reduce or repair damage to the environment are included in environmental costs. Environmental expenditures are capitalised if they have been incurred to prevent or reduce future damage or conserve resources and bring future economic benefits.

INCOME STATEMENT

EUR million	2016	2015
Materials and services	18.0	20.6
Employee costs		
Wages and fees	2.6	2.7
Other employee costs	1.3	1.3
Depreciation	12.3	12.2
Other operating expenses	11.3	12.0
Total	45.4	48.7

BALANCE SHEET

EUR million	2016	2015
Intangible and tangible assets		
Acquisition costs, 1 Jan.	272.6	289.9
Increases	11.5	13.2
Decreases	-5.3	-31.7
Accumulated depreciation at 31 Dec.	-197.2	-163.4
Book value, 31 Dec.	81.5	108.0
Provisions		
Environmental obligations	16.2	15.0

NOTES

EUR million	2016	2015
Guarantees due to environmental programmes	4.7	10.7

EMISSION ALLOWANCES

Metsä Group belongs to the European Union Emissions Trading System. In 2016 the group received 1,120,000 tonnes of emission allowances free of charge (1,133,000). In addition the Group has purchased 173,000 tonnes of emission allowances from the market (146,000) and sold 513,000 tonnes to the market (256,000). At balance closing date the group had emission allowances of 1,777,000 tonnes (1,501,000). Emissions during the reporting period were 551,000 tonnes (778,000).

Metsä Group has recognised the emission allowances according to the net method. The difference between actual emissions and emission allowances granted has been recognised though profit and loss if the actual emissions have exceeded the allowances granted.

In 2016 costs arising from emission allowances were EUR 0.9 million (0.9). At the end of the reporting period there were no provisions due to emission allowances in the balance sheet. In 2016 Metsä Group sold emission allowances amounting to EUR 2.6 million (2.0).

PARENT COMPANY INCOME STATEMENT

(FINNISH ACCOUNTING STANDARDS, FAS)

EUR million	Note	1.1.–31.12.2016	1.1.–31.12.2015
SALES	1	**1,668.6**	1,675.7
Change in stocks of finished goods and work in progress		**2.6**	1.5
Production for own use		**0.2**	0.2
Other operating income	2, 3	**81.1**	130.0
Materials and services	4		
Raw materials and consumables			
Purchases during the financial period		**-1,025.2**	-983.2
Change in inventories		**20.7**	-14.1
External services		**-436.9**	-432.7
Employee costs	4	**-161.0**	-164.4
Depreciation and impairment charges	2, 5	**-27.7**	-26.4
Other operating expenses	2, 4	**-80.2**	-86.7
		-1,710.3	-1,707.6
OPERATING RESULT		**42.2**	99.7
Financial income and expenses	6		
Income from Group companies		**103.7**	73.3
Income from participating interests		**1.4**	5.6
Income from other financial investments		**13.2**	13.2
Other interest and similar income		**0.8**	1.3
Net exchange gains/losses	7	**8.0**	-7.8
Value adjustments on non-current investments	2	**-0.1**	-23.1
Interest and similar expenses		**-24.7**	-32.3
		102.5	30.2
RESULT BEFORE APPROPRIATIONS AND TAXES		**144.7**	130.0
APPROPRIATIONS			
Change in depreciation differences		**6.9**	-0.5
Group contribution		**1.1**	0.8
		8.0	0.4
INCOME TAXES	8	**-8.3**	0.0
RESULT FOR THE FINANCIAL PERIOD		**144.4**	130.3

PARENT COMPANY BALANCE SHEET

EUR million	Note	31.12.2016	31.12.2015
ASSETS			
NON-CURRENT ASSETS			
INTANGIBLE ASSETS	9		
Intangible rights		**15.5**	16.0
Goodwill		**0.5**	0.6
Other capitalised expenditure		**1.0**	1.3
Advance payments and construction in progress		**4.8**	6.2
		21.9	24.1
TANGIBLE ASSETS	9		
Land and water areas		**8.4**	5.9
Buildings		**15.0**	37.5
Machinery and equipment		**32.7**	74.8
Other tangible assets		**1.1**	3.6
Advance payments and construction in progress		**12.1**	7.4
		69.4	129.3
INVESTMENTS	10, 11, 22		
Shares in Group companies		**1,642.5**	1,585.3
Receivables from Group companies		**139.7**	139.7
Investments in participating interests		**43.7**	43.7
Other shares and holdings		**2.2**	2.3
		1,828.1	1,771.0
NON-CURRENT ASSETS TOTAL		**1,919.3**	1,924.4
CURRENT ASSETS			
INVENTORIES			
Raw materials and consumables		**110.6**	101.5
Work in progress		**2.9**	6.6
Finished goods		**7.7**	37.4
Advance payments		**17.8**	17.2
		139.1	162.6
NON-CURRENT RECEIVABLES	12		
Receivables from Group companies		**0.0**	1.8
Other receivables		**0.0**	0.0
		0.0	1.8
CURRENT RECEIVABLES	12		
Accounts receivables		**55.2**	80.2
Receivables from Group companies		**567.7**	386.5
Receivables from participating interests		**2.8**	2.5
Loan receivables		**0.0**	0.3
Other receivables		**2.5**	2.8
Prepayment and accrued income		**7.3**	6.7
		635.6	479.0
RECEIVABLES TOTAL		**635.6**	480.8
CASH AND CASH EQUIVALENT		**0.1**	0.0
CURRENT ASSETS TOTAL		**774.7**	643.5
ASSETS TOTAL		**2,694.1**	2,567.9

EUR million	Note	31.12.2016	31.12.2015
MEMBERS' FUNDS AND LIABILITIES			
MEMBERS' FUNDS	13		
Participation shares		**219.6**	207.8
Additional shares A		**657.4**	630.8
Additional shares B		**166.6**	153.5
Transfer of refundable members' capital to liabilities for the waiting period		**-71.6**	-72.9
Other reserves			
Reserve for invested unrestricted equity		**0.1**	0.1
General reserve I		**3.9**	3.9
General reserve II		**67.4**	67.4
Retained earnings		**678.0**	608.6
Result for the financial period		**144.4**	130.3
		1,865.7	1,729.4
APPROPRIATIONS			
Accumulated depreciation difference		**11.3**	18.0
PROVISIONS	14	**1.6**	2.9
LIABILITIES	16, 17		
NON-CURRENT LIABILITIES			
Bonds		**0.0**	160.1
Loans from financial institutions		**271.8**	239.9
Advance payments		**2.2**	1.1
Loans from Group companies		**0.0**	17.3
Other liabilities		**20.7**	17.7
		294.7	436.0
CURRENT LIABILITIES	18		
Bonds		**158.6**	0.0
Loans from financial institutions		**43.8**	33.8
Pension premium loans		**9.5**	74.5
Advance payments		**5.7**	6.7
Accounts payable		**93.2**	70.4
Payables to Group companies		**38.8**	25.2
Payables to participating interests		**0.4**	1.3
Other liabilities		**61.7**	65.3
Accruals and deferred income	19	**109.1**	104.4
		520.8	381.6
LIABILITIES TOTAL		**815.6**	817.6
MEMBERS' FUNDS AND LIABILITIES TOTAL		**2,694.1**	2,567.9

CASH FLOW STATEMENT

EUR million	2016	2015
CASH FLOW FROM OPERATING ACTIVITIES		
Operating result	**42.2**	99.7
Adjustments to operating result 1)	**17.1**	-33.1
Interest received	**14.0**	14.5
Interest paid	**-22.6**	-32.5
Dividends received	**105.2**	78.9
Other financial items, net	**6.4**	-9.3
Taxes paid	**-6.5**	0.0
Change in working capital 2)	**-27.4**	34.3
	128.4	152.5
CASH FLOW ARISING FROM INVESTING ACTIVITIES		
Acquisition of shares	**-52.9**	-67.2
Investments in tangible and intangible assets	**-27.5**	-21.3
Proceeds from disposal of shares and businesses	**161.7**	73.3
Proceeds from sale of tangible and intangible assets	**0.7**	0.5
Change in non-current receivables, net	**-0.1**	6.2
	81.9	-8.4
CASH FLOW BEFORE FINANCING	**210.2**	144.1
CASH FLOW ARISING FROM FINANCING ACTIVITIES		
Increase in non-current liabilities	**66.3**	7.0
Decrease in non-current liabilities	**-106.8**	-169.0
Change in current liabilities, net	**12.9**	2.9
Change in current interest-bearing receivables, net	**-173.1**	9.7
Interest paid on members' capital	**-50.4**	-45.7
Increase in members' capital	**41.0**	50.9
	-210.2	-144.1
CHANGE IN CASH AND CASH EQUIVALENTS	**0.0**	0.0
Cash and cash equivalents at beginning of period	**0.0**	0.1
Change in cash and cash equivalents	**0.0**	0.0
CASH AND CASH EQUIVALENTS AT END OF PERIOD	**0.1**	0.0
1) Adjustments to operating result		
Depreciation and impairment charges	**27.7**	26.4
Gains and losses on sale of tangible and intangible assets	**-9.3**	-58.2
Change in provisions	**-1.4**	-1.2
Total	**17.1**	-33.1
2) Change in working capital		
Inventories (increase-/decrease+)	**-23.9**	18.4
Current non-interest bearing receivables (increase-/decrease+)	**-44.6**	9.0
Current non-interest-bearing liabilities (increase+/decrease-)	**41.2**	6.9
Total (increase-/decrease+)	**-27.4**	34.3

PARENT COMPANY ACCOUNTING POLICIES

Metsäliitto Cooperative's financial statements have been prepared in accordance with Finnish Accounting Standards (FAS). Metsäliitto Management Oy was incorporated on 31 January 2016 and Kirkniemen Kartano Oy on 30 November 2016.

TRANSACTIONS IN FOREIGN CURRENCY

Transactions in foreign currency have been recognised at the exchange rate on the day of the transaction. At the balance sheet date, receivables and liabilities denominated in foreign currency have been translated into euros at the exchange rate quoted by the European Central Bank at the balance sheet date. Net exchange gains/losses have been recognised to financial income and expenses in the income statement.

DERIVATIVE FINANCIAL INSTRUMENTS

Metsäliitto Cooperative uses derivatives only to hedge risks. The impact of the derivatives on the result is recognised in the same financial period as the earnings impact of the hedged item. Changes in the value of future cash flow hedging derivatives are not recognised. Liabilities due to open derivative contracts are presented in Note 20.

SALES

Sales are calculated after deduction of indirect sales taxes, trade discounts and other items adjusting sales.

LONG-TERM PROJECTS

Income and expenses from long-term projects are recognised according to their degree of completion once the outcome of the project can be reliably estimated. The degree of a project's completion shall correspond to the share of its projected total cost represented by the work carried out up to the date of evaluation. Once it becomes probable that the total cost required to complete the project will exceed the total revenue gained from it, the expected loss is immediately recognised as an expense.

PENSIONS AND PENSION FUNDING

Statutory pension security is handled by pension insurance companies outside Metsä Group. In addition to statutory pension security, some salaried employees have supplementary pension arrangements which are either insured, arranged through the Metsäliitto Employees' Pension Foundation or are an unfunded liability of the company.

Pension insurance premiums have been periodised to correspond to the accrual-based wages and salaries presented in the financial statements.

LEASING

Lease payments are treated as rental expenses.

ENVIRONMENTAL EXPENDITURE

Environmental expenditure comprises the specifiable expenses of environmental protection measures aiming primarily at combating, remedying or alleviating environmental damage.

INCOME TAX

Income tax in the income statement include the income tax of the taxable result for the period and adjustments to taxes of previous periods. The parent company has not recognised any deferred tax receivables or deferred tax liabilities in the financial statements. Deferred tax receivables and tax liabilities not recognised in the balance sheet is presented in Note 15.

PROPERTY, PLANT AND EQUIPMENT AND DEPRECIATION

The carrying values of property, plant and equipment are based on original acquisition costs less depreciation according to plan and impairment losses. Depreciation according to plan is based on the estimated useful life of the asset as follows:

Building	20–40 years
Machinery and equipment	3–15 years
Other items	3–10 years

Depreciation is not recorded on the purchase cost of land and water areas.

INVENTORIES

Inventories are measured at the lower of cost or net realisable value. In measuring inventories, the FIFO principle is observed or, alternatively, the weighted average price method. The acquisition cost of finished goods and work in progress include raw materials, direct salaries and wages, depreciation and other direct costs as well as a product focused share of variable and fixed common production costs at normal production level. Net realisable value is the estimated sales price less costs of production and sales.

PROVISIONS

Future costs and losses to which the company is committed and which are likely to be realised are included in the income statement under the appropriate expense heading and in the balance sheet under provisions for future costs whenever the precise amount and the time of occurrence are not known.

TERMINOLOGY

In its financial reporting, Metsäliitto Cooperative has started to primary use the word "result" to describe the financial result. Secondary the words "profit" or "loss" can be used, if the word "result" for some reason does not fit in the context. The terms "surplus" and "deficit" can also be used if there is a need to show a connection to the Cooperatives Act or to the rules of the cooperative.

COMPARATIVE FIGURES

If necessary, figures for 2015 have been changed to conform to changes in presentation.

NOTES TO THE PARENT COMPANY FINANCIAL STATEMENTS

EUR million	2016	2015
1. SALES BY MARKET AREA		
Finland	**1,166.0**	1,136.8
EU-countries	**311.8**	356.8
Other countries	**190.9**	182.1
Total	**1,668.6**	1,675.7
Long-term projects		
Income recognised in sales	**13.6**	7.3
Realised costs and booked gains (losses deducted) from long-term projects in progress	**1.5**	1.4
Advance payments received from long-term projects at the end of the year	**0.0**	0.3
2. EXTRAORDINARY ITEMS		
Change in stocks of finished goods and work in progress		
Write-off due to the sale of the gluelaminated beam business	**0.0**	
Other operating income		
Liquidation income from Metsä Wood Hungary Kft	**1.1**	
Sales profit from the gluelaminated beam business	**1.1**	
Sales profit from shares in Finsilva Oyj		51.4
Sales profit from shares in Burt Boulton and Haywood Ltd		3.5
	2.2	54.9
Depreciation and impairment		
Impairment of tangible assets of sawmills	**5.3**	
Depreciation due to sale of the gluelaminated beam business	**0.1**	
	5.4	0.0
Other operating expenses		
Loss on merger of Metsäliitto Management Oy	**1.1**	
Sales loss due to the sale of sawn timber business	**0.5**	
Expenses due to the sale of the gluelaminated beam business	**0.1**	
Expenses due to the sale of Metsä Wood France S.A.S.	**0.4**	4.8
Payments for legal proceedings	**0.1**	0.3
	2.2	5.1
Impairments from non-current investments		
Impairment of shares of Metsä Wood France S.A.S.		23.8
3. OTHER OPERATING INCOME		
Rents	**1.6**	1.7
Gains on disposal of assets	**10.6**	61.2
Service revenue	**65.3**	64.0
Others	**3.7**	3.1
Total	**81.1**	129.9

Gains on disposal of assets include in 2016 sales gains of EUR 0.1 million from the shares of Asunto Oy Tapiolan Jalava, EUR 0.3 million sales gains from the shares of Asunto Oy Tapiolan Pyökki, EUR 5.9 million sales gains from the shares of Asunto Oy Tapiolan Saarni, EUR 2.7 million from the sale of the ThermoWood operations and EUR 0.7 million from the sale of the gluelaminated beam business.

Gains on disposal of assets include in 2015 sales gains of EUR 0.6 million from the shares of Asunto Oy Tapiolan Jalava, EUR 5.1 million sales gains from the shares of Asunto Oy Tapiolan Pyökki, EUR 51.4 million sales gains from the shares of Finsilva Oyj and EUR 3.5 million sales gains from the shares of Burt Boulton and Haywood Ltd.

EUR million	2016	2015
4. OPERATING EXPENSES		
Materials and services		
Raw materials and consumables		
Purchases during the financial period	**1,025.2**	983.2
Change in inventories	**-20.7**	14.1
External services		
Distribution costs	**233.8**	245.7
Other external services	**203.2**	187.1
Total	**1,441.4**	1,430.1
Employee costs		
Wages, salaries and fees	**108.0**	108.8
Social security expenses		
Pension expenses	**21.6**	22.1
Other social security expenses	**31.4**	33.6
Total	**161.0**	164.4
Other operating expenses		
Rents and other property expenses	**9.0**	9.0
Services bought	**44.4**	47.1
Loss on sale of non-current assets	**1.1**	3.0
Other operating expenses	**25.7**	27.7
Total	**80.2**	86.7
SALARIES AND REMUNERATIONS PAID TO MANAGEMENT		
President and CEO	**4.9**	3.8
Members of the Board of Directors and their deputies	**0.5**	0.5
Members of the Supervisory Board	**0.2**	0.2
Total	**5.6**	4.6

Salaries and remuneration paid to top management are described in Group note 32.

PENSION COMMITMENTS

President and CEO Kari Jordan has a separate pension agreement with a retirement age of 60. The Board of Directors of Metsäliitto Cooperative and Kari Jordan have agreed on 7 May 2015 that Jordan will continue in his position beyond 9 March 2016, when he reaches the age of retirement (60) determined in his contract. The President and CEO's maximum level of pension is 60 per cent of the total salary under the Employees' Pension Act, calculated on the basis of the five-year period preceding retirement. Some of the members of the Group Executive Management Team have a separate pension agreement with a retirement age of 62.

Pension commitments of the top management are described in note 32.

EUR million	2016	2015
AVERAGE PERSONNEL	**2,341**	2,534
PRINCIPAL AUDITOR'S FEES		
Audit fees	**0.2**	0.2
Tax consulting fees	**0.0**	0.0
Other fees	**0.0**	0.0
Total	**0.2**	0.2

The principal auditor is KPMG Oy Ab.

5. DEPRECIATION AND IMPAIRMENT CHARGES

EUR million	2016	2015
Depreciation according to plan		
Intangible rights	**4.1**	3.9
Goodwill	**0.1**	0.1
Other capitalised expenditure	**0.4**	0.3
Buildings	**3.9**	4.7
Machinery and equipment	**13.4**	17.0
Other tangible assets	**0.4**	0.4
Depreciation according to plan, total	**22.4**	26.4
Impairment charges		
Machinery and equipment	**5.3**	0.0
Impairment charges, total	**5.3**	0.0
Depreciation and impairment charges, total	**27.7**	26.4
Change in depreciation difference	**-6.9**	0.5
Total depreciation	**20.8**	26.8

6. FINANCIAL INCOME AND EXPENSES

EUR million	2016	2015
Income from non-current investments		
Dividend income		
From Group companies	**103.7**	73.3
From participating interests	**1.4**	5.6
From others	**0.0**	0.0
Total	**105.2**	78.9
Interest income		
From Group companies	**13.2**	13.2
Total	**13.2**	13.2
Income from non-current investments	**118.4**	92.1
Other interest and financial income		
Interest income from Group companies	**0.5**	1.0
Interest income from participating interests	**0.0**	0.0
Other interest income	**0.3**	0.3
Total	**0.8**	1.3
Exchange differences	**8.0**	-7.8
Value adjustments of non-current investments	**-0.1**	-23.1
Interest and financial expenses		
Interest expenses paid to Group companies	**-2.3**	-3.2
Other interest expenses	**-19.6**	-26.4
Other financial expenses paid to Group companies	**-1.1**	-1.2
Other financial expenses	**-1.6**	-1.6
Total	**-24.7**	-32.3
Total financial income and expenses	**102.5**	30.2

Value adjustments of non-current investments include in 2016 write-offs of book values of EUR 0.1 million of other shares.

Value adjustments of non-current investments include in 2015 write-offs of book values of EUR 23.8 million of Wood Products Industry's foreign subsidiaries as well as a TEKES loan of EUR -1.0 million not demanded to be paid back.

7. NET EXCHANGE GAINS/LOSSES IN INCOME STATEMENT

EUR million	2016	2015
Gains/losses on sales	**-1.3**	1.9
Gains/losses on purchases	**0.1**	-0.2
Gains/losses on financing	**9.2**	-9.4
Total	**8.0**	-7.8

8. INCOME TAXES

EUR million	2016	2015
Taxes for the period	**-8.3**	0.0
Taxes for previous periods	**0.1**	0.0
Total	**-8.3**	0.0

9. INTANGIBLE AND TANGIBLE ASSETS

EUR million	2016	2015
INTANGIBLE ASSETS		
Acquisition cost, 1 Jan.	**66.3**	57.9
Increases	**2.0**	1.6
Decreases	**-5.1**	0.0
Transfers between items	**4.3**	6.8
Acquisition cost, 31 Dec.	**67.5**	66.3
Accumulated depreciation, 1 Jan.	**-50.3**	-46.5
Accumulated depreciation on decreases and transfers	**2.4**	0.0
Depreciation for the period	**-4.1**	-3.9
Accumulated depreciation, 31 Dec.	**-52.0**	-50.3
Book value, 31 Dec.	**15.5**	16.0
GOODWILL		
Acquisition cost, 1 Jan.	**1.1**	1.1
Acquisition cost, 31 Dec.	**1.1**	1.1
Accumulated depreciation, 1 Jan.	**-0.4**	-0.3
Depreciation for the period	**-0.1**	-0.1
Accumulated depreciation, 31 Dec.	**-0.5**	-0.4
Book value, 31 Dec.	**0.5**	0.6

EUR million	2016	2015
OTHER CAPITALISED EXPENDITURE		
Acquisition cost, 1 Jan.	**8.3**	7.7
Increases	**0.3**	0.6
Decreases	**-3.2**	0.0
Transfers between items	**0.1**	0.0
Acquisition cost, 31 Dec.	**5.6**	8.3
Accumulated depreciation, 1 Jan.	**-7.0**	-6.7
Accumulated depreciation on decreases and transfers	**2.8**	0.0
Depreciation for the period	**-0.4**	-0.3
Accumulated depreciation, 31 Dec.	**-4.6**	-7.0
Book value, 31 Dec.	**1.0**	1.3
ADVANCE PAYMENTS AND CONSTRUCTION IN PROGRESS		
Acquisition cost, 1 Jan.	**6.2**	8.5
Increases	**3.0**	4.5
Transfers between items	**-4.4**	-6.8
Acquisition cost, 31 Dec.	**4.8**	6.2
INTANGIBLE ASSETS TOTAL		
Acquisition cost, 1 Jan.	**81.9**	75.3
Increases	**5.4**	6.6
Decreases	**-8.3**	0.0
Transfers between items	**0.0**	0.0
Acquisition cost, 31 Dec.	**79.0**	81.9
Accumulated depreciation, 1 Jan.	**-57.8**	-53.5
Accumulated depreciation on decreases and transfers	**5.3**	0.0
Depreciation for the period	**-4.6**	-4.3
Accumulated depreciation, 31 Dec.	**-57.1**	-57.8
Book value, 31 Dec.	**21.9**	24.1
LAND AND WATER AREAS		
Acquisition cost, 1 Jan.	**6.5**	6.6
Increases	**3.9**	0.0
Decreases	**-1.4**	0.0
Acquisition cost, 31 Dec.	**9.0**	6.5
Accumulated depreciation, 1 Jan.	**-0.6**	-0.6
Accumulated depreciation, 31 Dec.	**-0.6**	-0.6
Book value, 31 Dec.	**8.4**	5.9
BUILDINGS		
Acquisition cost, 1 Jan.	**140.5**	139.5
Increases	**4.3**	0.6
Decreases	**-82.3**	0.0
Transfers between items	**0.4**	0.4
Acquisition cost, 31 Dec.	**63.0**	140.5
Accumulated depreciation, 1 Jan.	**-103.0**	-98.4
Accumulated depreciation on decreases and transfers	**59.0**	0.0
Depreciation for the period	**-3.9**	-4.7
Accumulated depreciation, 31 Dec.	**-48.0**	-103.0
Book value, 31 Dec.	**15.0**	37.5

EUR million	2016	2015
MACHINERY AND EQUIPMENT		
Acquisition cost, 1 Jan.	**470.7**	463.2
Increases	**10.2**	6.0
Decreases	**-222.2**	-0.4
Transfers between items	**7.0**	1.9
Acquisition cost, 31 Dec.	**265.7**	470.7
Accumulated depreciation, 1 Jan.	**-395.8**	-379.2
Accumulated depreciation on decreases and transfers	**181.5**	0.4
Depreciation for the period	**-18.7**	-17.0
Accumulated depreciation, 31 Dec.	**-233.0**	-395.8
Book value, 31 Dec.	**32.7**	74.8
OTHER TANGIBLE ASSETS		
Acquisition cost, 1 Jan.	**20.9**	19.6
Increases	**0.9**	1.3
Decreases	**-11.4**	0.0
Transfers between items	**-0.9**	0.0
Acquisition cost, 31 Dec.	**9.5**	20.9
Accumulated depreciation, 1 Jan.	**-17.3**	-16.9
Accumulated depreciation on decreases and transfers	**9.3**	0.0
Depreciation for the period	**-0.4**	-0.4
Accumulated depreciation, 31 Dec.	**-8.4**	-17.3
Book value, 31 Dec.	**1.1**	3.6
ADVANCE PAYMENTS AND CONSTRUCTION IN PROGRESS		
Acquisition cost, 1 Jan.	**7.4**	3.0
Increases	**11.1**	6.7
Transfers between items	**-6.4**	-2.3
Acquisition cost, 31 Dec.	**12.1**	7.4
TANGIBLE ASSETS TOTAL		
Acquisition cost, 1 Jan.	**646.0**	631.8
Increases	**30.5**	14.6
Decreases	**-317.2**	-0.5
Transfers between items	**0.0**	0.0
Acquisition cost, 31 Dec.	**359.4**	646.0
Accumulated depreciation, 1 Jan.	**-516.7**	-495.0
Accumulated depreciation on decreases and transfers	**249.8**	0.4
Depreciation for the period	**-23.1**	-22.1
Accumulated depreciation, 31 Dec.	**-290.0**	-516.7
Book value, 31 Dec.	**69.4**	129.3

During 2016 interest expenses of EUR 0.0 million were capitalised (0.0).

10. INVESTMENTS, SHARES

SHARES IN GROUP COMPANIES		
Acquisition cost, 1 Jan.	**1,585.3**	1,547.9
Increases	**71.6**	64.0
Decreases	**-14.4**	-26.5
Acquisition cost, 31 Dec.	**1,642.5**	1,585.3
SHARES IN PARTICIPATING INTERESTS		
Acquisition cost, 1 Jan.	**43.7**	54.0
Increases	**2.6**	2.3
Decreases	**-2.5**	-12.7
Acquisition cost, 31 Dec.	**43.7**	43.7

EUR million	2016	2015
OTHER SHARES AND HOLDINGS		
Acquisition cost, 1 Jan.	2.3	1.5
Increases	0.0	0.9
Decreases	-0.1	-0.2
Acquisition cost, 31 Dec.	2.2	2.3
INVESTMENTS, SHARES TOTAL		
Acquisition cost, 1 Jan.	1,631.3	1,603.5
Increases	74.2	67.2
Decreases	-17.1	-39.3
Acquisition cost, 31 Dec.	1,688.4	1,631.3
INVESTMENTS, RECEIVABLES		
RECEIVABLES FROM GROUP COMPANIES		
Acquisition cost, 1 Jan.	139.7	143.5
Decreases	0.0	-3.7
Acquisition cost, 31 Dec.	139.7	139.7
OTHER RECEIVABLES		
Acquisition cost, 1 Jan.	0.0	0.0
Decreases	0.0	0.0
Acquisition cost, 31 Dec.	0.0	0.0
INVESTMENTS, RECEIVABLES TOTAL		
Acquisition cost, 1 Jan.	139.7	143.5
Decreases	0.0	-3.7
Acquisition cost, 31 Dec.	139.7	139.7
INVESTMENTS, RECEIVABLES		
Other loan receivables	139.7	139.7
Total	139.7	139.7

11. FAIR VALUES OF FINANCIAL INVESTMENT IN NON-CURRENT ASSETS

STOCK EXCHANGE LISTED SHARES		
Book value	584.3	566.5
Fair value	1,009.3	977.0
Difference	-425.0	-410.5

The fair value of the listed Metsä Board Corporation shares exceeds the book value by EUR 425.0 million at 31 December 2016.

12. RECEIVABLES

NON-CURRENT RECEIVABLES		
Loan receivables	0.0	1.8
Other receivables	0.0	0.0
Total	0.0	1.8

There are no loan receivables, guarantees or other liabilities from the President and CEO, members of the Supervisory Board, members of the Board of Directors or their deputies or persons belonging to similar bodies.

EUR million	2016	2015
CURRENT RECEIVABLES		
Receivables from Group companies		
Accounts receivables	54.2	33.1
Loan receivables	493.6	335.2
Other receivables	2.2	0.0
Prepayment and accrued income	17.7	18.3
Total	567.7	386.5
Receivables from participating interests		
Accounts receivables	2.8	2.5
Total	2.8	2.5
Receivables from others		
Accounts receivables	55.2	80.2
Loan receivables	0.0	0.3
Other receivables	2.5	2.8
Prepayment and accrued income	7.3	6.7
Total	65.1	90.0
Receivables total	635.6	480.8

Non-current loan receivables include in 2015 a non-current receivable of EUR 18.1 million from Metsäliitto Management Oy. Metsäliitto Management Oy was incorporated on 31 January 2016.

PREPAYMENT AND ACCRUED INCOME, CURRENT		
Insurances	0.4	0.3
Periodisations of employee costs	2.1	0.9
Received compensations	0.0	0.6
Degrees of completion	1.0	0.4
Receivables from licenses	2.0	3.2
Others	1.8	1.3
Total	7.3	6.7

13. MEMBERS' FUNDS

Participation shares, 1 Jan.	207.8	206.2
Increase	11.4	6.4
Transferred from interest	1.6	1.7
Refund of participation shares	-1.2	-6.5
Total *)	219.6	207.8
Transfer of refundable members' capital to liabilities for the waiting period	-5.2	-1.9
Participation shares, 31 Dec.	214.4	205.9
Additional shares A, 1 Jan.	630.8	597.6
Increase	33.1	23.1
Transferred from interest	29.0	26.4
Equity Bonus	1.6	1.4
Refund of additional shares	-37.0	-17.8
Total	657.4	630.8
Transfer of refundable members' capital to liabilities for the waiting period	-29.2	-42.3
Additional shares A, 31 Dec.	628.2	588.5
Additional shares B, 1 Jan.	153.5	134.4
Increase	20.5	25.3
Refund of additional shares	-7.4	-6.2
Total	166.6	153.5
Transfer of refundable members' capital to liabilities for the waiting period	-37.3	-28.7
Additional shares B, 31 Dec.	129.2	124.7

EUR million	2016	2015
Other reserves		
Reserve for invested unrestricted equity, 1 Jan	**0.1**	0.0
Refund of Equity Bonus	**0.0**	0.1
Reserve for invested unrestricted equity, 31 Dec.	**0.1**	0.1
General reserve I, 1 Jan.	**3.9**	3.9
General reserve I, 31 Dec.	**3.9**	3.9
General reserve II, 1 Jan.	**67.4**	64.1
Transferred from retained earnings	**0.0**	3.3
General reserve II, 31 Dec.	**67.4**	67.4
Retained earnings, 1 Jan.	**738.9**	660.6
Interest paid	**-50.4**	-45.7
Transferred to general reserve II	**0.0**	-3.3
Used for accelerated refund of participation shares	**-8.9**	-1.5
Used for Equity Bonus	**-1.6**	-1.5
Retained earnings, 31 Dec.	**678.0**	608.6
Result for the financial period	**144.4**	130.3
Total members' funds	**1,865.7**	1,729.4
*) Unpaid participation shares		
Total called-up members' capital	**220.8**	256.4
Participation shares paid	**-209.1**	-206.3
Unpaid participation shares	**11.7**	50.1
The amount available for redemption of capital		
Participation shares **)	**219.6**	207.8
Additional shares A **)	**657.4**	630.8
Additional shares B **)	**166.6**	153.5
Retained earnings	**822.3**	738.9
Depreciation difference less tax liability	**9.0**	14.4
Total	**1,874.9**	1,745.3
**) Transfer of refundable members' capital to liabilities for the waiting period	**71.6**	72.9

In accordance with Metsäliitto Cooperative's rules under Section 16 one third of the distributable funds shown in the balance sheet confirmed for the preceding financial period can be used for refunding of participation shares and additional shares.

14. PROVISIONS

EUR million	2016	2015
PROVISION FOR PENSION		
1 Jan.	**0.0**	0.0
Increases	**0.0**	0.0
Decreases	**0.0**	0.0
31 Dec.	**0.0**	0.0
UNEMPLOYMENT PENSION COSTS		
1 Jan.	**2.7**	3.2
Increases	**0.4**	0.2
Decreases	**-1.7**	-0.7
31 Dec.	**1.4**	2.7
OTHER PROVISIONS		
1 Jan.	**0.2**	0.1
Increases	**0.0**	0.0
Decreases	**0.0**	0.0
31 Dec.	**0.2**	0.2
PROVISIONS TOTAL		
1 Jan.	**2.9**	3.4
Increases	**0.4**	0.3
Decreases	**-1.7**	-0.7
31 Dec.	**1.6**	2.9

15. DEFERRED TAX RECEIVABLES AND -LIABILITIES, NOT RECOGNISED IN THE BALANCE SHEET

EUR million	2016	2015
Deferred tax receivables		
Provisions	**0.3**	0.6
Unused taxable losses	**0.0**	0.9
Total	**0.3**	1.4
Deferred tax liabilities		
Depreciation difference	**2.3**	3.6
Total	**2.3**	3.6

16. LIABILITIES

EUR million			2016	2015
Non-current				
Non-interest bearing			**22.9**	18.8
Interest-bearing			**271.8**	417.2
Total			**294.7**	436.0
Current				
Non-interest bearing			**292.6**	269.9
Interest-bearing			**228.2**	111.7
Total			**520.8**	381.6
Non-current non-interest bearing liabilities include transferred refundable members' capital for the waiting period:				
Additional shares B			**20.7**	17.7
Current non-interest bearing liabilities include transferred refundable members' capital for the waiting period:				
Participation shares			**5.2**	1.9
Additional shares A			**29.2**	42.3
Additional shares B			**16.7**	11.0
Total			**51.0**	55.2
Bonds	Nominal value	Interest, %		
2012–2017	175.0	5.125	**174.9**	174.9
Metsä Group Treasury Oy's investment in the bond is reported in Payables to Group companies			**-16.3**	-14.8
Share of external investors			**158.6**	160.1

Metsäliitto Cooperative has an outstanding bond of EUR 175 million. The interest rate of the bond is 5.125% and the maturity date is 29.11.2017. The bond ranks senior and is unsecured. There are typical restrictions on change of control and pledges in the terms and conditions of the loan.

17. NON-CURRENT DEBTS WITH AMORTISATION PLAN

EUR million	Liabilities to Group companies	Bonds	Loans from financial institutions	Pension loans	Other liabilities	Total
2017	0.0	158.6	43.8	9.5	0.0	211.9
2018	0.0	0.0	20.3	0.0	0.0	20.3
2019	0.0	0.0	209.4	0.0	0.0	209.4
2020	0.0	0.0	9.4	0.0	0.0	9.4
2021	0.0	0.0	9.4	0.0	0.0	9.4
2022-	0.0	0.0	23.4	0.0	0.0	23.4
Total	0.0	158.6	315.6	9.5	0.0	483.7

EUR million	2016	2015
18. CURRENT LIABILITIES		
Bonds	**158.6**	0.0
Loans from financial institutions	**43.8**	33.8
Pension loans	**9.5**	74.5
Advance payments	**5.7**	6.7
Accounts payable	**93.2**	70.4
Liabilities to Group companies		
Loans	**16.3**	3.4
Advance payments	**7.4**	7.7
Accounts payable	**14.5**	11.2
Other loans	**0.0**	1.7
Accruals and deferred income	**0.6**	1.2
	38.8	25.2
Liabilities to participating interests		
Accounts payable	**0.4**	1.3
Liabilities to others		
Due members' capital transferred to liabilities during the waiting period	**51.0**	55.2
Other liabilities	**10.7**	10.2
	61.7	65.3
Accruals and deferred income	**109.1**	104.4
Total current liabilities	**520.8**	381.6
19. ACCRUALS AND DEFERRED INCOME		
Current		
Interest	**2.0**	1.6
Pension insurance premium	**3.9**	5.1
Other insurance premiums	**2.8**	2.5
Periodisations of employee costs	**35.3**	34.6
Periodisations of purchases	**55.5**	50.2
Others	**9.7**	10.4
Total	**109.1**	104.4

20. COMMITMENTS AND CONTINGENCIES

PENDING DISPUTES

In March 2011, the state enterprise Metsähallitus filed a claim for damages at the District Court of Helsinki, demanding that Metsäliitto Cooperative and two other forest industry companies jointly pay compensation for alleged damage caused by prohibited cooperation with regard to prices in the raw wood market. The claim is related to the 3 December 2009 decision by the Market Court which states that the aforementioned companies have violated the act on competition restrictions in the raw wood market. In addition, some municipalities, parishes and a group of individuals in Finland have instituted similar proceedings. The total amount of all claims directed at Metsäliitto Cooperative and the other aforementioned companies jointly is approximately EUR 185 million, of which approximately EUR 59 million is directed at Metsäliitto Cooperative alone. The aforementioned proceedings are associated with interest, value added tax claims and legal process expenses. Metsäliitto Cooperative's view is that the claims for damages are unfounded, and the company has not recognised any provisions regarding them.

In February 2016, the Supreme Court issued a decision stating that a compensation claim filed by a private forest owner has partially expired. Based on the Supreme Court decision concerning the expiration, the total amount of the damage claims is expected to reduce slightly.

The Helsinki District Court dismissed in its ruling issued in June 2016 the claim for damages of EUR 159.4 million made by Metsähallitus against the defendant companies jointly and ruled that Metsähallitus is responsible for reimbursing the defendant companies for their legal expenses. Metsäliitto Cooperative's share of Metsähallitus' claim for damages in the district court was EUR 49.5 million. Metsähallitus has appealed the District Court's judgment at the Court of Appeal.

In May 2014, Metsäliitto Cooperative and Metsä Board demanded the District Court of Helsinki to revoke the judgment issued by the Arbitral Tribunal on 11 February 2014 that ordered Metsäliitto Cooperative and Metsä Board to pay a total of EUR 67 million in damages to UPM-Kymmene Corporation. In the judgment issued in June 2015, the District Court rejected the demands by Metsäliitto Cooperative and Metsä Board. Metsäliitto Cooperative and Metsä Board appealed the District Court's judgment at the Court of Appeal. The Court Of Appeal dismissed in its ruling issued in October 21, 2016 Metsäliitto Cooperative's and Metsä Board's demands for damages. The ruling by the Court of Appeal is not final.

During the past 12 months there have been no other administrational processes, legal proceedings or arbitrations that can have or have had a significant impact on the financial position of Metsäliitto Cooperative. The company has no information of similar future pending disputes.

EUR million	2016	2015
CONTINGENT LIABILITIES		
For own liabilities		
Liabilities secured by pledges		
Loans from financial institutions	**297.6**	232.7
Pension loans	**0.0**	65.0
Pledges granted	**311.5**	336.8
On behalf of own and Group companies' liabilities		
Guarantee liabilities	**570.3**	552.4
On behalf of others		
Guarantee liabilities	**0.9**	0.9
Leasing liabilities		
For the next 12 months	**4.4**	6.9
For subsequent years	**12.5**	14.0
Total		
Pledges	**311.5**	336.8
Guarantee liabilities	**571.2**	553.3
Leasing liabilities	**16.9**	20.9
Total	**899.6**	911.0
Investment commitments		
Payments due under 1 year	**20.8**	0.0
Total	**20.8**	0.0

LIABILITIES DUE TO OPEN DERIVATE CONTRACTS

EUR million	GROSS AMOUNT 2016	GOING VALUE	Gross amount 2015	Going value
Interest derivatives				
Interest rate swaps	**78.3**	**-2.6**	111.0	-2.6
Currency derivatives				
Forward agreements	**62.4**	**-0.3**	132.9	1.6
Option agreements	**9.5**	**-0.1**	11.0	0.0
Commodity derivatives				
Other commodity derivatives	**2.4**	**0.1**	2.1	-0.9
Derivatives total	**152.5**	**-2.8**	257.0	-1.9

All derivative agreements of Metsäliitto Cooperative have been made in hedging purpose and cash flow hedge accounting according to IAS 39 is applied in major part of the agreements within IFRS financial statements. Only the part of currency derivatives that is related to hedging of accounts receivables and accounts payable is not directed to hedge accounting.

Interest rate derivatives are interest rate swaps that have been done to hedge the floating rate interest payments of which one mature on the accounting period starting 1.1.2017 and the other is extended until 2024. Currency derivatives have been made to hedge Wood Products Industry's currency cash flows and they mature during the accounting period starting on 1.1.2017. Commodity derivatives are gas oil forward agreements made to hedge Wood Products Industry's logistic purchases. They all mature during accounting period 2017. More detailed description of management of financial risks and principles applied to derivatives is included in Management of financial risks in IFRS financial statements Note 27.

EUR million	2016	2015
21. ENVIRONMENTAL ITEMS		
Income statement		
Raw materials and consumables	**0.4**	0.4
Employee costs		
Wages, salaries and fees	**0.5**	0.5
Social security expenses	**0.3**	0.2
Depreciation	**0.1**	0.2
Other operating expenses	**0.5**	0.5
Total	**1.8**	1.8
Balance sheet		
Tangible assets		
Acquisition costs 1 Jan.	**4.7**	4.3
Increases	**0.2**	0.4
Decreases	**-1.0**	0.0
Accumulated depreciation	**-3.2**	-3.7
Book value 31 Dec.	**0.7**	1.0
Granted liabilities for environmental items	**2.8**	5.8

Only additional recognisable costs that are primarily intended to prevent, reduce or repair damage to the environment are included in environmental costs. Environmental expenditures are capitalised if they have been incurred to prevent or reduce future damage or conserve resources and bring future economic benefits.

PARENT COMPANY SHARES AT 31 DECEMBER 2016

SHARES IN GROUP COMPANIES	Country	Parent company's holding, %	Group's holding, %	Number of shares	Book value, 1,000 EUR
Kumpuniemen Voima Oy	Finland	53.97		34	462
Metsa Forest Latvia SIA	Latvia	100.00		670	3,259
Metsä Board Corporation *	Finland	41.83		148,706,890	584,322
Metsä Fibre Oy	Finland	50.20	60.61	38,211	771,253
Metsä Forest Eesti AS	Estonia	100.00		150,000	1,146
Metsä Forest Sverige AB	Sweden	100.00		5,000	703
Metsä Group Services Sp. z.o.o.	Poland	100.00		100	2,000
Metsä Group Treasury Oy	Finland	100.00		50,000	10,236
Metsä Tissue Oyj	Finland	91.00		8,297,915	195,711
Metsä Wood Deutschland GmbH	Germany	100.00			11,948
Metsä Wood Eesti AS	Estonia	100.00		1,000	100
Metsä Wood Holland B.V.	The Netherlands	100.00			143
Metsä Wood Ibérica S.L.U.	Spain	100.00		500	146
Metsä Wood Schweiz AG	Switzerland	100.00		200	750
Metsä Wood UK Holdings Ltd	Great Britain	100.00		43,200,000	53,458
Metsä Wood USA Inc.	USA	100.00		500,000	316
Mittaportti Oy	Finland	100.00		3,000	50
OOO Metsa Forest Podporozhye	Russia	100.00			4,579
OOO Metsa Forest St. Petersburg	Russia	100.00		100	981
Punkavoima Oy	Finland	34.67		9,292	929
SHARES IN GROUP COMPANIES, TOTAL					**1,642,491**

*) Holding 61.49% by number of votes

PARTICIPATION INTERESTS	Country	Parent company's holding, %	Group's holding, %	Number of shares	Book value, 1,000 EUR
Asunto Oy Tapiolan Jalava	Finland	0.51			9
Asunto Oy Tapiolan Pyökki	Finland	2.37			119
Asunto Oy Tapiolan Saarni	Finland	7.33			192
Asunto Oy Tapiolan Tammi	Finland	48.98			1,295
Finsilva Oyj	Finland	19.77		19,064,275	5,719
Kiinteistö Oy Metsätapiola	Finland	48.98		55,734	19,477
Kiinteistö Oy Metsätapiolan Pysäköinti	Finland	48.96		212	3,235
Kiinteistö Oy Tapiolan Jalopuupysäköinti	Finland	19.36			2,621
Lohjan Biolämpö Oy	Finland	46.00		782,000	782
Metsäteho Oy	Finland	24.00		40	67
Perkaus Oy	Finland	33.33		2,500	6
Suomen Metsäsijoitus Oy	Finland	25.00		23,850	2,011
ZAO HC Vologodskiye Lesopromyshlenniki	Russia	44.19			6,164
Äänevoima Oy	Finland	20.00	20.00	2,000,000	2,000
PARTICIPATION INTERESTS, TOTAL					**43,697**

OTHER SHARES AND HOLDINGS	Country	Parent company's holding, %	Group's holding, %	Number of shares	Book value, 1,000 EUR
Finnish Bioeconomy Cluster FIBIC Oy	Finland	5.00		150	150
Misawa Homes of Finland	Finland			400	67
Real estate companies					1,647
Golf shares					160
Shares and holdings in telephone companies					31
Other shares and holdings					140
OTHER SHARES AND HOLDINGS, TOTAL					**2,196**

This document is an English translation of the Finnish auditor's report. Only the Finnish version of the report is legally binding.

AUDITOR'S REPORT

To the members of Metsäliitto Cooperative

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

OPINION

We have audited the financial statements of Metsäliitto Cooperative (business identity code 0116300-4) for the year ended 31 December 2016. The financial statements comprise the consolidated balance sheet, 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 cooperative's balance sheet, income statement, statement of cash flows and notes.

In our opinion

- the consolidated financial statements give a true and fair view of the group's financial performance, financial position and cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU
- the financial statements give a true and fair view of the parent cooperative'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.

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 the Financial Statements* section of our report.

We are independent of the parent cooperative 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.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

MATERIALITY

The scope of our audit was influenced by our application of materiality. The materiality is determined based on our professional judgement and is used to determine the nature, timing and extent of our audit procedures and to evaluate the effect of identified misstatements on the financial statements as a whole. The level of materiality we set is based on our assessment of the magnitude of misstatements that, individually or in aggregate, could reasonably be expected to have influence on the economic decisions of the users of the financial statements. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for qualitative reasons for the users of the financial statements.

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.

THE KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN THE AUDIT
CONTROL ENVIRONMENT RELATING TO THE FINANCIAL REPORTING PROCESS AND RELATED IT SYSTEMS	
The IT control environment relating to the financial reporting process and the application controls of individual IT systems have an impact on the selected audit approach. As the consolidated financial statements are based on extensive number of data flows from multiple IT systems, consequently the financial reporting control environment is determined as a key audit matter.	Our audit procedures included evaluation of the financial reporting process and related control environment, as well as testing of the effectiveness of controls including general IT controls. Our audit procedures focused on testing the reconciliation and approval controls as well as on evaluating the administration of access rights. Our audit procedures extensively consisted of several substantive procedures as well as data analysis relating to the most significant balances on the income statement and on the balance sheet.

THE KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN THE AUDIT
VALUATION OF TANGIBLE AND INTANGIBLE ASSETS (REFER TO ACCOUNTING POLICIES AND NOTES 8, 11 AND 12 TO THE CONSOLIDATED FINANCIAL STATEMENTS)	
Tangible and intangible assets total EUR 3.3 billion and represent 55 percent of the consolidated total assets. Thereof the goodwill balance amounts to EUR 0.6 billion. The carrying value of construction in progress under the tangible assets amounts to EUR 0.8 billion, including the Äänekoski bioproduct mill, which is under construction. Investments have a significant impact on the Group's cash flows, tangible and intangible assets and balance sheet structure. The impairment tests cover non-financial assets allocated to the business units. Determining the key assumptions used in the cash flow forecasts underlying the impairment tests requires management judgment. Due to the significant carrying values involved, valuation of tangible and intangible assets is determined a key audit matter.	Our audit procedures included evaluation of the appropriateness of the capitalization and depreciation principles applied. We also assessed the key assumptions used in the impairment tests by reference to the budgets approved by the Cooperative's Board of Directors, data external to the Group and our own views. We involved KPMG valuation specialists when assessing the mathematical accuracy of the calculations, as well as comparing the assumptions to externally available market and industry data. As part of our audit procedures we evaluated the project management and monitoring procedures of the investment projects, as well as tested the financial controls over investments. In addition, we considered the appropriateness of the disclosures regarding the tangible and intangible assets.
VALUATION OF INVENTORIES (REFER TO ACCOUNTING POLICIES AND NOTE 18 TO THE CONSOLIDATED FINANCIAL STATEMENTS)	
Inventory management, stocktaking routines and pricing of inventories are key factors in the valuation of inventories. The Group's carrying value of inventories was EUR 0.8 billion at the end of the financial year. The valuation of inventories involves management estimates in relation to potentially obsolete inventory, as well as to fluctuations in the market prices of finished goods. The valuation of inventories has a significant impact on the profit and loss account and therefore it is determined as a key audit matter.	We evaluated the appropriateness of the accounting policies by reference to IFRS standards, as well as the functionality of the key IT systems of inventory management. We tested the controls over inventory management, accuracy of inventory amounts and valuation of inventories as well as performed substantive audit procedures relating to the valuation of inventories to test the accuracy of inventory valuation. We also followed the execution of certain stocktaking during the financial year.
FINANCIAL CONTRACTS AND HEDGING INSTRUMENTS (REFER TO ACCOUNTING POLICIES AND NOTES 24, 27 AND 28 TO THE CONSOLIDATED FINANCIAL STATEMENTS)	
The financial liabilities amount to EUR 1.9 billion, accounting for 33 percent of the consolidated balance sheet. In addition, the Group has off-balance sheet committed credit facility agreements amounting to EUR 1.4 billion. The Group hedges financial risks with interest rate and foreign currency derivatives and their nominal values amounted to EUR 2.5 billion at the end of the financial year. Due to the significance of the financial and derivative contracts and the IFRS requirements set for hedge accounting, the financial contracts and hedging instruments are determined as a key audit matter.	Our audit procedures included evaluation of the recognition and measurement principles applied to financial instruments for appropriateness, as well as testing of controls over the accuracy and valuation of financial instruments. As part of our year-end audit procedures we tested the appropriateness of valuations by using data analysis, as well as selecting transactions for testing on a sample basis. In respect to hedge accounting, we evaluated the effectiveness of hedge accounting by reference to IFRS requirements. In addition, we evaluated the adequacy of the disclosures relating to financial instruments.

RESPONSIBILITIES OF THE BOARD OF DIRECTORS AND THE MANAGING DIRECTOR FOR THE FINANCIAL STATEMENTS

The Board of Directors and the Managing Director 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 Managing Director 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 Managing Director are responsible for assessing the parent cooperative's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to the 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 cooperative or the group or cease operations, or there is no realistic alternative but to do so.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE 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 scepticism 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 cooperative'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 Managing Director'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 cooperative'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 parent cooperative or the group 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

OTHER INFORMATION

The Board of Directors and the Managing Director 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 auditor's report thereon. We obtained the report of the Board of Directors prior to the date of this auditor's report, and the Annual Report is expected to be made available to us after that date.

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 the 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 on the report of the Board of Directors, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

OTHER OPINIONS

We support that the financial statements and the consolidated financial statements should be adopted. The proposal by the Board of Directors regarding the use of the surplus shown on the balance sheet is in compliance with the Cooperative Act. We support that the Members of the Supervisory Board and of the Board of Directors as well as the Managing Director of the parent cooperative should be discharged from liability for the financial period audited by us.

Espoo, 14 February 2017
KPMG Oy Ab

Raija-Leena Hankonen
Authorized Public Accountant

QUARTERLY DATA

EUR million	Yearly		Quarterly							
INCOME STATEMENT	**2016**	**2015**	**QIV/2016**	**QIII/2016**	**QII/2016**	**QI/2016**	**QIV/2015**	**QIII/2015**	**QII/2015**	**QI/2015**
Sales by segments										
Wood Supply and Forest Services	**1,534.4**	1,518.1	399.2	356.2	377.8	401.2	364.9	348.0	393.5	411.8
Wood Products Industry	**481.6**	533.6	115.3	115.1	129.9	121.4	117.4	135.2	146.1	134.9
Pulp and Sawn Timber Industry	**1,636.0**	1,771.8	416.0	388.7	422.5	408.8	442.3	430.1	487.0	412.4
Paperboard Industry	**1,720.3**	2,007.5	421.8	440.0	422.9	435.6	462.2	497.6	522.0	525.7
Tissue and Cooking Papers	**990.8**	1,015.8	249.2	246.6	248.8	246.2	263.8	249.2	249.0	253.7
Other operations	**5.0**	4.1	1.1	1.2	1.1	1.6	0.5	0.8	0.9	1.9
Eliminations	**-1,710.0**	-1,835.0	-427.3	-404.5	-419.0	-459.2	-445.9	-435.6	-468.4	-485.2
SALES TOTAL	**4,657.9**	5,016.0	1,175.2	1,143.3	1,183.9	1,155.6	1,205.4	1,225.2	1,330.2	1,255.1
Operating result by segments										
Wood Supply and Forest Services	**30.9**	29.0	8.9	7.7	6.5	7.8	6.3	7.0	6.9	8.7
Wood Products Industry	**40.0**	6.5	10.0	9.0	13.1	7.8	9.5	7.8	-15.3	4.5
Pulp and Sawn Timber Industry	**220.8**	340.7	53.3	58.1	48.2	61.2	79.7	83.4	95.6	82.0
Paperboard Industry	**132.3**	199.0	38.5	26.6	34.5	32.7	34.1	54.6	67.2	43.1
Tissue and Cooking Papers	**61.3**	41.6	16.8	17.8	13.2	13.5	23.9	6.5	6.1	5.1
Other operations	**0.0**	21.8	-8.1	4.4	4.6	-0.9	-5.1	4.2	23.3	-0.6
Eliminations	**-42.9**	-96.5	-9.7	-16.2	-1.6	-15.3	-20.2	-21.5	-29.8	-25.0
OPERATING RESULT TOTAL	**442.3**	542.1	109.7	107.4	118.5	106.8	128.2	142.0	154.0	117.8
Operating result, comparable	**438.6**	537.4	106.5	102.8	119.8	109.5	122.7	149.0	137.1	128.6
% of sales	**9.4**	10.7	9.1	9.0	10.1	9.5	10.2	12.2	10.3	10.2
Share of results from associated companies and joint ventures	**-1.1**	11.2	0.3	-0.5	-0.8	-0.1	2.7	-0.8	3.2	6.1
Net exchange gains/losses	**-5.7**	-1.2	-6.5	1.3	0.5	-1.0	2.6	-0.6	-6.7	3.5
Financial income and expenses	**-74.9**	-83.8	-18.4	-18.7	-20.0	-17.8	-20.1	-20.0	-22.4	-21.3
RESULT BEFORE TAX	**360.6**	468.4	85.1	89.5	98.2	87.8	113.4	120.7	128.2	106.1
Income taxes	**-80.7**	-112.6	-16.9	-21.7	-22.6	-19.5	-21.2	-38.4	-35.5	-17.5
RESULT FOR THE PERIOD	**279.9**	355.7	68.2	67.8	75.7	68.3	92.2	82.3	92.7	88.6

OPERATING RESULT, COMPARABLE	**2016**	**2015**	**QIV/2016**	**QIII/2016**	**QII/2016**	**QI/2016**	**QIV/2015**	**QIII/2015**	**QII/2015**	**QI/2015**
Wood Supply and Forest Services	**30.9**	29.0	8.9	7.7	6.5	7.8	6.3	7.0	6.9	8.7
Wood Products Industry	**38.7**	27.9	8.3	9.0	13.2	8.2	8.4	8.0	7.1	4.5
Pulp and Sawn Timber Industry	**214.6**	340.7	53.7	46.4	53.2	61.2	79.7	83.4	95.6	82.0
Paperboard Industry	**137.5**	179.9	32.8	34.0	35.8	35.0	35.1	54.6	47.0	43.2
Tissue and Cooking Papers	**63.1**	55.1	20.6	15.8	13.2	13.5	18.6	13.2	7.6	15.8
Other operations and eliminations	**-46.1**	-95.2	-17.7	-10.0	-2.1	-16.2	-25.3	-17.3	-27.0	-25.7
TOTAL	**438.6**	537.4	106.5	102.8	119.8	109.5	122.7	149.0	137.1	128.6

KEY RATIOS	**2016**	**2015**	**QIV/2016**	**QIII/2016**	**QII/2016**	**QI/2016**	**QIV/2015**	**QIII/2015**	**QII/2015**	**QI/2015**
Equity ratio, %	**43.9**	43.2	43.9	44.0	44.8	42.8	43.2	42.7	41.9	39.0
Net gearing ratio, %	**40**	25	40	40	38	35	25	29	34	41
Interest-bearing net liabilities, EUR million	**1,033**	610	1,033	991	945	847	610	682	779	887
Return on capital employed, %	**10.2**	13.7	10.1	10.2	11.4	10.3	12.9	13.9	15.5	12.5
comparable	**10.2**	13.6	9.8	9.8	11.5	10.6	12.3	14.6	13.8	13.5
Return on equity, %	**11.2**	15.9	10.7	10.9	12.4	11.3	15.5	14.2	16.5	16.7
comparable	**11.0**	15.8	10.2	10.2	12.6	11.8	14.6	15.4	13.9	18.8

FIVE YEARS IN FIGURES

EUR million	2016	2015	2014	2013	2012
Sales	**4,658**	5,016	4,970	4,938	5,001
Operating result	**442**	542	417	335	241
excluding non-recurring items	**439**	537	418	343	256
Result before tax	**361**	468	330	224	133
Result for the period	**280**	356	260	189	101
Non-current assets	**3,596**	3,166	3,024	3,251	3,380
Inventories	**767**	687	774	776	726
Other current assets	**1,583**	1,763	1,649	1,164	1,260
Total assets	**5,946**	5,616	5,447	5,191	5,366
Members' funds	**1,942**	1,806	1,590	1,483	1,367
Non-controlling interest	**658**	611	467	476	491
Non-current liabilities	**1,611**	1,652	1,843	2,070	1,717
Current liabilities	**1,735**	1,547	1,547	1,162	1,791
Total members' funds and liabilities	**5,946**	5,616	5,447	5,191	5,366
Return on capital employed, %	**10.2**	13.7	11.1	8.9	6.7
excluding non-recurring items	**10.2**	13.6	11.4	9.1	7.1
Return on equity, %	**11.2**	15.9	13.0	9.9	6.1
excluding non-recurring items	**11.0**	15.8	13.4	10.3	6.9
Equity ratio, %	**43.9**	43.2	37.9	37.9	34.7
Net gearing ratio, %	**40**	25	46	77	87
Gearing ratio, %	**74**	72	93	101	115
Interest-bearing liabilities	**1,935**	1,747	1,904	1,981	2,139
Interest-bearing financial assets	**902**	1,137	966	471	530
Interest-bearing net liabilities	**1,033**	610	938	1,510	1,609
Investments	**758**	492	143	214	204
% of sales	**16.3**	9.8	2.9	4.3	4.1
Personnel, average	**9,626**	10,117	10,775	11,216	11,986
Personnel, at the end of year	**9,300**	9,599	10,410	10,736	11,447
of whom in Finland	**4,927**	5,122	5,131	5,227	5,414

CALCULATION OF KEY RATIOS

Return on capital employed (%), ROCE = $\dfrac{\text{Result before tax -/+ net exchange gains/losses + interest and other financial expenses}}{\text{Balance total - non-interest-bearing liabilities (average)}}$

Return on equity (%) = $\dfrac{\text{Result before tax – income taxes}}{\text{Members' funds total (average)}}$

Equity ratio (%) = $\dfrac{\text{Members' funds total}}{\text{Total assets – advance payments received}}$

Net gearing ratio (%) = $\dfrac{\text{Interest-bearing net liabilities}}{\text{Members' funds total}}$

Gearing ratio (%) = $\dfrac{\text{Interest-bearing liabilities}}{\text{Members' funds total}}$

Interest-bearing net liabilities = Interest-bearing liabilities – cash and cash equivalent – interest-bearing receivables

COMPARABLE KEY RATIOS

Metsä Group has relabeled the previously referenced “excluding non-recurring items” non-IFRS financial measures with “comparable” performance measures. Exceptional and material items outside the ordinary course of business have been eliminated from the comparable operating result, and they have been allocated to the operating segments. The change in terminology does not affect the definition of items affecting comparability.

Reconciliation of operating result under IFRS and comparable operating result is presented in Note 3. Comparable return on capital employed has been calculated using the same adjustments as the comparable operating result, and it has been further adjusted with financial items affecting comparability when applicable. Metsä Group considers the key figures derived in this manner to improve the comparability between reporting periods.

None of these key figures with items affecting comparability eliminated are key figures used in IFRS reporting, and they cannot be compared with other companies' key figures identified with the same names. Typical items affecting comparability include material gains and losses on disposals of assets, impairments and impairment reversals in accordance with IAS 36 Impairment of Assets, restructuring costs and their adjustments as well as items arising from legal proceedings.

CORPORATE GOVERNANCE STATEMENT 2016

INTRODUCTION

Metsä Group's Corporate Governance statement has been given as a separate report and published simultaneously with Metsä Group's Financial Statements and Report of the Board of Directors.

Metsäliitto Cooperative is a Finnish cooperative and the parent company of Metsä Group. In this report, Metsäliitto Cooperative is referred to when a matter is being discussed from the parent company's point of view. The decision-making and administration of Metsä Group companies complies with the Cooperatives Act, the Limited Liability Companies Act, the Securities Markets Act, the rules of the cooperative, procedures approved by the administrative bodies, and the policies and guidelines approved by the Metsäliitto Cooperative Board of Directors and the Executive Management Team. The rules of Metsäliitto Cooperative are available in full on Metsä Groups website under "Metsä Group's corporate governance principles."

Metsä Group prepares its financial statements and interim reports in accordance with International Financial Reporting Standards (IFRS). The financial statements are published in Finnish and English.

Metsä Group's head office is located in Espoo, Finland. The registered office of the parent company Metsäliitto Cooperative is in Helsinki, Finland.

CORPORATE GOVERNANCE CODE

Metsä Group's parent company Metsäliitto Cooperative complies with the Corporate Governance Code for Finnish listed companies issued by the Securities Market Association on 1 January 2016; however, it takes into account the special characteristics of the cooperative form of incorporation and states the deviations from the recommendation with rationale. In accordance with the opinion issued by the Finnish Central Chamber of Commerce in January 2006, corporations with an extensive ownership base, extensive operations or which are regionally or nationally significant, should comply with the recommendation to the extent that it is possible, taking their special characteristics into consideration in accordance with the comply or explain principle, and informing the cause for deviation. The Corporate Governance Code is available on the website of the Securities Market Association at www.cgfinland.fi/en/.

The governance and management system of Metsä Group's parent company Metsäliitto Cooperative deviates from the recommendations Corporate Governance Code as follows:

- According to the Corporate Governance Code, the CEO should not be elected as the chairman of the Board of Directors. According to the rules of Metsäliitto Cooperative, Metsä Group's President and CEO acts as the vice chairman of the Board of Directors. Deviating from the recommendation can be justified by Metsäliitto Cooperative's cooperative administrative model.
- According to the Corporate Governance Code, the members of the Board of Directors are elected by the Annual General Meeting. According to the rules of Metsäliitto Cooperative, the members of the Board of Directors are elected by the Supervisory Board. Thus, the election of Metsäliitto Cooperative's Board of Directors deviates from the recommendation of the Corporate Governance Code on the election of the Board of Directors. The competence regulations that deviate from the recommendation secure the realisation of cooperative corporate governance.
- According to the Corporate Governance Code, the members of the Board of Directors are elected for a term of office of one (1) year at a time. According to the rules of Metsäliitto Cooperative, the term of office of the members of the Board of Directors is three (3) years at a time. The Board members' three-year term of office has been deemed necessary in order to secure the continuity of decision-making.
- According to the Corporate Governance Code, the CEO is elected by the Board of Directors in accordance with the Limited Liability Companies Act. According to the Cooperatives Act, the CEO may also be elected by the Supervisory Board, if so provided for in the cooperative's rules. According to the rules of Metsäliitto Cooperative, the Supervisory Board elects the CEO and the President and CEO of Metsä Group. In accordance with the rules, the tasks of the President and CEO, and the terms of the President and CEO's service contract are confirmed by the Board of Directors. The deviation from the recommendation in the election of the President and CEO can be justified by Metsäliitto Cooperative's cooperative administrative model.

MAIN ADMINISTRATIVE BODIES

Metsäliitto Cooperative's administrative bodies are the Representative Council, Supervisory Board, Board of Directors and the CEO. The bodies separately specified below in this statement assist the administrative bodies in their decision-making and prepare their decisions. Currently, the CEO of Metsäliitto Cooperative acts as the President and CEO of Metsä Group. The CEO is hereafter referred to as the "President and CEO."

According to the rules of Metsäliitto Cooperative, the administrative personnel of Metsäliitto Cooperative must not work for companies or other organisations operating either directly or indirectly in the same sector as Metsäliitto Cooperative or its group companies or participate in the administration of such companies or organisations.

REPRESENTATIVE COUNCIL

The Representative Council uses the supreme decision-making power belonging to the members in Metsäliitto Cooperative in the matters specified by law and regulations. The Representative Council substitutes for the meeting of the cooperative in Metsäliitto Cooperative. The meeting of the Representative Council discusses the matters specified in the Cooperatives Act and the rules of Metsäliitto Cooperative as well as other matters mentioned in the invitation to the meeting. The main tasks of the Representative Council are:

- to decide on adopting the financial statements;
- to decide on the distribution of profit to the members;
- to decide on discharging the Supervisory Board, Board of Directors and CEO/ President and CEO from liability;
- to elect the members of the Supervisory Board and the auditors and to decide on their remuneration.

A full member of Metsäliitto Cooperative may be elected to the Representative Council. Persons who are employed by Metsäliitto Cooperative or a Group company and who are members of the Metsäliitto Cooperative Supervisory Board or Board of Directors are not eligible to stand for election to the Representative Council.

The election of the Representative Council is carried out every four years by postal voting, a communications link or some other technical device. Each member has one vote. The election is carried out by election districts so that the number of representatives selected from each district equals the number of Metsäliitto Cooperative members on the list of voters for the district in question who are entitled to vote on 1 January of the election year, divided by 2,300. The election districts are confirmed by the Supervisory Board, and basically they are determined in accordance with Metsäliitto Cooperative's district organisations.

In accordance with the rules, the Representative Council convenes once a year in the spring. The Representative Council, Supervisory Board or the Board Directors may decide to arrange an extraordinary meeting. An extraordinary meeting must also be convened if demanded by at least one tenth of the Representative Council members. Unless otherwise required by the Cooperatives Act for certain matters, the Representative Council is convened by the Supervisory Board no later than seven (7) days before the meeting with a written invitation to the meeting sent to every member of the Representative Council, which must include the matters to be discussed in the meeting.

Each representative has one vote in the meeting. Amending the rules of Metsäliitto Cooperative requires that the amendment proposal is supported by a minimum of two thirds of the members present at the meeting. In addition to the meeting representatives, the Chairman of the Board of Directors and, as a general rule, the members of the Board of Directors and Supervisory Board shall be present at meetings of the Representative Council. In addition, the auditors shall also be present at the annual meeting.

The composition of the Representative Council is presented on page 98 of this report.

DISTRICT COMMITTEES

In accordance with the rules of Metsäliitto Cooperative, there is a District Committee in each supply district. The District Committee comprises the members of the Representative Council, Supervisory Board and Board of Directors elected from the District's area, as well as candidates not elected in the election of the Representative Council, in the order of their personal number of votes. Each District has twice as many committee members as the number of representatives elected from the District's area, with a minimum of five (5). The guidelines approved by the Supervisory Board specify the tasks of the District Committee. According to the guidelines, the main task of the District Committee is to promote communication and interaction between the members and Metsäliitto Cooperative's supply district in question with its operation.

SUPERVISORY BOARD

The rules of Metsäliitto Cooperative specify that the Supervisory Board is a part of Metsäliitto Cooperative's administration model. This aims to ensure the realisation of sufficient corporate governance and commitment of the members to Metsäliitto Cooperative's decision-making. Strategic and other farreaching decisions, however, belong to the powers of Metsäliitto Cooperative's Board of Directors, and operational management to the executive management.

The rules of Metsäliitto Cooperative specify the tasks of the Supervisory Board. The main task of the Supervisory Board is to ensure that Metsäliitto Cooperative is managed in accordance with the rules and the decisions of the Representative Council and the Supervisory Board. In addition, the Supervisory Board:

- elects and dismisses members of the Metsäliitto Cooperative Board of Directors and decides on their remuneration;
- elects the CEO, who also serves as the President and CEO of Metsä Group, unless otherwise decided by the Supervisory Board;
- gives the Board of Directors instructions in farreaching matters and matters of importance in principle;
- issues a statement for the Representative Council on the financial statements, including the consolidated financial statements, and the Board of Director's report.

The Supervisory Board elects a Chairman and Vice Chairman from among its members for one (1) year at a time and invites a secretary. The Supervisory Board convenes as summoned by the Chairman as often as necessary, or as proposed by the Board of Directors. The Supervisory Board is quorate when more than half the members are present. The opinion favoured by the majority shall be the decision. If the votes are even, the Chairman has the casting vote, and elections are decided by lot.

The Supervisory Board comprises a minimum of twenty (20) and a maximum of thirty (30) members elected by the Representative Council from among the members of Metsäliitto Cooperative. Metsäliitto Cooperative's personnel may elect a maximum of five (5) members to the Supervisory Board. In addition, the Representative Council may, at the proposal of the Supervisory Board, elect a maximum of three (3) expert members to the Supervisory Board. The term of office of a member of the Supervisory Board begins at the closure of the annual meeting that elected him or her and runs until the annual meeting of the Representative Council three (3) years later. The aim of the three-year term of office is to ensure continuity in decision-making. Once a member of the Supervisory Board turns 65, his or her term of office, however, terminates at the annual meeting of the Representative Council the following year. Regional equality is considered when electing the members of the Supervisory Board. A member of the Board of Directors may not be a member of the Supervisory Board.

The composition of the Supervisory Board is presented on page 99 of this report and on Metsä Group's website under "Metsäliitto Cooperative governance and Metsä Group management."

NOMINATION COMMITTEE OF THE SUPERVISORY BOARD

A special Nomination Committee elected from among the members of the Supervisory Board prepares the election of the members of the Board of Directors in accordance with procedures approved for it. In addition, the Nomination Committee makes a proposal for the fees paid to the Board of Directors. The Nomination Committee comprises six (6) members of the Supervisory Board as well as the Chairman and the Vice Chairman of the Supervisory Board. The Chairman of the Supervisory Board acts as the chairman of the Nomination Committee, and the secretary of the Supervisory Board acts as the secretary. The committee may invite the Chairman of the Board of Directors to attend their meeting as an expert member.

The Supervisory Board elected the following persons to the Nomination Committee in its meeting held on 3 May 2016: Teuvo Hatva, Ville Hirvonen, Antti Isotalo, Timo Kässi, Timo Nikula and Jukka Vanhatalo. Furthermore, Hannu Järvinen, Chairman of the Supervisory Board, and Juha Paajanen, Vice Chairman, are members of the Nomination Committee on the basis of their position.

INFORMATION ON THE MEETINGS OF THE SUPERVISORY BOARD DURING THE PREVIOUS FINANCIAL PERIOD

In 2016, there were 34 members in the Supervisory Board, four (4) of them personnel representatives elected by different personnel groups of Metsäliitto Cooperative. There were no expert members in the Supervisory Board in 2016. The Supervisory Board convened four (4) times, and the members' attendance rate was 98 per cent.

BOARD OF DIRECTORS

According to the rules of Metsäliitto Cooperative and legislation, the task of the Board of Directors is to ensure that Metsäliitto Cooperative and Metsä Group's operations and administration are appropriately arranged. The Board of Directors has composed a procedure for its operations that specifies in greater detail the operating principles followed in the decision-making of the Board of Directors. The working order is available in full on Metsä Group's website under "Metsä Group's corporate governance principles."

The tasks of the Board of Directors include:

- approving the tasks of the CEO/President and CEO and the terms of the service contract, and monitoring to ensure that they take care of the cooperative's running administration in accordance with the instructions and orders of the Board of Directors;
- appointing and dismissing the directors immediately subordinate to the CEO and, if elected, the President and CEO;
- deciding on how shares are collected and the issue of additional shares and their terms and conditions;
- approving the strategy and annual budget of the Cooperative and the Group, and supervising compliance with them;
- signing the financial statements and consolidated financial statements, and presenting them to the Supervisory Board for audit;
- preparing matters to be processed at the meetings of the Supervisory Board;
- deciding on the salaries and other benefits of the CEO/President and other senior management on the Compensation Committee's proposal;
- deciding on other matters that, taking into account the extent and quality of the operations of the cooperative, are unusual and farreaching.

The Board of Directors elects a Chairman from among its members for one (1) year at a time. According to the rules of Metsäliitto Cooperative, the President and CEO acts as the vice chairman. The Board of Directors convenes as summoned by the chairman as often as necessary. The President and CEO prepares the Board's meetings. The Board of Directors is quorate when more than half the members of the Board are present. If the votes are equal, the chairman has the casting vote. Minutes shall be kept of the meetings of the Board of Directors.

The Board of Directors regularly appraises its operation and procedures by conducting an annual self-assessment.

COMPOSITION AND TERM OF OFFICE OF THE BOARD OF DIRECTORS

The Supervisory Board elects Metsäliitto Cooperative's Board of Directors. The Board of Directors comprises a minimum of five (5) and a maximum of eight (8) members, plus the CEO of Metsäliitto Cooperative or the President and CEO of Metsä Group. The CEO of Metsäliitto Cooperative is not a member of the Board of Directors if the Supervisory Board has separately appointed a President and CEO. A Board member's term of office commences at the beginning of the calendar year following the meeting of the Supervisory Board that elected them and runs for three (3) years at a time. The term of office of a member of the Board of Directors ends at the end of the calendar year during which they turn 65.

When preparing the nominations of the members of the Board of Directors, the Supervisory Board's Nomination Committee considers their qualifications, experience and available time, and also ensures that the composition of the Board includes diverse expertise.

In 2016, the position of the Chairman of the Board of Directors was held by Martti Asunta, that of the Vice Chairman by Kari Jordan, and the members were Mikael Aminoff, Arto Hiltunen, Leena Mörttinen, Juha Parpala, Timo Saukkonen, Mikael Silvennoinen and Antti Tukeva.

METSÄLIITTO COOPERATIVE'S BOARD OF DIRECTORS, 31 DECEMBER 2016

MEMBER OF THE BOARD OF DIRECTORS	MEMBER OF THE BOARD OF DIRECTORS SINCE	DATE OF BIRTH	EDUCATION	PARTICIPATION IN METSÄLIITTO COOPERATIVE (OWN, UNDER COMMON OWNERSHIP AND CONTROLLED BY CORPORATIONS) ON 31 DECEMBER 2016 (EUR)	SHARES IN METSÄ BOARD CORPORATION (OWN AND CONTROLLED BY CORPORATIONS) ON 31 DECEMBER 2016 (B SHARE)
Martti Asunta, Chairman	2005, Chairman since 2008	1955	M.Sc. (Forestry)	72,870	53,744
Kari Jordan, Vice Chairman	2005, Vice Chairman since 2005	1956	M.Sc. (Econ.)	5,448	800,000
Mikael Aminoff	2008	1951	M.Sc. (Forestry)	43,007	63,020
Arto Hiltunen	2007	1958	M.Sc. (Econ.)	1,170	
Leena Mörttinen	2016	1967	M.Sc. (Econ.), D.Soc.Sc.	2,550	
Juha Parpala	2009	1967	Agrologist	23,490	1,087
Timo Saukkonen	2007	1963	M.Sc. (Agriculture and Forestry), forester	88,173	4,600
Mikael Silvennoinen	2015	1956	M.Sc. (Econ.)	195	14,000
Antti Tukeva	2009	1953	Agronomist	41,504	3,479

In November 2016, the Supervisory Board of Metsäliitto Cooperative elected Jussi Linnaranta (M.Sc. (Agriculture and Forestry), agronomist) to be a new member of the Board of Directors as of 1 January 2017. Mikael Aminoff, who had been a member of the Board of Directors since 2008, resigned his Board membership pursuant to the age clause of the rules as of 1 January 2017.

More detailed information on the members of the Board of Directors is presented on pages 100–101 of this report and on Metsä Group's website under "Metsäliitto Cooperative governance and Metsä Group management."

INDEPENDENCE OF BOARD MEMBERS AND DIVERSITY OF THE BOARD OF THE DIRECTORS

According to the overall evaluation by the Board of Directors, all members of the Board, with the exception of the President and CEO, are independent of Metsäliitto Cooperative. Metsäliitto Cooperative does not have such significant owner-members as referred to in the Corporate Governance Code of whom the members of the Board of Directors would not be independent.

In December 2016, the Board of Directors of Metsäliitto Cooperative approved the principles concerning the diversity of the Board of Directors. According to the principles, the successful management of the tasks of the Board of Directors and its Committees requires a diverse composition, diverse competence and experience, as well as consideration of the personal qualities of individual members. Metsäliitto Cooperative has identified, in addition to a knowledge of the forest economy and industry sector, experience in demanding management tasks and an international operating environment as essential in terms of the Board of Director's diversity. Other factors identified as promoting diversity include Board members' mutually complementary educational backgrounds, management experience in various segments of business operations, and a diverse age and gender range. It is Metsäliitto Cooperative's goal that both genders are represented on the Board of Directors. The Supervisory Board's Nomination Committee observes these principles when preparing proposals on the composition of the Board of Directors presented to the Supervisory Board.

In 2016, the Board of Directors was composed of nine members, most of whom have an academic degree. The members of the Board of Directors have significant experience in demanding administrative and management duties from a number of sectors and international business operations. The Board was composed of eight men and one woman. Several Board members are distinguished members of society.

BOARD COMMITTEES

In order to ensure that the Board of Directors' tasks are effectively carried out, Metsäliitto Cooperative's Board of Directors has an Audit Committee and a Compensation Committee. The Committees do not have the authority to make decisions independently; the Board of Directors makes the decisions on matters based on the preparation of the Committees. The Board of Directors elects the members of the Committee from among its members.

Audit Committee

The Audit Committee assists the Board of Directors in performing its monitoring task. In this task, the Committee assesses and supervises matters related to financial reporting, auditing, internal audit and risk management in accordance with procedures approved for it. The Audit Committee comprises a minimum of three (3) members, majority of whom are independent of the company, elected by the Board of Directors from among its members annually. In addition, the President and CEO attends the meetings of the Audit Committee, except for the times when the Audit Committee wishes to convene without the presence of the executive management. The Audit Committee regularly reports to the Board of Directors on its operations and observations. In 2016, the Chairman of the Audit Committee was Mikael Silvennoinen and members were Martti Asunta and Arto Hiltunen.

Compensation Committee

The purpose of the Compensation Committee is to assist the Board of Directors in ensuring that Metsä Group has appropriate and competitive pay systems, and successor and development planning in accordance with the procedure approved by the Board of Directors. In its task, the Committee presents e.g. the terms of the employment relationship of the CEO and the President and CEO, pay systems for the senior management and key principles in the senior management's contracts to the Board of Directors to decide on. In addition, the Compensation Committee presents the annual targets for the senior management to the Board of Directors and monitors their realisation. Furthermore, the committee reviews matters related to the compensation systems of the senior management and proposes them for the Board of Directors to decide on.

The Board of Directors annually elects three (3) members to the Compensation Committee from among its members. The majority of the members of the Compensation Committee must be independent of Metsä Group, and a member of Metsä Group's executive management may not be a member of the Committee. The Compensation Committee regularly reports to the Board of Directors on its operations. In 2016, the Chairman of the Compensation Committee was Arto Hiltunen and members were Martti Asunta and Antti Tukeva.

Information on the meetings of the Board of Directors and its Committees in 2016

The Board of Directors convened 12 times in 2016. Board members Asunta, Jordan, Mörttinen, Parpala, Saukkonen, Silvennoinen and Tukeva attended all meetings. Aminoff and Hiltunen attended 11 meetings. The members' attendance rate was 98 per cent.

The Audit Committee convened four (4) times. Committee members Silvennoinen and Asunta attended all meetings. Hiltunen attended three (3) meetings. The attendance rate of the Audit Committee members was 92 per cent in 2016. The Compensation Committee convened seven (7) times, and the members' attendance rate was 100 per cent.

PRESIDENT AND CEO

Metsäliitto Cooperative has a CEO who also acts as the President and CEO of Metsä Group unless otherwise decided by the Supervisory Board. The President and CEO manages the operation of the entire Metsä Group. The President and CEO of Metsä Group, Kari Jordan, also acts as the CEO of Metsäliitto Cooperative. The President and CEO is elected by the Supervisory Board, and the Board of Directors approves the contract of the President and CEO.

President and CEO Kari Jordan (M.Sc. (Econ.), born 1956) has acted as the CEO of Metsäliitto Cooperative since 2004, and as the President and CEO of Metsä Group since 2006.

The President and CEO's duty is to manage the operational actions of Metsä Group in accordance with the law and regulations as well as the decisions and instructions of the administrative bodies. According to the rules, the President and CEO is in charge of arranging the running administration of the cooperative and supervises its financial administration.

More detailed information on the President and CEO is presented on page 100 of this report and on Metsä Group's website under "Metsäliitto Cooperative governance and Metsä Group management."

EXECUTIVE MANAGEMENT TEAM

Metsä Group has an Executive Management Team with the Group's President and CEO as its chairman. The Executive Management Team assists the President and CEO in the planning and operational management of business operations and prepares proposals for the Board of Directors, such as business strategies, budgets and significant investments. The Executive Management Team has no authority based on laws or rules. The Executive Management Team comprises Metsä Group's President and CEO, the CEOs of the subsidiaries, the Executive Vice Presidents of Metsä Wood and Metsä Forest, and the Group's CFO and Executive Vice President, Strategy.

The Executive Management Team convenes as summoned by the Chairman, primarily twice a month, and additionally whenever necessary.

In 2016, the Executive Management Team comprised Kari Jordan (President and CEO), Hannu Anttila (Executive Vice President, Strategy), Petri Helsky (CEO of Metsä Tissue Oy), Ilkka Hämälä (CEO of Metsä Fibre Oy), Mika Joukio (CEO of Metsä Board Corporation), Esa Kaikkonen (Executive Vice President, Metsä Wood), Juha Mäntylä (Executive Vice President, Metsä Forest) and Vesa-Pekka Takala (CFO).

METSÄ GROUP'S EXECUTIVE MANAGEMENT TEAM, 31 DECEMBER 2016

MEMBER OF THE EXECUTIVE MANAGEMENT TEAM (MEMBER OF THE EXECUTIVE MANAGEMENT TEAM SINCE)	POSITION AT METSÄ GROUP	YEAR OF BIRTH	EDUCATION	PARTICIPATION IN METSÄLIITTO COOPERATIVE (OWN, UNDER COMMON OWNERSHIP AND OWNED BY CONTROLLED CORPORATIONS) ON 31 DECEMBER 2016 (EUR)	SHARES IN METSÄ BOARD CORPORATION (OWN AND OWNED BY CORPORATIONS) ON 31 DECEMBER 2016 (B SHARE)
Kari Jordan (2005)	President and CEO	1956	M.Sc. (Econ.)	5,448	800,000
Hannu Anttila (2005)	Executive Vice President, Strategy	1955	M.Sc. (Econ.)		146,588
Petri Helsky (2015)	CEO of Metsä Tissue Corporation	1966	M.Sc. (Eng.)		
Ilkka Hämälä (2008)	CEO of Metsä Fibre Oy	1961	M.Sc. (Eng.)		103,551
Mika Joukio (2012)	CEO of Metsä Board Corporation	1964	M.Sc. (Eng.)	19,930	186,348
Esa Kaikkonen (2008)	Executive Vice President, Metsä Wood	1969	LL.M.		124,871
Juha Mäntylä (2008)	Executive Vice President, Metsä Forest	1961	M.Sc. (Agr. and For.)	239,450	86,694
Vesa-Pekka Takala (2010)	CFO	1966	M.Sc. (Econ.)		117,271

More detailed information on the members of the Executive Management Team is presented on pages 102–103 of this report and on Metsä Group's website under "Metsäliitto Cooperative governance and Metsä Group management."

INTERNAL CONTROL, INTERNAL AUDIT AND RISK MANAGEMENT

Profitable business requires that operations are monitored continuously and with adequate efficiency. Metsä Group's internal control covers the control of financial reporting, internal authorisation rights, investment follow-up and credit control. The functionality of internal control is evaluated by Metsä Group's internal audit. Internal control is carried out throughout the organisation. Internal control methods include internal guidelines and reporting systems that support control.

The principles, objectives and responsibilities of Metsä Group's internal control and the principles of internal audits are described below. Metsä Group's executive management, risk management director and internal audit are in charge of composing the principles mentioned above and the Board of Directors for ultimately ratifying them.

INTERNAL CONTROL

In Metsä Group, internal control covers financial reporting and other monitoring. Internal control is implemented by the Board of Directors, the Audit Committee and the executive management, as well as the entire personnel. Internal control refers to those management activities that seek to ensure:

- achievement of the goals and objectives set for Metsä Group;
- economical, appropriate and efficient use of resources;
- management of operational risks;
- reliable and correct financial and other management information;
- adherence to external regulations and internal policies;
- adherence to appropriate procedures related to customer relationships;
- sufficient security of operations, information and property;
- arrangement of adequate and suitable manual and ICT systems to support operations.

Internal control is divided into: (i) proactive control, such as defining Metsä Group's values and general operational and business principles, as well as its goals and strategy; (ii) daily control, such as general control and follow-up with operational systems and work guidelines, related to operational steering; and (iii) subsequent control, such as different management evaluations and inspections, comparisons and verifications, the aim of which is to ensure that the goals are met and that the agreed operational and control principles are followed. Metsä Group's corporate culture, governance and the approach to control together create the basis for the entire process of internal control.

INTERNAL MONITORING OF THE FINANCIAL REPORTING PROCESS, CREDIT CONTROL AND AUTHORISATION RIGHTS

The financial organisations of the business areas and the Group are responsible for financial reporting. The units and business areas report the financial figures each month. Business area controllers check the monthly performance of units from each business area and report them further to the Group financial administration. Business area profitability development and business risks and opportunities are discussed monthly at the Metsä Group Executive Management Team meetings attended by the senior management of Metsä Group and of each business area, as well as at financial management team meetings attended by the Group CFO and director of finance and the CFO of each business area, among others. The results are reported to the Board of Directors of Metsäliitto Cooperative each month. The results of the business areas are additionally reported to the Boards of Directors of their parent companies each month. Metsä Group's Controllers' Manual describes the reporting and control regulations and the reporting procedure in detail.

Credit control in Metsä Group is carried out by each business area in accordance with the Group credit control policy and the business area-specific credit control policy based on it. Credit control is carried out by the Group's central credit control organisation in cooperation with the management of the business areas.

Authorisation rights concerning expenses, significant contracts and investments have been continuously specified for different organisation levels, according to the decision-making order confirmed by the Board and the authority separately granted by the President and CEO and other management personnel.

Investment approval and follow-up are carried out by the business areas and the Group's financial administration according to the decision-making order and investment policy approved by the Board of Directors. The most significant investments are separately submitted for approval by the Executive Management Team and the Boards of the Group's parent company, and of the parent company of the business area.

INTERNAL AUDIT

Metsä Group's internal audit assists the Board of Directors in performing its supervisory task by assessing the level of internal audit maintained in order to attain the targets of Metsä Group's operation. In addition, the department supports the organisation by assessing and ensuring the functioning of the business processes, risk management and management and administration systems. In its audit work, the internal audit function complies with the internal audit guideline ratified by the Board of Directors of Metsäliitto Cooperative.

The internal audit unit operates under the supervision of the Group's President and CEO and the Audit Committee. An internal audit action plan is prepared for one calendar year at a time. The audit focuses on areas that have particular significance for the risk assessed and the Group's objectives at the time. The action plan will be reviewed with the management semi-annually, with regard to how up to date and appropriate it is.

The extent and coordination of auditing will be ensured by regular contact and flow of information with other internal control functions and auditors. Internal audit uses, if necessary, external outsourced services for temporary additional resourcing or performing assessment tasks that require special expertise. In this case, the external service providers act under the supervision of the head of the internal audit.

A report is written for each audit and distributed to the Group's President and CEO, the senior management of the affiliated group being audited and the management of the audited function or unit. The audit reports are submitted to the auditors for information and to the parties that are considered relevant based on the content of the report. The internal audit department composes a semi-annual summary report to the Audit Committee on the audits carried out, the most significant observations and the agreed measures. In addition, the semi-annual report states the most significant changes in carrying out the audits compared to the action plan and other main duties performed by the internal audit department, as well as any changes in resources. An annual report of the activity of the internal audit shall be composed for the Board of Directors.

RISK MANAGEMENT

Risk management is an essential part of Metsä Group's standard business planning and leadership. Risk management is part of daily decision-making, operations follow-up and internal control, and it promotes the objectives set by the company and ensures that they are met.

Linking business management effectively with risk management is based on the operational principles confirmed by Metsäliitto Cooperative's Board of Directors; the aim of the principles is to maintain risk management as a process that is well defined, understandable and sufficiently practical. Risks and their development are reported on a regular basis to the Board's Audit Committee. Centralised risk management also takes care of the coordination and competitive bidding for Metsä Group's insurance coverage.

The most crucial objective of risk management is to identify and evaluate those risks, threats and opportunities that may have an impact on the implementation of the strategy and on how short-term and long-term objectives are met. A separate risk review is also included in the most significant investment proposals.

The business areas regularly evaluate and monitor the risk environment and related changes as part of their annual and strategic planning. The risks identified and their means of control are reported to the company's management, Audit Committee and Board at least twice a year. Business risks also involve opportunities, and they can be utilised within the boundaries of the agreed risk limits. Conscious risk-taking decisions must always be based on an adequate evaluation of the risk-bearing capacity and the profit/loss potential, among other things.

RISK MANAGEMENT RESPONSIBILITIES

Risk management responsibilities in Metsä Group are divided as follows:

- The Board of Directors is responsible for Metsä Group's risk management and confirms the company's risk management policy.
- The Audit Committee evaluates the adequacy of Metsä Group's risk management and the essential risk areas and provides the Board with related proposals.
- The President and CEO and the members of the Executive Management Team are responsible for the specification and adoption of the risk management principles. They are also responsible for ensuring that the risks are taken into account in the company's planning processes and that risk reporting is adequate and appropriate.
- The Group's Risk Management Director is in charge of the development and coordination of the risk management process, performance of risk assessment and essential insurance decisions.
- Business areas and services functions identify and evaluate the essential risks related to their own areas of responsibility in their planning processes, prepare for them, take necessary preventive action and report on the risks as agreed.

RISK MANAGEMENT PROCESS

The essential elements of Metsä Group's risk management include implementing a comprehensive corporate risk management process that supports the entire business, protecting property and ensuring business continuity, Metsä Group's security and its continuous development, as well as crisis management and continuity and recovery plans. According to the risk management policy and principles, adequate risk management forms a necessary part of the preliminary review and implementation stages of projects that are financially or otherwise significant.

The tasks of risk management are to:

- ensure that all identified risks with an impact on personnel, customers, products, property, information assets, corporate image, corporate responsibility or operational capacity are controlled according to applicable laws and on the basis of best available information and financial aspects;
- ensure that Metsä Group's objectives are met;
- fulfil the expectations of stakeholders;
- protect property and ensure disruption-free business continuity;
- optimise the profit/loss possibility ratio;
- ensure the management of Metsä Group's overall risk exposure and minimise the overall risks.

The most significant risks and uncertainties that Metsä Group is aware of are described in the report of the Board of Directors.

INSIDER GUIDELINES

Metsä Group complies with the EU's market abuse regulation (Regulation (EU) No 596/2014 of the European Parliament ad of the Council; hereinafter referred to as "MAR"), securities market legislation, and the insider guidelines of the parent company Metsäliitto Cooperative and the subsidiary Metsä Board Corporation, prepared in accordance with rules and instructions drawn up by the Helsinki stock exchange. Metsä Group requires every employee to follow the insider regulations.

Pursuant to Article 14 of MAR and Chapter 51 of the Criminal Code of Finland, a person in possession of insider information may not: (i) engage or attempt to engage in insider dealing by acquiring or disposing of the company's financial instruments under their own or a third party's name; (ii) recommend that another person engage in insider dealing or induce another person to engage in insider dealing; or (iii) disclose inside information to another person unless this occurs as part of the normal performance of work, tasks or the profession. Insider guidelines aim to enable the people considered the company's insiders to hold shares in the company openly while maintaining public trust in trading and price formation with the company's securities. Metsä Group only recommends long-term investments and the use of purchase programmes. Insiders are provided with instructions and training at frequent intervals.

Following MAR's entry into force on 3 July 2016, Metsä Group companies no longer have public insiders, nor do they maintain permanent company-specific insider registers, but rather only project- or event-specific insider lists. The lists include information on persons participating in insider projects who are not allowed to trade the financial instruments of the company in question during the project.

Metsäliitto Cooperative has defined its executives as referred to in MAR to include the members of the Supervisory Board, the members of the Board of Directors, and the President and CEO. The executives in question and their related parties are obligated to inform the company and the Financial Supervisory Authority of their transactions in Metsäliitto Cooperative's financial instruments. Metsäliitto Cooperative will publish such transactions as stock exchange releases. The aforementioned persons are subject to a closed period of 30 calendar days prior to the publication of Metsä Group's interim reports and financial statements, during which time the executives may not trade Metsäliitto Cooperative's financial instruments. In addition to the executives subject to the disclosure obligation the company specifies such other persons who, in the course of their duties, participate in the preparation of interim reports and financial statements and may not trade Metsäliitto Cooperative's financial instruments during the closed period.

Metsä Board Corporation has defined its executives as referred to in MAR to include the members of the Board of Directors and the CEO. The persons in question and their related parties are obligated to inform the company and the Financial Supervisory Authority of their transactions concerning Metsä Board's shares and financial instruments, and Metsä Board will publish such transactions as stock exchange releases. The aforementioned persons are subject to a closed period of 30 calendar days prior to the publication of Metsä Group's interim reports and financial statements, during which time the managers may not trade Metsä Board's financial instruments. In addition to the executives subject to the disclosure obligation the company specifies such other persons who, in the course of their duties, participate in the preparation of interim reports and financial statements and may not trade Metsä Board's shares or financial instruments during the closed period.

RELATED PARTY TRANSACTIONS

Metsäliitto Cooperative and its Group companies assess and monitor related party transactions. Related parties are determined in accordance with International Accounting Standards (IAS 24), and they include, among others, all Group companies and the members of the Board of Directors and the Executive Management Team, as well as their immediate family members. Any conflicts of interest are taken into account in decision-making, and in accordance with the Corporate Governance Code, each Group company maintains a list of the members of its related parties.

AUDIT

According to the rules of Metsäliitto Cooperative, Metsäliitto Cooperative has one (1) auditor, which shall be an auditing firm authorised by the Finland Chamber of Commerce. The Representative Council elects the auditor to review the accounts for the year underway, and their task ends at the closure of the next annual meeting of the Representative Council. The task of the auditor is to audit the financial statements and accounting of the Group and the parent company and the administration of the parent company. The auditor provides a statutory auditor's report to the members of Metsäliitto Cooperative in connection with the annual financial statements and regularly reports on their observations to the Board of Directors and the management of Metsä Group.

In accordance with the resolution of the Representative Council meeting in the spring of 2016, Metsäliitto Cooperative's auditor for 2016 is KPMG Oy Ab, firm of authorised public accountants, with Raija-Leena Hankonen, APA, as main responsible auditor.

In 2016, companies that belong to Metsä Group paid a total of EUR 1,119,000 (EUR 1,146,000 in 2015) in audit fees to KPMG in Finland and internationally and a total of EUR 107,000 (EUR 128,000 in 2015) to other accounting firms. In addition, the KPMG chain was paid EUR 46,000 (EUR 54,000 in 2015) for services not related to the actual audit, and other auditing firms were paid EUR 252,000 (EUR 124,000 in 2015).

REMUNERATION STATEMENT 2016

This Remuneration Statement of Metsä Group on the remuneration of the Board of Directors, Supervisory Board and executive management has been issued pursuant to the Finnish Corporate Governance Code published by the Securities Market Association (www.cgfinland.fi/en/). The description of the decision-making procedure and principles concerning remuneration in this Remuneration Statement is updated when necessary, but always at least simultaneously with the Corporate Governance Statement. The Remuneration Report concerning the remuneration paid during the previous financial period is published at the same time.

DECISION-MAKING PROCEDURE CONCERNING REMUNERATION

Decisions on the remuneration of the Supervisory Board of the Group's parent company, Metsäliitto Cooperative, are made by the Representative Council.

Decisions on the remuneration of the members of Metsäliitto Cooperative's Board of Directors are made by the Supervisory Board on the basis of a proposal made by the Supervisory Board's Nomination Committee.

The Board of Directors decides on the remuneration and other financial benefits of the Group President and CEO and the members of the Group's Executive Management Team employed by Metsäliitto Cooperative, as well as on the principles of the bonus and share-based incentive scheme on the basis of the Compensation Committee's preparation. All Metsä Group companies comply with the same remuneration principles, and the remuneration criteria are approved by the Board of Directors of each subsidiary.

PRINCIPLES OF REMUNERATION

SUPERVISORY BOARD AND BOARD OF DIRECTORS

Pursuant to a decision of the Representative Council, the Chairman and Vice Chairman of the Supervisory Board are paid fixed monthly remuneration and meeting fees. Other members of the Supervisory Board are paid meeting fees. The members of the Supervisory Board are furthermore entitled to travel compensation pursuant to Metsä Group's travel policy.

Pursuant to the Supervisory Board's decision, each member of the Board of Directors is paid fixed monthly remuneration and meeting fees. Meeting fees are also paid for committee meetings. In addition, the chairpersons of the Board of Directors' Audit Committee and Compensation Committee are paid separate monthly compensation. The members of the Board of Directors are entitled to travel compensation according to Metsä Group's travel policy. The remuneration paid for Board work accumulates pension benefits.

The President and CEO is not paid a salary or remuneration for Board work. With the exception of the President and CEO, the members of the Board of Directors do not fall within the scope of Metsä Group's short- or long-term incentive schemes.

EXECUTIVE MANAGEMENT

The purpose of the remuneration system for Metsä Group's executive management is to remunerate the management in a fair and competitive manner for the performance of Metsä Group and for realising the strategy and development of the business operations. The remuneration system for executive management comprises a fixed monthly salary, a performance bonus determined on the basis of the task's effect on earnings ("short-term remuneration scheme"), a share-based incentive scheme ("long-term remuneration scheme") and the management's pension benefits.

PRESIDENT AND CEO

The terms and conditions of the President and CEO's service are defined in writing in the President and CEO's contract, the terms of which have been confirmed by the Board of Directors. The term of notice of the President and CEO is six (6) months. If the contract of the President and CEO is terminated by the Board, the President and CEO is entitled to severance pay corresponding to 24 months' total salary. No severance compensation is paid if the contract is terminated by the President and CEO.

The President and CEO's monthly salary is agreed in the President and CEO's contract, and it includes company housing, a company car, a chauffeur and other fringe benefits of a minor nature. Pursuant to the President and CEO's contract, the Board of Directors may decide that the President and CEO receives a bonus, based on defined financial criteria, corresponding to nine (9) months' salary.

The President and CEO falls within the scope of the Finnish Employees' Pensions Act. It provides pension security based on the period of service and earned income as provided in the Act. In the Finnish earnings-related pension system, basic salary, remuneration and taxable fringe benefits are included in earned income, whereas income from options and share-based incentive systems for management are not. The President and CEO has a separate pension agreement with a retirement age of 60. The Board of Directors of Metsäliitto Cooperative and Kari Jordan, President and CEO, agreed in May 2015 that Jordan will continue in his position beyond 9 March 2016, when he reached the age of retirement determined in his contract. The President and CEO's maximum level of pension is 60 per cent of the total salary under the Employees' Pensions Act, calculated on the basis of the five-year period preceding retirement.

OTHER EXECUTIVES

The other members of Metsä Group's Executive Management Team also have written manager contracts. The period of notice applicable to members of the Executive Management Team is six (6) months, and the members are entitled to severance pay equalling 6–12 months' salary if their contract is terminated on grounds not related to the executive.

In addition to the monthly salary paid to the other members of Metsä Group's Executive Management Team, they may also be paid a bonus specific to each Group company, to be determined separately. The maximum bonus paid to members of the Executive Management Team can vary, according to the task's effect on earnings, between the amounts corresponding to six (6) or seven (7) months' salary for that person. The criteria for the bonus system are the performance targets at Group level and in the executives' own areas of responsibility.

The other members of the Executive Management Team fall within the scope of the Finnish Employees' Pensions Act. It provides pension security based on the period of service and earned income as provided in the Act. Depending on the date on which the manager contract began, some members of Metsä Group's Executive Management Team have separate benefit-based pension insurance policies, with a retirement age of 62. According to the pension insurance, the level of pension is a maximum of 60 per cent of the total salary under the Employees' Pensions Act, calculated on the basis of the five-year period preceding retirement. If their employment relationship with Metsä Group ends before retirement age, members of the Executive Management Team are entitled to a paid-up policy. At the end of 2016, six members of the Executive Management Team had separate pension arrangements.

LONG-TERM SHARE-BASED REMUNERATION

Share-based incentive scheme for 2014–2018: The Board of Directors of Metsäliitto Cooperative decided in February 2014 on a share-based incentive scheme for Metsä Group's executives for the years 2014–2018. The share-based incentive scheme has three earning periods of three years each: the calendar years 2014–2016, 2015–2017 and 2016–2018.

The Board of Directors of Metsäliitto Cooperative determines the executives who belong to the target group and their maximum remuneration at the beginning of every three-year earning period (the maximum remuneration is expressed as a number of shares). Attaining the targets established for an earning period determines the proportion of the maximum remuneration that will be paid to the executives. The amount of the remuneration paid annually may be limited. Any remuneration will be paid partially in shares in Metsä Board Corporation and partially in cash. The remuneration will, as a rule, be paid in the spring following the earning period. Each earning period will be followed by a subsequent two-year commitment period during which the participant is not entitled to transfer or dispose of the shares. If the executive's employment contract is terminated or cancelled by the Group company or the executive during the commitment period, the Board of Directors is entitled to require the executive to return the share-based incentive earned for the earning period, without consideration.

Any remuneration from each earning period (2014–2016, 2015–2017 and 2016–2018) is based on Metsä Group's return on capital employed (ROCE), earnings before interest and taxes (EBIT) and equity ratio.

The remuneration earned for the earning period 2014–2016 is detailed below in the section "Remuneration Report 2016".

The remuneration for the earning period 2015–2017 equates in value to a maximum of approximately 3 million Metsä Board B shares, including the portion payable in cash. At the end of the 2016 earning period, the scheme covers 50 persons, including all the members of Metsä Group's Executive Management Team.

The remuneration for the earning period 2016–2018 equates in value to a maximum of approximately 2.5 million Metsä Board B shares, including the portion payable in cash. At the end of the 2016 earning period, the scheme covers 71 persons, including all the members of Metsä Group's Executive Management Team.

Share-based incentive scheme for 2017–2021: The Board of Directors of Metsäliitto Cooperative decided in January 2017 to extend the share-based incentive scheme for Metsä Group's executives to the years 2017–2021. The scheme aims to integrate the goals of the owners and the management to increase the Group's value, secure the management's commitment to the implementation of the common strategy and offer the management a competitive remuneration system based on shareholdings.

The performance-based share-based incentive scheme for 2017–2021 has three earning periods: the calendar years 2017–2019, 2018–2020 and 2019–2021. The Board of Directors determines the executives who belong to the target group and their maximum remuneration at the beginning of every three-year earning period (the maximum remuneration is expressed as a number of shares). The earning criteria for each earning period and the targets set for them at the beginning of each earning period are decided by the Board of Directors. The potential remuneration for the earning period 2017–2019 will be based on the development of Metsä Group's return on capital employed (ROCE) as defined by the Board of Directors. The Board is furthermore entitled to cut, partly or in full, the remuneration based on the system, provided that certain criteria related to the development of the Group's result and equity ratio are not met. In addition, the Board may set a maximum amount for the remuneration paid to those participating in the incentive scheme from one or more of Metsä Group's incentive schemes. If the maximum amount set for the remunerations paid is exceeded, the remuneration may be cut with regard to the part that exceeds the maximum amount.

Each earning period will be followed by a subsequent, approximately two-year commitment period during which the participant is not entitled to transfer or dispose of the shares. If the executive's employment contract is terminated or cancelled by the Group company or the executive during the commitment period, the Board of Directors is entitled to require the executive to return the share-based incentive earned for the earning period, without consideration. The possible remuneration for the earning period 2017–2019 will be paid in the spring of 2020 as Metsä Board Corporation's B shares.

In the 2017–2019 earning period, the system's target group consists of 85 people, including the members of Metsä Group's Executive Management Team. The remuneration to be paid on the basis of the system for the earning period 2017–2019 equates in value to a maximum of a total of 2.8 million Metsä Board Corporation's B shares, including the portion payable in cash. In addition, the remuneration includes a cash portion, which covers the taxes and tax-like charges resulting from the remuneration to the participants.

REMUNERATION REPORT 2016

SUPERVISORY BOARD

The Annual General Meeting of the Representative Council in spring 2016 decided to keep the remuneration of the Supervisory Board members unchanged in 2016. In 2016, the monthly remuneration of the Chairman of the Supervisory Board was EUR 3,900 and the meeting fee EUR 700 per meeting. The Chairman was paid a total of EUR 64,850 (EUR 59,000 in 2015) in salaries and meeting fees. The monthly remuneration of the Vice Chairman of the Supervisory Board was EUR 1,700 and the meeting fee EUR 700 per meeting in 2016. The Vice Chairman was paid a total of EUR 27,350 (EUR 28,400 in 2015) in salaries and meeting fees. The other members were paid EUR 700 per meeting, totalling EUR 114,800 (EUR 108,600 in 2015). Members of the Supervisory Board were paid a total of EUR 207,000 (EUR 196,000 in 2015) in salaries and fees in 2016.

BOARD OF DIRECTORS

At its meeting in November 2015, the Supervisory Board decided to raise the meeting fee payable to the members of the Board of Directors from EUR 600 to EUR 700. In other respects, the remuneration of the members of the Board of Directors remained unchanged in 2016. In 2016, the monthly remuneration of the Chairman of the Board of Directors was EUR 6,700 and the meeting fee EUR 700 per meeting. The Chairman was paid a total of EUR 96,540 (EUR 94,540 in 2015) in salaries and meeting fees. The monthly remuneration of the other members was EUR 3,700 and the meeting fee EUR 700 per meeting in 2016. The chairperson of the Audit Committee was paid separate monthly compensation of EUR 1,200. At its meeting in May 2016, the Supervisory Board also decided on EUR 1,000 in monthly compensation to be paid to the chairperson of the Compensation Committee. The other members were paid a total of EUR 405,550 (EUR 387,700 in 2015) in salaries and meeting fees. The members of the Board of Directors were paid a total of EUR 502,090 (EUR 482,240 in 2015) in salaries and fees in 2016. The aforementioned fees paid for Board work accumulate pension benefits. Metsä Group's President and CEO was not paid a separate salary or remuneration for Board work.

PRESIDENT AND CEO

Metsä Group companies paid President and CEO Kari Jordan a total of EUR 5,023,867 (EUR 3,955,430 in 2015) in salaries, remuneration and other benefits in 2016. The salary including fringe benefits paid by Metsäliitto Cooperative to the President and CEO in 2016 amounted to EUR 1,122,530 (EUR 1,111,432 in 2015), and the bonus and share-based incentive to EUR 3,776,633 (EUR 2,721,694 in 2015). The other Group companies paid the President and CEO a total of EUR 124,704 (EUR 122,304 in 2015) in salaries, remuneration and other benefits. In 2016, the annual contribution of the President and CEO's defined benefit pension plan was 3.0 per cent (8.5 per cent in 2015) of the total salary and remuneration paid by Metsä Group companies to the President and CEO.

OTHER EXECUTIVES

In 2016, Metsä Group companies paid to the members of the Executive Management Team (other than the President and CEO) a total of EUR 8,078,831 (EUR 6,344,338 in 2015) in salaries and remuneration, of which EUR 2,801,726 consisted of salary including fringe benefits, and EUR 5,277,104 of bonuses and share-based incentives. In addition to the President and CEO, six members had benefit-based pension insurance policies, the annual contributions of which totalled 11.78 per cent of the total salaries and remuneration paid to members of the Executive Management Team of Metsä Group companies (other than the President and CEO) in 2016.

LONG-TERM SHARE-BASED REMUNERATION

The remuneration for the 2014–2016 earning period of the share-based incentive scheme paid to a total of 48 persons (including all members of Metsä Group's Executive Management Team) equated in value to approximately 3.6 million Metsä Board B shares, including the portion payable in cash. President and CEO Kari Jordan's share of the remuneration corresponded to the value of approximately 0.6 million shares, whereas the share of the other members of the Executive Management Team corresponded to the value of approximately 0.9 million shares.

METSÄLIITTO COOPERATIVE'S REPRESENTATIVE COUNCIL

Members of Metsäliitto Cooperative elect a Representative Council from among the members every four years by mail, telecommunications or by some other technical device. The Representative Council is the highest decision-making body.

Anttila Juha	Farmer	Mänttä-Vilppula
Haikkonen Aila	Master of Science, Agricultural Entrepreneur	Pori
Hanhimäki Jorma	Farmer	Kauhava
Hiekka Matti	Farmer	Ikaalinen
Hiltunen Martti	Account Manager	Kaavi
Häppölä Heikki	Farmer	Orimattila
Härkönen Matti J.	Forestry Entrepreneur	Sotkamo
Isomuotia Harri	Master of Science (For.)	Hämeenkyrö
Jänkälä Aarne	Farmer	Rovaniemi
Kallio Maarit	Farmer, Agrologist	Sastamala
Kankaanpää Antti	Rural Entrepreneur	Orivesi
Karhunen Asko	Farmer	Suonenjoki
Ketola Jyrki	Director, Forestry Entrepreneur	Helsinki
Kivenmäki Ari	Agrologist, Farmer	Kuortane
Kiviranta Esko	Farmer, Trained on the Bench	Sauvo
Kontinen Kati	Research Manager, Licentiate of Science (Agr. and For.)	Ristiina
Koskinen Jaakko	Farming Entrepreneur	Hamina
Kurtti Aulis	Forest Owner	Kuusamo
Könönen Katri	Farmer	Tohmajärvi
Laitinen Markku	Farming and Forestry Entrepreneur	Kangasniemi
Lauttia Petri	Farmer	Hämeenlinna
Lillandt Anders	Farmer	Kristiinankaupunki
Lunttila Tommi	Farmer	Äänekoski
Långgård Tomas	Farmer	Maalahti
Minkkinen Timo	Forestry Entrepreneur	Viitasaari
Moilanen Heli	Public Health Nurse	Paltamo
Morri Tiina	Forestry Entrepreneur	Virrat
Mäntylä Arto	Farmer	Kurikka
Nevavuori Jari	Product Manager, Farmer	Uusikaupunki
Niemelä Henry	Farmer, Forest Machine Entrepreneur	Lapua
Nybacka Mika	Forestry Entrepreneur	Haapajärvi
Nylund Mats	Farmer, Member of Parliament	Pedersören kunta
Oinas-Panuma Eero	Reindeer Herder, Rural Entrepereneur	Pudasjärvi
Orjala Jari	Farming Entrepreneur, Lecturer	Kannus
Pekonen Kari	Farming Entrepreneur	Parikkala
Pietilä Juho	Farmer	Loimaa
Purhonen Petri	Farmer	Enonkoski
Pylkkänen Ari	Forestry Engineer	Rantasalmi
Raininko Tuomo	Farming and Forestry Entrepreneur	Kankaanpää
Rautiola Antti	Farmer	Oulainen
Ruusuvirta Jukka	Farmer	Kivijärvi
Savola Mikko	Member of Parliament	Ähtäri
Savolainen Jyrki	Farmer	Laukaa
Sipola Atso	Farmer	Oulu
Sirviö Antti	Rural Entrepreneur	Kemijärvi
Soronen Mauno	Vicar	Haapavesi
Säynätjoki Ilkka	Farmer	Kuhmoinen
Tanskanen Paavo	Farmer	Polvijärvi
Tasanen Terho	Machine Entrepreneur, Farmer	Nousiainen
Tikka Antti-Lassi	Quality Manager, Farming Entrepreneur	Kiuruvesi
Tolvanen Matti	Forest Technician, Farming and Forest Entrepreneur	Varkaus
Tuominen Pasi	Agrologist, Farmer	Eura
Tyskas Kim	Farming entrepreneur, Salesman	Lapinjärvi
Uotila Kirsi	Forestry Entrepreneur, Technology Student	Helsinki
Uusitalo Ilkka	Farmer	Salo
Vanhatalo Tuula	Bachelor of Science (Agr. and For.)	Hyvinkää
Virnala Jukka	Entrepreneur	Kurikka
Wasberg Johan	Forestry Engineer	Mustasaari
Ylimartimo Aatto	Farmer	Tervola
Ylä-Outinen Päivi	Farmer	Lappeenranta

METSÄLIITTO COOPERATIVE'S SUPERVISORY BOARD

The Supervisory Board's duty is to supervise the appropriate management of Metsäliitto Cooperative in compliance with the relevant regulations, the Supervisory Board's decisions, and in the interests of Metsäliitto Cooperative. It also supervises the implementation of the Representative Council's decisions and elects Metsäliitto Cooperative's Board of Directors.

CHAIRMAN		
Järvinen Hannu	Agronomist	Janakkala
VICE CHAIRMAN		
Paajanen Juha	Farming and Forestry Entrepreneur	Savonlinna
MEMBERS		
Alatalo Matti	Farmer	Soini
Björkenheim Johan	Farmer	Isokyrö
Brandt Mats	Agrologist	Kokkola
Ekman Eero	Rural Secretary	Paimio
Hatva Teuvo	Forestry Entrepreneur	Kajaani
Haukilahti Tapani	Farmer	Veteli
Hirvonen Ville	Agrologist	Rääkkylä
Isotalo Antti	Farmer	Kauhava
Junttila Risto	Executive Manager	Kemijärvi
Jäärni Antti	Farmer	Simo
Kinnunen Esko	Farmer	Pieksämäki
Kulmala Airi	Specialist, Farmer	Nousiainen
Kuutti Petri	Farmer	Kouvola
Kässi Timo	Agrologist	Uurainen
Laineenoja Jari	Agronomist, Financing Manager	Huittinen
Laitinen Pirkko	Agrologist	Utajärvi
Lappalainen Jukka	Farmer	Pielavesi
Lindqvist Hans-Erik	Master of Science (Agr. and For.), Mayor	Närpiö
Malmström Mårten	Farmer	Espoo
Mikkola Antti-Jussi	Farmer	Pälkäne
Nikula Timo	Agrologist	Laitila
Siponen Ahti Tapani	Master of Social Sciences	Kiuruvesi
Tolonen Mikko	Farmer	Suomussalmi
Turtiainen Matti	Master of Science (Agr. and For.), Agronomist	Savonlinna
Vanhatalo Jukka	Farmer	Siikainen
Wasström Anders	Farming Entrepreneur	Raasepori
Äijö Matti	Forestry Engineer	Ikaalinen
PERSONNEL REPRESENTATIVES		
Keskinen Matti	Forest Specialist, Wood trade and Forestry services	Lahti
Koljonen Timo	Solution Owner	Helsinki
Naukkarinen Janne	Chief Shop Steward	Savonlinna
Tuhkanen Marko	Maintenance Supervisor Electric and Automation	Äänekoski

METSÄLIITTO COOPERATIVE'S BOARD OF DIRECTORS

MARTTI ASUNTA

b. 1955
M.Sc (Forestry)
Metsäneuvos
(Finnish honorary title)

Member of the Board since 2005, Chairman since 2008

Metsä Board Corporation, Vice Chairman of the Board (2008–)
Metsä Fibre Oy, Member of the Board (2008–)
Metsä Tissue Corporation, Member of the Board (2008–)
Pellervo-Seura ry, Member of the Board (2008–), Chairman of the Board (2010–)
Pellervo-Media Oy, Chairman of the Board (2013–)
Finnish Agri-Agency for Food and Forest Development, Member of the Board (2012–)
Cooperative Council of Finland, Chairman (2013–)
Kiinteistötoimisto Martti Asunta LKV, Entrepreneur (1995–2015)
Huoneistokeskus Oy, Branch Manager (2003–2005)
Municipality of Kuru, Project Manager (2001–2003)
Suomen Yhdyspankki, Bank Manager (1993–1995)
Tampere Regional Savings Bank (SSP), Area Manager (1988–1993)
Federation of Forest Management Associations in Pohjois-Häme, Field Manager, Executive Manager (1982–1988)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: EUR 72,870

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 53,744 (B-share)

KARI JORDAN

b. 1956
M.Sc (Economy)
Vuorineuvos
(Finnish honorary title)

Member and Vice Chairman of the Board since 2005

Metsä Group, President and CEO (2006–)
Metsäliitto Cooperative, CEO (2004–)
Metsä Board Corporation, Chairman of the Board (2005–)
Metsä Fibre Oy, Member of the Board (2004–), Chairman (2006–)
Metsä Tissue Corporation, Chairman of the Board (2004–)
Central Chamber of Commerce of Finland, Member of the Board (2007–2011), Chairman (2012–2016)
Confederation of Finnish Industries EK, Member of the Board (2005–2016), Vice Chairman (2009–2011, 2013–2014), Member of the Board's Working Committee (2015–2016)
Finnish Forest Industries Federation, Chairman of the Board and the Board's Working Committee (2009–2011), Vice Chairman of the Board and Board's Working Committee (2005–2009, 2014–), Member of the Board (2012–2013)
Varma Mutual Pension Insurance Company, Member of the Supervisory Board (2006–2012), Vice Chairman of the Board (2013), Chairman of the Board (2014), Chairman of the Supervisory Board (2015–)
Holds several positions of trust in foundations and non-profit associations

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: EUR 5,448

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 800,000 (B-share)

ARTO HILTUNEN

b. 1958
M.Sc (Economy)

Member of the Board since 2007

Metsä Tissue Corporation, Member of the Board (2010–)
SOK Corporation, CEO and Chairman of the Board (2007–2009)
Cooperative Society Elanto, Managing Director, (2004–2007), Chairman of the Board (2005–2007)
Cooperative Elanto, following the merger decision, Managing Director (2003)
Helsinki Cooperative Society HOK, Managing Director, Chairman of the Board (1998–2003)
Veho Group Oy AB, Member of the Board (2011–), Chairman of the Board (2012–)
Talent Vectia Oy, Member of the Board (2010–2015)
SRV Group Plc, Member of the Board (2010–)
Posti Corporation, Member of the Board (2010–), Chairman (2011–)
Jenny and Antti Wihuri Foundation, Member of the Board of (2010–2015), Vice Chairman (2016–)
Yliopiston Apteekki, Member of the Board (2015–)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: EUR 1,170

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: no ownership

JUSSI LINNARANTA

b. 1972
M.Sc (Agriculture and Forestry)
Agronomist

Member of the Board since 2017

Metsäliitto Cooperative, Member of the Supervisory Board (2004–2016)
Agricultural entrepreneur (2001–)
Thermal entrepreneur (2003–)
Ministry of Agriculture and Forestry, Information and Research Centre, various positions (1997–2007)
Pohjois-Savo Cooperative bank, Member of the Representative Council (2014–)
The Central Union of Agricultural Producers and Forest Owners (MTK), Member of the Energy Committee (2007–2008, 2014–2016)
Kalakukko 2006 ry, Member of the LEADER Operational Committee and the Board (2001–2006)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: 78,350 euros

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: No ownership

LEENA MÖRTTINEN

b. 1967
M.Sc (Economy)
Doctor of Social Sciences (Econ.)

Member of the Board since 2016

Finnish Family Firms Association, Managing director (2015–)
Confederation of Finnish Industries, Director, Competence and Growth (2012–2015)
Nordea, various management positions (2006–2012)
Bank of Finland, Financial Stability and Statistics department, Advisor (2005–2006)
European Central Bank, Senior Economist (2002–2005)
Bank of Finland, Financial Stability department, Economist (1999–2002)
University of Helsinki, Researcher (1995–1999)
Kansallisteatterin Säätiö Member of the Board (2015–)
University of Oulu, Member of Investment Committee (2013–)
Scout Foundation, Member of the Supervisory Board (2011–)
Sibelius Academy Foundation, Member of the Board (2015–2016)
Finnish Biathlon Association, Vice Chairman of the Board (2013–2016)
LähiTapiola Mutual Pension Insurance Company, Member of the Board (2013)
Finnish Industry Investment Ltd, Member of the Board (2012–2013)
University of Oulu, Vice Chairman of the Board (2010–2013)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: EUR 2,550

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: no ownership

JUHA PARPALA

b. 1967
Agrologist

Member of the Board since 2009

Farmer (1994–)
Metsäliitto Cooperative, District Committee (1997–), Member of the Supervisory Board (2001–2008)
Simon Turvejaloste Oy, Member of the Board (2011–)
Vapo Oy, Member of the Supervisory Board (2009)
Osuuskunta Pohjolan Maito, Member of the Board (2006–2007)
Parish of Simo, Member of the Church Council (2015–)
Municipality of Simo, positions of trust

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: EUR 23,490

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 1,087 (B-share)

TIMO SAUKKONEN

b. 1963
M.Sc (Agriculture and Forestry)

Member of the Board since 2007

Farmer (1992–)
Metsäliitto Cooperative, various positions of trust (1995–)
Delegation of Pellervo, Confederation of Finnish Cooperatives, Member (2008–)
Simpele Cooperative Bank, Member of the Supervisory Board (2000–), Chairman (2011–)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: EUR 88,173

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 4,600 (B-share)

MIKAEL SILVENNOINEN

b. 1956
M.Sc (Economy)

Member of the Board since 2015

IMS Talent Oy, Chairman of the Board (2013–)
Pohjola Bank plc, Managing Director (1997–2013)
Pohjola Bank plc, various management positions (1989–1997)
Wärtsilä Group, various management positions (1983–1989)
Konecranes Plc, Member of the Board (2008–2015)
Orion Corporation, Member of the Board (2014–)
Hartwall Capital Ltd, Member of the Board (2014–)
Pontos Group, Member of the Board (2014–)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: EUR 195

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 14,000 (B-share)

ANTTI TUKEVA

b. 1953
Agronomist
Maanviljelysneuvos (Finnish honorary title)

Member of the Board since 2009

Osuuskunta Maitosuomi, CEO, Member of the Board (2007–2015)
Osuuskunta Normilk, CEO (1994–2015)
Osuuskunta Maitojaloste, CEO, Member of the Board (1991–2006)
Arola and Vaara farms, Farming and forestry (1985–)
LähiTapiola Southern Ostrobothnia, Member of the Board (2012–2015)
Lakeus Local Insurance Mutual Company, Vice Chairman of the Board (2006–2012)
Several positions of trust in agrifood organisations (1985–2015)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: EUR 41,504

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 3,479 (B-share)

METSÄ GROUP EXECUTIVE MANAGEMENT TEAM

KARI JORDAN

b. 1956
M.Sc (Economy)
Vuorineuvos
(Finnish honorary title)

President and CEO, Metsä Group
Member of the Executive Management Team since 2005

Metsä Group, President and CEO (2006–)
Metsäliitto Cooperative, CEO (2004–), Vice Chairman of the Board (2005–)
Metsä Board Corporation, Chairman of the Board (2005–)
Metsä Fibre Oy, Member of the Board (2004–), Chairman of the Board (2006–)
Metsä Tissue Corporation, Chairman of the Board (2004–)
Central Chamber of Commerce of Finland, Member of the Board (2007–2011), Chairman of the Board (2012–2016)
Confederation of Finnish Industries EK, Member of the Board (2005–2016), Vice Chairman (2009–2011, 2013–2014), Member of the Board's Working Committee (2015–2016)
Finnish Forest Industries Federation, Chairman of the Board and the Board's Working Committee (2009–2011), Vice Chairman of the Board and Board's Working Committee (2005–2009, 2014–), Member of the Board (2012–2013)
Varma Mutual Pension Insurance Company, Member of the Supervisory Board (2006–2012), Vice Chairman of the Board (2013), Chairman of the Board (2014), Chairman of the Supervisory Board (2015–)
Holds several positions of trust in foundations and non-profit associations

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: EUR 5,448

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 800,000 (B-share)

HANNU ANTTILA

b. 1955
M.Sc (Economy)

Executive Vice President, Strategy, Metsä Group
Member of the Executive Management Team since 2005

Metsä Group, Executive Vice President, Strategy (2006–28.2.2017)
M-real Corporation (now Metsä Board Corporation), CEO (2005–2006)
Metsäliitto Group, Chief Financial Officer (2003–2004)
Metsä Tissue Corporation, CEO, (1998–2003)
Oy Metsä-Botnia Ab and **Metsä Serla Corporation** (now Metsä Fibre Oy and Metsä Board Corporation), Various management positions
Metsä Tissue Corporation, Member of the Board (2004–)
Metsä Fibre Oy, Member of the Board (2004–)
Metsä Group Financial Services Ltd., Chairman of the Board (2010–2013)
Pohjolan Voima Oy, Member of the Board (2009–)
Tapiola Mutual Life Assurance Company, Member of the Advisory Board (2011–)
Teollisuuden Voima Oyj, Member of the Board (2007–)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: no ownership

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 146,588 (B-share)

PETRI HELSKY

b. 1966
M.Sc (Chemical Engineering)
M.Sc (Economy)

CEO, Metsä Tissue Corporation
Member of the Executive Management Team since 2015

Metsä Tissue Corporation, CEO (2015–)
Kemira Oyj, President, (Paper and Region APAC), Member of the management team (2008–2015)
Kemira ChemSolutions, Vice President (2007–2008)
Solvay Group, several management positions (1993–2007)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: no ownership

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: no ownership

ILKKA HÄMÄLÄ

b. 1961
M.Sc (Engineering)

CEO, Metsä Fibre Oy
Member of the Executive Management Team since 2008

Metsä Fibre Oy, CEO (2008–)
Oy Metsä-Botnia Ab (now Metsä Fibre Oy), various management positions in since 1988
Finnish Forest Industries Federation, Vice Chairman of the Board and the Board's Working Committee (2012–2013), Member of the Board (2014–), Chairman of the Labour Market Committee (2017–)
Pohjolan Voima Oy, Deputy Member of the Board (2009–)
Ilmarinen Mutual Pension Insurance Company, Member of the Supervisory Board (2009–)
Delegation of Excellence Finland, Member (2008–)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: no ownership

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 103,551 (B-share)

MIKA JOUKIO

b. 1964
M.Sc (Technology)
MBA

CEO, Metsä Board Corporation
Member of the Executive Management Team since 2012

Metsä Board Corporation, CEO (2014–)
Metsä Tissue Corporation, CEO (2012–2014)
M-real Corporation (now Metsä Board Corporation), Head of Consumer Packaging (2006–2012)
Metsä-Serla Corporation and **M-real Corporation** (now Metsä Board Corporation), various positions in management since 1990

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: 19,930

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 186,348 (B-share)

ESA KAIKKONEN

b. 1969
LL.M

Executive Vice President, Metsä Wood
Executive Vice President, Strategy, Metsä Group as of 1 March 2017
Member of the Executive Management Team since 2008

Metsä Wood, Executive Vice President (2013–)
Executive Vice President, Strategy, Metsä Group (1 March 2017–)
Metsä Group, General Counsel (2003–2013)
Metsäliitto Group, Legal counsel (2000–2003)
Metsä-Serla Corporation, (now Metsä Board Corporation), Legal counsel (1998–2000)
Federation of the Finnish Woodworking Industries, Chairman of the Board (2015–)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: no ownership

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 124,871 (B-share)

JUHA MÄNTYLÄ

b. 1961
M.Sc (Agriculture and Forestry)
Forester
Metsäneuvos
(Finnish honorary title)

Executive Vice President, Metsä Forest
Member of the Executive Management Team since 2008

Metsä Forest, Executive Vice President (2008–)
Metsäliitto Cooperative, various positions in since 1988
Metsä Fibre Oy, Member of the Board (2008–)
Finsilva Oyj, Member of the Board (2007–)
Etelä-Pohjanmaa Forestry Centre and Enso Forest Development Ltd, previously various positions
CEPI (Confederation of European Paper Industries), Member of Forest Committee (2012–2014)
Swedish Forest Industries Federation, Member of the Forest Committee (2011–)
Finnish Forest Industries Federation, Chairman of the Forest Committee (2010–)
Finnish Forest Foundation, Chairman of the Board (2010–2014), Member of the Board (2015–)
Natural Resources Institute Finland, Chairman of the Board (2015–)
Pellervo Economic Research, Member of the Board (2011–2015)
Suomen Puukauppa Oy, Member of the Board (2016–)

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: 239,450

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 86,694 (B-share)

VESA-PEKKA TAKALA

b. 1966
M.Sc (Enocomy)

Chief Financial Officer, Metsä Group
Member of the Executive Management Team since 2010

Metsä Group, Chief Financial Officer (2010–)
Metsä Group Treasury Oy, Chairman of the Board (2013-)
Outotec Group, Chief Financial Officer and Director of Finance (2006–2010), member of the management team, deputy to the CEO
Outokumpu Group, Chief Financial Officer (2001–2006), Member of the management team (2005)
Outokumpu Group, previously management positions in the financial administration

Participation (own, under common ownership and by controlled corporations) in Metsäliitto Cooperative on 31 December 2016: no ownership

Shares (own and by controlled corporations) in Metsä Board Corporation on 31 December 2016: 117,271 (B-share)

FINANCIAL REPORTING

Metsä Group does not comment on the Group's financial performance or similar matters from the close of each reporting period up to the publication of the report for the period, apart from substantial changes in the market conditions or correcting incorrect information.

FINANCIAL INFORMATION

The financial reports are published in Finnish and English. Annual Brochures and other publications can be ordered by sending e-mail to communications@metsagroup.com and found on the Group's website at www.metsagroup.com. Stock exchange releases, interim reports and financial statements are updated on Metsä Group's website in real time. In addition, the website presents the Group's products, customers, sales network, environmental matters and organisation. You can order Metsä Group's publications and provide feedback on the website. Metsä Group's general e-mail address is communications@metsagroup.com.

Metsä Group aims to offer company-related information that is up to date and easy to utilise on a regular and open basis. The company aims to provide reliable and truthful information on its operations and financial position and short-term outlook. All investors are treated equally.

Metsä Group publishes its financial reports in 2017 as follows:

SILENT PERIOD	FINANCIAL REPORT	PUBLISHING DATE
1.1.–2.2.2017	2016 Financial Statements	Thu 2.2.2017
1.4.–4.5.2017	Interim report January–March	Thu 4.5.2017
1.7.–3.8.2017	Half-year Financial Report	Thu 3.8.2017
1.10.–1.11.2017	Interim report January–September	Wed 1.11.2017

Make the most of Metsä

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PEFC/02-31-92