

ANNUAL REPORT 2013

# MORE WITH BIOFORE

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UPM does not publish a separate environmental and corporate responsibility report but has integrated the contents into this annual report. Various highlights from the year 2013 can be found under the sections for each business area. The GRI content index is on pages 51–52. To find out more about UPM's responsibility agenda, please visit [www.upm.com/responsibility](http://www.upm.com/responsibility).

# UPM – The Biofore Company

UPM integrates bio and forest industries and builds a sustainable future across six business areas.

In 2013, UPM's sales totalled EUR 10.1 billion. UPM has production plants in 14 countries and a global sales network. UPM employs approximately 21,000 employees worldwide. UPM shares are listed on the NASDAQ OMX Helsinki stock exchange. At the end of 2013, UPM had 94,568 shareholders.

### SALES, EUR MILLION

2013	10,054	▼	-4%
2012	10,492		

### OPERATING PROFIT, EUR MILLION\*)

2013	683	▲	+23%
2012	556		

\*) excluding special items

### MARKET CAPITALISATION, EUR MILLION

2013	6,497	▲	+40%
2012	4,633		

## UPM Biorefining

UPM Biorefining consists of pulp, timber and biofuels businesses and plantation operations. UPM has four modern pulp mills in Finland and Uruguay and four sawmills in Finland. UPM's biorefinery for producing wood-based renewable diesel will start up in summer 2014 in Finland. The main pulp customers are producers of tissue, speciality papers and board as well as the oil and petrochemicals industry for biofuels. Timber customers are construction, joinery and furniture industries. UPM aims to grow as a reliable pulp supplier and seeks growth in advanced biofuels.

Our products are made of renewable raw materials and are recyclable. With our new business structure we will drive transformation and seek to further develop our business portfolio.

## UPM Energy

UPM Energy generates cost competitive low-emission energy and operates in physical and derivatives trading on the Nordic and Central European energy markets. UPM's energy generation capacity consists of hydropower, nuclear power, condensing power and wind power. UPM Energy aims to grow on the Nordic CO<sub>2</sub> emission-free energy market.

## UPM Raflatac

UPM Raflatac manufactures self-adhesive label materials for product and information labelling for label printers and brand owners in the food, personal care, pharmaceutical and retail segments, for example. UPM Raflatac is the second-largest producer of self-adhesive label materials worldwide. UPM Raflatac aims to advance in growth markets and strengthen its position in specialty labelstock products.

## UPM Paper Asia

UPM Paper Asia serves growing markets with fine papers in Asia and labelling materials globally. The operations consist of the UPM Changshu paper mill in China and labelling and packaging materials production lines at the UPM Tervasaari and UPM Jämsänkoski mills in Finland. The main customers are retailers, printers, publishers, distributors and paper converters. UPM Paper Asia seeks growth in office papers in China and the Asia-Pacific region, and in labelling materials worldwide.

## UPM Paper ENA (Europe and North America)

UPM Paper ENA produces magazine paper, newsprint and fine papers for a wide range of end uses in 18 modern paper mills in Europe and the United States. The main customers are publishers, retailers, printers and distributors. UPM has a global paper sales network and an efficient logistics system. UPM Paper ENA focuses on cost leadership and improved profitability to secure cash flow.

## UPM Plywood

UPM Plywood offers plywood and veneer products, mainly for construction, transport and other manufacturing industries. UPM is the leading plywood supplier in Europe, with production in Finland, Estonia and Russia. UPM Plywood aims to improve profitability and the value offering and service packages for selected end-use customers.

## Other operations

Wood Sourcing and Forestry secures competitive wood and biomass for all UPM businesses using wood and manages UPM-owned forests. In addition, UPM offers a wide range of wood trade and forestry services to forest owners and forest investors. UPM Biocomposites and UPM Biochemicals units are also included in Other operations.

# Our transformation continues – with a new gear



During 2013, we launched a number of measures to increase profitability. Our growth initiatives also proceeded well.

The implementation of the new company business structure was a major milestone. The business group structure introduced in 2008 had fulfilled its purpose. Within that framework we created commercial platforms and market-driven business organisations for Energy and Pulp. We also achieved profitability turnaround in the Timber and Plywood businesses and restructured our European Label business. These are all now healthy UPM businesses in their own right.

The new business structure is based on six business areas and is already off to a good start. We expect that the new structure will sharpen the focus, targets and required actions for each business.

At the same time we also announced a short-term profitability improvement programme targeting EUR 200 million in cost savings by the end of 2014. The implementation of the programme is proceeding rapidly and by Q4 we had achieved 48% of the targeted savings.

We have also set ourselves clear targets over the next three years for focused growth initiatives in biofuels, wood-free uncoated speciality papers and labelling materials in China, label materials and pulp production. These projects aim to increase EBITDA by EUR 200 million.

In parallel with this process we also seek to simplify our business portfolio.

## Satisfactory results in 2013

In terms of business performance, 2013 started off with a brisk headwind but ended with satisfactory results thanks to the many profit improvement measures. Operating profit excluding non-recurring items

improved to EUR 683 million (556 million). Thanks to a strong operating cash flow we were able to reduce our net debt by EUR 170 million throughout the course of the year.

In particular, the UPM Biorefining, UPM Plywood and UPM Paper ENA (Europe and North America) business areas were able to improve their performance significantly through active internal measures.

Many pulp mills in the UPM Biorefining business area were able to break their production records last year which boosted our pulp volumes. The granting of permission to increase pulp production in the UPM Fray Bentos mill in Uruguay also had a positive impact on the results for the final quarter of 2013.

Plywood performance has improved consistently throughout the year. Both the sales strategy and production efficiency have been in management's particular focus with excellent results.

In Paper ENA, decreasing volumes and prices as well as unfavourable exchange rates were sources of serious headwind throughout the year and called for strong cost-saving actions. By the end of the year the business had managed to restore its profitability to the level of the previous year and had a significantly more competitive cost structure than in early 2013.

UPM Energy was able to maintain unchanged average electricity prices. In UPM Raflatac there were positive sales developments, particularly in

the growth markets. Despite challenging currency developments in Asia, the performance of UPM Paper Asia was satisfactory.

## Responsibility brings competitive advantages

Sustainable and responsible operations are at the core of UPM's Biofore strategy. We are strongly committed to continuous improvement in economic, social and environmental performance. To enhance transparency towards our stakeholders, we have adopted the Global Reporting Initiative (GRI) reporting framework. Our target is sustainable operations that will bring us competitive advantages in various businesses.

Also in 2013, UPM's consistent work in the area of responsibility received third-party recognition. The company was again listed in the Dow Jones Sustainability Indices. The companies which perform better against sustainability criteria than their competitors are selected in the indices.

Our efforts to make UPM a safer place to work were successful for a second year in a row. The Step Change in Safety programme has reduced the accident frequency by over 60% in two years. Every UPMer can take pride in creating a safer working culture within UPM. There is still some way to go, but we are on the right track.

## Outlook

Growth in the European economy is expected to remain low in 2014, but also to improve from last year. Growth in the US and in developing economies is expected to continue to outperform Europe.

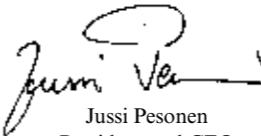
UPM's business outlook for the first half of 2014 is broadly stable. UPM has a versatile business portfolio with many well performing businesses.

Our spearhead investment project is proceeding according to plan. The Lappeenranta biorefinery reached full construction height last year and will start the production of renewable wood-based diesel during the summer of 2014. The advanced renewable diesel is made from crude tall oil, a residue from pulp production.

Renewable diesel opens up a new horizon for the company's growth prospects. In the longer term, also biocomposites and biochemicals will complement UPM's range of new products.

The versatile use of forest biomass, competitiveness and being at the forefront of developments will advance UPM's Biofore strategy in 2014. The transformation of the company has proceeded rapidly and I am proud of the change readiness that UPMers have shown in the face of these changes. This gives us confidence in proceeding further with our profitability and growth initiatives.

Our goal is to enhance the value of UPM businesses. The Board's dividend proposal of EUR 0.60 indicates the owners' confidence in UPM's stable outlook and its ability to reinvent itself.

  
Jussi Pesonen  
President and CEO

## More with Biofore – Resource efficiency as the cornerstone of UPM

UPM aims to create more with less in all its operations. The efficient use of raw materials and energy brings savings in terms of the environment and costs.

### Water

- We reduce water consumption and effluent load by investing in effluent treatment plants and developing production processes
- UPM has reduced its specific wastewater volumes by approximately 25% and its effluent load (COD) per tonne of pulp by 50% in the last ten years

### Energy

- We increase energy efficiency by innovating and sharing best practices between the mills
- The share of fossil fuels is reduced by focusing on the use of renewable energy
- UPM has decreased its electricity consumption by 20% per tonne of paper and reduced the share of fossil fuels by approximately 10% in the past ten years

### Raw materials and waste

- We focus on seeking versatile and innovative ways to utilise every fibre of the renewable and recyclable wood biomass that we use as raw material
- Approximately 90% of the production waste is reused

### Eco-labels

- Eco-labels demonstrate a good environmental performance
- The share of eco-labeled products increased by 7% to 75% in 2013 compared to the previous year

UPM sees by-products and waste as today's new raw materials. UPM's focus on resource efficiency has produced innovations, where non-renewable materials can be replaced with renewables. UPM BioVerno, UPM ProFi and UPM Formi are examples of these products. Resource efficient innovations are also made in production technologies and logistics.

### Read more

The cases in the annual report and at [www.upm.com/responsibility](http://www.upm.com/responsibility)

# Shifting gear in UPM transformation

In 2013, UPM adopted a new business structure to facilitate UPM transformation and performance and to drive clear change in profitability. Profit improvement target is EUR 400 million from performance improvement and focused growth initiatives.

### Vision

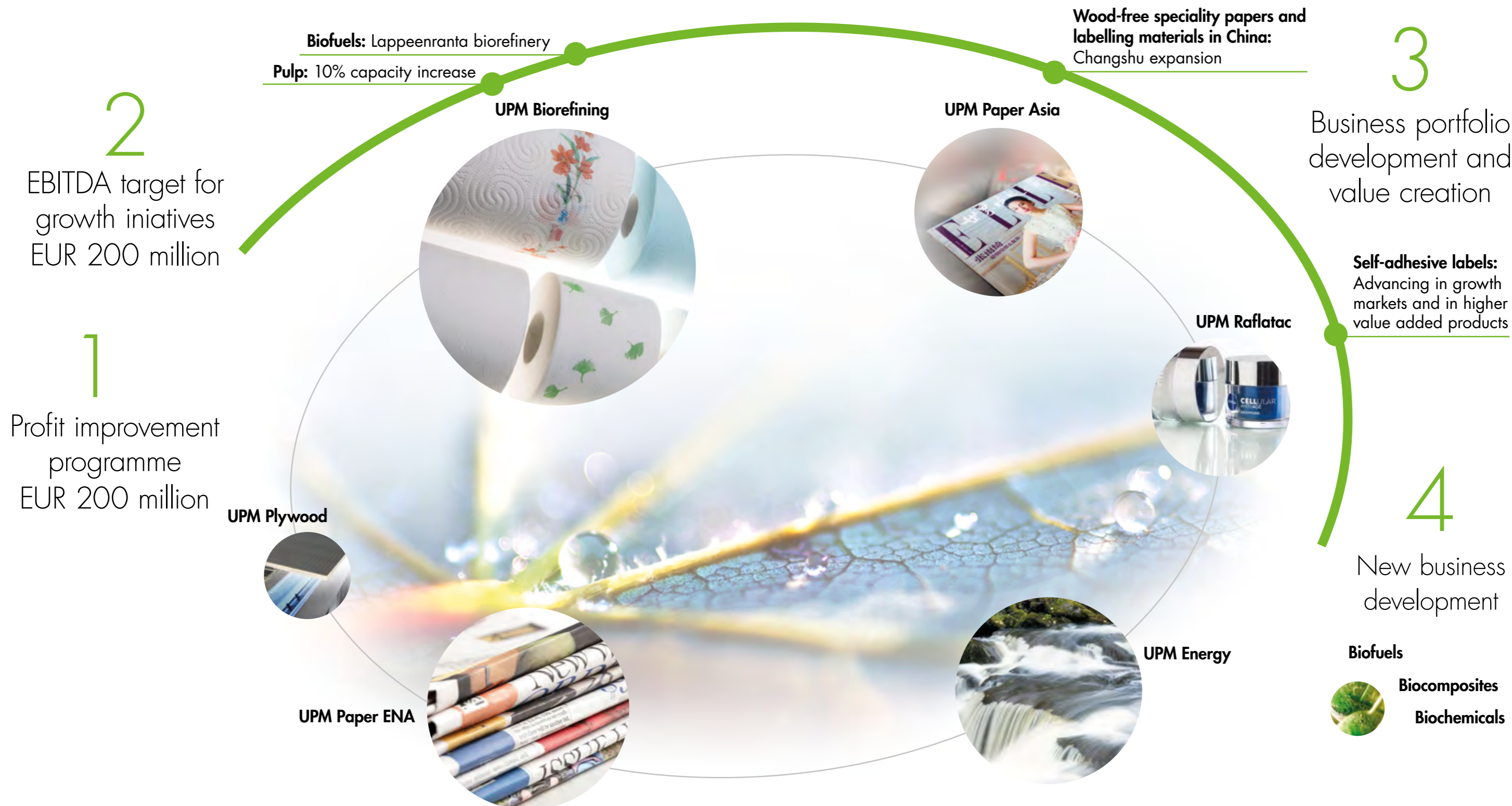
As the frontrunner of the new forest industry UPM leads the integration of bio and forest industries into a new, sustainable and innovation-driven future. Cost leadership, change readiness, engagement and safety of our people form the foundation of our success.

### Purpose

We create value from renewable and recyclable materials by combining expertise and technologies within fibre-based, energy-related and engineered materials businesses.

### Values

Trust and be trusted  
Achieve together  
Renew with courage



The size of pictures corresponds the businesses' portion of the Group's EBITDA.

### Biofore strategy in a changing operating environment

The world around us is changing rapidly and the future will bring both opportunities and challenges that we have never experienced before. Global demand for resources – oil, food, water and energy – is surging, driven by global population growth, urbanisation and a growing middle class in the emerging markets. Climate change has already emerged as a major global phenomenon. Furthermore, the shifting of economic power from West to East and the increasing pace at which business is conducted and digital technologies are becoming integrated into our everyday lives is changing the operating environment considerably.

UPM's Biofore strategy fits well into this changing world.

**Renewables:** UPM's products are based on sustainably sourced renewable raw materials.

**More with Biofore:** Making more out of less is central to UPM's resource efficiency as well as a major source of cost efficiency.

**Recycling:** Most of UPM's products are recyclable and UPM recycles many of them into new products such as paper, biocomposites and energy.

**Energy:** In energy generation, whether in electricity, heat or biofuels, UPM's operations are based on reliable, low-emission and cost-competitive energy sources. UPM is continuously improving its energy efficiency.

**Growth markets:** UPM has an attractive platform for growth in Asia, Latin America and Eastern Europe in pulp, paper, label materials and wood products businesses – serving the growing consumption in a sustainable way.

**Efficient operations:** Cost efficiency and scalable operations are important in all businesses, but form the cornerstone of success in the mature European and North American graphic paper business.

**Innovation:** UPM's knowhow and strong position in the wood processing – or biorefining – value chain is utilised to innovate new sustainable businesses with large target markets and higher value added. Many of these new renewable alternatives will replace non-renewable products.

**Responsibility:** UPM applies the same high standards for environmental performance, safety at work, sourcing and code of conduct everywhere in the world.

The majority of the global change drivers support UPM's businesses in the long term, but they do not affect all UPM businesses equally. This means that strategic direction, targets and actions vary throughout different UPM busi-

nesses in order to capture opportunities and mitigate challenges in both the short and long term.

### New business structure to facilitate UPM transformation and performance

In 2013, UPM adopted a new business structure. The company now consists of the following business areas: UPM Biorefining (pulp, biofuels and sawn timber), UPM Energy, UPM Raflatac, UPM Paper Asia, UPM Paper ENA (Europe and North America) and UPM Plywood. Other operations include UPM's wood sourcing and forestry and UPM Biocomposites and UPM Biochemicals business units. Each business area has a defined strategic role and clear targets, outlined in the adjacent table.

With the new structure, UPM aims to: **Adopt a lean and simple structure:**

The new structure enables faster decision making and more differentiated target setting for the various businesses. The simplified organisation is cost efficient and scalable to the business needs.

**Drive performance:** UPM aims for top business area performance in its respective markets. To get a strong start towards this goal, UPM announced a short-term profitability improvement programme targeting EUR 200 million of annualised cost savings by the end of 2014 as compared with Q2 2013. The programme includes both variable and fixed cost savings and involves all business areas.

**Capture growth opportunities:** UPM has several businesses with attractive long-term fundamentals for growth and profitability. UPM has defined a portfolio of organic growth initiatives for the next three years and targets additional EBITDA of EUR 200 million when all the initiatives are in operation. The growth initiatives include the renewable diesel biorefinery in Lappeenranta, Finland, a 10% increase in pulp production capacity through debottlenecking actions in all four existing pulp mills, the new production unit for wood-free speciality papers and labelling materials at UPM Changshu, China and continued growth in self-adhesive labelstock in emerging markets and higher value added products.

**Develop the business portfolio:** UPM now has the opportunity to decide on how to best uncover and increase the value of its business portfolio. This process may involve changes to ownership structures.

**Create new businesses:** Biofuels is a good example of UPM innovation, with the renewable diesel biorefinery in Lappeenranta,

### EVENTS

**17 Jan:** UPM changes Paper and Energy businesses' asset values to reflect the fair values

**14 March:** UPM wins Sustainable Biofuels Award in Rotterdam

**11 June:** UPM signs joint development agreement with Renmatix Inc. in biochemicals

**17 June:** UPM and Ashland Inc. announce collaboration on application development for UPM's biofibrils technology

**6 Aug:** UPM announces its new business structure to be effective 1 November 2013

**12 Sept:** UPM renews its world-class position in the Dow Jones Sustainability Index

**16 Sept:** UPM Formi wins Technology Innovation Award for plastic industry in China

**24 Oct:** UPM announces plans to streamline global functions and wood sourcing and forestry

Finland, under construction and coming into operation in summer 2014. Other new businesses include biocomposites that are already being marketed to customers as well as biochemicals and biofibrils that are currently in the development phase.

### Focus on responsibility and leadership

Corporate responsibility is an integral part of all our operations and is seen as a source of competitive advantage. UPM is strongly committed to continuous improvement in economic, social and environmental performance. Over the past years, UPM has focused heavily on improving safety at work and on further improving the environmental performance of production units. Special attention has also been paid to contractor safety. (Read more on pages 38 and 39).

Achieving the ambitious targets requires high performing people and teams to drive business transformation. This also highlights the importance of being an attractive employer with inspiring and empowering leaders who offer diverse opportunities to perform and grow. To ensure the sustainable success of our businesses and the people who make it happen, UPM's management is paying special attention to performance orientation and employee engagement.

### UPM BIOFORE STRATEGY IN ACTION 2013

Business area	Strategic targets	Actions in 2013
UPM BIOREFINING	Growth in cost-competitive, high quality pulp and advanced biofuels Efficient sawn timber business Utilise synergies and increase value added in biorefining	Increased production permit for UPM Fray Bentos pulp mill in Uruguay Debottlenecking actions identified in all pulp mills targeting 10% increase in production capacity Strategic pulp sales and marketing co-operation with Canfor Pulp Continued construction of Lappeenranta biorefinery to produce wood-based renewable diesel, recruitment and training of operational personnel started Sale of Pestovo sawmill in Russia, Aigrefeuille further processing mill in France and Kaukas further processing operations in Finland
UPM ENERGY	Expand in reliable, cost-competitive and low-emission power generation Value creation with physical trading and hedging	Continued OL3 construction OL4 planning Refurbishment of hydropower plants continued
UPM RAFLATAC	Growth through product renewal and in emerging markets	Growth in emerging markets continued based on expansion of distribution terminal network in 2012 Growth based on new higher value added products continued Manufacturing operations in Switzerland, South Africa and Australia discontinued as part of the profit improvement programme
UPM PAPER ASIA	Growth in Chinese and Asian paper markets Growth in the global label papers market	Investment in the new production unit for wood-free speciality papers and labelling materials at UPM Changshu, China
UPM PAPER ENA	Cash flow generation and cost efficiency Consolidation in Europe	New, leaner organisation Profitability improvement actions involving fixed and variable cost savings Closure of UPM Stracel and UPM Docelles (closed in January 2014) paper mills in France, UPM Rauma PM3 in Finland and UPM Ettringen PM4 in Germany Construction of CHP power plant investment at UPM Schongau, Germany, continued
UPM PLYWOOD	Operational efficiency and flexibility	Increased productivity on the restructured production assets Improved sales following the customer-driven organisation initiated in 2012
NEW BUSINESS DEVELOPMENT	UPM Biocomposites: Business creation and market entry in UPM Formi and continued growth in UPM ProFi biocomposites UPM Biochemicals: Further application development of biofibrils and biochemicals	UPM Formi commercialisation progressed with several customers in various end-use segments Joint development agreement with Renmatix Inc. in biochemicals Co-operation agreement with Ashland Inc. on development for UPM's biofibrils technology
WOOD SOURCING AND FORESTRY	Secure competitive biomass	Sold 36,000 hectares of forest land remote from UPM mills Development of supply chain efficiency and services Implementation of a new way of operating

### DRIVERS FOR UPM'S BUSINESSES

**LOW-EMISSION AND RENEWABLE ENERGY**

- Energy prices and security of supply
- Integrating European markets
- Climate change

**FAST MOVING CONSUMER GOODS, RETAIL**

- Ageing population in developed markets
- GDP growth, urbanisation and growing middle class in emerging markets

**ADVERTISING, OFFICE COMMUNICATION**

- Digitalisation – from print to screen
- Change in economic gravity from mature to emerging markets

**BIO-BASED MATERIALS**

- Raw materials scarcity
- Sustainability and renewability
- Replacing oil-based materials
- Recycling and reusing



# UPM as an investment

UPM aims to increase profitability, growth outlook and the value of its business portfolio. The target is to simplify and develop the business portfolio to uncover and increase its value.

## UPM aims to increase shareholder value

At the business area level, UPM targets top performance in their respective markets. To reach this target, UPM has announced a profitability improvement programme targeting EUR 200 million in cost savings by the end of 2014 compared to Q2 2013 earnings.

To expand the well performing businesses with positive long term fundamentals, UPM will implement designated growth initiatives over the next three years, targeting additional EBITDA of EUR 200 million when all the initiatives are in full operation.

UPM is seeking to simplify and develop its business portfolio in order to uncover and increase its value. Increasing the share of highly profitable businesses with good fundamentals for growth improves the company's long term profitability and boosts the value of the shares.

Strong operating cash flow is important for UPM as it enables the realisation of organic growth initiatives and new business development, as well as paying attractive dividends to UPM shareholders. The company aims to maintain a strong balance sheet to enable

## 5-YEAR SHARE PERFORMANCE AND VALUATION MULTIPLES

	2013	2012	2011	2010	2009
Share price at 31 Dec, EUR	12.28	8.81	8.51	13.22	8.32
Earnings per share, excluding special items, EUR	0.91	0.74	0.93	0.99	0.11
Dividend per share, EUR	0.60*	0.60	0.60	0.55	0.45
Operating cash flow per share, EUR	1.39	1.98	1.99	1.89	2.42
Effective dividend yield, %	4.9	6.8	7.1	4.2	5.4
P/E ratio	19.5	neg.	9.2	13.4	75.6
P/BV ratio <sup>1)</sup>	0.87	0.62	0.60	0.97	0.66
EV/EBITDA ratio <sup>2)</sup>	8.3	6.0	5.8	7.6	7.6
Market capitalisation, EUR million	6,497	4,633	4,466	6,874	4,326

\*1 2013: Board's proposal

<sup>1)</sup> P/BV ratio = Share price at 31.12./Equity per share

<sup>2)</sup> EV/EBITDA ratio = (Market capitalisation + Net debt)/EBITDA

portfolio changes that increase UPM's shareholder value.

Responsibility is an integral part of UPM's Biofore strategy. Good corporate governance, target-oriented leadership, appropriate working conditions and community involvement are essential to UPM's way of working.

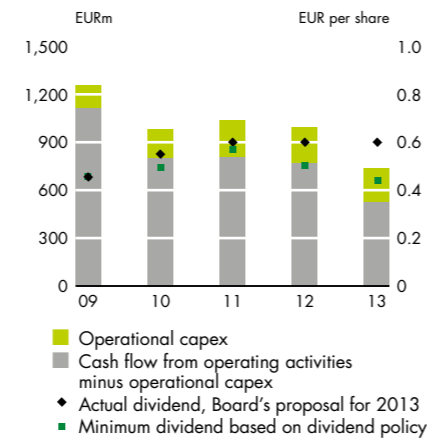
UPM's expertise in renewable and recyclable materials, low-emission energy and resource efficiency is the key to developing new, sustainable business opportunities with high added value. Proactive corporate responsibility work also enables business impacts and risks to be efficiently identified and mitigated. UPM's consistent efforts in this area continued to

gain external recognition in 2013 (read more on page 10).

## Dividend policy

UPM intends to pay an annual dividend of at least one third of the net cash flow from operating activities minus operational capital expenditure. To promote dividend stability, net cash flow will be calculated as an average over a three-year period. Remaining funds will be shared between growth capital expenditure and debt reduction. The net cash flow from operating activities for 2013 was EUR 735 million and operational capital expenditure was EUR 209 million.

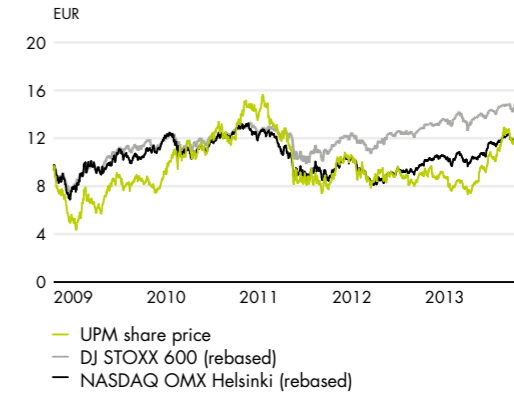
## Cash flow-based dividend policy



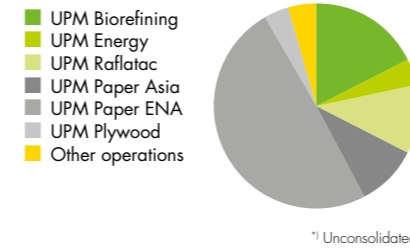
## UPM share price 2009–2013 and total shareholder return



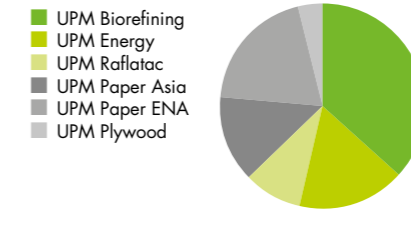
## UPM share price 2009–2013 compared with indices



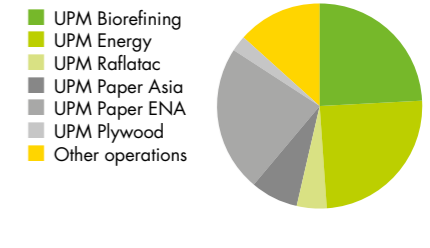
## Sales 2013<sup>1)</sup> EUR 10,054 million



## EBITDA 2013 EUR 1,155 million



## Capital employed 2013 EUR 11,583 million



## AMONG THE WORLD'S LEADERS IN SUSTAINABILITY

UPM's Biofore strategy received external recognition in 2013 for its climate, forestry and innovation actions.

UPM regained its position in both the Dow Jones European and World Sustainability Indices (DJSI) for 2013-2014. UPM was also assessed as the industry leader in environmental sustainability within the Paper and Forest Products sector, with top scores.

Innovation plays a key role in developing resource-efficient solutions for a more sustainable world. In March, UPM Biofuels received the Sustainable Biofuels Award for its success in developing an innovative production process for an advanced renewable diesel, UPM BioVerno. So, even before production has started, UPM's wood-based diesel production process has won a major international prize.

Read more: [www.upm.com/responsibility](http://www.upm.com/responsibility)



## Financial targets

UPM sets internal financial targets for each business area and the whole Group. The financial targets emphasise the importance of cash flow and the financial flexibility of the company in steering the businesses.

The company's long-term target is an operating profit margin that exceeds 10%. The return on equity target is at least five percentage points above the yield of a 10-year risk-free investment such as the Finnish government's euro-denominated bonds. At the end of 2013, the minimum target for return on equity, as defined above, was 7.1%.

The gearing ratio is to be kept below 90%.

## Earnings sensitivities

### Changes in sales prices

The biggest factor affecting UPM's financial results is the sales price of paper. A change in the volume delivered has less than half of the effect of the same percentage change in sales prices.

### Exchange rate risk

Changes in exchange rates over a prolonged period have a marked impact on financial results.

It is the company's policy to hedge an average of 50% of its estimated net currency cash flow for 12 months ahead.

At the end of 2013, UPM's estimated net currency flow for the coming 12 months was EUR 1,720 million. The US dollar represented the biggest exposure, at EUR 970 million.

### EFFECT OF A 10% CHANGE IN PRICES ON OPERATING PROFIT FOR THE YEAR

	EURm
Papers in UPM Paper ENA	553
Fine and speciality papers in UPM Paper Asia	90
Label materials	121
Plywood	39
Sawn timber	29
Chemical pulp (net effect)	13

Changing exchange rates can also have indirect effects, such as change in relative competitiveness between currency regions.

### FOREIGN CURRENCY NET CASH FLOW

	EURm
USD	970
GBP	440
JPY	190
Others, total	120

### Cost structure

The company's biggest cost items are the cost of fibre raw material and personnel expenses.

### COSTS, EXCLUDING DEPRECIATION

%	2013	2012
Delivery of own products	11	11
Wood and fibre	29	28
Energy	10	10
Fillers, coating and chemicals	12	12
Other variable costs	13	13
Personnel expenses	15	15
Other fixed costs	10	11
<b>Total</b>	<b>100</b>	<b>100</b>

Costs totalled EUR 9.1 billion in 2013 (2012: 9.4 billion)

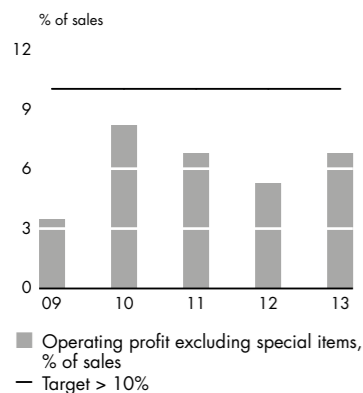
## Risk management

UPM's business operations are subject to various risks which may have an adverse effect on the company. The list below is not complete but it explains some of the risks with their potential impacts and how UPM manages those risks today.<sup>1)</sup>

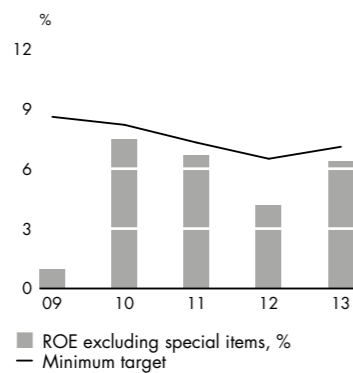
	Risk description	Impact	Management
STRATEGIC RISKS	Structural changes in paper usage result in decline in paper demand which leads to overcapacity	Low operating rates and weak pricing power in the industry	Ensure cost efficiency of operations Proactive product portfolio management
	Delay in OL3 nuclear plant start-up and consequent loss of profit and cost overruns	Material cost overrun	Ensure that contractual obligations are met by both parties Arbitration proceedings have been initiated by both parties
	Cost of an acquisition proves high and/or targets for strategic fit and integration of operations are not met	Return on investment does not meet targets	Disciplined acquisition preparation to ensure the strategic fit, right valuation and effective integration
OPERATIONAL RISKS	Regulatory changes such as EU climate policy and new requirements for CO <sub>2</sub> emissions	Subsidies for alternative uses of wood raw material increase costs Changes to relative competitiveness of energy forms	Communicate the employment and value-added creation impacts of such policies clearly Invest in new, value-adding uses of biomass Cost competitive operations
	Availability and price of major production inputs like chemicals, fillers or roundwood	Increased cost of raw materials and potential production interruptions would lower profitability	Long-term sourcing contracts and relying on alternative suppliers Ownership of forestland and long-term forest management contracts
FINANCIAL RISKS	Ability to retain and recruit skilled personnel	Business planning and execution impaired, affecting long-term profitability	Competence development Incentive schemes
	Major trading currencies like USD weaken against euro	Stronger euro weakens profitability of exports and attracts competitive imports to euro area	Hedging net currency exposure on a continuous basis Hedging the balance sheet
HAZARD RISKS	Payment default or customer bankruptcy	Loss of income	Active management of credit risks and use of credit insurance
	Environmental risks; A leak, spill or explosion	Damage to reputation, possible sanctions Direct cost to clean up and to repair potential damages to production unit, loss of production	Maintenance, internal controls and reports Certified environmental management systems (ISO 14001, EMAS)
HAZARD RISKS	Physical damage to the employees or property	Harm to employees and damage to reputation Damage to assets or loss of production	Occupational health and safety systems Loss prevention activities and systems Emergency and business continuity procedures

<sup>1)</sup> A more detailed description of risks and risk management is included in the Report of the Board of Directors on page 67.

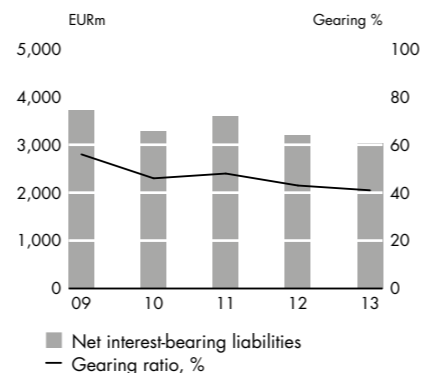
Operating profit excluding special items compared with target



ROE compared with target



Net interest-bearing liabilities and gearing





# UPM Biorefining – Growth initiatives in renewable diesel and pulp debottlenecking

UPM Biorefining provides a versatile range of chemical pulp for many growing end uses, such as tissue and speciality papers and board, as well as printing and writing papers.

UPM's annual chemical pulp production capacity is 3.3 million tonnes, produced in four modern, efficient pulp mills in Finland and Uruguay.

UPM is building the world's first biorefinery producing wood-based renewable diesel. Production will start in summer 2014.

The pulp mills produce renewable energy in their recovery boilers and provide CO<sub>2</sub>-neutral biomass-based electricity for the Nordic and Uruguayan markets.

UPM operates four efficient sawmills in Finland offering certified sawn timber to its customers worldwide.

## Business performance

Operating profit increased due to higher pulp sales prices and increased deliveries. In sawn timber business, restructuring measures together with higher delivery volumes and sales prices resulted in improved profitability. Fixed costs decreased in spite of preparation of the commercial launch of UPM BioVerno, UPM's renewable diesel.

## Business development

In the UPM Biorefining business area, UPM combines integrated production of pulp, renewable diesel, sawn timber and energy with a joint supply chain of wood raw materials. Pulp mills produce renewable energy in their recovery boilers and provide CO<sub>2</sub>-neutral biomass-based electricity. As a residue of the pulp production, mills produce crude tall oil, which is the raw material in the world's first biorefinery producing wood-based renewable diesel, in Lappeenranta, Finland. Sawmills have a central role in the wood supply chain, as their by-products are used in the production of pulp and energy. In UPM Biorefining, UPM benefits from efficient use of wood raw materials and integrated production, where residues are refined into new value-added business.

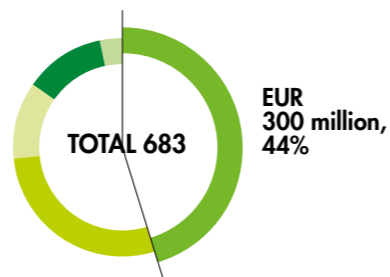
## BUSINESS PERFORMANCE

SALES		
2013	1,988	+1%
2012	1,970	EUR million

OPERATING PROFIT *)		
2013	300	+52
2012	248	EUR million

\*) excluding special items

## UPM'S OPERATING PROFIT 2013 (excl. special items)



## UNIQUE MARKET POSITION IN ASIA

In the past three years, UPM's pulp sales in China and the Asia Pacific region (APAC) have multiplied more than five times. At the same time, the number of customers has multiplied by nine. The majority of Asian sales go to China but UPM has strengthened its presence geographically with new customers in South Korea, Indonesia, Taiwan and Vietnam.

UPM focuses on customers operating in the growing end-use areas of tissue, board and speciality papers. Demand for their end products, such as facial tissues, toilet paper and label papers as well as packaging board, is driven by urbanisation and economic growth. The biggest end-use area for UPM's pulp in China is tissue. Demand for tissue papers is expected to grow by 7% in the next 5-10 years.

UPM's office in Shanghai is located close to its customers and the sales and service team is able to support them or react promptly to any feedback or enquiries. Close co-operation with UPM's global R&D network enables technical analysis and studies in the local R&D centre in Changshu, China.

Read more: [www.upm.com/pulp](http://www.upm.com/pulp)

## KEY FIGURES

	2013	2012
Sales, EURm	1,988	1,970
Operating profit excl. special items, EURm	300	248
Capital employed (average), EURm	2,825	2,806
ROCE excl. special items, %	10.6	8.8
Personnel on 31 Dec.	2,376	2,674
Pulp deliveries, 1,000 t	3,163	3,128

UPM is an active operator in the global pulp market as a reliable pulp supplier for customers. In 2013, 1.9 million (1.6 million) tonnes of UPM's total annual pulp production capacity of 3.3 million tonnes were sold to external customers.

UPM aims to grow further as a pulp producer, with its strengths being high quality, efficient logistics and the ability to provide different pulp grades sustainably with outstanding environmental performance.

In 2013, UPM continued to develop its global pulp sales and marketing organisation around the world, including logistics and supply chain.

Plantation-based pulp represents 36% of UPM's total pulp production capacity. Forestal Oriental, UPM's eucalyptus plantation forestry company in Uruguay, secures the supply of pulpwood for the UPM Fray Bentos pulp mill and is the centre of expertise for UPM plantation operations.

The plantations are FSC® and PEFC™ certified. UPM Forestal Oriental owns 234,000 hectares of land, approximately 60% of which is planted with eucalyptus. The rest of the land is used for cattle grazing and forestry-related infrastructure, or is protected and not used for plantation operations.

In August, UPM announced plans to expand production capacity in its pulp mills by approximately 10% through debottlenecking investments. Work started at the UPM Pietarsaari mill in autumn 2013 and, following completion in summer 2014, will improve flexibility in the use of raw materials and increase mill production capacity.

In October, the State of Uruguay granted permission for the UPM Fray Bentos mill to increase its annual pulp production from 1.1 million to 1.2 million tonnes.

## EVENTS

**26 April:** UPM and VTT initiate fleet tests of wood-based diesel using Volkswagen cars

**15 July:** UPM sells the Pestovo sawmill in Russia

**14 Aug:** UPM sells further processing operations at UPM Kaukas sawmill in Finland

**2 Oct:** UPM completes the sale of the Aigrefeuille further processing mill in France

**3 Oct:** State of Uruguay grants UPM Fray Bentos mill permit to increase annual pulp production

**7 Nov:** UPM and Canfor Pulp enter into pulp sales co-operation

In November, UPM and Canfor Pulp Products Inc. entered into a strategic sales and marketing co-operation agreement, starting in January 2014. UPM's sales network represents and co-markets Canfor Pulp's products in Europe and China, while Canfor Pulp's sales network represents and co-markets UPM Pulp in North America and Japan. This co-operation provides customers with the most versatile range of northern softwood, birch, eucalyptus and mechanical pulp available on the global market, in combination with world-class technical service.

In 2013, UPM completed the rebuild of the effluent treatment plant at the UPM Pietarsaari mill in Finland. The rebuild covered all the main phases of waste water treatment and improves the mill's production efficiency and environmental performance.

The investment in the Lappeenranta biorefinery proceeded according to schedule in 2013. The organisation was put in place, training of operational staff began and commercial preparations were made. Production is scheduled to start in the summer of 2014. The technology is based on UPM innovation and provides synergies with the existing businesses. As a product, UPM BioVerno is of premium quality in terms of greenhouse gas emissions and energy content. There is no blending wall and it is refined from a sustainable residue from pulp production. The sustainability requirements of EU biofuel regulations are becoming stricter, thus favouring UPM BioVerno, which is produced outside of the food value chain and does not require indirect land use changes. (Read more on UPM BioVerno development on page 25.)

In its sawn timber business, UPM completed the divestment of further processing operations by selling the further processing mill in Aigrefeuille, France in October. In July, UPM sold the Pestovo sawmill in Russia. UPM's four sawmills are closely integrated with the company's other mills using wood raw materials.

## Market review

Chemical pulp market prices increased during the first half of 2013. Softwood pulp (NBSK) and hardwood pulp (BHKP) market prices diverged during the second half of the year.

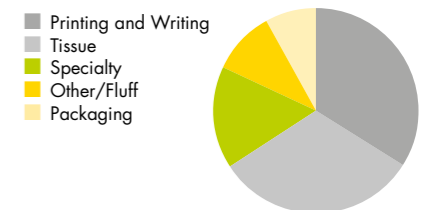
Balanced market conditions supported additional price increases for softwood market pulp during the second half of 2013. The euro-denominated price remained stable as the USD/EUR exchange rate weakened.

In hardwood pulp, market prices decreased during the second half of the year as new capacity entered the market impacting the supply-demand balance.

## PULP PRODUCTION CAPACITY

1,000 t/a	January 2014
UPM Fray Bentos	1,200
UPM Kaukas	740
UPM Pietarsaari	790
UPM Kymi	570
<b>Production capacity, total</b>	<b>3,300</b>

## Global end-use distribution of chemical pulp



Source: Hawkins Wright

In 2013, the average softwood pulp (NBSK) market price was EUR 646/tonne (634/tonne) and the average hardwood pulp (BHKP) market price was EUR 596/tonne (585/tonne). At the end of the year, the softwood pulp market price was EUR 656/tonne (613/tonne) and the hardwood pulp market price was EUR 557/tonne (587/tonne).

Global chemical pulp shipments increased by 2% from the previous year. Shipments to China and North America increased by 5%, while shipments to Western Europe remained the same.

Sawn timber demand increased in 2013. The increase was led by exports to Asia and North Africa. Demand in Europe remained fairly stable.

## R&D

UPM has been able to reduce process water consumption significantly in its pulp mills. In UPM's newest mill in Fray Bentos, Uruguay, the consumption of process water is among the lowest in the industry.

In plantations operations, development work focuses on strengthening the tree breeding programme and developing new frost-tolerant eucalyptus clones in order to create more value and improve productivity.

UPM Pulp intensified joint development activities with customers, mainly in Europe and China, in 2013.

In biofuels, R&D activities focused on supporting the Lappeenranta biorefinery to ensure that the start-up is a success and support the market entry of the UPM BioVerno renewable diesel.

In the long term, one of the aims of research work is to extend biofuel production to new processes and raw materials, such as pyrolysis oils and solid biomass.



CONTENTS

UPM Biorefining

# UPM Energy – Profitability remained high

UPM Energy has a versatile set-up of cost competitive low-emission power generation plants in Finland consisting of hydropower, nuclear power, condensing power and wind power. The electricity is sold on the Nordic electricity market.

The total electricity generation capacity of the UPM Energy business area is 1,610 MW, including UPM's own hydropower plants and shareholdings in energy companies.

UPM Energy's largest shareholdings include 44.7% of Pohjolan Voima Oy (PVO), which is a majority shareholder (58.5%) in Teollisuuden Voima Oyj (TVO), and 19% of Kemijoki Oy's hydropower shares.

UPM owns nine hydropower plants in Finland.

## Business performance

Operating profit decreased due to lower hydropower generation volumes in 2013 compared to record-high hydropower volumes in 2012 as a result of exceptionally good hydrology in Finland. Thanks to a successful hedging strategy the average electricity sales price increased by 2% to EUR 46.1/MWh (45.2/MWh). Profitability continued to be strong.

## Business development

UPM Energy operates on the Nordic electricity market in power generation and physical and financial trading. UPM's versatile set-up of cost competitive low-emission power generation provides nuclear power as base load capacity, hydropower as controllable capacity and condensing power as reliable peak load capacity. UPM Energy is the second largest electricity generator in Finland and is active in the Nordic and Central European energy market for electricity, gas, coal and emission allowances.

Having achieved competence in physical and derivatives trading and developed the organisation over the past few years, UPM has turned its energy operations into a market-driven utility business. Utilising its capacity and trading competences, UPM Energy aims to grow on the Nordic CO<sub>2</sub> emission-free energy market.

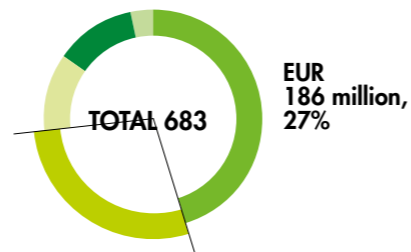
## BUSINESS PERFORMANCE

SALES		
2013	466	-3%
2012	482	EUR million

OPERATING PROFIT *)		
2013	186	-31
2012	217	EUR million

\*) excluding special items

## UPM'S OPERATING PROFIT 2013 (excl. special items)



**+2%**  
AVERAGE ELECTRICITY SALES PRICE

**1,610 MW**  
TOTAL ELECTRICITY GENERATION CAPACITY

## MORE VALUE IN HYDROPOWER

UPM is the owner or co-owner of four hydropower plants operating on the Kokemäenjoki river in Finland. In 2013, UPM began to operate three of the plants.

Co-operation and co-ordination between plant owners has increased the production efficiency of all power plants. Benefits of the co-operation are such as joint planning, transparency of processes and better consideration of environmental aspects along the length of the river.

Thanks to its adjustability, hydropower plays an integral part in the reliability of an energy system. By co-ordinating and adjusting the operation of the hydropower plants, UPM creates benefits for all of the power plant owners.

UPM's hydropower plant renovation project will be continued in Harjavalta, where the plant will be refurbished and modernised. The refurbishment will increase generation capacity and adjustability, and improve the operational efficiency and environmental safety of the power plant. The project is scheduled for completion by the end of 2017 and will significantly increase the production of renewable energy in Finland.

UPM has systematically broadened and deepened its expertise in energy production, energy trading and portfolio management in the last few years.

## KEY FIGURES

	2013	2012
Sales, EURm	466	482
Operating profit excl. special items, EURm	186	217
Capital employed (average), EURm	2,882	3,266
ROCE excl. special items, %	6.5	6.6
Personnel on 31 Dec.	92	101
Electricity deliveries, GWh	8,925	9,486

## EVENTS

**9 April:** UPM and Element Power establish a wind power development joint venture

**12 June:** UPM participates in PVO's share issue for Olkiluoto 3 with EUR 119 million

UPM has continuously upgraded its hydropower production assets. Through its ownership of Länsi-Suomen Voima Oy, UPM decided to refurbish and modernise the Harjavalta hydropower plant to increase generation capacity. At the Voikkaa hydropower plant, refurbishment of the third unit was completed in 2013.

In April, UPM and Element Power established a wind power development joint venture company in order to develop wind power production possibilities at a number of sites throughout Finland, primarily on land leased from UPM. Based on preliminary wind measurements, UPM has several land assets that are well suited to wind energy production.

The largest ongoing project is at TVO, which is building a third nuclear power reactor, OL3, at Olkiluoto, Finland. The new unit will have an annual nuclear power generation capacity of approximately 1,600 MW. In 2013, the civil construction works were completed and the main components of the reactor were installed. Planning, documentation and licensing of the reactor plant automation continued. Through PVO, UPM is entitled to approximately 500 MW of capacity, which accounts for approximately 31% of the new plant's output for the project.

In June, UPM decided to participate in the share issue from PVO to finance the OL3 project. UPM's share of the issue is EUR 119 million, of which EUR 31 million was paid in Q2 2013. The remaining part of the share issue will be implemented during the coming years based on the financing needs of the project.

In July 2010, the Finnish parliament ratified the government's favourable decision-in-principle concerning TVO's application to construct OL4, its fourth nuclear power plant unit. UPM participates in the financing of the bidding and engineering phase of OL4.

## Market review

The hydrological balance in Finland fluctuated in 2013 and was on average lower than in 2012. During the first half of the year the balance

remained above the long-term average. However, a prolonged period of dry weather deteriorated the hydrological balance during the third quarter, whereas wet weather conditions in the fourth quarter restored the balance to close to normal levels by year-end.

The Nord Pool electricity system spot price was slightly higher than in the previous year, mainly due to a deteriorating hydrological balance in Scandinavia. The Finnish area price was above the Nord Pool system price as transmission cable maintenance work between Finland and Sweden limited imports, and at the same time imports from Russia remained low. In the past, electricity has flowed from Russia to Finland at a fairly steady level based on bilateral trade. Since 2011, electricity trade between Finland and Russia has gradually become price-driven, and import volumes are determined in the electricity exchange by the price levels in the markets on both sides of the border.

The average Finnish area spot price on the Nordic electricity exchange in 2013 was EUR 41.2/MWh, 13% higher than during the same period the previous year (EUR 36.6/MWh).

As a result of a weak European economy and oversupply of emission allowances, the CO<sub>2</sub> emission allowance price decreased. The approval by a majority of EU member states for withdrawing ("backloading") emission allowances in the EU emissions trading system in the autumn did not stimulate the price in a meaningful way. At the end of December, the CO<sub>2</sub> emission allowance price was EUR 4.7/t, 30% lower than on the same date the previous year (EUR 6.7/t).

The Finnish area front-year forward price closed at EUR 38.9/MWh in December, 11% lower than on the same date last year (43.5/MWh).

## R&D

R&D work at UPM Energy focuses on improving the efficiency and cost competitiveness of biomass-based energy technologies.

To reach its target, UPM Energy participates in several research programmes. These programmes are looking for new innovative solutions to improve the design and operation of large-scale energy conversion systems using biomass fuel mixtures.

In 2013, UPM Energy continued with the joint research programme covering the entire value chain of biocoal, i.e. torrefied biofuel that is aiming to replace coal in energy production. The programme will be completed in 2014.

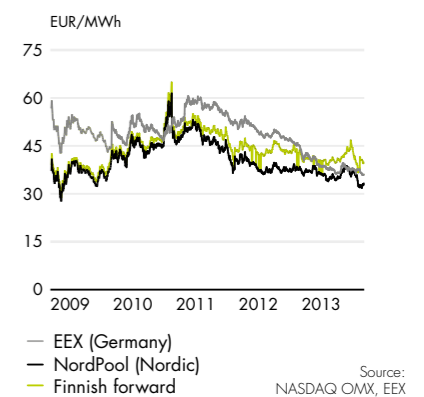
## CAPACITY TO GENERATE POWER THROUGH OWN POWER PLANTS AND SHAREHOLDINGS

	Nominal MW
Hydropower	708
Nuclear power	581
Condensing power	320
Wind power	1
<b>UPM Energy in total</b>	<b>1,610</b>
Combined heat and power and hydropower at mill sites	1,525
<b>Total UPM</b>	<b>3,135</b>

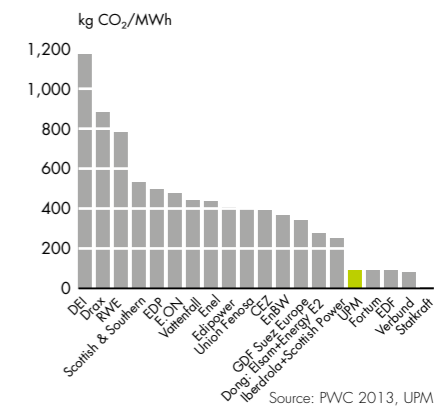
## ELECTRICITY GENERATION

TWh	2013	2012
Hydropower	2.9	4.0
Nuclear power	4.8	4.7
Condensing power	1.1	0.8
<b>Total</b>	<b>8.8</b>	<b>9.5</b>

## Electricity 1-year forward price



## Specific CO<sub>2</sub> emissions in electricity generation



# UPM Raflatac – Healthy growth in specialty labels and new markets

UPM Raflatac manufactures self-adhesive label materials for product and information labelling in industries such as food and beverage, retail and logistics. Label materials are used for both high-volume and specialised end-use applications.

Customers are mainly small and medium-sized label printers. However, in recent years, large label printers have become an increasing part of UPM Raflatac's customer base and their role in the industry has also increased.

Products are sold worldwide through a global network of sales offices and slitting and distribution terminals.

## Business performance

Operating profit decreased from the previous year, mainly due to lower sales margin. Expanded operations enabled volume growth, more than offsetting the increase in fixed costs. Price pressure remained stiff.

## Business development

In the past few years, UPM Raflatac has expanded its product offering and presence in rapidly growing markets, and has continued to strengthen its position in speciality label-stock products, particularly in developed markets. This growth strategy produced satisfying results in 2013.

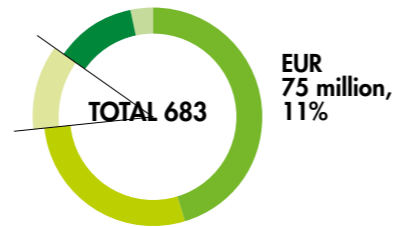
## BUSINESS PERFORMANCE

SALES		
2013	1,213	+1%
2012	1,202	EUR million

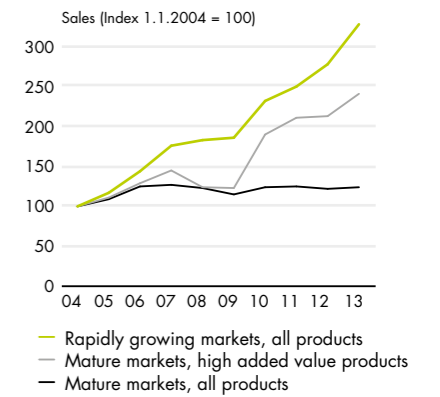
OPERATING PROFIT *)		
2013	75	-6
2012	81	EUR million

\*) excluding special items

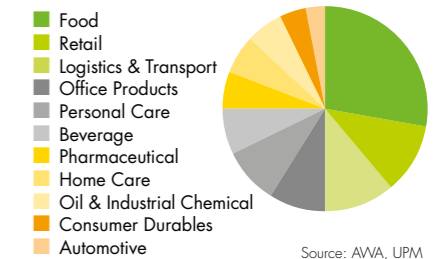
**UPM'S OPERATING PROFIT 2013**  
(excl. special items)



## Advancing in rapidly growing markets



## Global labelstock end-uses



Source: AWA, UPM

**12** FACTORIES  
**21** SLITTING AND DISTRIBUTION TERMINALS

DELIVERIES **+4.5%**

**30%** OF SALES FROM RAPIDLY GROWING MARKETS

## UNIQUE PARTNERSHIP IN SUSTAINABLE LABEL PRODUCTS

UPM Raflatac is working in a unique partnership with Unilever and a leading global label printer to determine the environmental impacts of packaging labels. Their common goal is to identify the areas in a self-adhesive label's lifecycle where the environmental impacts of product labelling can be reduced.

During the project, lifecycle assessments (LCA) have been carried out on 22 product labels from Unilever's home and personal care ranges. The calculations take into consideration environmental impacts throughout the entire labelling value chain, including raw material sourcing, transport, manufacturing, printing and various end-of-life scenarios. The results support the development of increasingly sustainable labelling solutions to meet future needs.

By incorporating the impacts of the printing process, the LCA model is the first of its kind and the most extensive in the labelling industry. The project is a solid example of how co-operation between different stakeholders in the labelling value chain can help develop the industry's competitiveness.

## KEY FIGURES

	2013	2012
Sales, EURm	1,213	1,202
Operating profit excl. special items, EURm	75	81
Capital employed (average), EURm	532	524
ROCE excl. special items, %	14.1	15.5
Personnel on 31 Dec.	2,869	2,873

In growing markets such as Eastern Europe, Latin America and Asia, UPM Raflatac has significantly enhanced its service and manufacturing network by opening new slitting and distribution terminals and has invested in new technology. UPM Raflatac achieved strong 17% growth in these markets in 2013 compared to 2012. UPM Raflatac will continue to expand in these growing markets in line with its strategy.

In developed markets such as Western Europe and North America, UPM Raflatac has continuously strengthened its offering in speciality products. Focused efforts in distribution, marketing and product development have also enabled faster growth in speciality products. In 2013, UPM Raflatac achieved above average market growth in high added value products: approximately 15% compared to 2012. Through continued initiatives, UPM Raflatac will enhance its speciality product offering.

In 2013, rapidly growing markets represented approximately 30% of UPM Raflatac's volumes, and developed markets 70%.

UPM Raflatac has competitive labelstock factories and a broad distribution network of sales offices and slitting and distribution terminals. Thanks to this set-up, UPM Raflatac was able to restructure and improve efficiency in 2013 without impacting the product range, service and deliveries offered to customers.

In July, UPM Raflatac announced plans to reduce labelstock production capacity in Europe, South Africa and Australia to secure cost competitiveness and profitability in markets where the demand situation is not in line with production capacity. Based on this plan, the labelstock factory in Martigny, Switzerland, the coating operations in Durban, South Africa, and the slitting and distribution terminal in Johannesburg, South Africa, were closed and production was reorganised and moved to other factories. The coating operations in Melbourne, Australia will be closed in spring 2014.

## Market review

Label materials have a wide range of end uses: food and beverage labelling, retail and logistics, applications in personal care, home care and durables, and security and pharmaceutical labelling. Roughly 80% of self-adhesive label-

stock demand is driven by private consumption and the remaining 20% depends on industrial production. Continuous product development creates new end-use applications.

The label materials market offers growth potential around the world. In terms of volume, growth potential is strongest in Asia, Latin America and Eastern Europe. In the mature markets of Western Europe, the United States and Japan, growth is mainly driven by product renewal and tailored solutions. Although most growth is in developing markets, the main volume still comes from mature markets.

Along with a gradual, albeit slow, improvement in the macro-economic environment, growth in the global demand for self-adhesive labelstock improved over the year. Demand in Western Europe is estimated to have improved slightly, especially during the second half of the year, whereas in North America demand is estimated to have experienced modest growth during the course of the year. In Eastern Europe, Asia and Latin America growth continued, but at a lower level.

Products driven by private consumption, e.g. those for food, beverage and personal care end uses, fared better than products used in industrial production and logistics.

Average raw material costs remained stable. Raw material costs decreased in the first half of 2013, and increased slightly during the second half of 2013. Average sales prices decreased.

## R&D

In the specialty business, UPM Raflatac focused on developing new high added value products to its range. New adhesive solutions for the wine industry and various new security-labelling solutions were introduced in 2013. The product capabilities were also expanded to gummed and pressure sensitive postage stamps as well as multilayer film laminates.

In the standard products, a large number of paper-based products were re-engineered for greater cost efficiency and improved performance. This re-engineering activity was particularly focused on the Asian markets. New thinner film products were also introduced to improve the cost competitiveness of the filmic products.

# UPM Paper Asia – Growth and healthy profitability

UPM Paper Asia serves growing markets with fine papers in Asia and labelling materials globally.

Success in fine papers is supported by high quality products, well established own brands and use of certified fibre. Superior customer service is provided through an extensive sales network in Asia.

UPM Paper Asia is a global market leader in labelling materials with high quality products and value for customers.

The annual production capacity is 0.8 million tonnes of fine papers, manufactured at the UPM Changshu mill in China, and 0.6 million tonnes of labelling and packaging materials, manufactured at the UPM Jämsänkoski and UPM Tervasaari mills in Finland.

The investment for the third production unit at the UPM Changshu site is proceeding.

## Business performance

Operating profit decreased in 2013, mainly due to lower fine paper prices. Deliveries remained on the same level as the previous year.

## Business development

UPM Paper Asia seeks growth in office papers in China and the Asia-Pacific region, and in labelling materials worldwide.

The fine paper market is nearly 40 million tonnes in the Asia-Pacific region, and the demand outlook is healthy. China is by far the largest market in the Asia-Pacific region, offering the strongest growth opportunities. In recent years, new paper machine investments, especially in China, have increased production capacity faster than demand has increased, which has resulted in intensified competition.

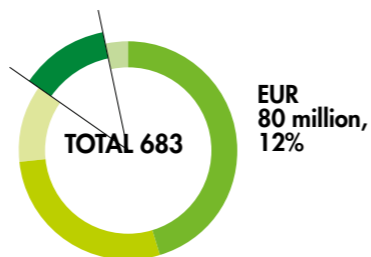
## BUSINESS PERFORMANCE

SALES		-2%
2013	1,108	
2012	1,131	EUR million

OPERATING PROFIT *)		-21
2013	80	
2012	101	EUR million

\*) excluding special items

UPM'S OPERATING PROFIT 2013 (excl. special items)



**1 KG**

OF LANDFILL WASTE PER TONNE OF PAPER

**5.4 m<sup>3</sup>**

PROCESS WASTEWATER PER TONNE OF PAPER

**84%**

OF UPM CHANGSHU'S FIBRE RAW MATERIALS IS CERTIFIED FIBRE

## EMAS REGISTRATION FOR UPM CHANGSHU MILL

UPM Changshu is the first paper mill to be awarded EU Eco-Management and Audit Scheme (EMAS) registration in China.

"The environmental performance of the UPM Changshu paper mill has been very good (see examples on the left) and we have already fulfilled the basic requirements set by the EMAS certification, but registration only became a possibility recently," explains Environmental Manager Lisheng Jin.

"The certification highlights transparency regarding reporting emissions to water, air and soil. We have to follow and fulfil domestic and international environmental regulations very strictly. EMAS audits are an excellent way to improve our environmental performance further," Jin notes.

In 2012, the UPM Fray Bentos pulp mill in Uruguay became the first non-European site ever to achieve EMAS registration.

Read more: [www.upm.com/responsibility](http://www.upm.com/responsibility)

## KEY FIGURES

	2013	2012
Sales, EURm	1,108	1,131
Operating profit excl. special items, EURm	80	101
Capital employed (average), EURm	882	915
ROCE excl. special items, %	9.1	11.0
Personnel on 31 Dec.	1,457	1,504
Paper deliveries, 1,000 t	1,378	1,370

## Market review

In fine papers, UPM focuses on high quality office papers and selectively on coated and uncoated graphic papers, where UPM Paper Asia holds a strong position. Demand in the office paper segment is expected to grow by approximately 3-5% per annum in the Asia-Pacific region and by twice as much in China.

In labelling materials, UPM focuses on high quality release liners and face papers for various end uses. UPM has invested consistently for labelling materials over the last 15 years, and current assets at the UPM Tervasaari and UPM Jämsänkoski mills are performing well, providing added value in a growing market.

The annual growth of UPM's labelling materials is expected to be approximately 3-5% worldwide. In developing markets, fast urbanisation, growing middle classes and higher income levels are the main drivers for demand growth in labelling materials. Demand growth is also supported by rapid development of retailers, distributor networks and automated product labelling. Mature market demand is driven by economic activity and characterised by increasing demand for customer-specific solutions.

Investment for the third production unit focusing on wood-free uncoated speciality papers and labelling materials at the UPM Changshu mill in China is proceeding.

The investment will facilitate growth and enhance the cost efficiency and global market coverage of labelling materials. In addition, it provides an excellent platform for strengthening UPM's global partnerships with self-adhesive labelstock customers and expanding with these products in Asia with a local production facility. The production unit is expected to start up by the end of 2015.

Fine paper prices decreased in Asia during 2013. The slide levelled off towards the end of the year, and price increases in selected markets were implemented. On average, market prices were lower than the previous year, which was compounded with the negative currency impact in some of UPM's major markets. Office paper prices remained fairly stable.

In 2013, demand for fine paper increased only slightly in Asia, though the growth varied by product and market segment. There was overcapacity in all major fine paper grades in Asia.

Demand growth and Chinese government actions to shut down technically outdated, non-environmentally friendly paper capacity will relieve the situation in the medium term. This development is supported by a growing number of Asian customers who are looking for certified environmentally friendly products, enhancing UPM's competitive position.

Global demand for labelling materials picked up slightly during the course of the year and was approximately 4% higher than in the previous year. In Asia and other developing markets, demand continued to grow at about double the average global growth rate in 2013. Prices for labelling materials remained stable.

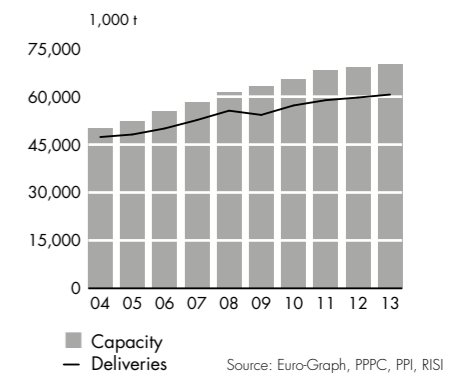
## R&D

The UPM Asia R&D centre based in Changshu is responsible for research on local raw materials and focuses on supporting UPM's production units in China and the Asia-Pacific region, with the main focus being R&D work for paper products. Labelling materials R&D focuses on customer-specific solutions, efficiency improvements and technologies for sustainable solutions.

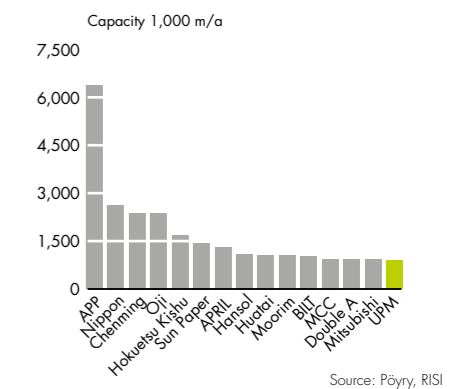
## UPM PAPER ASIA'S PRODUCTION CAPACITIES

	1,000 t/a
Fine papers	800
Labelling and packaging materials	600
<b>Total</b>	<b>1,400</b>

Graphic paper production capacities and total deliveries in Asia



Asia's biggest paper producers



# UPM Paper ENA – Enhancing operational focus through simplified structure

UPM Paper ENA (Europe and North America) provides magazine paper, newsprint and fine papers for a wide range of end uses.

The main customers are publishers, retailers, printers and distributors.

The annual paper production capacity is 10.2 million tonnes, manufactured in 18 modern paper mills in Finland, Germany, the United Kingdom, France, Austria and the United States.

UPM has a global paper sales network and an efficient logistics system.

The combined heat and power (CHP) plants operating on paper mill sites are included in the business area.

## Business performance

Operating profit increased, mainly due to lower depreciation. The reduction in fixed and variable costs could not fully offset lower average paper prices and a reduction in deliveries. Profitability was also partly impacted by unfavourable exchange rate developments in many markets. The average price of all paper deliveries in euros was approximately 4% lower than in 2012. Paper deliveries decreased by 6% to 8,910,000 tonnes (9,501,000), partly affected by the sale of packaging paper operations of the UPM Tervasaari and UPM Pietarsaari mills.

## Business development

The UPM Paper ENA business area focuses on cost leadership and improved profitability to secure cash flow.

The year 2013 was characterised by tougher market conditions, particularly during the first half of the year, due to decreasing paper prices. During the second half of the year, the price slide levelled off and demand increased seasonally. To withstand the challenging market conditions, UPM announced plans to take restructuring measures to improve the cost competitiveness of its European operations in January. The plan included permanent paper capacity reduction in Europe of 580,000 tonnes

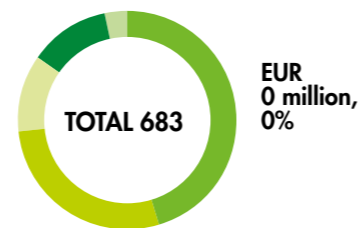
## BUSINESS PERFORMANCE

SALES	2013	2012	%
2013	5,560	6,192	-10%
2012	6,192		EUR million

OPERATING PROFIT *)	2013	2012	%
2013	0	-81	+81
2012	-81		EUR million

\*) excluding special items

UPM'S OPERATING PROFIT 2013 (excl. special items)



**-45%**

FRESH WATER CONSUMPTION

**-23%**

WASTEWATER LOAD

**3,200 TONNES**

OF FIBRES AND FILLERS RETURNED BACK TO PRODUCTION

**2,200 MWh**

IN ENERGY SAVINGS

## MATERIAL EFFICIENCY IMPROVED AT UPM STEYRERMÜHL

UPM Steyrmühl paper mill has achieved significant results in material efficiency (see examples on the left). In total, the mill saves some 1.1 million euros annually due to production process improvements, including savings generated by reduced process chemicals.

The improvements are part of the Paper business' material efficiency programme launched in 2011. The programme aims to reduce process water consumption and lower the amount of suspended solids. Thanks to these achievements, both material and cost efficiency have improved.

"The success of the material efficiency programme is the result of employee engagement and good co-operation at UPM Steyrmühl. We have already made major steps and we still have ideas for further improvement," said General Manager Matthias Scharre.

The project group consists of specialists from various areas of mill processes. Based on the development ideas, a total of 14 projects to improve material efficiency have been put into effect.

UPM Steyrmühl's ideas and achievements have also been shared with other UPM mills.

## KEY FIGURES

	2013	2012
Sales, EURm	5,560	6,192
Operating profit excl. special items, EURm	0	-81
Capital employed (average), EURm	2,672	4,732
ROCE excl. special items, %	0.0	-1.7
Personnel on 31 Dec.	11,081	11,861
Paper deliveries, 1,000 t	8,910	9,501

## EVENTS

**7 Jan:** Coated magazine paper production ceases at UPM Stracel mill

**17 Jan:** UPM announces plans to reduce graphic paper capacity in Europe by 580,000 tonnes

**8 April:** UPM closes down the PM3 at UPM Rauma mill in Finland and the PM4 at UPM Ettringen mill in Germany

**6 May:** UPM finalises the sale of its closed Stracel paper mill

and streamlining of the business area organisation.

In April, UPM ceased production at UPM Rauma paper machine 3 in Finland and UPM Ettringen paper machine 4 in Germany. Both machines produced a total of 420,000 tonnes of uncoated magazine paper annually.

The UPM Docelles paper mill in France was closed in January 2014. The mill produced 160,000 tonnes of uncoated wood-free papers annually.

According to the previous asset review announced in 2011, UPM ceased paper production and signed an agreement on the sale of assets and part of the land at the UPM Stracel paper mill site in Strasbourg, France, in January 2013.

During the second half of the year, profitability improved, mainly due to lower costs.

In August, UPM announced its decision to move to a simpler, more scalable structure to improve performance. The Paper Business Group structure was discontinued, and the operations were separated into two business areas: UPM Paper ENA and UPM Paper Asia. UPM Paper ENA's management was relocated to Augsburg in Germany. The business organisation was also streamlined and reorganised based on customer segments. The reorganisation will sharpen the operational focus of each strategic business unit (SBU).

In connection with the reorganisation, UPM announced further actions to reduce fixed and variable costs, with the full impact to be achieved by the end of 2014. Fixed costs will be reduced through delayering, downsizing, increased scalability and simplification of working procedures. Variable costs will be reduced in areas such as sourcing, logistics and manufacturing.

The strict capital expenditure policy continued in 2013. Capital expenditure within the Paper ENA business area was EUR 92 million (155 million). The largest ongoing investment is the combined heat and power plant project at UPM Schongau in Germany. With the EUR 85 million investment, UPM aims to reduce energy costs significantly and secure the energy supply for the mill. The start-up is scheduled to take place by the end of 2014.

## Market review

The European paper market continued to be impacted by the recession. In 2013, demand for graphic papers decreased by 5% in Europe. The decrease was steeper in the first half of the year, which was also reflected in the paper price development. Graphic paper prices decreased at the beginning of the year and remained largely stable during the second half of the year. On average, graphic paper prices were 4% lower than in 2012. Due to the challenging market conditions, graphic paper production capacity was closed during the year, especially in newsprint, where the supply-demand balance was also improved. Newsprint prices increased during the second half of the year. Supported by continuous growth in the US economy, demand for magazine papers decreased only 1% in North America. The average US dollar price for magazine papers was slightly lower than in the previous year.

Magazine publishers in Europe experienced a slight decrease in readership and circulation figures. The number of advertising pages decreased, mainly due to the continuously weak economy but also due to advertisers allocating spending from print to digital media as a result of changes in consumers' time usage. In Europe, magazine advertising expenditure decreased by 8% compared to the previous year. Spending on magazine advertising in North America, the Asia-Pacific region and Latin America, on the other hand, decreased by approximately 2%.

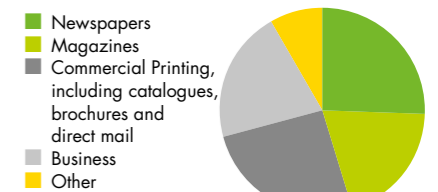
The year 2013 was also challenging for newspaper publishers. Both printed newspaper titles and circulations decreased in Europe. Newspaper advertising expenditure decreased by 8% in Europe in 2013.

Direct mail end-use and demand from the retail sector remained stable in 2013. According to several studies, direct mail continues to play an important role in multi-channel marketing campaigns. Confidence that direct

## UPM PAPER ENA'S PRODUCTION CAPACITIES

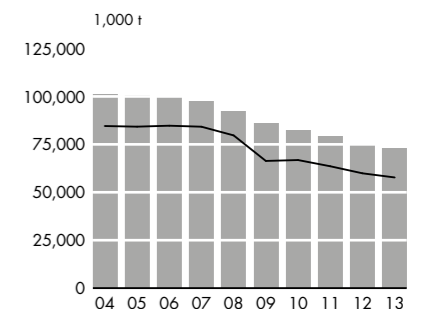
	1,000 t/a
Magazine papers	5,270
Newsprint	2,720
Fine papers	2,200
<b>Total</b>	<b>10,190</b>

## Graphic paper end-uses in Europe



Source: Euro-Graph, RISI

## Graphic paper production capacities and deliveries in Europe and North America



Source: Euro-Graph, PPPC, PPI, RISI

marketing provides higher returns on marketing spend is also high among retailers.

Spending on internet advertising continued to grow throughout the year and contributed to the slight positive development seen in total advertising expenditure in 2013. The role of printed media as an advertising medium decreased slightly, but remains important at the core of multi-channel media and advertising platforms.

Demand for office papers remained stable in Europe in 2013.

## R&D

The R&D work focuses on improving cost efficiency through the material efficiency programme launched in 2011. One key target is to reduce water consumption at the paper mills. (Read more on the outcome at the UPM Steyrmühl mill on page 21.)

UPM is also studying ways to exploit deinking process waste and recycle surplus materials coming from paper mills to use waste streams more efficiently.

# UPM Plywood – Improved profitability thanks to increased deliveries and strict cost control

Plywood is a composite product made of renewable raw materials with excellent strength-to-weight properties. It is used in building and construction, as well as in a number of industrial applications such as transportation equipment.

UPM's annual plywood and veneer production capacity is approximately one million cubic metres.

Progress was good in demanding end-use segments.

UPM sells its plywood and veneer products under the registered trademark WISA. The new thermoformable wood material is sold under the trademark UPM Grada.

## Business performance

Operating profit increased due to higher delivery volumes and lower fixed costs. Mix adjusted average price was slightly higher than in the previous year, whereas variable costs remained fairly stable.

## Business development

The UPM Plywood business area is aiming to improve its profitability. It is also aiming to improve the value offering and service packages for selected end-use customers.

The market environment remained fairly similar for UPM Plywood in 2013 compared to the previous year. Activity in the European construction sector remained weak in general, whereas deliveries to more demanding end-use segments outside Europe increased. During the second half of the year, deliveries to construction-related

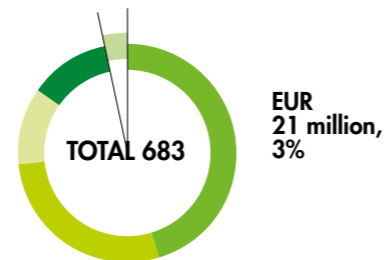
## BUSINESS PERFORMANCE

SALES	2013	429	+9%
	2012	393	EUR million

OPERATING PROFIT *)	2013	21	+19
	2012	2	EUR million

\*) excluding special items

UPM'S OPERATING PROFIT 2013 (excl. special items)



## DEVELOPING THE ULTIMATE LIGHTWEIGHT TRAILER

The magnificent but fragile landscape of the Alps sets special requirements for transport equipment. Despite the challenges of the region, road freight continues to be the dominant means of heavy transport. Vehicles must meet strict weight requirements in order to minimise the impacts of transport on the environment as well as on the road infrastructure.

Leading lightweight trailer manufacturer Schwarzmüller's solution to the challenge has been their groundbreaking ULTRA-LIGHT trailer, which weighs only 4,800 kg – 25-30% less than a normal trailer. A lighter trailer allows for a bigger payload or lower fuel consumption.

UPM Plywood's product specialists have provided technical expertise to the Austrian Schwarzmüller's R&D team in an attempt to further reduce the trailer's weight. To achieve this, the WISA Bonded Floor Solution is being piloted. Attaching the plywood floor to the trailer chassis with glue instead of screws increases trailer's rigidity by making the floor an integral part of the overall load-bearing structure. This means the chassis structure can be even lighter than before.

The first pilot trailer was built during spring 2013 and is currently being tested.

## KEY FIGURES

	2013	2012
Sales, EURm	429	393
Operating profit excl. special items, EURm	21	2
Capital employed (average), EURm	286	300
ROCE excl. special items, %	7.3	0.7
Personnel on 31 Dec.	2,455	2,531
Plywood deliveries, 1,000 m <sup>3</sup>	737	679

end-use segments in certain markets in Europe revived slightly compared to the second half of 2012. Deliveries for industrial applications in Europe remained stable over the year.

In order to stand out in the competitive plywood market following a lengthy slow-down in Europe over the past few years, UPM Plywood has successfully established business outside Europe in more demanding end-use segments, such as the LNG (liquefied natural gas) industry. Investment activity in LNG terminals and carriers is high, and the outlook remains promising. UPM Plywood has also intensified its efforts to improve customer focus, agility and cost competitiveness alongside the major restructuring measures that have been implemented over the past few years. Through strict cost control and focused cost reduction initiatives, cost inflation was largely mitigated in 2013.

The extension and modernisation work at the Savonlinna birch plywood mill in Finland was completed in 2012. As a result of the refurbishment, the Savonlinna mill is one of the world's most technically advanced birch plywood mills, with a broad product offering of high quality special birch plywood. Mill performance improved in 2013.

## Market review

Following decreasing plywood demand in Europe during 2012, there were some initial signs of an improvement in demand during the second half of 2013. The Eurozone leading indicators and construction confidence in certain markets in Europe improved during the latter part of the year. Demand development in Europe was fairly similar in construction-related end-use segments and in industrial applications. Compared with pre-recession levels, overall demand in Europe remained, however, significantly lower. Raw material costs remained stable over the year.

In 2013, the plywood market in Europe was almost in balance, partly due to certain delivery problems with overseas suppliers, but also due to strengthening demand in the United States. Market prices increased somewhat during the year, and were on average slightly higher than in the previous year.

## R&D

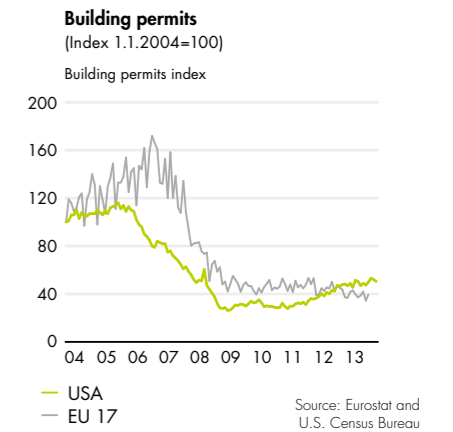
UPM Plywood's product and technology development work focused on creating new customer-based solutions in addition to commercialising and piloting applications developed previously.

One of the key areas was to improve the properties of the current LNG containment system.

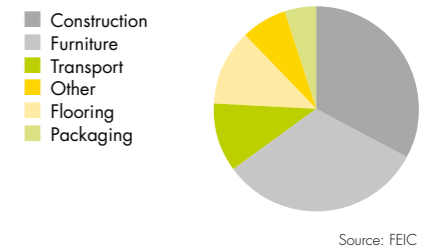
For concrete forming end uses, R&D work concentrated on creating new customer-focused products that are more economic with good functional properties.

Development of rigid structures for vehicle flooring continued with pilot installations for selected customers. In addition, plywood with high friction surface was in the development pipeline.

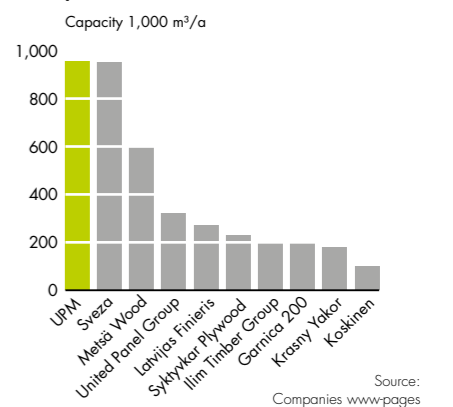
UPM Plywood also developed new patent pending vision technology machine for veneer production. The new measuring technology enables improved raw material utilisation and new type of product solutions.



## Plywood end-uses in Europe



## Europe's biggest plywood producers



ALL PRODUCTS AVAILABLE AS  
**FSC OR PEFC**  
CERTIFIED

**13 TONNES**  
LESS CO<sub>2</sub> EMISSIONS  
DURING TRAILER LIFETIME

# Innovations to replace non-renewable materials with renewable alternatives

**Biofuels are a topical example of UPM's innovation work, with the renewable diesel biorefinery in Lappeenranta due to start operating in summer 2014. Other new businesses include biocomposites, which are already being marketed to customers, as well as biochemicals and biofibrils, which are currently in the development phase.**

The versatile use of renewable wood biomass, combined with innovation, resource efficiency and sustainability, is the cornerstone of UPM's Biofore strategy. Innovations are at the forefront in the creation and development of new products that can be used to replace non-renewable materials with renewable, recyclable and low-impact alternatives and provide resource-efficient alternatives for the future.

The objective of UPM's R&D programmes and business development is to create new technologies and products for UPM's developing businesses and to provide support for its current businesses and ensure that they remain

competitive. In particular, improvements in material efficiency make it possible to consume fewer resources and raw materials in production processes.

In developing businesses, UPM's development expenditure has increased steadily. The majority of UPM's R&D input is focused on new technologies and businesses. In total, UPM spent approximately EUR 155 million (81 million) on research and development for existing and developing businesses, which equates to 20.6% (8.0%) of UPM's operating cash flow.

On top of the direct R&D expenditure of approximately EUR 38 million (45 million), the figures include negative operating cash flow and capital expenditures in developing businesses. The focus is on developing biofuels, biocomposites, biochemicals, biofibrils and CO<sub>2</sub>-neutral energy.

## Biofuels – Getting ready for market entry

In 2013, UPM focused strongly on the preparatory work for the market entry of the UPM BioVerno renewable diesel. UPM carried out comprehensive emission, performance and

wear tests together with the Technical Research Centre of Finland (VTT).

One key objective of the R&D work has been to optimise the feedstock base, purification and hydrotreatment of crude tall oil used for the renewable diesel production. After the start-up of the biorefinery in summer 2014, the emphasis will be on optimising and increasing the efficiency of the production processes. (Read more on biofuels under UPM Biorefining section on page 13.)

## New applications in UPM Biocomposites

In 2013, UPM combined its two composite units, UPM ProFi and UPM Formi, to form UPM Biocomposites. The business unit develops, manufactures, markets and sells high quality composite products and granulates for a wide range of consumer and industrial applications.

UPM ProFi and UPM Formi composites combine the best characteristics of natural fibres and plastic. Their principal ingredients are cellulose fibres and polymers, which can be either virgin or recycled. The composites can be recycled and are non-toxic.

UPM ProFi products are used for decking and other outdoor end uses. They are made mainly from the surplus paper and plastic left over from the production of self-adhesive label materials. In 2013, the UPM ProFi decking product portfolio was expanded to include a new solid profile decking board.

UPM Formi composite is used to replace plastic in many applications, from furniture to consumer electronics and high-end speakers. UPM Formi is manufactured from cellulose fibre and plastics. Around half of the oil-based plastic is replaced with cellulose fibres in the biocomposite. (Read more on the new applications on page 43.)

Products manufactured from UPM Formi comply with food contact material requirements stipulated in EU and US Food and Drug Administration (FDA) regulations. The composite also complies with EU toy safety regulations.

In 2013, UPM Biocomposites developed new material and coating technologies combining the two different composites which improve product quality and the cost effectiveness of the production processes.

## Business opportunities with UPM Biochemicals

In 2013, UPM combined its biochemicals-related business initiatives to form UPM Biochemicals. The unit develops wood-based chemical building blocks, performance chemicals and biofibrils.

Product development at UPM Biochemicals is at the pre-commercial phase, and UPM is actively developing and testing industrial applications with its partners in Finland and abroad in order to create mill-scale industrial concepts.

Chemical building blocks are a cost competitive replacement for fossil-based monomers and chemicals such as intermediates to bioplastics. Performance chemicals utilise the basic structure of the natural biopolymers of wood, such as lignin and hemicellulose. These structures provide a unique performance for adhesives, resins and plastics, for example.

Biofibrils are micro- and nano-fibrillated cellulose products that can be used to shape materials and give them new characteristics. They are suitable for many industrial applications that require a high stabilisation capacity and high viscosity.

In 2013, the R&D work on biofibrils for developing pilot- and plant-scale industrial applications continued. UPM signed a co-operative agreement with Ashland Inc. to develop and commercialise products containing UPM's biofibrils technology. UPM and Ashland will jointly study the use of biofibrils in a wide range of industrial application opportunities.

UPM also signed a joint development agreement with Renmatix Inc. to further develop Renmatix's water-based Plantrose™ process to convert woody biomass into inter-

mediates for subsequent downstream processing into biochemicals. The long-term goal of the initiative is to offer cost competitive alternatives for selected petrochemicals on an industrial scale.

## Co-operation to support implementation

Tekes, the Finnish Funding Agency for Technology and Innovation, is an important partner for UPM, as it is supporting several research projects, such as the development of biofuels, energy-saving technologies and biochemical competence and biofibrils technology.

In 2013, UPM received approximately EUR 3.8 million (3.7 million) from Tekes for its research projects. These projects were carried out in co-operation with research institutes, universities and other companies.

In 2013, the European Commission and the industries within the bioeconomy launched the Public Private Partnership (PPP) programme, which aims to support biorefinery concepts and the growth of the bioeconomy in Europe. The PPP is an important funding element for speeding up the implementation of future investments in new areas such as biochemicals, biocomposites and biofibrils.

In recent years, UPM's intellectual property rights applications have increased significantly. The importance of patent registration highlights the progress in new businesses.

UPM is a shareholder in the Finnish Bioeconomy Cluster (FIBIC). The Cluster's research programmes focus on the bioeconomy and products based on renewable materials, thus supporting UPM's internal R&D activities.

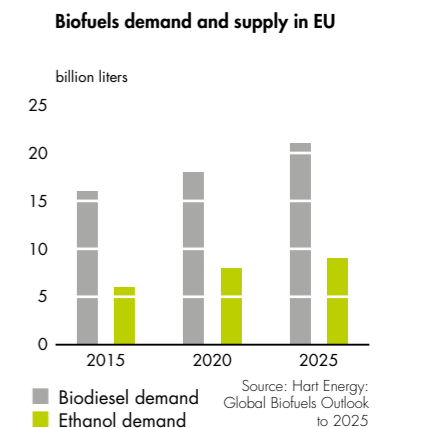
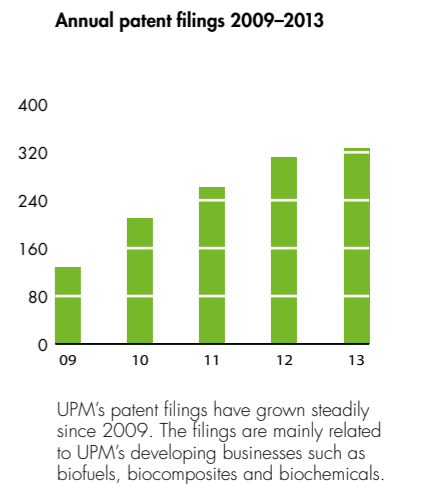
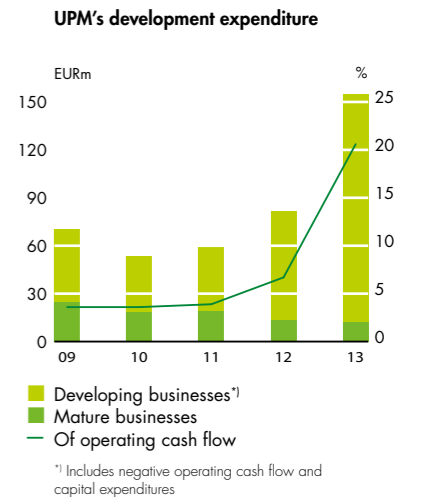
## Global network of research centres supporting businesses

The focus at the UPM Research Centre in Lappeenranta, Finland, is mainly on fibre raw materials, paper and process development for pulping, biofuels and biochemicals. The UPM Biorefinery Development Centre for piloting biofuels and biochemicals is also located in Lappeenranta.

UPM's recycled fibre research is based in Augsburg, Germany. The WISA R&D Centre for plywood and composites is located in Lahti, while labelstock R&D takes place in Tampere, Finland.

The UPM Asia R&D Centre in China is responsible for research on local raw materials and the specific market needs for UPM products, as well as manufacturing and technical customer service support for UPM's production units in China and the Asia-Pacific region.

At the UPM Fray Bentos pulp mill in Uruguay, UPM's competence centre focuses on researching eucalyptus species and their impact on end-product properties. The centre works in co-operation with Uruguayan research institutes and universities.



**250**  
PROFESSIONALS  
IN R&D WORLDWIDE

EUR **150** MILLION  
INVESTMENT TO BIOFUELS  
ONGOING

EUR **155** MILLION  
UPM'S DEVELOPMENT  
EXPENDITURE

## WOOD-BASED DIESEL TAKEN OUT ON THE ROAD FOR A TEST DRIVE

During 2013, UPM completed 20,000 kilometres (12,400 miles) of test drives in co-operation with VTT Technical Research Centre of Finland on vehicles powered by UPM's BioVerno diesel. The aim was to test the performance of the renewable diesel and its effects on engines, as well as fuel consumption and emissions.

The vehicles selected for the test drive were new Volkswagen Golf TDIs, awarded Car of the Year 2013. Engine and vehicle tests have previously been conducted on UPM BioVerno by VTT as well as a number of other laboratories.

UPM's innovative renewable diesel, UPM BioVerno, significantly reduces greenhouse gas emissions caused by traffic when compared with fossil fuels.

This high-quality biofuel is produced from tall oil, a residue of the forest industry, with no raw materials suitable for food being used in the production process. UPM BioVerno is an ideal fuel for all diesel-powered vehicles.

Read more:  
[www.upmbiofuels.com](http://www.upmbiofuels.com)

# Finding the right fit with stakeholder dialogue

Dialogue, feedback and good co-operation in line with UPM's values are the most important ways of promoting mutual understanding with stakeholders.

Corporate responsibility is an integral part of the company's long term business development, which enables UPM to partner and create value with stakeholders, benefitting both the business and local communities.

UPM continuously develops tools and platforms to foster dialogue between the company and its stakeholders.

Stakeholder engagement is a critical part of UPM's operations worldwide. The key focus areas and activities vary locally and according to stakeholder needs. The company's stakeholder engagement procedures provide targets for co-operation and guidance for identifying stakeholders.

Several UPM mills have long-established community forums in place, such as the UPM Blandin Advisory panel in the United States and the Steyrermühl Bürgerbeirat in Austria.

In the Finnish pulp and paper mills, UPM has regional collaboration teams in place. The teams are headed by mill managers and meet monthly to discuss the main priorities including issues related to local stakeholder engagement.

UPM has also established new platforms for stakeholder engagement, such as Kaukas forum at the UPM Kaukas integrate mill in Lappeenranta, Finland. The forum consists of representatives of local stakeholders. The Kaukas forum meets 2-3 times a year and its aim is to enhance dialogue with local stakeholders.

The UPM Foundation in Uruguay promotes the development of communities through education, training and entrepreneurship. The goal is to facilitate, encourage and

activate grassroots projects to promote the long-term, sustainable development of local communities.

UPM continuously tracks stakeholder views, monitors global sustainability megatrends and follows up on weak signals relating to the changing operating environment.

UPM's main stakeholders are customers, suppliers, investors, employees, media, non-governmental organisations (NGOs), governments and regulators, as well as the communities where UPM operates.

Their feedback is analysed from the point of view of both risk and opportunity. Various stakeholder feedback channels exist across the company.

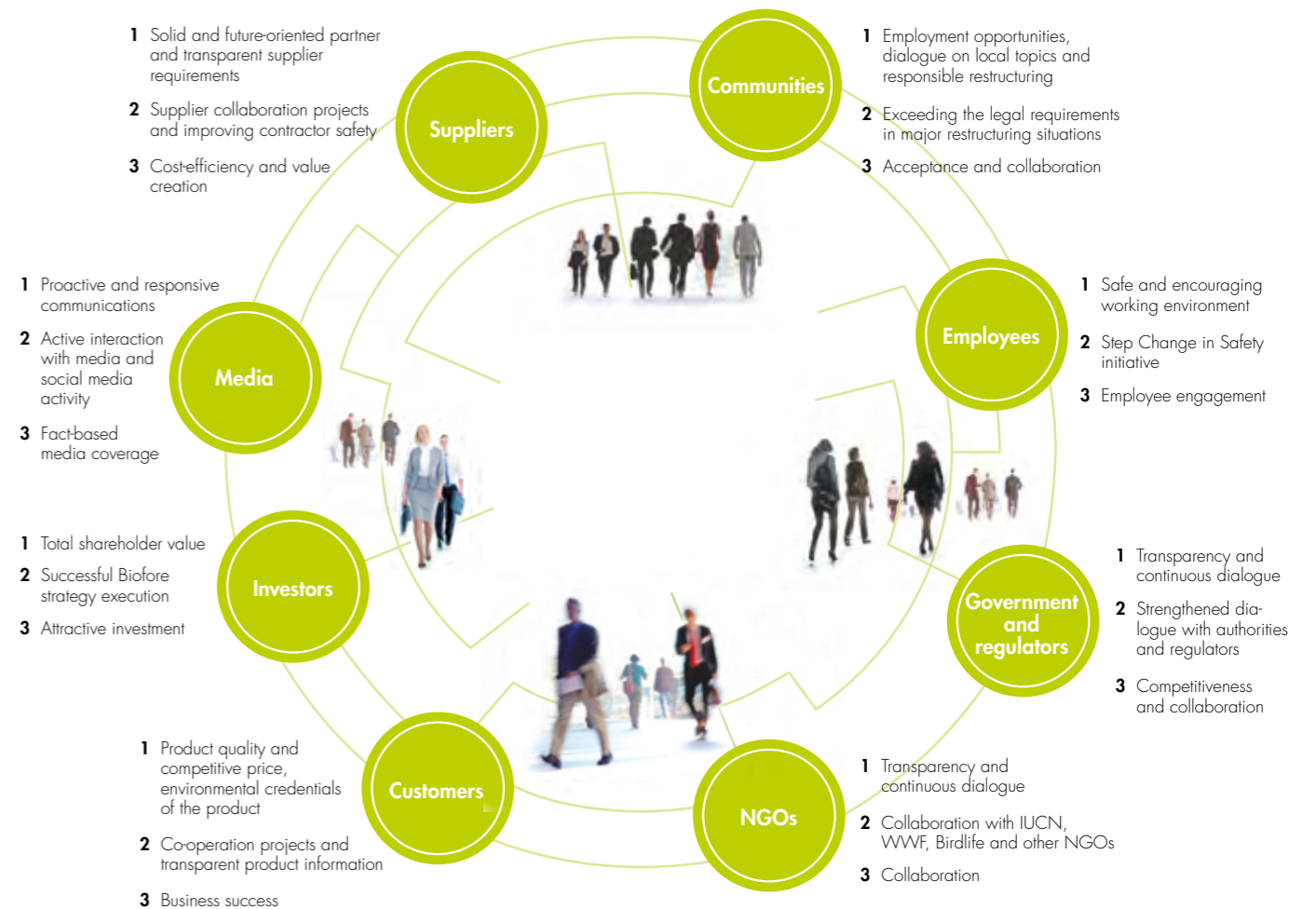
In 2013, UPM conducted its materiality analysis by studying global sustainability megatrends, corporate risk mapping, internal and external stakeholder feedback and other relevant sources to identify the issues that are critical to each business. Based on the work, UPM has defined the following issues as critical:

- safety and environmental risk management
- sustainable forest management and raw material sourcing
- resource efficiency
- product characteristics such as safety and eco-labels

### Addressing stakeholder views

Based on stakeholder feedback, the main stakeholder concerns are discussed locally on a one-to-one basis. The main themes in 2013 with regard to the production plants were short term air emissions such as smell and noise. Feedback on wood sourcing and forest harvesting was

## THE FOCUS OF UPM'S STAKEHOLDER ENGAGEMENT WORK IN 2013

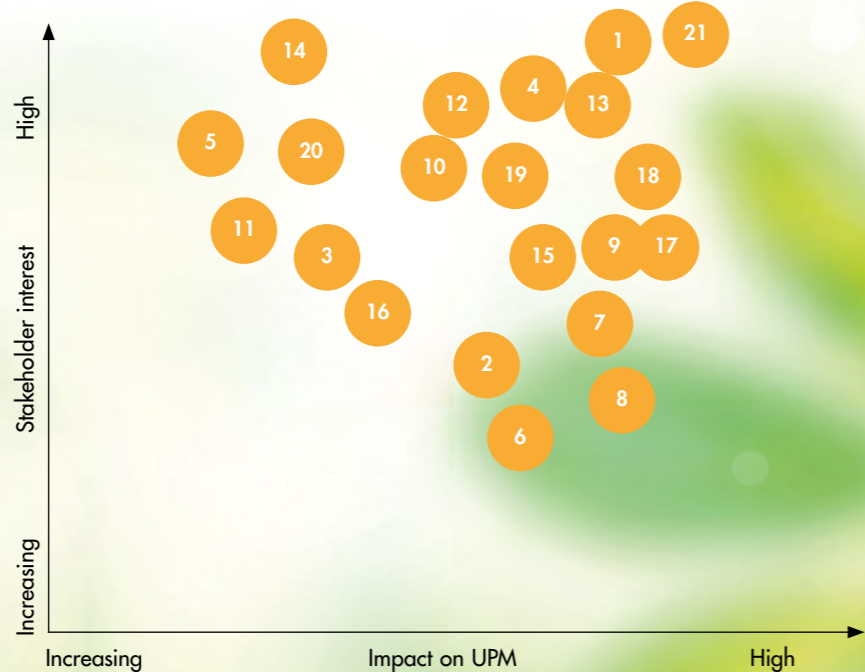


UPM's Biofore strategy forms the foundation of UPM's stakeholder dialogue. The key stakeholders have been identified in the company's stakeholder strategy work. The key focus areas and activities vary locally and according to stakeholder needs. Find out more about our activities in 2013 in this picture.

- 1 Stakeholders' expectations
- 2 Engagement activities
- 3 UPM's target

## UPM'S MATERIALITY ANALYSIS 2013

1. Long-term profitability
2. Public policy
3. Responsible sourcing
4. Environmental performance
5. Climate change
6. Biofore brand
7. Power shift from west to east
8. Material efficiency
9. Safety
10. Product safety
11. Land management
12. Sustainable forestry
13. Stakeholder engagement
14. Transparency
15. Corporate governance
16. Human rights
17. People development and talent attraction
18. R&D platform/Innovation
19. Forest certification
20. Biodiversity
21. Employee engagement



## DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED BY UPM IN 2013 (EUR MILLION)

Direct economic value created		Economic value distributed	
Sales	10,054	Operating costs	-7,762
Income from sale of assets	36	Employee wages and benefits	-1,326
Income from financial investments	5	Payments to providers of loans	-70
Other income	41	Dividend distribution	-317
		Corporate income taxes paid and donations	-162
	10,136		-9,637

**Economic value retained 499**

UPM's economic impact is significant in the surrounding communities. The company's operations contribute to local, regional and national economies by generating economic benefits for different stakeholder groups. The related direct monetary flows indicate the extent of added value globally.



also discussed, and corrective actions were taken where necessary. Dialogue about product safety issues also continued with several suppliers.

In 2013, UPM conducted several stakeholder engagement surveys in co-operation with third parties. These surveys included customer satisfaction surveys and the annual Employee Engagement Survey (EES). (Read more on page 36.)

These stakeholder surveys were designed to identify how stakeholders perceive UPM and the key areas for development. The studies also provide information that is used to assess the impact of emerging sustainability trends and risks posed to the company's operations. Based on the feedback, UPM's stakeholders appreciate the Biofore vision and the company's strong track record in environmental performance.

**Raising concerns**

UPM does not tolerate any violations of the UPM Code of Conduct or the rules and guidelines that accompany it.

All employees and external parties are encouraged to report suspected violations anonymously using the UPM Report Misconduct channel, and the company has internal procedures in place to deal with alleged breaches of the Code of Conduct.

In 2013, a total of ten concerns were reported through the UPM Report Misconduct channel. In all cases, UPM took the corrective actions considered appropriate to the circumstances.

The complaints related mainly to suspected failures to adhere to the company's anti-bribery procedures and suspected conflicts of interest. Some of the cases involved misconduct and led to disciplinary action including terminations of employment.

**UPM HAS A SIGNIFICANT IMPACT ON SOCIETY – CASE FINLAND**

UPM's economic impact on the Finnish society is significant. The value chain from forest creates broad economic prosperity. The most important multiplied impacts relate to employment, logistics, raw materials supply, tax revenues, income from exports and investments. UPM's operations and production plants have a particularly important role in the provinces outside the growth centres.

The economic impacts cover all UPM's key stakeholders from investors and employees to customers, local communities and decision-makers.



**LITTLE SCIENTIST LABS FOR PUPILS IN CHINA**

UPM initiated a new project in co-operation with Beijing Green and Shine Foundation to promote rural education in China. The Little Scientist Lab aims to foster science skills in primary school pupils in remote areas that have little access to resources and lessons on science and nature.

UPM has donated lab facilities which can be used to conduct basic experiments in physics, chemistry and biology.

Xinhua Central School in Guanghan city, Sichuan province was chosen as the first school. The school has close ties with the neighbouring Finnish Sichuan Charity School. UPM became one of the active corporate sponsors of the Finnish Charity School after the 2008 earthquake in Sichuan.

UPM's support for the first "Little Scientist Lab" in the region will not only significantly improve the pupils' capability to explore nature and science, but will also increase the ability to provide effective education in rural areas. Furthermore, the lab project provides a great platform for strengthening UPM's local stakeholder engagement and reinforces UPM's role as a responsible company operating in China.

The Little Scientist Labs see the continuation of the co-operation between UPM and Beijing Green and Shine Foundation following the mini library project in Yunnan province. In 2013, UPM continued to donate books to several rural primary schools.



**THE BIOFORE CONCEPT CAR WILL BE LAUNCHED IN THE SPRING**

The Biofore Concept Car, a joint production by UPM and the Helsinki Metropolia University of Applied Sciences, is to premiere at the Geneva International Motor Show in March 2014.

This unique concept car is designed as a futuristic, street-legal vehicle that demonstrates the use of renewable biomaterials in the automotive industry.

Various parts of the concept car will be made from UPM's biobased materials – the UPM Formi biocomposite and UPM Grada thermoformable wood material. The biobased materials will significantly improve the overall environmental performance of the car, without compromising quality.

UPM Raflatrac label materials will be used in spare parts as well as in the interior and exterior design of the car. The Concept Car will also be powered by UPM BioVerno wood-based renewable diesel.

Students of automotive engineering and industrial design at the Helsinki Metropolia University of Applied Sciences in Finland have constructed the car based on principles of sustainability, recyclability and Biofore thinking.

Read more: [www.bioforeconceptcar.upm.com](http://www.bioforeconceptcar.upm.com)

# Continuous dialogue and collaboration with customers

UPM's interaction with customers is based on continuous dialogue and regular customer satisfaction surveys.

Customers value UPM's comprehensive product range, reliability and excellent environmental performance.

UPM offers a wide range of renewable and recyclable products to be further processed into a variety of useful everyday products, and also provides services that meet the needs of a versatile range of customers.



## CUSTOMER COLLABORATION IN UPM'S BUSINESSES

UPM's businesses vary in the products and services they offer. Each business has its own customer management process and way of interacting with customers. A comprehensive understanding of the markets, knowledge of end-uses and an understanding of customers' needs form the basis of UPM's customer relationship management.

UPM's target is to provide customers with solutions that improve customers' business processes, with a special focus on creating mutual benefits with increased efficiency. Topics related to environmental performance are also at the centre of UPM's customer offering.

### Collaboration with customers

In addition to a continuous operative dialogue, UPM is engaged in various development projects with customers. Many of the projects are related to product development, supply chain efficiency and optimisation, as well as the co-planning of activities.

Customer satisfaction is measured regularly in most businesses through customer satisfaction surveys conducted by a third party. These serve as a tool for developing actions, and bring an important customer dimension to performance management.

### Customers interested in responsibility

Based on the dialogue and surveys, UPM's customers are interested in the company's environmental performance and the sustainability of its operations.

Product safety, forest certification and chains-of-custody, the origin of wood, ecolabels, carbon footprints, recyclability and waste reduction are among the most important topics.

UPM offers product declarations and environmental data for most products as a tool to provide customers with information on the sustainability of products and the supply chain.

	Pulp	Biofuels	Timber products	Energy	Paper	Label	Plywood	Wood Sourcing and Forestry
<b>Product range</b>	Softwood, birch and eucalyptus pulp	Wood-based renewable diesel for transport	Standard and special sawn timber	Trading in physical and derivatives electricity markets	Magazine papers, newsprint, fine papers, labelling and packaging materials	Self-adhesive paper and film labelstock	Plywood and veneer products	Wood and wood-based biomass (logs, pulpwood, chips, forest residues etc.), forest estates and lakeshore plots
<b>Services</b>	Technical and supply chain services, environmental product data	Co-operation in optimising supply chain	Online order-delivery tracking system, technical support, environmental services	Selected services in strategic areas for internal and external customers	Technical support, training and consultancy, stocking and vendor-managed inventory services, environmental services	Technical support, services tailored to end-use needs, environmental services	Technical support and supply chain services, services tailored to end-use needs	Full range of forestry services covering the whole lifecycle of forests and forest ownership
<b>Customer industries</b>	Producers of tissue, speciality, and printing and writing papers, as well as packaging board	Transportation, oil and petrochemicals industry	Building, construction, furniture, joinery, packaging industries	UPM businesses and electricity supply sector in the Nordic countries and Central Europe	Newspaper and magazine publishers, printers, retailers and cataloguers, distributors, converters	Label printers, packers, brand owners in the food, beverage, personal care, pharmaceutical, retail and logistics segments, for example	Construction, transportation and parquet industries	All UPM businesses using wood or wood-based biomass, forest owners
<b>Sales and distribution</b>	<ul style="list-style-type: none"> <li>Own sales network</li> <li>Own distribution</li> </ul>	Co-operation and negotiating take-off agreements with chosen industry partners	<ul style="list-style-type: none"> <li>Own sales network, agents, distributors, direct sales</li> <li>Deliveries from the sawmills to customers</li> </ul>	Electricity exchanges (Nord Pool, Spot, NASDAQ OMX, EEX, ECX) and OTC markets	<ul style="list-style-type: none"> <li>Global sales and agent network and distributors (paper merchants)</li> <li>Own distribution and partners</li> </ul>	<ul style="list-style-type: none"> <li>Roll products: through slitting and finishing terminals</li> <li>Sheet products: through agents and merchants</li> </ul>	<ul style="list-style-type: none"> <li>Own sales network supported by agents</li> <li>Landed stocks in main markets</li> <li>Direct sales to major industrial customers and to selected distribution partners</li> </ul>	<ul style="list-style-type: none"> <li>Own wood sourcing network in North Europe and Central Europe</li> <li>Forestry services through network of offices in Finland and the UK</li> </ul>
<b>Measurement of customer satisfaction</b>	Continuous dialogue, customer surveys	Continuous dialogue and collection of feedback, end-user studies	Continuous dialogue and collection of feedback, annual customer surveys	Continuous dialogue	Continuous dialogue, annual customer surveys	Continuous dialogue, customer surveys, training, seminars	Continuous dialogue, bi-annual customer surveys	Continuous dialogue and regular customer surveys
<b>Actions in 2013</b>	<ul style="list-style-type: none"> <li>Strengthening of sales, supply chain and market support teams</li> <li>Focus on pulp quality and appearance</li> <li>Introduction of a sustainability scorecard</li> </ul>	<ul style="list-style-type: none"> <li>Optimisation of raw material use</li> <li>Building supply chain</li> <li>Negotiating take-off agreement</li> <li>Establishing partnerships with selected companies</li> <li>Optimisation of product features</li> </ul>	<ul style="list-style-type: none"> <li>Focus on strategic markets</li> <li>Optimisation of raw material use</li> </ul>	<ul style="list-style-type: none"> <li>Strengthening of own presence in Kokemäenjoki river area, provision of connected services to other owners at co-owned hydropower companies</li> <li>Leveraging commodity risk management</li> </ul>	<ul style="list-style-type: none"> <li>Launching a series of new products that bring savings to our customers</li> <li>Joint product development</li> <li>Develop a modular service offering</li> <li>Supply chain efficiency and footprint optimisation</li> </ul>	<ul style="list-style-type: none"> <li>Joint product development</li> <li>Local recycling solutions</li> <li>Environmental projects</li> <li>Improved product packaging</li> <li>Improvement of supply chain efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Sales management and customer-oriented organisation</li> <li>Definition of value propositions with customers</li> <li>Customer categorisation</li> </ul>	<ul style="list-style-type: none"> <li>Development of supply chain efficiency and services</li> <li>Implementation of a new way of operating</li> <li>Development of web solutions to improve customer service</li> </ul>
<b>Target</b>	To strengthen our position in growing end-use areas and markets	Market entry, establishing strong customer relations and building platform for wood-based biofuels	To increase market share in strategic markets and to improve the customer service level further	To capture more value in the electricity and commodities market	To secure competitive advantage and our position in a growing market and enhance our competence further	To ensure the mutual benefits of future customer projects and increase responsiveness further	To strengthen market position/share in selected businesses by offering products and services to improve customers' process efficiency	To secure competitive wood and biomass for all UPM businesses in a sustainable manner

# Suppliers are an integral part of UPM value creation

Sourcing operations play a significant role in ensuring the efficiency and profitability of UPM. The objective of UPM's sourcing operations is to maintain a supplier base that is capable of delivering material and service solutions that are both cost competitive and innovative to UPM businesses globally.

Every year, UPM's sourcing professionals purchase a wide range of products, materials and services. These include the company's primary raw materials, such as wood, pulp, energy and recycled paper, as well as other direct and indirect materials such as chemicals, pigments, spare parts, and services from IT and logistics to maintenance. The company's sourcing network consists of suppliers ranging from private forest owners and local companies to large global corporations.

## Towards long-term co-operation with selected suppliers

UPM aims to be a professional partner to its suppliers and to develop supplier relationships in a responsible manner that delivers long term benefits to both parties.

Long-term co-operation plans based on mutual commitment and openness between companies are in place with key suppliers. The aim of this co-operation is to work together to optimise the entire value chain, while sharing best practices for areas such as supply chains, manufacturing and product development.

Ensuring responsible sourcing is an integral part of supplier performance management. UPM works closely with suppliers to ensure that all the company's requirements are met and to establish mutual understanding on the issue of sustainability.

In 2013, UPM co-operated with suppliers with regard to safety in particular. A large number of suppliers have been trained in the company's new safety requirements. (Read more on the improvement of contractor work safety on page 37.)

**64%** OF SUPPLIER SPEND IS QUALIFIED AGAINST THE SUPPLIER CODE

WOOD AND BIOMASS PURCHASES IN **17** COUNTRIES

APPROXIMATELY **15%** OF UPM'S WOOD CONSUMPTION COMES FROM COMPANY-OWNED FORESTS

**36%** OF ALL FIBRE USED IN UPM'S PAPER PRODUCTION IS RECYCLED FIBRE

## Systematic supplier assessment and requirements

Transparent and systematic supplier requirements are the basis for the company's supplier selection process and supplier performance evaluation. UPM's risk assessment covers environmental, social and economic risks and is carried out at supplier level where appropriate. Supplier audits are initiated based on identified risks or gaps in supplier performance.

UPM requires all its suppliers to apply the principles of the Code of Conduct and to fulfil the criteria concerning social and environmental responsibility. These supplier requirements are defined in the UPM Supplier Code.

In 2013, 64% (56%) of supplier spend was qualified against the Supplier Code. Additional specific requirements are in place for areas such as wood, chemicals, safety, logistics, pulp and packaging.

Suppliers are encouraged to apply management systems based on internationally recognised standards and the best available techniques and practices.

## Wood is the primary raw material for UPM's businesses

UPM is both a major forest owner and a purchaser of wood. UPM's wood sourcing operations are closely integrated with UPM

businesses using wood as a basic raw material. UPM sources all wood assortments to ensure optimal utilisation of this valuable raw material.

In 2013, UPM sourced 28.0 million (25.2 million) cubic metres of wood around the world. The majority of wood is purchased from the Finnish private forest owners to whom UPM also offers a wide range of forest services. A network of local entrepreneurs takes care of harvesting, logistics and forestry work operations.

In Finland, UPM's total wood purchases in the private wood market were 9.4 million cubic metres in 2013, 24% higher than in 2012 (7.5 million).

## Tracing the origin of wood is a prerequisite for UPM

UPM's tracing systems and chain of custody model cover the requirements for both PEFC and FSC forest certification schemes. UPM considers forest certification to be an excellent tool for promoting sustainable forestry.

With its chains of custody system, UPM ensures full traceability of the origin of wood worldwide.

UPM verifies that the wood raw material supplied to its mills is sustainably sourced, legally logged and procured according to the requirements of international forest certification schemes and the new EU Timber Regulation. UPM therefore has control over the origin of its own harvesting and ensures that other sources are controlled through contractual terms of agreement and supplier audits.

All of UPM's wood supplies are covered by third-party-verified chains of custody and 80% (77%) of the wood used is certified. (Read more on UPM's sustainable forestry on page 47.)

## Pulp and chemicals are purchased worldwide

UPM buys approximately 1.6 million tonnes of chemical pulp from external suppliers. Specific requirements are set for pulp suppliers with regard to environmental performance, forestry, wood sourcing and performance reporting.

UPM is also a major purchaser of chemicals. Chemical suppliers are subject to specific requirements with regard to product safety, such as the UPM Restricted Chemical Substance List (UPM RSL) and EU Ecolabels. The UPM RSL was updated in 2013 and currently contains approximately 6,000 restricted chemicals. The implementation of the new list will start in 2014. (Read more on page 41.)

Environmental and social performance data is collected regularly from UPM's pulp and chemical suppliers. The results of these surveys are discussed with the suppliers, both on-site and off-site. The data collection is an integral part of supplier risk and performance management.

In 2013, sourcing professionals at UPM Raflatac conducted a responsibility and

## WOOD DELIVERIES TO UPM MILLS

1,000 m <sup>3</sup>	2013	2012
Finland	17,907	16,591
Germany	1,691	1,093
Austria	1,098	833
Russia	352	613
France	0	306
United Kingdom	297	313
Estonia	123	119
United States	881	879
Uruguay	4,519	3,527
<b>Total</b>	<b>26,868</b>	<b>24,274</b>

product safety survey with almost 200 paper, chemical and films suppliers. Suppliers were given feedback based on their responses.

## Energy from renewable sources

UPM is both a significant purchaser and a producer of energy. The majority of electrical and thermal energy is used for the company's pulp and paper production. UPM favours a wide range of low-emission energy sources and focuses on energy efficiency and energy savings in its businesses. In 2013, 67% (65%) of the fuels used by UPM were from renewable sources.

In addition to the company's own electricity generation, electricity is also purchased from the Nordic and Central European energy markets. In Germany, the company also has bilateral agreements in place with electricity suppliers. In 2013, 6.2 TWh (7.1 TWh) of electricity was purchased.

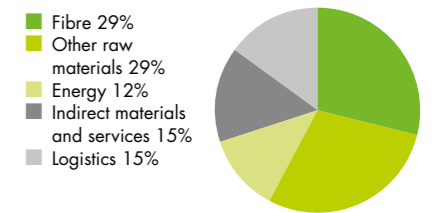
## Logistics form the foundation for on-time deliveries

UPM delivers approximately 21,000 loads of products and raw materials around the world every week. Of all UPM deliveries, 69% are by rail and road and 31% are by sea traffic. The majority of UPM's haulage is handled by contract partners. UPM aims to create strategic long term alliances in order to create benefits for the company and its customers.

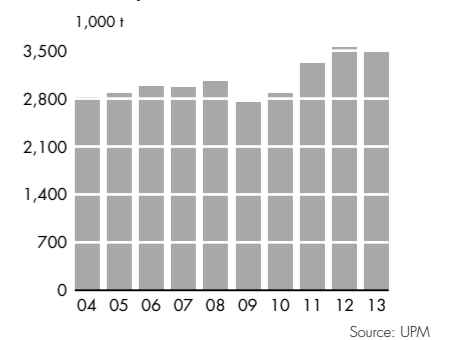
The criteria for forming these alliances are efficiency and the ability to meet environmental and social responsibility requirements. UPM has set compulsory requirements for the handling, transportation and warehousing of UPM products.

As more stringent regulations on transport emissions come into force, UPM is developing alternative logistics and fuel solutions with alliance partners. Regarding the new sulphur regulation approved by the European Parliament in September 2012, UPM is co-operating with shipping lines and ship owners to find ways of complying with the forthcoming regulation, which comes into effect in 2015.

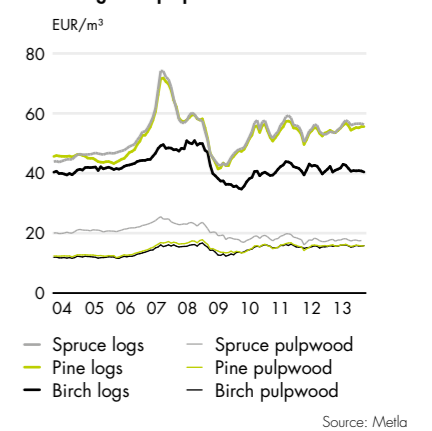
## UPM external purchasing spend



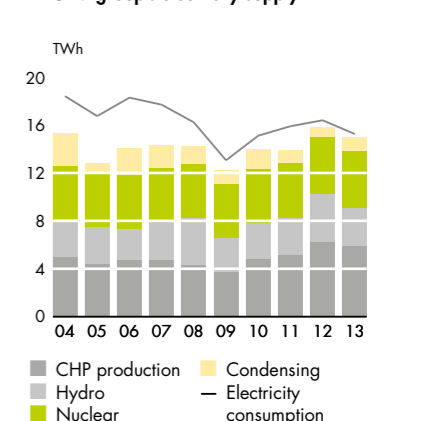
## UPM's recovered paper consumption



## Monthly stumpage prices for logs and pulpwood in Finland



## UPM group's electricity supply



# People enable company transformation

The main objective of UPM's People strategy is to drive the company's transformation into the Biofore Company by enhancing the UPM culture.

As a result of the "Step Change in Safety" initiative, safety results continued to improve significantly.

UPM's responsible restructuring continued in impacted locations in 2013.



UPM invests in the development of all employees, with a focus on supporting learning at work. UPM invests to develop multi-skilled employees and their professional competences. An additional focus area in recent years has been the reinforcement of a collaborative way of working.

### UPM offers opportunities to perform and grow

As a global company, UPM offers a variety of career opportunities all over the world.

UPM aims to provide its employees with meaningful jobs where they are able to achieve results, and a motivating and safe working environment with a focus on employees' wellbeing. As an employer, UPM has reward and recognition processes with an emphasis on high performance. Responsibility is an integral part of UPM's Biofore strategy and its everyday operations.

At the end of 2013, UPM had a total of 20,950 employees. The reduction of 1,230

employees is mostly attributable to the restructuring and sale of businesses. At the same time, the number of employees in the biofuels business increased.

UPM started its new two-year apprenticeship programme at the UPM Kymi and UPM Kaukas mills in Finland. The aim of the programme is to attract new talent and enable the new working generation to work on a wider range of tasks in various departments in the mills. There were over 1,300 applications for the 45 apprentice vacancies. The aim of the new apprenticeship programme, which will begin in February 2014, is for apprentices to obtain a vocational degree in the paper industry. The programme is run in co-operation with a local vocational school.

In Germany, more than 100 apprentices start in 15 professions at UPM every year.

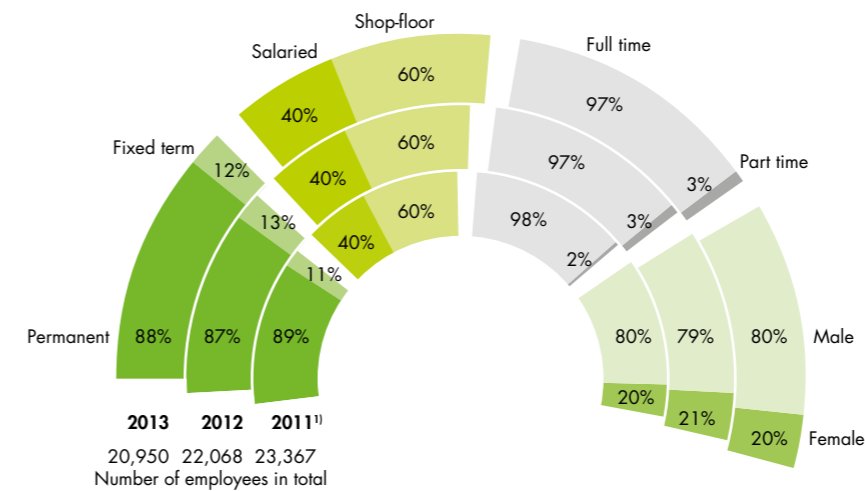
### UPM promotes active participation

UPM complies with international, national and local laws and regulations and respects international agreements with regard to human and labour rights. UPM respects freedom of association and abides by legally binding collective agreements. UPM promotes equal opportunities and objectivity in employment and career development and respects employee privacy.

Employee participation and consultation are organised in accordance with international and national rules and regulations.

The UPM European Forum is the Group's official international co-operative body, and representatives from UPM's mills in Europe attend its meetings. The European Forum met twice in 2013. Meetings covered topical issues and open dialogue related to the business situa-

### UPM PERSONNEL IN FIGURES



	2013	2012	2011 <sup>1)</sup>
Turnover %	12.45	15.06	10.17
Turnover% (voluntary)	5.49	5.95	5.20
Average age of personnel	43.4	42.8	43.0
<b>People development</b>			
Average training hours <sup>2)</sup> (hours employee)	15.5	17.3	15.5
<b>OHS figures</b>			
Lost-time accident frequency	5.4	8.5	15.2
Absenteeism %	3.4	3.5	3.7

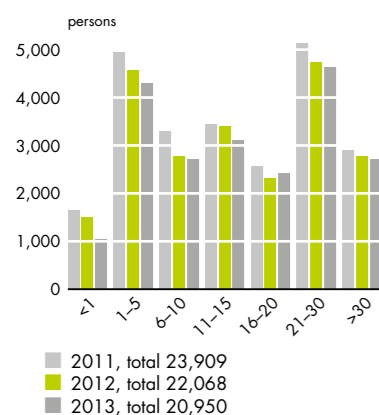
<sup>1)</sup> HR figures for 2011 reflect active employees  
<sup>2)</sup> Reflects active employees

### PERSONNEL BY COUNTRY

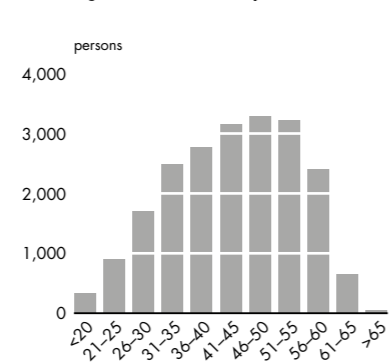
31 Dec.	2013	2012	2011
Finland	8,110	8,636	9,639
Germany	4,609	4,714	5,332
United Kingdom	1,136	1,205	1,497
France	901	1,146	1,195
Russia	771	970	1,006
Austria	547	546	572
Poland	440	454	369
Estonia	206	217	201
Spain	194	212	226
Switzerland	68	110	12
Italy	62	65	71
Turkey	38	39	39
Belgium	32	35	36
Sweden	26	29	24
Other Europe	109	98	104
China <sup>1)</sup>	1,412	1,430	1,414
United States <sup>2)</sup>	1,116	1,129	1,188
Uruguay	562	576	554
Malaysia	174	185	170
Brazil	95	48	44
Australia	77	86	91
South Africa	66	72	82
India	41	36	33
Rest of the world	158	142	118
<b>Total</b>	<b>20,950</b>	<b>22,180</b>	<b>24,017</b>

<sup>1)</sup> Incl. Hong Kong  
<sup>2)</sup> Incl. Madison 50%. The figures for 2011 and 2012 have been recalculated to include Madison.

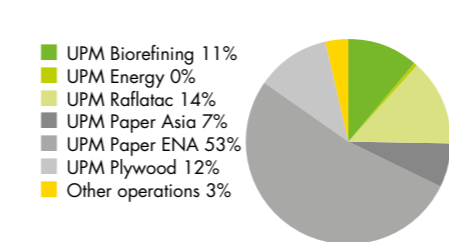
Employees' years of service with UPM 2011-2013



Age structure of UPM personnel 2013



UPM's personnel by business area 2013 20,950



tion and changes within the company and the business environment.

Another way of promoting employee participation is the annual Employee Engagement Survey (EES). The survey provides information about development in the workplace and provides feedback to managers.

In 2013, the response rate stayed at the same level as the previous year (78%). The overall engagement index declined slightly to 60% (63%). The manager effectiveness index continued to increase (74%). The Occupational Health and Safety (OHS) index remained at the same level as the previous year (77%).

Based on the results of the survey, the company-wide areas for development are being carried over. Workplace safety remains high up on UPM's agenda.

UPM does not collect information on or report on its employees' union membership at a global level due to differences in national legislation in various countries. The estimated percentage of employees covered by collective agreement mechanisms is 65%.

### Striving for achievements, personal growth and renewal

UPM utilises the 70/20/10 model stating that 70% of learning takes place on the job, 20% comes from learning from others and their experiences and 10% is training off the job.

UPM's performance management process is used systematically to set strategy-related targets and development plans for employees around the world. The focus of personal performance reviews is clear target setting, feedback and individually agreed development areas.

UPM organises training and coaching for managers in order to develop their performance management skills. In 2013, 85% (84%) of all UPM employees had a personal performance review with their managers.

### Empowering leadership as a target

In 2013, UPM renewed the leadership development programme portfolio to support the ongoing transformation in the company. Key themes for the new development programmes are self-leadership, coaching and leading in

85% OF ALL UPM EMPLOYEES HAD A PERSONAL PERFORMANCE REVIEW WITH THEIR MANAGERS

EMPLOYEES IN 48 COUNTRIES

NEARLY -40% DECREASE IN ABSENTEEISM DUE TO ACCIDENTS AT WORK

complexity. UPM aims to have inspiring and empowering leaders that are able to lead in an agile and sustainable manner and for all employees to have strong self-leadership capabilities.

UPM continued its mentoring programme and its leadership development alumni and front-line managers' development programmes.

UPM focused on a coaching style of leadership throughout 2013. The aim is to increase employee engagement and empowerment.

### Recognising high performance

UPM employs a total compensation approach consisting of base salary, benefits and incentives, which are determined by UPM's global rules, local legislation and market practice. Intangible recognition is also included in the reward portfolio. Emphasis is placed on striving for high performance when decisions are made regarding pay. For significant individual or team achievements, there is a separate Achievement award practice in place.

All of UPM's employees belong to a unified annual short term incentive scheme. The plan combines company and business-level targets and personal and/or team performance targets. EBITDA is one of the key financial indicators for the company and business-level targets.

The total amount of annual incentives for the year 2013 is EUR 38 million.

UPM has two long term incentive programmes: a Performance Share Plan for

senior executives and a Deferred Bonus Plan for other key employees. Based on the results of the 2012 earning period, 640,000 shares were earned under the Deferred Bonus Plan. These shares will be distributed to the nominated participants in 2015. Based on the results for 2013,

the estimated number of earned shares to be delivered to participants in 2016 is 254,000.

The earning period for the Performance Share Plan is three years. The first plan covers the years 2011–2013, the second plan the years 2012–2014 and the third plan the years 2013–2015. Approximately 600 key employees are covered by the plans.

The two long-term incentive programmes were launched in 2011 and are run on an annual basis. These programmes have replaced the Share Ownership Plan and Stock Option Programme launched in 2007. The Share Ownership Plan has already ceased and the Stock Option Programme will cease in 2014.

### Ensuring responsible restructuring

UPM's activities on permanently closed sites and in restructuring typically focus on retraining, re-employment and relocation within the company, as well as on supporting entrepre-

neurship. Active measures promoting employment and retraining are carried out in close co-operation with various authorities and other third parties.

In January 2013, UPM ceased paper production at the UPM Stracel paper mill in Strasbourg, France. In April, UPM closed down paper machine 3 at the UPM Rauma mill in Finland and paper machine 4 at the Ettringen mill in Germany.

In July, UPM Raflatac announced the closures of the labelstock factory in Martigny, Switzerland, coating operations in Melbourne, Australia, and Durban, South Africa, and the slitting and distribution terminal in Johannesburg, South Africa.

The UPM Docelles paper mill in France was closed in January 2014.

In Timber operations, UPM sold its further processing business at Kaukas in Lappeenranta, Finland, and at Aigrefeuille in France. The Pestovo sawmill in Russia was also sold.

In addition, UPM restructured its wood sourcing and forestry activities, the operations of global functions and the head office activities of the UPM Paper ENA business area.

## Focus on safety and wellbeing

The company-wide "Step Change in Safety 2012-2014" initiative has resulted in a substantial improvement in safety results. In 2013, UPM's lost-time accident frequency (the number of lost-time work accidents per one million hours of work) was 5.4 (8.5). The second year of the campaign brought nearly 40% improvement from previous year. The target for the end of 2014 is below five.

At the end of the year, 11 production units achieved more than one year without any lost-time accidents.

Unfortunately, there was one fatal travel accident during a business trip in Finland in 2013.

The 2013 theme "We can prevent all accidents" underlined the importance of the work community's role in making safety a natural part of everyday activities. Evaluation, learning and improvement, and making safety an integral part of our business management system and daily activities have been the focus areas. In addition, UPM introduced a new safety theme each month. UPM's safety standards were also reviewed during the autumn.

UPM celebrated the company's first Safety Week in all UPM locations in April in connection with the World Day for Safety and Health at Work organised by the International Labour Organization (ILO).

The 2013 UPM Safety Award was given to two business units UPM Pellos plywood mill in Finland and NorService paper service centre in Germany for outstanding safety performance and commitment.

As well as its own employees, UPM's safety requirements apply also to subcontractors and visitors. UPM requires its subcontractors to follow the safety guidelines, which enables them to carry out their work safely whilst on UPM premises. (Read more on contractor safety improvements on page 37.)

Absences due to illness and accidents decreased slightly from 2012. UPM's global absenteeism was 3.4% (3.5%). Absenteeism decreased in France and in the United States in particular. In addition to the decrease in the number of accidents, absenteeism due to accidents at work decreased significantly (nearly 40%).

### Monitoring employees' wellbeing

At UPM, there is a good co-operation between employer, employee and occupational health organisation to improve the occupational health of personnel. Various metrics and indicators are used to monitor employees' wellbeing locally. These indicators include, for example, the annual employee engagement survey (EES), follow-up of safety and absence indicators and occupational health checks aligned with national legal requirements. This information is used to monitor individuals and work communities and plan local activities to support wellbeing at work.

As of the beginning of 2013, all UPM's sites in Finland are non-smoking. Some UPM sites in the UK and France were already non-smoking.

UPM considers the health and safety of employees, visitors and other people affected by its operations to be of paramount importance. UPM aims to be an industry leader in safety and to have no fatal accidents at UPM premises.

LOST-TIME ACCIDENT FREQUENCY FELL TO **5.4**

OVER **60%** IMPROVEMENT IN TWO YEARS



### Focus on health

In connection with the Step Change in Safety initiative, a special focus area for 2014 will be health. The aim of the "Focus on Health" campaign is to support continuous improvement of employees' health, quality of life, and ability to perform on a voluntary basis.

Most UPM sites already have activities and practices to support a healthier lifestyle. Local management teams will review their health practices at all UPM sites. Based on the findings, further development activities will be arranged. In addition, a personal health plan consisting of a medical check, wellness assessment and personal action plan will be piloted at a few sites.

# 400-2,000

CONTRACTORS WORKING ON EACH UPM PULP AND PAPER MILL ANNUALLY

MORE THAN **13,000** CONTRACTORS TRAINED IN UNITS' SAFETY TRAININGS

**-15%** REDUCTION IN THE NUMBER OF CONTRACTOR ACCIDENTS

### STEP CHANGE IN CONTRACTOR SAFETY

Contractor safety is an integral part of the company's safety performance. All contractors are required to have a basic understanding of UPM's safety procedures and to conduct job/work-specific safety training.

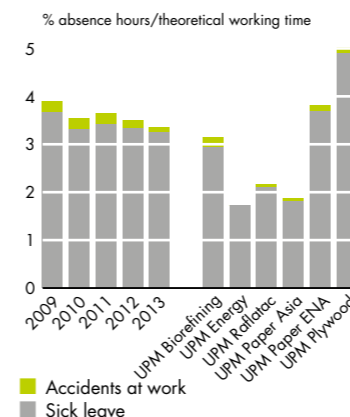
As part of the safety initiative, UPM has updated its safety requirements for contractors. In addition to the general requirements, more specific requirements have been introduced for contractors working at UPM's premises and for drivers of heavy-goods vehicles.

UPM introduced a special web-based safety induction to complement the UPM general safety and site-specific inductions. The safety induction is a prerequisite before starting work at a UPM site or making deliveries with a heavy-goods vehicle. More than 17,000 contractors have completed the induction already.

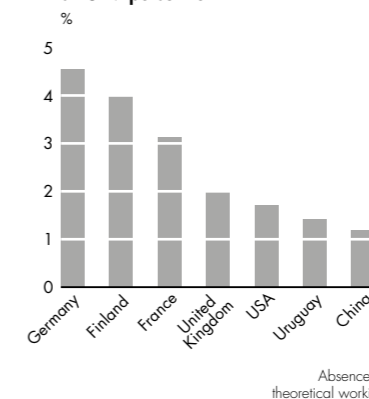
The target of the safety requirements and training sessions is to ensure that neither UPM employees nor contractors are subjected to any risks when working on UPM's premises. UPM has also taken further risk assessment measures by conducting safety self-assessments with over 300 key contractors working in high-risk safety positions.

From 2014 onwards, contractors will also be rewarded for their good safety performance, commitment and initiative with an annual safety award.

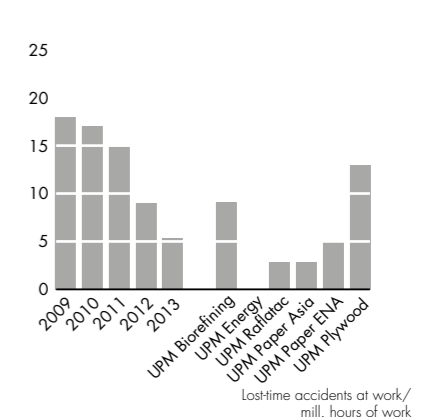
Absenteeism % due to sickness and accidents at work, all UPM personnel



Absenteeism due to sickness and accidents at work, all UPM personnel



Lost-time accident frequency, all UPM personnel



# UPM's Biofore strategy represents a commitment to sustainable development

The foundation for corporate responsibility at UPM is the company's Biofore strategy. It sets the direction for innovation, product development, and safe and sustainable operations.

UPM regained its position in both the European and World Dow Jones Sustainability Indices (DJSI) and received other external recognition for its climate, forestry and innovation actions.

More with Biofore: material efficiency in operations improved significantly.

UPM's corporate initiative "Step Change in Safety" proceeded with excellent results – nearly 40% reduction in lost-time accident frequency in 2013.



Businesses based on renewable and recyclable raw materials form the core of UPM's Biofore strategy. Responsible use of resources brings with it advantages with regard to energy, production and cost efficiency. UPM products are produced in a way that uses less water, less energy and fewer raw materials, and at the same time generates less waste, giving the products more economic and environmental value.

UPM's long term commitment to responsibility is evident throughout the lifecycle of products. The social and environmental impacts of raw material portfolio and sourcing, production, deliveries and product use are taken into account until the product is recycled, reused or disposed of.

In addition, UPM's wide range of expertise in biomass utilisation and recycling combined with the existing sourcing network provides a solid platform for the development of new, higher value-added businesses. Many of UPM's current and new products provide alternatives to non-renewable materials.

The evaluation of global sustainability megatrends, risks and stakeholder expectations is an integral part of UPM's strategy process. Renewability, recyclability and resource efficiency have been identified as critical issues for UPM's current and future business and a response to resource scarcity and societal needs on a large scale.

Although climate change or resource scarcity could potentially become a risk, UPM also sees opportunities as its products are based on renewable raw materials, the majority of its energy generation and use is based on fossil CO<sub>2</sub>-neutral sources and most

of its products are recyclable. These strengths ensure that UPM will be well positioned in an operating environment where renewable and recyclable resources are acknowledged for their environmental credentials.

## Committing to responsibility targets

UPM has defined corporate responsibility principles with forward-looking targets and corresponding measures in the key areas of economic, social and environmental responsibility.

Sustainable products and climate, water, forest and waste management have been defined as the key areas of environmental responsibility. In terms of social issues, sourcing, local stakeholder engagement, safety and responsible restructuring are key focus areas. UPM aims to improve its performance in all of these areas continuously.

In 2013, UPM's corporate responsibility activities focused on the company-wide safety initiative, improving contractor safety and expanding the internal Clean Run environmental campaign into new business areas. (Read more on the safety initiative on page 38 and contractor safety on page 37.)

## Managing the responsibility agenda

UPM's responsibility principles form part of the company's strategy process, which is a prerequisite for continuous improvement and also guarantees attention from members of management.

UPM's global corporate responsibility agenda is managed by the Group Executive

Team (GET), headed up by the President and CEO. The GET sets the agenda and direction for future development. The daily practices are integrated into each business and, at corporate level, the responsibility agenda is managed by the Environment and Responsibility team, which co-ordinates the various initiatives by business areas and functions.

In 2013, UPM revised its Anti-Bribery Rules. The rules are available in 11 languages and they complement company's zero-tolerance policy on corruption and bribery, which is set out in the Code of Conduct, and explain in further detail the ethical behaviour expected from employees and also from third parties. Training on the rules has been organised.

UPM is committed to monitoring and reviewing its performance in relation to preventing corruption and bribery. In connection with this development, the Ethics Advisory Committee has been established to periodically review and evaluate the effectiveness of the Rules. The Committee reports regularly to the UPM Audit Committee on the status of anti-bribery compliance within the company.

## Investments in resource efficiency show returns

UPM has invested to ensure compliance and performance that exceeds environmental regulations. UPM's investments in environmental performance are part of the Group's investment programme, and their aim is to promote the efficient and responsible use of energy, water and raw materials.

In 2013, UPM's environmental investments totalled EUR 29 million (35 million). The largest investment was the rebuild of the bio-

## MORE WITH BIOFORE: RESPONSIBILITY AS A SOURCE OF COMPETITIVE ADVANTAGE



## EVENTS

- 7 March:** UPM is awarded the EU Ecolabel Communication Award 2012 for its commitment to sustainable products
- 14 March:** UPM wins Sustainable Biofuels Award in Rotterdam
- 15 July:** UPM receives EMAS registration in China
- 12 Sept:** UPM renews its world-class position in the Dow Jones Sustainability Index
- 20 Sept:** UPM renews apprenticeship programme at UPM Kymi and UPM Kaukas mills in Finland
- 26 Sept:** UPM brings into use a new bio heating plant that generates energy from bark at UPM Korkeakoski sawmill in Finland
- 8 Oct:** UPM achieves a top position in Carbon Disclosure Project's (CDP) Nordic Climate Disclosure Leadership Index (CDLI) for the fifth year running

logical effluent treatment plant at the UPM Pietarsaari pulp mill in Finland.

UPM's environmental costs, which were mainly attributable to effluent treatment and waste management, totalled EUR 134 million (133 million), including depreciation.

No significant environmental incidents occurred in 2013. However, there were several minor temporary deviations from permit conditions. These deviations were reported to the relevant authorities immediately, and corrective and preventive measures were taken. The measures are part of the company's internal Clean run campaign, which aims to improve environmental performance further and to promote and maintain environmental awareness.

## Committed to responsible business practices

The foundation for UPM's responsible business practice is the company's Code of Conduct, which provides the basis for the company's approach to human and labour rights, ethical business conduct, safety, environmental practices and safeguarding company assets. The Code of Conduct is complemented by more detailed policies, rules and guidelines (read more on the company's policies on page 57). UPM provides regular training in the area, and Code of Conduct training is part of the induction of new employees.

UPM requires all of its employees to participate in training on the Code of Conduct. By the end of the year, over 17,000 employees had attended the training (85%). UPM aims to reach 90% participation in the training by 2015.

UPM is also committed to the ten principles of the UN Global Compact. The ten principles



## CLEAN RUN IS ABOUT AWARENESS, COMMITMENT AND CONCRETE ACTIONS

The Clean Run campaign, launched in 2011 at UPM pulp and paper mills, was expanded to other businesses in 2013.

Although the environmental challenges differ, the key focus of the campaign remains the same: to further improve the mills' environmental performance by promoting environmental awareness, identifying issues before they have an environmental impact, encouraging immediate reporting and learning from others.

In wood sourcing and forestry, Clean Run stands for consistent monitoring, meticulous recording of the findings and the active follow-up of any corrective actions.

At the UPM Raflatac Scarborough factory in the UK, the Clean Run targets and mindset have been embedded in the regular safety walks. In practice, departmental teams inspect their area to identify and classify items that need improvement or immediate action and share best practices.

Read more on environmental performance: [www.upm.com/responsibility](http://www.upm.com/responsibility)

### PRODUCT SAFETY STARTS WITH CHEMICAL PURCHASING

UPM Restricted Chemical Substance List (UPM RSL), updated in 2013, takes product safety further to ensure that UPM's products are safe to use and environmentally sound. If it is anticipated that a chemical will include prohibited substances, UPM starts discussions with its suppliers about the role of restricted substances in the product.

Programme director Marja Koljonen from the Baltic Sea Action Group (BSAG) welcomes UPM's initiative in updating the list. UPM's product safety approach guarantees that the substances will not enter the water system.

"UPM's new list also includes hazardous chemicals that have been discovered only recently and are not yet officially prohibited. These chemicals are toxic, accumulative and long lasting and they will cause, among other things, harmful effects to reproduction processes in humans and animals," she says.

The chemicals usually enter the water system through industrial or municipal water treatment plants as they can also be found in several consumer products. "They do not have a direct impact on water eutrophication, for example, but they will accumulate and transfer into the food chain," notes Koljonen.

UPM has signed a voluntary commitment with BSAG to participate in the Baltic Sea rescue mission. According to Koljonen, UPM's commitment is ideal as it fits the company's own processes, business model and targets, and develops them in a direction that helps the Baltic Sea and the company.

Read more: [www.upm.com/suppliers](http://www.upm.com/suppliers) and [www.bsag.fi](http://www.bsag.fi)



are derived from internationally recognised standards in the areas of human rights, labour, the environment and anti-corruption.

In 2013, UPM conducted a high-level Human Rights Due Diligence exercise to identify UPM's potential human rights impacts within the context of the UN "Protect, Respect and Remedy" policy framework and the associated UN Guiding Principles on Business and Human Rights.

According to the study, UPM has a range of management systems to address human rights-related risks, but there is scope for further enhancement. UPM will take the necessary steps to consolidate the company's position on the UN policy framework as well as the other human rights conventions and principles.

#### More credibility with transparent reporting

At corporate level, UPM follows the Global Reporting Initiative's G3 reporting guidelines, which enable companies to measure and report on their sustainability performance.

The corporate responsibility information in English (see the Independent Assurance Report on page 53) has been assured by an independent third party, Pricewaterhouse-

Coopers Oy, and congruence between the English and Finnish versions has been checked.

PricewaterhouseCoopers has checked that UPM's corporate responsibility reporting for 2013 meets the GRI requirements for Application Level B+, which does not indicate quality, but the number of indicators.

The GRI content index can be found on pages 51–52, and an extended version of the GRI content index, including detailed descriptions of the scope of the reporting and data measurement techniques, is available at [www.upm.com/responsibility](http://www.upm.com/responsibility).

To support the company's strong focus on stakeholder engagement and sustainable development further, UPM is committed to the principles of inclusivity, materiality and responsiveness, as defined in the AA1000 AccountAbility Principles Standard (2008).

UPM provides comprehensive environmental information that has been assured by third parties from corporate level right through to the mills and individual products. Products with eco-labels, environmental product declarations and certified operations are the methods used to inform the company's stakeholders about sustainability, transparency and risk management. (Read more on EMAS registration in China on page 19.)

# 1,200

ENVIRONMENTAL OBSERVATIONS AND IMPROVEMENT IDEAS AT PULP AND PAPER MILLS

# 7%

INCREASE IN THE SHARE OF ECO-LABELED PRODUCTS

UPM does not publish a separate environmental and corporate responsibility report but has integrated the contents into this annual report. Various highlights from the year 2013 can be found under the sections for each business area. The GRI content index is on pages 51–52.

To find out more about UPM's responsibility agenda, please visit [www.upm.com/responsibility](http://www.upm.com/responsibility).

Key trends	Key area of responsibility	Target	Achievement 2013
POWER SHIFT IN WORLD ECONOMY	<b>ECONOMIC</b> <b>Profit</b> Shareholder value creation	<ul style="list-style-type: none"> <li>Operating profit margin &gt; 10%</li> <li>Return on equity at least 5 percentage points above the yield of a 10-year risk-free investment</li> <li>Gearing ratio to be kept below 90%</li> </ul>	Operating profit excluding special items was 6.8% of sales. Return on equity excluding special items was 6.4%. Gearing ratio as of 31 December 2013 was 41%.
	<b>Governance</b> Accountability and compliance	<ul style="list-style-type: none"> <li>&gt; 90% coverage of participation to UPM Code of Conduct training by 2015 <sup>2)</sup></li> </ul>	85% of employees have completed the Code of Conduct training.
	<b>SOCIAL <sup>1)</sup></b> <b>Leadership</b> Responsible leadership	<ul style="list-style-type: none"> <li>Employee engagement index overall favourable score exceeding 70% by 2015</li> <li>Employee engagement survey response rate reaching 70% and over by 2015</li> </ul>	Employee engagement index overall favourable score declined slightly to 60%. Employee engagement survey response rate was 78%.
	<b>People development</b> High performing people	<ul style="list-style-type: none"> <li>Employee Personal Performance Review (PPR) coverage exceeding 90% globally by 2015</li> </ul>	Employee Personal Performance Review (PPR) coverage increased slightly and was at the level of 85% globally.
DEMOGRAPHIC CHANGE	<b>Working conditions</b> Safe and encouraging working environment	<ul style="list-style-type: none"> <li>No fatal accidents (continuous)</li> <li>Last-time accident frequency below 5 (per million hours or work) by 2015</li> <li>Annual targets set for the reporting of near misses and safety observations</li> </ul>	One fatal travel accident during a business trip in Finland. Nearly 40% improvement in last-time accident frequency (LTAF) from the previous year. In 2013, the LTAF was 5.4. Annual targets set and exceeded in all business areas.
	<b>Community involvement</b> Local commitment	<ul style="list-style-type: none"> <li>Continuous development of strategic sustainability initiatives with leading NGOs</li> <li>Continuous sharing of best practices of stakeholder initiatives</li> </ul>	Co-operation with IUCN, WWF and Birdlife continued. New stakeholder forums established.
	<b>Responsible sourcing</b> Value creation through responsible business practices	<ul style="list-style-type: none"> <li>&gt; 80% of UPM supplier spend qualified against UPM Supplier Code by 2015 <sup>5)</sup></li> <li>Continuous supplier auditing based on systematic risk assessment practices</li> </ul>	64% of supplier spend qualified against UPM Supplier Code with eight percentage points increase compared to the previous year. Supplier auditing continued. Auditing trainings organised to sourcing personnel and new auditing tools introduced.
	<b>ENVIRONMENTAL <sup>2)</sup></b> <b>Products</b> Taking care of the entire lifecycle	<ul style="list-style-type: none"> <li>Environmental management systems certified in 100% of production units (continuous)</li> <li>Environmental declarations for all product groups (continuous)</li> <li>25% growth in the share of eco-labeled products by 2020 <sup>3)</sup></li> </ul>	All except 2 sites have certified environmental management systems in place. UPM is a global frontrunner in the use of EU EMAS. Environmental declarations are available for all relevant UPM products. In 2013, Raflatac developed a lifecycle assessment tool for its label products. Increase of eco-labeled sales in line with the target. UPM was the first user of the new EU Ecolabel for newsprint paper grades.
CLIMATE CHANGE	<b>Climate</b> Creating climate solutions	<ul style="list-style-type: none"> <li>15% reduction in fossil CO<sub>2</sub> emissions by 2020 <sup>3)</sup></li> </ul>	Development not in line with the target. Despite of good improvements in the fuel mix and energy efficiency, actions have not compensated the increased level caused by the Myllykoski acquisition.
	<b>Water</b> Using water responsibly	<ul style="list-style-type: none"> <li>15% reduction in waste water volume by 2020 <sup>4)</sup></li> <li>20% reduction in COD load by 2020 <sup>4)</sup></li> </ul>	Development not in line with the target. Average specific waste water volume for UPM increased due to a higher weight of pulp in portfolio, despite of the fact that UPM Fray Bentos has one of the lowest process water uses in the industry. Development in line with the target. 16% reduction achieved for the UPM average product since 2008.
	<b>Forest</b> Keeping forests full of life	<ul style="list-style-type: none"> <li>Maintain high share of certified fibre 85%</li> <li>100% coverage of chains of custody (continuous)</li> </ul>	The share of certified fibre increased to 80% from 77% in 2012. Chains of custody coverage is approximately 99%.
	<b>Waste</b> Reduce, reuse and recycle	<ul style="list-style-type: none"> <li>40% reduction in solid waste to landfill by 2020</li> </ul>	Development nearly in line with the target, despite of the fact that amount of landfilled solid waste increased.
RESOURCE SCARCITY	<b>ENVIRONMENTAL <sup>2)</sup></b> <b>Products</b> Taking care of the entire lifecycle	<ul style="list-style-type: none"> <li>Environmental management systems certified in 100% of production units (continuous)</li> <li>Environmental declarations for all product groups (continuous)</li> <li>25% growth in the share of eco-labeled products by 2020 <sup>3)</sup></li> </ul>	All except 2 sites have certified environmental management systems in place. UPM is a global frontrunner in the use of EU EMAS. Environmental declarations are available for all relevant UPM products. In 2013, Raflatac developed a lifecycle assessment tool for its label products. Increase of eco-labeled sales in line with the target. UPM was the first user of the new EU Ecolabel for newsprint paper grades.
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	<b>Forest</b> Keeping forests full of life	<ul style="list-style-type: none"> <li>Maintain high share of certified fibre 85%</li> <li>100% coverage of chains of custody (continuous)</li> </ul>	The share of certified fibre increased to 80% from 77% in 2012. Chains of custody coverage is approximately 99%.

<sup>1)</sup> Social targets: from 2011 levels  
<sup>2)</sup> Environmental targets: from 2008 levels  
<sup>3)</sup> Includes paper, timber, plywood, pulp and label

<sup>4)</sup> Numerical targets relevant for pulp and paper production  
<sup>5)</sup> Covers all UPM business-to-business spend including wood and wood-based biomass sourcing and excluding energy

# Taking care of the entire lifecycle

UPM's products are made from renewable, biodegradable and recyclable raw materials.

UPM has certified all its European pulp and paper mills and the UPM Fray Bentos pulp mill in Uruguay in accordance with the voluntary EU Eco-Management and Audit Scheme (EMAS). EMAS promotes transparency and mitigation of environmental impacts on the local area. In 2013, the UPM Changshu paper mill became the first paper mill in China to be certified by EMAS (read more on page 19).

UPM uses eco-labels, such as the EU Ecolabel and German Blue Angel, PEFC and FSC forest certification labels. These labels demonstrate a commitment on the

The majority of UPM's production sites, as well as its forestry operations, are covered by environmental, quality and health and safety systems, which are certified in accordance with the ISO 9001, ISO 14001 and OHSAS 18001 standards respectively.

part of UPM to meet a wide range of sustainability criteria, set by external stakeholders.

UPM is the largest producer of EU Ecolabeled newsprint, graphic and copying papers. In 2013, UPM was awarded the EU Ecolabel Communication Award for increasing public awareness and knowledge of the EU Ecolabel. UPM also contributed heavily to the creation of EU Ecolabel criteria for converted paper products. UPM's papers can be used as substrates in this new criterion, which will be published in early 2014.

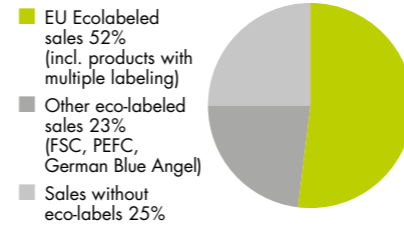
### Sustainability starts with product development

UPM businesses have adopted an ecodesign approach in their product development processes, which means systematic integration of environmental aspects into product design at an early stage, covering the whole lifecycle.

In 2013, UPM received the Sustainable Biofuels Award 2013 for Breakthrough Innovation in Technology at the World Biofuels Markets Congress & Exhibition for its success in developing an innovative production process for an advanced renewable diesel, UPM BioVerno.

UPM's aim is to deliver "More with Biofore" by continuously reducing the environmental impact of its products over the whole lifecycle. For this ambitious goal to be achieved, material efficiency needs to play a key role in all company operations. (Read more on the results for UPM Steyrermühl on page 21.)

### UPM's eco-labeled sales<sup>1</sup>



<sup>1</sup>incl. Paper, Pulp, Plywood, Timber and ProFi

In 2013, 75% (68%) of UPM's overall sales of paper, chemical pulp, plywood and timber products was eco-labeled. This figure includes FSC, PEFC and EU Ecolabels, and national eco-labels. By 2020, UPM aims to increase the share of eco-labeled products by 25% compared with the 2008 level.

Product safety plays an important part in providing customers with products that are safe to use and environmentally sound. In 2013, UPM updated the UPM Restricted Chemical Substance List (UPM RSL) originally launched in 2010. In total, the new list includes approximately 6,000 restricted chemicals. The implementation of the new list will start in 2014 (read more on page 41).



### NEW USES FOR UPM FORMI

2013 saw many new uses for UPM Formi biocomposite material.

One of the world's most well-known high-quality speaker manufacturers, the Finnish company Genelec, uses UPM Formi in their new speaker model. The material is easy to mould and has excellent acoustic features. One of the key goals for Genelec was to find a sustainable material that would also guarantee pure audio quality.

The kitchen fitting manufacturer Puustelli Group developed, in co-operation with UPM, kitchen fitting frame components that increase the utilisation of renewable natural fibres and reduce the manufacturing carbon footprint by 35-45%.

"The new UPM raw material will revolutionise the manufacturing of kitchen fittings and also enable the frames to be recycled. The lighter weight of the material also means lower transport costs and increased energy savings", says managing director Jussi Aine of Puustelli.

Read more about UPM Formi: [www.upmformi.com](http://www.upmformi.com)



# Waste is today's new material

UPM is committed to maximising the reuse of materials and minimising the generation of waste.

Nearly all organic production residues, including bark and wood residues, as well as fibre-containing solids from deinking and effluent treatment, are used in energy generation at mill sites.

Ash resulting from bioenergy generation forms the most significant proportion of UPM's solid waste. Ash is used on a large scale in applications ranging from landscaping to road building. Today, approximately 90% of all UPM's production waste is reused or recycled.

UPM's new construction product, Cinerit, made of fly ash from the thermal recovery of biogenic waste materials, is used to stabilise and improve soils. Using fly ash instead of burning limestone reduces CO<sub>2</sub> emissions significantly.

UPM has developed innovative ways to reduce its own waste and reuse waste in new products. These include UPM BioVerno, UPM's renewable diesel made of crude tall oil, which is a residue of pulp production. In addition, UPM ProFi composite products are made from the surplus paper and plastic left over from the production of self-adhesive label materials.

UPM is also the world's largest user of paper for recycling for the production of graphic papers, consuming 3.5 million tonnes of paper for recycling in 2013.

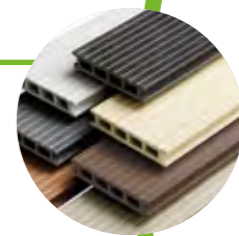
By 2020, UPM aims to reduce the amount of its solid waste sent to landfill by 40% compared with the 2008 level. The reduction target was increased in 2012 because of the good progress made.

UPM is the world's largest user of paper for recycling for the production of graphic papers.



**36%** OF ALL FIBRE USED IN UPM'S PAPER PRODUCTION IS RECYCLED FIBRE

UPM ProFi composite products are made from the surplus paper and plastic left over from the production of self-adhesive label materials.



APPROXIMATELY **90%** OF ALL PRODUCTION WASTE IS REUSED

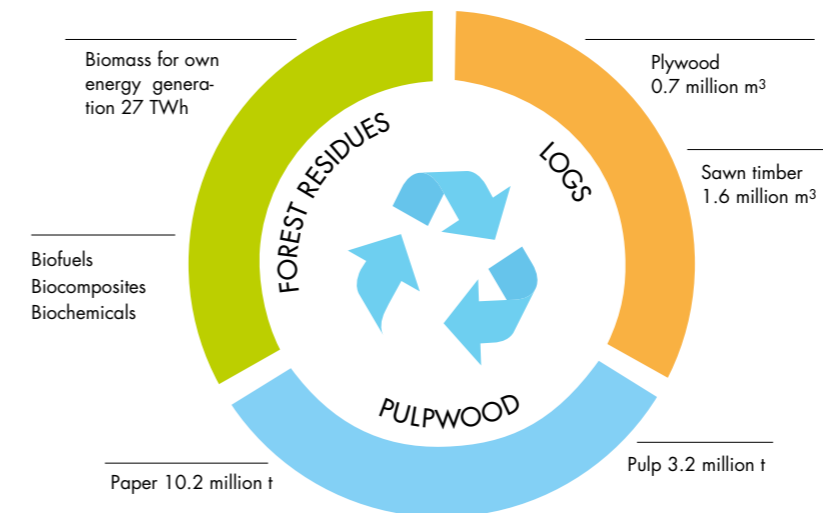
UPM's renewable diesel, UPM BioVerno, is produced from crude tall oil, a residue of pulp production.



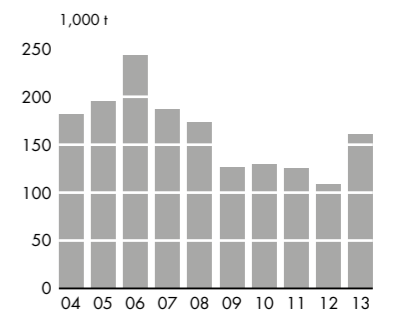
UPM's new construction product Cinerit is made of fly ash from the thermal recovery of biogenic waste materials.



### ADDING VALUE TO SUSTAINABLY SOURCED WOOD AND BIOMASS



### UPM's total waste to landfills



The total amount of solid waste sent to landfill has decreased by over 10% over the last ten years. However, from 2012 to 2013 the total amount of waste to landfills increased significantly. The reason is that former re-use possibilities for ash ceased at one of UPM's paper mills and new ways of re-use are being investigated.

Sustainable products • Waste



# Climate actions recognised and energy efficiency improved

UPM products offer an alternative to fossil-based products, because they are renewable and store carbon. UPM is continuously reducing the carbon footprint of its operations and improving energy efficiency.

UPM has a wide range of energy sources and it maximises the use of carbon-neutral energy. Biomass-based fuels make up approximately 84% of the fuels used by UPM in Finland and approximately 67% of those used worldwide. UPM is the second-largest generator of biomass-based electricity in Europe.

In addition, UPM has invested significantly in renewable energy since 2000.

The largest ongoing projects are the new combined heat and power (CHP) plant at the UPM Schongau mill in Germany, due to be completed by the end of 2014, and the refurbishment of the company's own hydropower production assets in Finland. UPM's investments in biomass-based power and heat generation (CHP) at the production sites have more than doubled the capacity.

In 2013, the UPM Korkeakoski sawmill in Finland introduced a new bio heating plant that uses only bark for heat energy genera-

tion. The plant improves the sawmill's energy efficiency in an environmentally responsible way by using bark that is left over from the sawing process.

UPM's continuous target is to improve energy efficiency. Energy efficiency has been significantly improved by energy audits, promoting innovation and internal campaigns over the last 15 years.

From its energy-saving investments carried out in 2013, UPM gained savings of EUR 6.1 million, achieved 32,000 t avoidance in CO<sub>2</sub> emissions and 138,000 MWh reduction in energy consumption. The annual savings are EUR 8.7 million, 48,000 t and 195,000 MWh.

In 2013, UPM's climate change actions were recognised externally. UPM achieved a top position in the Carbon Disclosure Project (CDP) Nordic 260 Climate Disclosure Leadership Index (CDLI) for the fifth year running. The index evaluates companies' climate reporting.

By 2020, UPM aims to reduce fossil CO<sub>2</sub> emissions by 15% compared with the 2008 level.

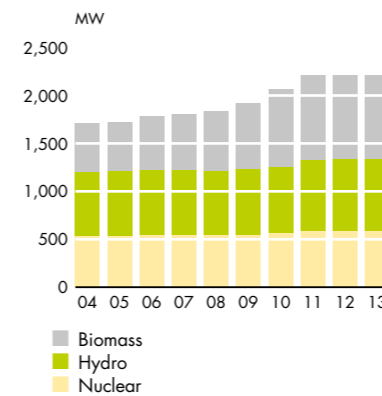
## COMBINED HEAT AND POWER PLANTS AT MILL SITES, TWh

TWh	2013	2012
Electricity generation	5.9	6.2
Heat generation	29.5	26.9

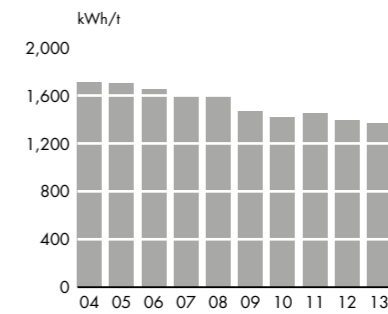
## FUELS USED FOR HEAT GENERATION

TWh	2013	2012
Black liquor	17.9	16.6
Bark and other biomass	9.4	8.8
Heat recovered from TMP production	1.4	1.7
<b>Renewable fuels total</b>	<b>28.7</b>	<b>27.1</b>
Peat	0.8	0.8
Purchased heat	0.2	0.4
Natural gas	8.5	9.1
Oil	0.7	0.6
Coal	3.6	3.3
<b>Total</b>	<b>42.6</b>	<b>41.3</b>

UPM's CO<sub>2</sub> emission-free power generation capacity

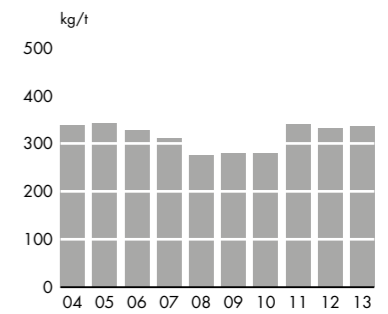


UPM's electricity consumption per tonne of paper



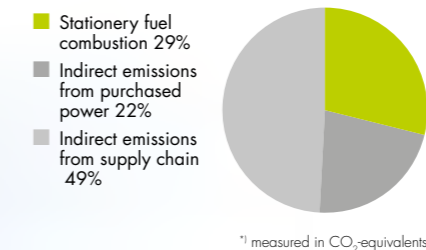
The electricity consumption per tonne of paper has decreased by 20% over the last ten years.

UPM's fossil CO<sub>2</sub> emissions per tonne of paper



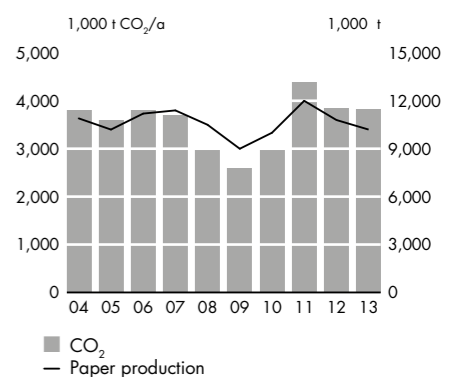
Since 1990, specific CO<sub>2</sub> (carbon dioxide) emissions per tonne of paper have been reduced by approximately 25%. Big steps were made through investments in renewable energy production, but also by continuously increasing energy efficiency. Acquisition of paper mills with a high share of fossil fuels increased both the total and the specific CO<sub>2</sub> in 2011.

Sources of UPM's greenhouse gas emissions<sup>1</sup>



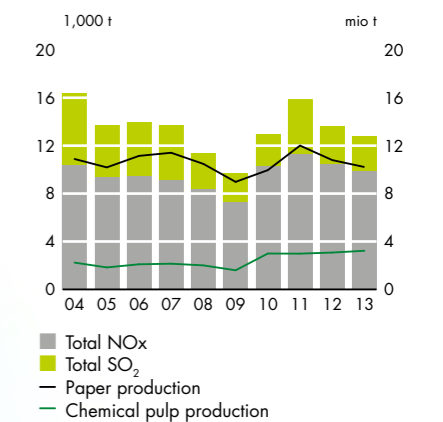
According to the calculation, approximately 50% of the direct and indirect greenhouse gas emissions are related to UPM's energy use, but raw materials, transportation and processing of sold products also have a significant impact. More details are available at [www.upm.com/responsibility](http://www.upm.com/responsibility).

Paper mills' fossil carbon dioxide emission 2004-2013



Increased usage of renewable energy and improved energy efficiency are decreasing fossil CO<sub>2</sub> emissions. However, acquisition and divestments of paper mills are having a major impact on the development.

UPM's acidifying flue gases



Increases in total volumes are due to acquisitions (in 2010 and 2011). In 2013, improvements at pulp mills had a big impact on the further reduction of NO<sub>x</sub> and SO<sub>2</sub> emissions.

**78%** OF ELECTRICITY GENERATED BY UPM IS FREE FROM FOSSIL-FUEL CO<sub>2</sub> EMISSIONS

**67%** OF ALL FUEL USED BY UPM IS BASED ON RENEWABLE BIOMASS

ACIDIFYING FLUE GASES DOWN BY OVER **30%** OVER THE LAST TEN YEARS

# UPM ensures that all wood and wood fibre is sustainably sourced



Wood is a renewable material and the primary raw material for UPM's businesses. UPM is both a major forest owner and a purchaser of wood. (Read more on wood sourcing on page 33.)

UPM manages its forests with a view to enhancing biological diversity, natural ecosystems and the carbon cycle, and operates according to the principles of sustainable forest management.

UPM ensures that all wood and wood fibre is sustainably sourced by using third-party-verified chains of custody and forest certifications.

All of UPM's own forests and eucalyptus plantations are certified according to the FSC and/or PEFC certification schemes. In addition, UPM has an FSC Group Certificate in Finland and a UKWAS Group Certificate in the UK to which private forest owners can sign up.

The aim of UPM's global biodiversity programme is to maintain and increase biodiversity in forests and to promote best practices in sustainable forestry. In connection with the biodiversity programme, UPM carried out several projects with stakeholders in 2013. UPM became a network partner in the "Biodiversity in Good Company" initiative in Germany as part of the UN Decade Office for Biodiversity.

UPM continued its co-operation with the WWF's New Generation Plantations Project in Uruguay to develop and promote sustainable plantation practices.

In 2013, UPM became the sector leader for the materials industry in the CDP's (Carbon Disclosure Project) forests programme, which evaluates companies' disclosure of their exposure to deforestation risks.

## LOCAL CO-OPERATION WITH BIRDLIFE

UPM is partnering with BirdLife as part of its global biodiversity programme.

"UPM co-operates with expert networks locally and internationally. BirdLife is a global organisation that is uniting a comprehensive network of environmental organisations and experts. We are carrying out dozens of local projects with BirdLife, especially in regions where UPM is operating as a landowner or procuring wood," explains Timo Lehesvirta, Director of Stakeholder Relations, UPM Forest Global.

In 2013, UPM started a Chestnut Seedeater (*Sporophila cinnamomea*) conservation project in co-operation with the NGO Aves Uruguay to increase the grassland bird population. The bird requires tall grasslands for nesting and feeding but local farmers also use these grasslands for cattle grazing.

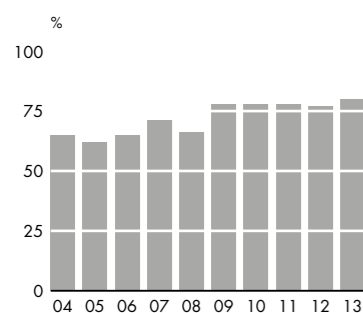
In 2012, some grassland areas were already excluded from cattle grazing with the help of Aves Uruguay experts. Recent findings indicate that the strategy has been successful as both male and female Chestnut Seedeaters have been spotted for the first time. The next stage of the project is to expand the conservation area.

In Finland, BirdLife renovated an old tower for bird watching in a 200-hectare protected area in Toivanjoki, Janakkala. Three quarters of the conservation area is on UPM property. The Toivanjoki area is part of the EU's Natura 2000 network of protected areas and is an important feeding and resting area for migrating birds.

In the UK, UPM Tilhill has carried out an experimental project to restore 114 hectares of rough grazing and hill ground to native forest in Scotland. The fenced area helps wildlife such as the black grouse (*Lyrurus tetrix*), which has suffered serious habitat loss. Altogether, some 410,000 trees were planted over the last two years in this region.

Read more: [www.upm.com/responsibility](http://www.upm.com/responsibility)

### Certified wood supplied to mills



The average share of certified fibre supplied to UPM's mills remains at a high and stable level of 80% (77%). By 2020, UPM aims to increase the share of certified fibre to 85%. UPM's 2020 target was increased in 2012 because of the good progress made.

## UPM WOOD AND BIOMASS RESOURCES

### FOREST OWNED BY UPM <sup>1)</sup>

	Hectares
Finland	819,000
United States	75,000
United Kingdom	7,000
<b>Total</b>	<b>901,000</b>

### PLANTATIONS OWNED BY UPM <sup>1)</sup>

	Hectares
Uruguay	234,000

<sup>1)</sup> In addition, UPM manages 1.5 million hectares of privately owned forests and 58,000 hectares of plantations.

**80%** OF ALL WOOD USED BY UPM IS SOURCED FROM **CERTIFIED FORESTS**

**83%** OF UPM'S PAPER IS PRODUCED USING FIBRE THAT MEETS THE CRITERIA OF EITHER **THE FSC OR THE PEFC FOREST CERTIFICATION SCHEME**

# More results with responsible water management

Water has an important role in UPM's pulp and paper production and hydropower generation. When using water, UPM's target is to minimise the impacts of operations on local water resources and safeguard the natural water cycle in forests. UPM's main production plants are located in areas where there is sufficient water available.

UPM uses water responsibly in terms of the company's water consumption and effluent quality. All UPM's pulp and paper mills have both mechanical and biological wastewater treatment facilities. The material efficiency programme, launched in 2011, continued at the paper mills. The objective is to reduce process water consumption and suspended solids. (Read more on the results of the material efficiency programme at the UPM Steyrermühl mill on page 21.)

In 2013, the rebuild of the effluent treatment plant at the UPM Pietarsaari pulp mill in Finland was completed. Read more about improving wastewater treatment plants below.

In the pulp business, process water consumption has been defined as a strategic development project. In 2013, UPM completed a project with the aim of improving the existing mill processes and developing the next-generation pulp process, where the process water requirement per tonne of pulp is further reduced from the current level. At the Uruguayan UPM Fray Bentos mill, which is UPM's newest mill, the process water consumption is among the lowest in the industry.

By 2020, UPM aims to reduce wastewater volume by 15% and COD load by 20% in pulp and paper production compared with the 2008 levels. UPM's 2020 COD reduction target was increased in 2012 because of the good progress made.



## IMPROVING WASTEWATER TREATMENT PLANTS

Sustainable use of water is one of UPM's core environmental principles. In 2013, UPM completed investments in wastewater treatment plants at the UPM Nordland paper mill in Germany and the UPM Pietarsaari pulp mill in Finland.

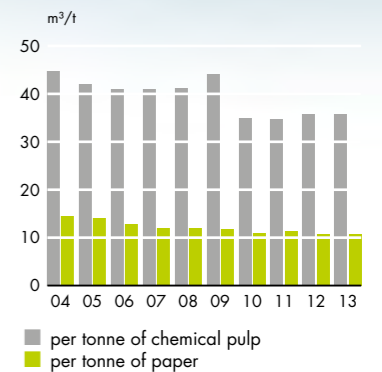
UPM is currently reviewing water management and material efficiency at several mills.

"Our primary objective is to operate the new wastewater treatment plants with minimal emissions and maximising energy efficiency. The effluent treatment plant expansions help to achieve long term environmental targets and are in line with the company's Biofore strategy," explains Seija Vatka, Manager, Water.

UPM Nordland mill expanded its effluent treatment plant to allow the mill to further reduce Chemical Oxygen Demand (COD) and Biological Oxygen Demand (BOD5) loads. UPM Pietarsaari pulp mill completed the rebuild of its effluent treatment plant to improve the mill's production efficiency and reduce its environmental impact.

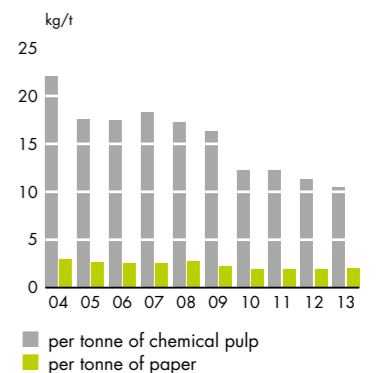
Read more: [www.upm.com/responsibility](http://www.upm.com/responsibility)

### UPM's process wastewater volumes



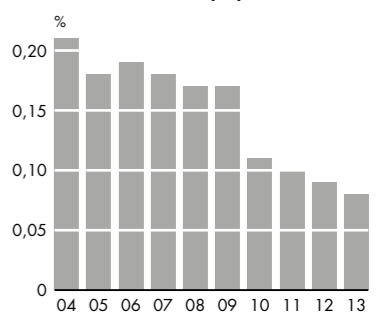
UPM has reduced wastewater volumes per tonne of paper by 25% and per tonne of chemical pulp by 20% over the last ten years.

### UPM's COD load



The COD load has decreased by over 30% per tonne of paper, and by 50% per tonne of chemical pulp, over the last ten years.

### UPM's AOX load per tonne of bleached chemical pulp



Acidifying flue gases down by over 60% over the last ten years. AOX indicates the amount of halogens bound to the organic compounds present in the effluent.

# UPM's material balance 2013

UPM's material balance sums up the total material, energy and emission flows to and from UPM worldwide. In 2010, UPM set long-term environmental targets for 2020, and defined indicators to measure performance in key areas.

In 2012, UPM revised the targets and tightened when reasonable. UPM aims to continuously reduce environmental impacts over the entire lifecycle of its products and the company bases its annual performance evaluation on these indicators.

In 2013, most of the total consumption and emission figures remained on a rather stable level compare to the previous year. Improvements are visible in the reduction of effluent load (COD, AOX) and air emissions (NOx, SO<sub>2</sub>), which are resulting from both special projects and continuous improvement efforts.

## Raw materials

Biomass is the basis for all UPM businesses. Certified chain of custody systems ensure that wood is sourced from sustainably managed forests.

UPM's Supplier Code defines suppliers' minimum compliance requirements in terms of responsibility with regard to matters such as environmental impact, human rights, labour practices, health and safety, and product safety.

The targets related to raw materials concern the certified fibre share and the coverage of chains of custody.

## Energy

The majority of electrical and thermal energy is used for paper and pulp production. However, pulp mills are producing more energy than they are using.

UPM has invested significantly in the use of renewable and CO<sub>2</sub>-neutral energy to reduce the environmental load from energy generation.

UPM's CO<sub>2</sub> target is strongly connected to energy sources and energy efficiency.

### ENERGY

	2013
Fossil fuels, GWh	14,000
Renewable fuels <sup>1)</sup> , GWh	27,000
Purchased electricity <sup>2)</sup> , GWh	14,000
Purchased heat, GWh	200

<sup>1)</sup> 78% from UPM processes (e.g. bark, fibre sludge, black liquor)

<sup>2)</sup> Includes UPM shares of hydro, nuclear and condensing power as well as purchases from the market

### RAW MATERIALS

	2013
Wood, m <sup>3</sup>	26,900,000
Market pulp, t	1,600,000
Paper for recovery, t	3,500,000
Purchased paper for converting, t	180,000
Minerals, t	2,500,000
Plastics, adhesives, resins, films, t	160,000
Co-mingled domestic waste <sup>1)</sup> , t	200,000

<sup>1)</sup> At UPM Shotton, a Material Recovery and Recycling Facility (MRRF) sorts co-mingled waste, of which the recovered paper fraction is reused at the paper mill.

## Water

Water is an essential resource for pulp and paper production, where water is used within the process and for cooling. The share of the other UPM units is minor.

The majority of water that is used comes from rivers or lakes. A small amount comes from groundwater, where water levels are monitored.

The targets for water are to decrease process wastewater volume and effluent load.

### WATER UPTAKE <sup>1)</sup>

	2013
Surface water, million m <sup>3</sup>	460
Groundwater, million m <sup>3</sup>	22
Sanitary water, million m <sup>3</sup>	4

<sup>1)</sup> Rainwater is not used in the process but it can be gathered and led to watercourses, depending on the site.

## Emissions to air

The majority of UPM's airborne emissions are caused by energy generation at its pulp and paper mills.

Choice of fuels, combustion technology and flue-gas purification are the primary ways to reduce these emissions.

The targets for air emissions focus on the reduction of fossil carbon dioxide emissions.

### EMISSIONS TO AIR <sup>1)</sup>

	2013
Sulphur dioxide, t	2,800
Nitrogen oxides, t	9,900
Carbon dioxide (fossil) <sup>2)</sup> , t	3,800,000

<sup>1)</sup> Direct air emissions include emissions from UPM power plants and a respective share of co-owned power plants connected to UPM's energy supply. External power plants or boilers are considered in terms of heat supply. Hürth is taken into account

for electricity as there is a direct supply from the neighbouring power plant.

<sup>2)</sup> In addition to direct CO<sub>2</sub> emissions, UPM is also evaluating and reporting its indirect CO<sub>2</sub> and other greenhouse gas emissions. Power purchased from the grid results in an additional 3 million tonnes. Areas such as transport and raw material production result in an additional 7 million tonnes. Detailed information can be found on UPM's website.

## Products

UPM products are mainly based on renewable raw materials that are recyclable and biodegradable.

Third-party-verified eco-labels are commonly used to prove good environmental performance.

The targets for products are to increase the share of eco-labeled products, certified environmental management systems and availability of environmental product declarations.

### PRODUCTS

	2013
Paper <sup>1)</sup> , t	10,000,000
Chemical pulp <sup>1)</sup> , t	1,900,000
Fluff pulp, t	50,000
Converting materials, t	470,000
Plywood and veneer, m <sup>3</sup>	750,000
Sawn timber, m <sup>3</sup>	1,600,000
Heat, GWh	800
Electricity, GWh	4,500
By-products (waste for reuse), dry t	1,200,000

<sup>1)</sup> Paper and chemical pulp volumes differ from the overall production of the paper and pulp mills because the paper and chemical pulp used internally have been deducted from the number of products sold.

## Solid waste

Much of the process waste is either used as raw material or in energy generation.

Most production sites have reduced the volume of solid waste and improved handling by sorting waste at the source.

The target for waste is to reduce the amount of production waste sent to landfills.

### SOLID WASTE <sup>1)</sup>

	2013
To landfills <sup>2)</sup> , dry t	162,000
To temporary storage, dry t	8,000
To municipal incineration plants, dry t	700
Hazardous waste for special treatment <sup>3)</sup> , t	4,200

<sup>1)</sup> Includes process and production waste. Also sorted waste from UPM Shotton's MRRF plant is included. Waste from exceptional major demolition/construction work is not included but reported separately: approx. 8,000 dry t of exceptional construction waste at UPM Schongau in 2013.

<sup>2)</sup> The amount of waste to landfills increased significantly by approx 50,000 t. The reason is that former reuse possibilities at one site ceased and new ways are being investigated.

<sup>3)</sup> The main forms of hazardous waste are oil and other oil waste that is either reused or recycled. UPM is working with local licenced external partners on hazardous waste treatment.

## Emissions to water

UPM's paper and pulp production is the main source of emissions to water.

All effluents are treated both mechanically and biologically in the effluent treatments plants, before being released into watercourses.

Emission levels and environmental impacts are regulated and monitored.

The targets have been set for process wastewater volume and chemical oxygen demand (COD).

### EMISSIONS TO WATER <sup>1)</sup>

	2013
Chemical oxygen demand <sup>2)</sup> , t	77,300
Biological oxygen demand (7 days) <sup>2)</sup> , t	9,600
Adsorbable organic halogens, t	250
Process waste water, million m <sup>3</sup>	250

<sup>1)</sup> The scope is pulp and paper mills: the impact of other UPM units is minor.

<sup>2)</sup> Information includes the load from the Augsburg, Caledonian, Hürth and Madison paper mills to external effluent treatment plants as well as external users of UPM's treatment plants. COD is not measured at Madison. BOD is not measured at Hürth.

# GRI content index

UPM follows the Global Reporting Initiative's (GRI) sustainability reporting guidelines (version 3.0) in its corporate responsibility reporting. The reporting meets the GRI requirements for the Application Level B+, which refers to the quantity of indicators. The index below shows how and where the GRI indicators are addressed in the annual report and the company internet pages. An extended version of the GRI content index can be found at [www.upm.com/responsibility](http://www.upm.com/responsibility).

- AR = Annual Report 2013
- Fully reported
- Partially reported

Profile	Location	Level
<b>1. STRATEGY AND ANALYSIS</b>		
1.1 CEO's statement	AR Pages 3–4	●
1.2 Key impacts, risks and opportunities	AR Pages 7–8, 12, 42	●
<b>2. ORGANISATIONAL PROFILE</b>		
2.1 Name of the organisation	AR Page 82	●
2.2 Primary brands, products and services	AR Pages 1–2, 4	●
2.3 Operational structure	AR Pages 7, 117	●
2.4 Location of organization's headquarters	AR Page 143	●
2.5 Number of countries and locations of operations	AR Pages 141–142	●
2.6 Nature of ownership and legal form	AR Page 82	●
2.7 Markets served	AR Pages 31–32, 97	●
2.8 Scale of the reporting organisation	AR Pages 1, 132	●
2.9 Significant changes regarding size, structure or ownership	AR Pages 68–69	●
2.10 Awards received in the reporting period	AR Pages 7, 10, 40, Ext. GRI*)	●
<b>3. REPORT PARAMETERS</b>		
<b>Report profile</b>		
3.1 Reporting period	1 January 2013–31 December 2013	●
3.2 Date of most previous report	26 February 2013	●
3.3 Reporting cycle	Annual	●
3.4 Contact point for questions regarding the report or its content	AR Page 143	●
<b>Report scope and boundary</b>		
3.5 Process for defining report content	AR Pages 27, 41	●
3.6 Boundary of the report	Extended GRI content index	●
3.7 Limitations on the scope or boundary of the report	Extended GRI content index	●
3.8 Basis for reporting subsidiaries, joint ventures and other entities affecting comparability	Extended GRI content index	●
3.9 Data measurement techniques and the bases of calculations	Extended GRI content index	●
3.10 Explanation of re-statements	Extended GRI content index	●
3.11 Significant changes from previous reporting periods in the scope, boundary, or measurement methods	Extended GRI content index	●
<b>Assurance</b>		
3.13 Policy and current practice with regard to seeking external assurance for the report	AR Pages 41, 53	●
<b>4. GOVERNANCE</b>		
<b>Governance</b>		
4.1 Governance structure	AR Pages 54–56, 136–137	●
4.2 Position of the Chairman of the Board	AR Page 136	●
4.3 Independence of the Board members	AR Pages 55, 136	●
4.4 Mechanisms for shareholder and employee consultation	AR Pages 54–56	●
4.5 Executive compensation and linkage to organisation's performance	AR Pages 55, 58–59	●
4.6 Process for avoiding conflicts of interest	AR Pages 54–56	●
4.7 Process for determining the Board members' expertise in strategic management and sustainability	AR Pages 54–55, 62	●
4.8 Implementation of mission or values statements, Code of Conduct and other principles	AR Pages 6, 33, 40, 57	●
4.9 Procedures of the Board for overseeing management of sustainability performance, including risk management	AR Pages 39, 57	●
4.10 Processes for evaluating the Board's performance	AR Page 55	●
<b>Commitments to external initiatives</b>		
4.11 Addressing the precautionary approach	AR Page 138	●
4.12 Voluntary charters and other initiatives	AR Page 40	●
4.13 Memberships in associations	Extended GRI content index	●
<b>Stakeholder engagement</b>		
4.14 List of stakeholder groups	AR Pages 27–28	●
4.15 Identification and selection of stakeholders	AR Page 28	●
4.16 Approaches to stakeholder engagement	AR Pages 27–29, 31–32	●
4.17 Key topics raised through stakeholder engagement	AR Pages 29, 36	●
<b>5. PERFORMANCE INDICATORS</b>		
<b>ECONOMIC PERFORMANCE</b>		
<b>Management approach to economic responsibility</b>		
EC1 Direct economic value generated and distributed	AR Pages 11–12, 42, 138	●
EC2 Financial implications, risks and opportunities due to climate change	AR Page 28	●
EC3 Coverage of defined benefit plan obligations	AR Pages 12, 45	○
EC4 Significant subsidies received from government	AR Pages 108–111	●
<b>Indirect Economic Impacts</b>		
EC9 Understanding and describing significant indirect economic impacts, including the extent of impacts	AR Pages 26, 98	●
EC9 Understanding and describing significant indirect economic impacts, including the extent of impacts	AR Page 37	○

\*) Extended GRI content index

Profile	Location	Level
<b>ENVIRONMENTAL INDICATORS</b>		
<b>Management approach to environmental responsibility</b>		
<b>Materials</b>		
EN1 Materials used by weight or volume	AR Pages 42–43, 47–48	●
EN2 Percentage of materials used that are recycled input materials	AR Page 49	●
<b>Energy</b>		
EN3 Direct energy consumption	AR Pages 33–34, 49	●
EN4 Indirect energy consumption by primary source	AR Pages 45, 49	●
EN5 Energy saved due to conservation and efficiency improvements	AR Page 49	○
EN6 Initiatives to provide energy-efficient or renewable energy based products and services	AR Page 45	●
	AR Pages 25, 45	○
<b>Water</b>		
EN8 Total water withdrawal by source	AR Page 49	●
EN9 Water sources significantly affected by withdrawal of water	Extended GRI content index	●
EN10 Percentage and total volume of water recycled and reused	Extended GRI content index	○
<b>Biodiversity</b>		
EN11 Location and size of land holdings in biodiversity-rich habitats	AR Page 47, Ext. GRI*)	●
EN12 Significant impacts on biodiversity in protected areas and biodiversity-rich areas outside protected areas	Extended GRI content index	●
EN13 Habitats protected or restored	Extended GRI content index	●
EN14 Managing impacts on biodiversity	AR Page 47, Ext. GRI*)	●
<b>Emissions, effluents and waste</b>		
EN16 Total direct and indirect greenhouse gas emissions	AR Pages 46, 50	●
EN17 Other relevant indirect greenhouse gas emissions by weight	AR Page 46, Ext. GRI*)	●
EN18 Initiatives to reduce greenhouse gas emissions	AR Page 45	●
EN20 NO <sub>x</sub> , SO <sub>x</sub> and other significant air emissions	AR Page 50	●
EN21 Total water discharge by quality and destination	AR Page 50	●
EN22 Total amount of waste by type and disposal method	AR Page 50	●
EN25 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting	Extended GRI content index	○
<b>Products and services</b>		
EN26 Mitigating environmental impacts of products and services	AR Pages 23, 25–26, 43–44	●
EN29 Significant environmental impacts of transporting products	Extended GRI content index	○
EN30 Total environmental protection expenditures and investments by type	AR Page 39	○
<b>SOCIAL INDICATORS</b>		
<b>Management approach to social responsibility</b>		
Labour practises and Decent Work		
<b>Employment</b>		
LA1 Total workforce by employment type, employment contract and region	AR Pages 35–43, Ext. GRI*)	●
LA2 Total number and rate of employee turnover by age group, gender and region	AR Page 36	○
<b>Labour/management relations</b>		
LA4 Coverage of collective bargaining agreements	AR Page 36	●
LA5 Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements	AR Page 36	●
<b>Occupational health and safety</b>		
LA7 Injuries, lost days, absentee rates and fatalities	AR Page 37, Ext. GRI*)	○
LA8 Education, training, counseling, prevention, and risk-control	AR Pages 37–38	○
<b>Training and education</b>		
LA10 Average hours of training per year per employee	AR Page 38	○
LA11 Programs for skills management and lifelong learning	AR Page 36	●
LA12 Employees receiving performance and career development reviews	AR Page 36	●
<b>Diversity and equal opportunity</b>		
LA13 Composition of governance bodies and breakdown of employees	AR Page 36, Ext. GRI*)	●
<b>HUMAN RIGHTS</b>		
HR2 Percentage of significant suppliers and contractors that have undergone hr screening and actions taken	AR Page 36, Ext. GRI*)	○
HR3 Employee training on policies and procedures concerning human rights relevant to operations	AR Page 33	○
HR6 Operations identified as having significant risk for child labour	AR Page 40–41	○
HR7 Operations identified as having significant risk for forced or compulsory labour	AR Pages 40–41, Ext. GRI*)	●
HR9 Number of incidents involving rights of indigenous people and actions taken	AR Pages 40–41, Ext. GRI*)	●
<b>SOCIETY</b>		
<b>Community</b>		
SO1 Assessment and management of impacts of operations on communities	Extended GRI content index	○
<b>Corruption</b>		
SO3 Percentage of employees trained in anti-corruption policies and procedures	AR Page 37	○
SO4 Actions taken in response to incidents of corruption	AR Page 40–41	○
<b>Public Policy</b>		
SO6 Contributions to political parties, politicians and related institutions	AR Page 29	○
SO7 Number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practises and their outcomes	AR Page 40–41	○
<b>Compliance</b>		
SO8 Significant fines and sanctions for non-compliance with laws and regulations	AR Page 72–73	●
<b>PRODUCT RESPONSIBILITY</b>		
<b>Product and service labelling</b>		
PR3 Type of product information required by procedures	AR Page 43–44, Ext. GRI*)	●
PR5 Practises related to customer satisfaction and results of customer satisfaction surveys	AR Pages 31–32, Ext. GRI*)	●

We have self-declared our reporting to be Application Level B+ of the GRI G3 Guidelines. PricewaterhouseCoopers Oy has checked our reporting and has confirmed it to be Application Level B+.

## GRI content index

## CONTENTS

# Independent Assurance Report



To the Management of UPM-Kymmene Corporation

We have been engaged by the Management of UPM-Kymmene Corporation (hereinafter also the Company) to perform a limited assurance engagement on corporate responsibility performance indicators in the areas of economic, social and environmental responsibility for the reporting period of January 1, 2013 to December 31, 2013. The assured performance indicators are disclosed in UPM-Kymmene Corporation's Annual Report 2013, and on its website in section "Responsibility", and they are listed in section 5 "Performance Indicators" of the GRI Content Index (hereinafter CR Reporting). The GRI Content Index is disclosed in the Company's Annual Report 2013 and on its website.

Furthermore, the assurance engagement has covered UPM-Kymmene Corporation's adherence to the AA1000 AccountAbility Principles with moderate (limited) level of assurance.

## Management's responsibility

The Management of UPM-Kymmene Corporation is responsible for preparing the CR Reporting in accordance with the Reporting criteria as set out in the Company's reporting instructions and the G3 Sustainability Reporting Guidelines of the Global Reporting Initiative.

The Management of UPM-Kymmene Corporation is also responsible for the Company's adherence to the AA1000 AccountAbility Principles of inclusivity, materiality and responsiveness as set out in AccountAbility's AA1000 AccountAbility Principles Standard 2008.

## Practitioner's responsibility

Our responsibility is to express a conclusion on the CR Reporting and on the Company's adherence to the AA1000 AccountAbility Principles based on our work performed. Our assurance report has been made in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone else, except to UPM-Kymmene Corporation for our work, for this report, or for the conclusions that we have reached.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information". This Standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance whether any matters come to our attention that cause us to believe that the CR Reporting has not been prepared, in all material respects, in accordance with the Reporting criteria.

In addition, we have conducted our work in accordance with the AA1000 Assurance Standard 2008. For conducting a Type 2 assurance engagement as agreed with the Company, the AA1000AS (2008) requires planning and performing of the assurance engagement to obtain moderate (limited) assurance on whether any matters come to our attention that cause us to believe that UPM-Kymmene Corporation does not adhere, in all material respects, to the

AA1000 AccountAbility Principles and that the CR Reporting is not reliable, in all material respects, based on the Reporting criteria.

In a limited assurance engagement the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. An assurance engagement involves performing procedures to obtain evidence about the amounts and other disclosures in the CR Reporting, and about the Company's adherence to the AA1000 AccountAbility Principles. The procedures selected depend on the practitioner's judgement, including an assessment of the risks of material misstatement of the CR Reporting. Our work consisted of, amongst others, the following procedures:

- Interviewing senior management of the Company.
- Interviewing employees from various organisational levels of the Company with regards to materiality, stakeholder expectations, meeting of those expectations, as well as stakeholder engagement.
- Assessing stakeholder inclusivity and responsiveness based on the Company's documentation and internal communication.
- Assessing the Company's defined material corporate responsibility topics as well as assessing the CR Reporting based on these topics.
- Performing a media analysis and an internet search for references to the Company during the reporting period.
- Visiting the Company's Head Office as well as three sites in Austria, Finland and Germany.
- Interviewing employees responsible for collection and reporting of the information presented in the CR Reporting at the Group level and at the different sites where our visits took place.
- Assessing how Group employees apply the reporting instructions and procedures of the Company.
- Assessing the systems and practices used for the collection and consolidation of quantitative information.
- Testing the accuracy and completeness of the information from original documents and systems on a sample basis.
- Testing the consolidation of information and performing recalculations on a sample basis.

## Conclusion

Based on our work described in this report, nothing has come to our attention that causes us to believe that UPM-Kymmene Corporation does not adhere, in all material respects, to the AA1000 AccountAbility Principles.

Furthermore nothing has come to our attention that causes us to believe that UPM-Kymmene Corporation's CR Reporting has not been prepared, in all material respects, in accordance with the Reporting criteria, or that the CR Reporting is not reliable, in all material respects, based on the Reporting criteria.

When reading our assurance report, the inherent limitations to the accuracy and completeness of sustainability information should be taken into consideration.

## Observations and recommendations

Based on our work described in this report, we provide the following observations and recommendations in relation to UPM-Kymmene Corporation's adherence to the AA1000 AccountAbility Principles. These observations and recommendations do not affect the conclusions presented earlier.

- **Regarding Inclusivity:** UPM-Kymmene Corporation continues to demonstrate a strong commitment to inclusivity and stakeholder engagement. The Company regularly engages in dialogue with diverse stakeholder groups. In 2013, the Company strengthened its approach to stakeholder engagement through the establishment of the Stakeholder Relations function. On this basis, we recommend that the Company continues to further develop the systematic management of stakeholder engagement.
- **Regarding Materiality:** UPM-Kymmene Corporation has further developed its materiality assessment process. In 2013, the Company updated its materiality assessment, and identified the issues that are critical for each business area, and also for the Group as a whole. We recommend that the business areas are further involved in the identification and prioritisation process to ensure a shared understanding of the key material topics.
- **Regarding Responsiveness:** Being responsive to stakeholder needs and concerns is key to UPM-Kymmene Corporation, and evident from the use of different channels to engage in dialogue and convey messages. The Company's new business structure and the Stakeholder Relations function provide further opportunities to increase the effectiveness of stakeholder engagement. In future, we recommend that the Company increases its disclosure on how stakeholder engagement has impacted the Company's response to material corporate responsibility topics.

## Practitioner's independence and qualifications

We comply with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the IESBA (the International Ethics Standards Board for Accountants).

Our multi-disciplinary team of corporate responsibility and assurance specialists possesses the requisite skills and experience within financial and non-financial assurance, corporate responsibility strategy and management, social and environmental issues, as well as the relevant industry knowledge, to undertake this assurance engagement.

Helsinki, 14 February 2014

## PricewaterhouseCoopers Oy

Juha Wahlroos Authorised Public Accountant	Sirpa Juutinen Partner, Sustainability & Climate Change
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# Corporate governance

UPM-Kymmene Corporation is a publicly listed limited liability company domiciled in Finland, and its corporate governance is based on the Finnish Companies Act, the Securities Market Act, UPM's Articles of Association, the rules of NASDAQ OMX Helsinki Ltd and the rules and regulations of the Finnish Financial Supervisory Authority. In addition, UPM complies with the recommendations of the Finnish Corporate Governance Code issued by the Securities Market Association. Furthermore, the company's governance is based on the Board and Committee Charters and corporate policies approved by the Board of Directors, and complementary rules and guidelines approved by the Group Executive Team.

UPM's Corporate Governance Statement, prepared in accordance with Recommendation 54 of the Finnish Corporate Governance Code, is presented on pages 136–138. UPM's Remuneration Statement, dated 26 February 2014 and prepared in accordance with Recommendation 47 of the Finnish Corporate Governance Code, is available on the corporate website [www.upm.com](http://www.upm.com) in the Investors Section, under Governance.

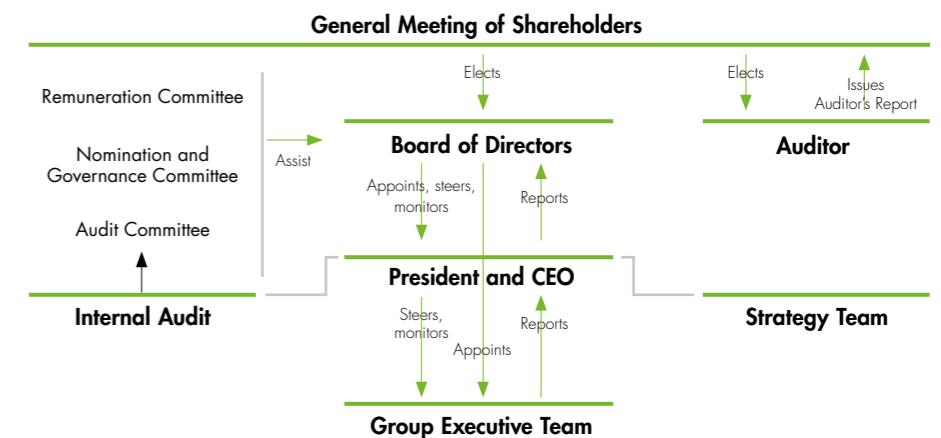
## Control and governance

UPM's control and governance is divided among the shareholders represented at the General Meeting of Shareholders, the Board of Directors and the President and CEO as shown in the illustration on the right. The General Meeting of Shareholders elects members to the Board of Directors, and the Board appoints the President and CEO. The President and CEO is assisted by the company's Group Executive Team, the members of which are appointed by the Board of Directors.

## General Meeting of Shareholders

The General Meeting of Shareholders is the company's supreme decision-making body. The Annual General Meeting is held within six months of the closing of the financial period. UPM's Annual General Meeting 2013 was held on 4 April in Helsinki, Finland. A total of 1,769 shareholders attended the meeting in person or through a legal or proxy representative, representing 42.4% of the company's registered share capital and voting rights at the time of the meeting.

## CORPORATE GOVERNANCE STRUCTURE OF UPM-KYMMENE CORPORATION



Under the Finnish Companies Act, matters to be decided upon at a General Meeting include:

- Amendments to the Articles of Association
- Adoption of the financial statements
- Decision on the use of the profit shown on the adopted balance sheet
- Discharge from liability for the President and CEO, and the Board of Directors
- Election of members to the Board of Directors and resolution on their remuneration
- Election of the company's auditor and resolution on auditor's remuneration

A shareholder has the right to have the General Meeting deal with a matter that falls within its competence, provided that the shareholder submits a written request to the Board of Directors well in advance of the meeting so that the matter can be included in the notice of the meeting. The request is deemed to have been delivered on time if the Board of Directors has been notified of the request at least four weeks prior to publication of the meeting notice or, according to the Board Charter, by 15 January, whichever date is later.

The right to attend a General Meeting applies to any shareholder who is registered as a company shareholder eight working days prior to the

General Meeting and who is pre-registered for the meeting by the end of the pre-registration period set by the company.

## Board of Directors

The company's Board of Directors is composed of at least five but no more than twelve directors elected by the Annual General Meeting. Directors are elected for a term that begins at the end of the Annual General Meeting at which they are elected and ends at the conclusion of the next Annual General Meeting. The Articles of Association do not contain other limitations concerning the election of members to the Board of Directors. According to the Board Charter, a person who has reached 70 years of age will not be proposed for re-election unless there is a specific reason to do so.

The Directors must have the qualifications required to perform their duties and must be able to devote a sufficient amount of time to Board work. The Board appoints a Chairman and a Deputy Chairman from its members. The Board of Directors is deemed to have a quorum if more than half of its members are present and one of them is either the Chairman or the Deputy Chairman.

UPM's Annual General Meeting 2013 set the number of Directors at ten and decided to re-elect Matti Alahuhta, Berndt Brunow, Karl Grotenfelt, Wendy E. Lane, Jussi Pesonen, Ursula Ranin, Veli-Matti Reinikkala, Kim Wahl and Björn Wahlroos to the Board. Piia-Noora Kauppi was elected as a new member of the Board. The Directors' personal details, career histories and key positions of trust are presented on page 62 and on the corporate website.

Björn Wahlroos was re-elected Chairman and Berndt Brunow Deputy Chairman of the Board of Directors. Mr Wahlroos has served as Board Chairman since his election to the Board in 2008 and Mr Brunow as Deputy Chairman since 2005.

### Remuneration of the Board of Directors

The Annual General Meeting 2013 approved the Nomination and Governance Committee's proposal that the fees of the Board and Committee members remain unchanged. The fees have remained unchanged since 2007. The fees of non-executive Directors are shown in the table on the right.

Of these annual fees, totalling EUR 985,000, 60% was paid in cash and 40% in the form of company shares purchased on the Board members' behalf. The company is responsible for any costs and transfer tax related to the acquisition of company shares for the Board members. In addition to the annual fees, the Board members do not receive any other financial benefits for their Board or Committee membership.

According to the Board Charter, the Board members are encouraged to own company shares on a long term basis. The Directors' shareholdings in the company at the end of the year are shown in the table below. Up-to-date information on Directors' shareholdings and any changes therein can be found on the corporate website.

### SHAREHOLDINGS OF THE MEMBERS OF THE BOARD OF DIRECTORS ON 31 DECEMBER 2013

Director	Shares
Matti Alahuhta	55,954
Berndt Brunow	296,867
Karl Grotenfelt	54,121
Piia-Noora Kauppi	5,145
Wendy E. Lane	27,612
Jussi Pesonen	195,294
Ursula Ranin	27,534
Veli-Matti Reinikkala	30,784
Kim Wahl	8,762
Björn Wahlroos	244,654
<b>Total</b>	<b>946,727</b>

The shareholdings above include also shares held by the Directors' closely associated persons and controlled entities.

### BOARD REMUNERATION

	2013		2012	
	Annual fees (EUR)	of which shares (pcs)	Annual fees (EUR)	of which shares (pcs)
Chairman	175,000	8,925	175,000	7,216
Deputy Chairman	120,000	6,120	120,000	4,948
Audit Committee Chairman	120,000	6,120	120,000	4,948
Members *)	95,000	4,845	95,000	3,917

\*) The President and CEO does not receive any financial benefits for his role as a member of the Board.

### Independence of the members of the Board of Directors

The company's Nomination and Governance Committee assists the Board of Directors in the assessment of the independence of the Directors on an ongoing basis based on information provided by the Directors. In January 2013, prior to making its proposal to the Annual General Meeting for the election of the members of the Board of Directors, the Committee assessed that all Director nominees were independent of the company and of its significant shareholders, with the exception of President and CEO Jussi Pesonen, who is not independent of the company. The assessment was made based on the independence criteria of the Finnish Corporate Governance Code.

### Responsibilities of the Board

The duties and responsibilities of the Board of Directors and its committees are defined in the Board and Committee Charters approved by the Board of Directors. The Board of Directors reviewed the Charters during the year. This review resulted in the clarification of committee duties and responsibilities and the division of these duties and responsibilities between the committees. The amended Charters are available on the corporate website in the Investors section, under Governance.

Pursuant to its Charter, the Board of Directors handles all matters pertaining to its area of responsibility under Finnish law. Under the Finnish Companies Act, the Board of Directors is responsible for the administration and appropriate organisation of the company's operations and the appropriate arrangement of control of the company's accounts and finances.

Further responsibilities of the Board of Directors include:

- Evaluating and approving the company's strategic direction
- Approving the strategic plans of the company and its business areas and evaluating the implementation of such plans
- Reviewing and approving financial objectives and major corporate plans and transactions
- Establishing acceptance limits for capital expenditures, investments, divestitures and financial commitments
- Overseeing strategic and operational risk management and internal control

- Appointing the President and CEO and members of the Group Executive Team, and approving their compensation
- Determining the dividend policy and presenting a proposal for payment of the dividend to the Annual General Meeting

In accordance with the Board Charter, the Board of Directors reviews its performance and working methods annually. The Board self-evaluation survey is conducted in November and its results are reviewed at the Board meeting in December.

The Board of Directors convenes according to a pre-determined meeting schedule and when deemed necessary. The meeting schedule is based on the company's financial reporting schedule and is complemented by the Board of Directors' strategy and budget meetings. Items are discussed at Board meetings based on a pre-prepared agenda. Minutes are kept for each meeting and reviewed and approved by the Board. In 2013, the Board held nine meetings. On average, the Directors attended 97.8% of the meetings.

### Committees of the Board of Directors

The Board of Directors has established three committees composed of its members: the Audit Committee, the Remuneration Committee (previously the Human Resources Committee) and the Nomination and Governance Committee (previously the Nomination and Corporate Governance Committee). The Board appoints the members of the committees and their chairmen annually. A committee always has at least three members. In 2013, all Board committees fulfilled their respective independence and desirable qualification requirements as set out in the Finnish Corporate Governance Code and Committee Charters. The President and CEO may not be appointed as a member of these committees.

The table on the following page contains information on the committees' composition, the number of meetings and attendance in 2013.

### Committee responsibilities

The committees assist the Board of Directors by preparing matters within the competence of the Board of Directors. The committee chairmen report to the Board of Directors on committee activities on a regular basis. In addition,

minutes are kept for all committee meetings and distributed to all Directors.

The Audit Committee carries out a quarterly review of the company's financial results and interim financial statements for the period in question and reviews reports on assurance and legal matters including reports on internal control, internal audit, risk management, and litigations and other legal proceedings. The external auditor attends all committee meetings and provides the committee with a review of the interim audit as well as an account of the audit and non-audit fees. The committee also regularly meets with the internal auditor and the external auditor without members of management being present.

When preparing its proposal to the Annual General Meeting for the election of the external auditor, the Audit Committee evaluates the qualifications and independence of the external auditor on an annual basis. At regular intervals, the committee also arranges an audit tendering process for the audit services to ensure the independence and cost efficiency of the external audit.

The Remuneration Committee carries out an annual review of the company's short and long term incentive plans and related incentive measures and targets, evaluates the performance of the President and CEO and other senior executives and makes recommendations to the Board of Directors for the compensation and benefits of the President and CEO and other senior executives. In addition, the committee carries out an annual review of the procedures and development strategies for senior positions and succession plans for the President and CEO and other senior executives, and reports to the Board of Directors on such matters.

When preparing its proposal to the Annual General Meeting regarding the election or re-election of the members of the Board of Directors, the Nomination and Governance Committee reviews the composition of the Board and initiates a search for potential new directors early in the autumn. When reviewing the composition of the Board, the committee considers whether the Board is sufficiently diverse and represents an appropriate balance of competences in order to address the needs of the company's business operations and strategic agenda. The committee has determined that desirable skills and qualifications for the directors include, among others, relevant industry experience, experience in finance and accounting, international business experience, experience in leadership and strategy formation and experience in corporate governance.

When preparing its proposal to the Annual General Meeting regarding the Board's remuneration, the committee considers, among other things, the development of director remuneration and the level of director remuneration in peer companies.

To assist the Board in the evaluation of the directors' independence and ability to devote time to Board work, the committee has adopted a procedure whereby the committee is regularly reported any changes in the directors' employ-

### BOARD OF DIRECTORS' COMMITTEES 2013

Committees	Audit Committee	Remuneration Committee	Nomination and Governance Committee
Members	Karl Grotenfelt (Ch.) Piia-Noora Kauppi (as of 4 April)	Berndt Brunow (Ch.) Ursula Ranin	Björn Wahlroos (Ch.) Matti Alahuhta
	Wendy E. Lane Kim Wahl	Veli-Matti Reinikkala	Karl Grotenfelt
Number of meetings	5	6	4
Attendance-%	95	100	100

ment or positions of trust so that it can assess the potential effects of such changes on directors' independence and availability.

The committees' duties and responsibilities are defined in the Committee Charters, and they are also presented in the Corporate Governance Statement on pages 136–138.

### President and CEO

The Board of Directors appoints the President and CEO of the company. Jussi Pesonen has served as the company's President and CEO since January 2004. The Board has approved his service contract, including financial benefits and other terms of service. Mr Pesonen has also been a member of UPM's Board of Directors since March 2007.

The President and CEO is responsible for developing the company's strategic and business plans for submission to the Board and for the day-to-day management of the company's affairs in accordance with the instructions and orders given by the Board of Directors.

The President and CEO is responsible for the company's accounts complying with the law and the company's financial administration and management being organised in a reliable manner. The President and CEO provides the Board of Directors with the information it requires to perform its duties.

The President and CEO may take measures that are considered unusual or extensive in view of the scope and nature of the company's business only with authorisation from the Board of Directors, unless the time required to obtain such authorisation would cause substantial harm to the company, in which case the President and CEO must first consult with the Chairman of the Board of Directors.

Information on the President and CEO's financial benefits, retirement age and severance pay is available on page 58.

### Group Executive Team

The company's business structure was changed during the year, and this change was also reflected in the corporate management system. The Group Executive Board consisting of the President and CEO, CFO and Business Group Presidents was discontinued, as were the business groups. As of 1 November, the Group Executive Team consists of the Business Area and Function Heads. The members of the new Group Executive Team are shown in the illustration below. Their personal details, career histories and key positions of trust are presented on page 64. Information on their financial benefits and share and stock option holdings in the company is provided on pages 59–60.

### GROUP EXECUTIVE TEAM

President and CEO Jussi Pesonen			
CFO <sup>1)</sup>	Tapio Korpeinen	UPM Biorefining	Heikki Vappula
General Counsel	Juha Mäkelä	UPM Energy	Tapio Korpeinen
Strategy	Kari Ståhlberg	UPM Raflatac	Tapio Kolunsarka
Technology <sup>2)</sup>	Jyrki Ovaska	UPM Paper Asia	Kim Poulsen
Human Resources	Riitta Savonlahti	UPM Paper ENA	Bernd Eikens
Stakeholder Relations <sup>3)</sup>	Pirkko Harrela	UPM Plywood	Mika Sillanpää

<sup>1)</sup> Incl. Finance & Control, Treasury, IR, IT, Sourcing and Real Estate (incl. Finnish forest assets)  
<sup>2)</sup> Incl. Investment Management, R&D, new business development (biocomposites, biochemicals)  
<sup>3)</sup> Incl. Corporate Communications, Corporate Responsibility and Environmental Affairs

The Group Executive Team assists the President and CEO in the operational management of the company. The main duties and responsibilities of the Group Executive Team relate to group strategy and budget, financial forecasts and financial performance of the group and its business areas, function budgets and functional plans, and corporate procedures and guidelines.

In matters pertaining to the preparation of group and business area strategies, financial targets, strategic projects, capital expenditure, M&A initiatives and other strategic development initiatives, the President and CEO is assisted by the Strategy Team consisting of the CFO and the Heads of the Strategy, Technology and Legal Functions.

Each of the company's business areas and functions has its own management team, the purpose of which is to assist the Business Area or Function Head in the preparation and implementation of strategies, budgets, commercial strategies, business development plans, and the operating model and organisation for the business area or function in question.

**Auditor**

For the purpose of auditing the company's administration and accounts, the Annual General Meeting elects an auditor, which must be a firm of public accountants authorised by the Central Chamber of Commerce of Finland. The auditor's term of office begins at the end of the Annual General Meeting at which it is elected and ends at the conclusion of the next Annual General Meeting. The Annual General Meeting 2013 re-elected PricewaterhouseCoopers Oy, a firm of authorised public accountants, to act as the company's auditor, with Juha Wahlroos, Authorised Public Accountant, as the auditor in charge.

**Audit fee**

The remuneration of the company's auditor is approved by the Annual General Meeting based on the proposal prepared by the Board of Directors' Audit Committee. The AGM 2013 resolved that the audit fee would be paid against invoices approved by the Audit Committee. Following the AGM, the Audit Committee approved the annual audit plan, including the proposal for the audit fee and framework for non-audit fees. In addition, the Committee carried out a quarterly review of the auditor's report on audit and non-audit fees, verified the fees against invoices received by the company and approved the invoices in question. The fees paid to the auditor are shown in the following table.

**AUDITOR'S FEES**

EURm	2013	2012
Audit	2.6	2.9
Audit related	0.1	0.0
Tax consulting	0.9	1.0
Other services	0.1	0.5
<b>Total</b>	<b>3.7</b>	<b>4.4</b>

**Internal Control and Internal Audit**

The purpose of internal control is to ensure that the company's operations are effective and profitable, that financial and other information is reliable and that the company complies with the relevant regulations and operating principles. The company's Board of Directors, assisted by the Audit Committee, is responsible for monitoring the company's internal control system. The company's Group Executive Team has approved internal control rules. Internal control pertaining to financial reporting is described in the Corporate Governance Statement on pages 136–138.

The Internal Audit function assists the Board of Directors with its supervisory responsibility by ensuring that the group's control measures have been planned and set up effectively. The Internal Audit function is administratively subordinate to the President and CEO, but has direct access to the Audit Committee and reports to it quarterly on the adequacy and effectiveness of the group's control systems. The basic operating principles for internal audit are defined in the Internal Audit Charter, which was confirmed by the Board of Directors. The internal audit operations cover all the fields of the business operations, units, companies, processes and functions of the group.

**Corporate policies**

The Board of Directors approves the corporate policies that govern the management and administration of the company. These policies include the Code of Conduct, Disclosure Policy, Risk Management Policy, Group Treasury Policy and Insider Policy, and the Acceptance Policy, which defines the contract, trading and investment acceptance procedure.

**Code of Conduct**

The Code of Conduct forms the baseline for all company operations and sets out standards of behaviour for each individual at UPM globally. It covers topics relating to legal compliance and disclosure, conflicts of interest, gifts and bribes, HR practices, human rights issues and environmental matters. Violation of the Code will lead to disciplinary action up to and including termination of employment. The Code of Conduct is complemented by more detailed rules and guidelines approved by the Group Executive Team.

These rules and guidelines include Anti-Bribery Rules, Competition Law Compliance Rules, Contract Management Rules, Human Resources Rules, Environmental Rules and the Equality Rule.

**Disclosure Policy**

The purpose of the company's Disclosure Policy is to guarantee fair disclosure of information to the public and to make sure that disclosure is timely and consistent at all levels. The company's external reporting follows the principle of providing accurate and complete information in a timely and non-selective manner to all parties in the market. Any information disclosed must be correct, relevant and clear, and it must not be misleading. Information must be released promptly.

To ensure the fulfilment of the company's disclosure obligations, the company has established the Disclosure Committee to monitor and set guidelines for external disclosure. The Committee addresses the general content of such disclosures, including regular and unscheduled releases of financial information, their timely delivery and their compliance with regulatory requirements. The Disclosure Committee consists of the Chief Financial Officer and the Heads of Investor Relations and Communications, as well as the General Counsel.

**Risk Management Policy**

UPM's Risk Management Policy comprises the objectives, roles and responsibilities of the company's risk management system and defines how risk management activities are conducted within the UPM Group. The Policy covers all business areas, mills and functions. Each unit is responsible for the identification of risks and their management in practice. The Group Executive Team monitors changes in risks and risk concentrations. A description of the company's strategic, operational, financial and hazard risks is included in the Report of the Board of Directors on pages 67–77.

**Group Treasury Policy**

The Group Treasury Policy provides the framework of rules according to which treasury activities are to be conducted within the UPM Group. It also defines the allocation of responsibilities for treasury activities and sets guidelines for the financial risk exposure permitted at UPM and for the identification, measurement and control of financial risks.

**Insider Policy**

The company's Insider Policy sets out guidelines for the company's insiders and for the management and administration of insider matters. The Policy was last amended in 2013.

The company complies with the securities laws and regulations applicable to it, including the Guidelines for Insiders issued by NASDAQ OMX Helsinki Ltd, the Central Chamber of

Commerce of Finland and the Confederation of Finnish Industries.

UPM's public insiders include the members of the Board of Directors, the President and CEO, the Chief Financial Officer, the Business Area Heads and the auditor in charge. The holdings of the public insiders are public information available on the corporate website and from Euroclear Finland Ltd.

Certain trading procedures apply to both public insiders and permanent insiders (i.e. employees who regularly have access to inside information) of the company. Insiders are not allowed to trade in the company's securities during closed window periods. The closed window periods are four-week periods preceding and including the date on which the company's annual or quarterly results are

disclosed. Trading is allowed during the open window periods, which are three-week periods commencing on the first business day following disclosure of the company's annual or quarterly results. Periods between the open and closed window periods are referred to as clearance periods. Trading during clearance periods requires advance permission from the company's Insider Administration. When necessary, project-specific insider registers will be set up and trading restrictions will be imposed as a result. Persons possessing inside information are not allowed to trade in the company's securities. The company's Insider Administration monitors compliance with trading restrictions.

To avoid any suspicion related to the use of inside information, the company's public insiders are advised to employ trading plans in

accordance with the Trading Guidelines for Insiders issued by the Finnish Financial Supervisory Authority.

**Acceptance Policy**

The purpose of the Acceptance Policy is to determine the monetary limits according to which various organisational levels are authorised to accept investments, disinvestments and risks and to conclude major sales, purchase, charter and service agreements in the ordinary course of business. The principles stated in the Policy are adopted in more detailed guidelines, manuals and rulings within the company's business areas and functions. The Policy was last amended in 2013.

**Management remuneration**

The total remuneration of the President and CEO and of the members of the Group Executive Team consists of base salary and benefits, short term incentives and equity-based long term incentives under the share reward plans.

**Decision-making process for remuneration**

The Board of Directors resolves on the remuneration of the President and CEO based on the proposal by the Board of Directors' Remuneration Committee.

The President and CEO presents a proposal for the remuneration of the members of the Group Executive Team to the Remuneration Committee, which prepares a proposal to the Board of Directors for resolution.

Terms and conditions of incentive plans are prepared by the Remuneration Committee in consultation with independent advisors and approved by the Board.

**Financial benefits for the President and CEO**

The performance of the President and CEO is evaluated annually by the Remuneration Committee and, based on this evaluation, the Remuneration Committee recommends total compensation of the President and CEO to the Board for approval. The President and CEO's annual salary and other financial benefits are shown in the table below.

**SALARIES, INCENTIVES AND OTHER BENEFITS FOR THE PRESIDENT AND CEO**

EUR 1,000	2013	2012
<b>Salaries and benefits</b>		
Salaries	1,059	1,059
Incentives	553	508
Benefits	26	36
<b>Total</b>	<b>1,638</b>	<b>1,603</b>
<b>Pension costs</b>		
Finnish statutory pension scheme	282	276
Voluntary pension plan	677	672
<b>Total</b>	<b>959</b>	<b>948</b>

In addition, a single premium of EUR 1.1 million has been paid into the President and CEO's voluntary group pension plan in 2013 to cover past service pension liabilities.

In accordance with the President and CEO's service contract, the retirement age of President and CEO Jussi Pesonen is 60. The target pension is 60% of the average indexed earnings from the last 10 years of employment calculated according to the Finnish statutory pension scheme. The cost of lowering the retirement age to 60 is covered by supplementing the statutory pension with a voluntary defined benefit pension plan. Should the President and CEO leave the company before reaching the age of 60, an immediate vesting right corresponding to 100% of the earned pension (pro rata) will be applied.

If notice of termination is given to the President and CEO, severance pay of 24 months' base salary will be paid, in addition to the salary for the six-month notice period. Should the President and CEO give notice of termination to the company, no severance pay will be paid in addition to the salary for the notice period.

If there is a change of control in the company, the President and CEO may terminate his service contract within three months from the date of the event that triggered the change of control and shall receive compensation equivalent to 24 months' base salary.

## Financial benefits for the Group Executive Team

The Remuneration Committee reviews the performance of the members of the Group Executive Team annually based on the evaluation and proposal of the President and CEO. Based on this review, the Remuneration Committee recommends total compensation of the Group Executive Team members to the Board for approval. The annual salary and other financial benefits for the Group Executive Team are shown in the table below.

## SALARIES, INCENTIVES AND OTHER BENEFITS FOR THE GROUP EXECUTIVE TEAM (EXCL. THE PRESIDENT AND CEO) \*)

EUR 1,000	2013	2012
<b>Salaries and benefits</b>		
Salaries	3,396	2,975
Incentives	1,067	496
Benefits	137	121
<b>Total</b>	<b>4,600</b>	<b>3,592</b>
<b>Pension costs</b>		
Finnish statutory pension scheme	740	522
Voluntary pension plan	531	456
<b>Total</b>	<b>1,271</b>	<b>978</b>

\*) 11 members at the end of 2013, 8 members in 2012.

Members of the Group Executive Team are covered by the statutory pension plan in the country of residence, supplemented by voluntary defined contribution pension plans. The retirement age is 63. Executives belonging to the Group Executive Team as of 1 January 2010 have fully vested rights corresponding to 100% of the accumulated account. Executives who have become members of the Group Executive Team after 1 January 2010 are entitled to fully vested rights five years after becoming a member of the Group Executive Team.

Members of the Group Executive Team receive severance pay in the event that their service contract is terminated by the company prior to the retirement age. The period for severance pay is 12 months in addition to the six months' salary for the notice period, unless notice is given for reasons that are solely attributable to the executive.

If there is a change of control in the company, each member of the Group Executive Team may terminate his/her employment contract within one month from the date of the event that triggered the change of control, and will receive compensation equivalent to 24 months' base salary.

## PERFORMANCE SHARE PLANS

Performance share plan	PSP 2011-2013	PSP 2012-2014	PSP 2013-2015
No. of participants	30	27	36
Max No. of shares to be paid:			
to President and CEO	0	219,000	219,000
to other members of GET	0	355,000	385,000
to other key individuals	0	560,000	595,000
Total max No. of shares to be paid	0	1,134,000	1,199,000
Share delivery (year)	2014	2015	2016
Earning criteria	Operating cash flow and EPS	Operating cash flow and EPS	Operating cash flow and EPS

The share reward estimates indicated above represent the gross value of the rewards, from which the applicable taxes will be deducted before the shares are delivered to the participants.

## DEFERRED BONUS PLANS

Deferred bonus plan	DBP 2011	DBP 2012	DBP 2013
No. of participants (at grant)	520	580	560
Max No. of shares to be paid (at grant)	1,200,000	1,800,000	1,640,000
No. of participants on 31 Dec. 2013	445	550	530
Max No. of shares to be paid on 31 Dec. 2013 (approx.)	335,000	640,000	254,000
Share delivery (year)	2014	2015	2016
Earning criteria	Participant's STI targets	Participant's STI targets	Group/Business Group EBITDA

The share reward estimates indicated above represent the gross value of the rewards, from which the applicable taxes will be deducted before the shares are delivered to the participants.

## Short term incentive plan

In 2013, the short term incentive plan for the President and CEO and the members of the Group Executive Team was linked to achievement of the predetermined financial targets of the Group or Business Group (70% of the total maximum) and the executive's individual and safety improvement targets (together 30% of the total maximum). This amounted to a maximum annual incentive of 100% of the annual base salary for the members of the former Group Executive Board and 70% of the annual base salary for the members of the Group Executive Team. For the President and CEO, the maximum annual incentive amounted to 150% of the annual base salary. In the annual incentive plan for 2013, the financial target was based on EBITDA.

Due to the change in the company's business structure, which became effective on 1 November 2013, the plan has been aligned with the new structure as of the start of 2014.

## Long term incentive plans

As of 2011, the company's long term incentives consist of the Performance Share Plan (PSP) for senior executives and the Deferred Bonus Plan (DBP) for other key employees.

## Performance Share Plan

The Performance Share Plan consists of annually commencing three-year plans. The plan is aimed at the Group Executive Team and other selected members of management. Under the plan, UPM shares are awarded based on the group-level performance during a three-year earning period. The shares earned are delivered after the earning period has ended. The Performance Share Plans are presented in the table above.

## Deferred Bonus Plan

The Deferred Bonus Plan is aimed at selected other key employees of the company and it consists of annually commencing plans. Each plan consists of a one-year earning period and a two-year restriction period. During the restriction period, prior to share delivery, the share rewards earned are adjusted with dividends and other capital distribution, if any, paid to all shareholders. The first plan began at the beginning of 2011 and the shares earned will be delivered in the spring of 2014. The Deferred Bonus Plans are presented in the table above.

## SHARES AND STOCK OPTIONS HELD BY THE MEMBERS OF THE GROUP EXECUTIVE TEAM IN 2013

Name	2013	Shares	2007B options	2007C options
Jussi Pesonen*)	1 Jan. 31 Dec.	195,294 195,294	170,000 0	360,000 200,000
Bernd Eikens*) (GET member since 1 Nov.)	1 Nov. 31 Dec.	21,536 21,536	- -	23,714 0
Pirkko Harrela	1 Jan. 31 Dec.	35,488 35,488	20,000 0	70,000 70,000
Tapio Kolunsarka*) (GET member since 1 Sept.)	1 Sept. 31 Dec.	13,140 10,000	- -	- -
Tapio Korpeinen*)	1 Jan. 31 Dec.	45,792 45,792	70,000 0	180,000 30,000
Juha Mäkelä	1 Jan. 31 Dec.	32,068 32,068	40,000 0	100,000 50,000
Jyrki Ovaska	1 Jan. 31 Dec.	64,612 64,612	95,000 0	180,000 60,000
Kim Poulsen*) (GET member since 2 May)	2 May 31 Dec.	- -	- -	- -
Riitta Savonlahti	1 Jan. 31 Dec.	24,570 16,570	27,205 0	70,000 5,000
Mika Sillanpää*) (GET member since 1 Nov.)	1 Nov. 31 Dec.	9,000 9,000	- -	10,000 10,000
Kari Ståhlberg (GET member since 1 Nov.)	1 Nov. 31 Dec.	4,212 4,212	- -	40,875 20,875
Jussi Vanhanen (GET member until 31 Aug.)	1 Jan. 31 Aug.	45,792 25,792	25,000 0	180,000 180,000
Heikki Vappula*)	1 Jan. 31 Dec.	25,920 10,000	40,000 0	180,000 0
Harmut Wurster (GET member until 31 Oct.)	1 Jan. 31 Oct.	38,692 38,692	- -	70,000 0

\*) Executives belonging to UPM's public insiders. Their shareholdings above include shares held by their closely associated persons and controlled entities.

## Stock option programme

The stock option programme 2007 originally included three option series (2007A, 2007B and 2007C) entitling their holders to subscribe for a maximum of 15 million company shares. Each series had a two-year subscription period, the last of which will end on 31 October 2014 (2007C). The maximum number of shares that can be subscribed for by exercising 2007C options with the strike price of EUR 10.49 is 4,500,500. The stock option holdings of the Group Executive Team are presented in the table above. This programme has been replaced by the Performance Share Plan and Deferred Bonus Plan.

## Share ownership recommendation

The Board encourages the Group Executive Team to have direct share ownership in the company. The Board has therefore given an ownership recommendation for the Group Executive Team. The Board recommends that the President and CEO maintain share ownership corresponding to a two-year gross base salary, and the other members of the Group Executive Team share ownership corresponding to a one-year gross base salary.



# Board of Directors 31 December 2013



BJÖRN WAHLROOS

BERNDT BRUNOW

JUSSI PESONEN

KARL GROTENFELT

VELI-MATTI REINIKKALA

URSULA RANIN

MATTI ALAHUHTA

PIIA-NOORA KAUPPI

KIM WAHL

## Björn Wahlroos

Chairman  
Member and Chairman since 2008  
Chairman of the Nomination and Governance Committee  
Independent of the Company and significant shareholders  
Born 1952  
Ph.D. (Econ.)

President and CEO of Sampo plc 2001–2009. Chairman of the Board of Mandatum Bank plc 1998–2000, CEO and Vice Chairman of the Board of Mandatum & Co Ltd 1992–1997 and Member of the Executive Committee and Executive Vice President of the Union Bank of Finland 1985–1992. Prior to 1985, Professor of Economics.

Chairman of the Board of Sampo plc, Nordea Bank AB (publ) and Hanken School of Economics.

## Berndt Brunow

Deputy Chairman  
Member since 2002, Deputy Chairman since 2005  
Chairman of the Remuneration Committee  
Independent of the Company and significant shareholders  
Born 1950  
B.Sc. (Econ.)

President and CEO of Oy Karl Fazer Ab 2002–2007. President and CEO of Sanitec Corporation 2000–2002. Over 20 years of experience in executive positions at Finnrap and UPM-Kymmene Corporation.

Chairman of the Board of Lemminkäinen Corporation and of Oy Karl Fazer Ab. Board member of Hartwall Capital Oy Ab.

## Matti Alahuhta

Member since 2008  
Member of the Nomination and Governance Committee  
Independent of the Company and significant shareholders  
Born 1952  
D.Sc. (Eng.)

President and CEO of KONE Corporation since 2006 and Board member of KONE Corporation since 2003. President of KONE Corporation 2005–2006. Executive Vice President of Nokia Corporation 2004, President of Nokia Mobile Phones 1998–2003 and President of Nokia Telecommunications 1993–1998.

Chairman of the Board of Outotec Oyj and Aalto University Foundation. Member of the Foundation Board at the International Institute for Management Development (IMD, Switzerland). Vice Chairman of the Board of the Confederation of Finnish Industries (EK).

## Karl Grotenfelt

Member since 2004  
Chairman of the Audit Committee, Member of the Nomination and Governance Committee  
Independent of the Company and significant shareholders  
Born 1944  
LL.M.

Chairman of the Board of Directors of Famigro Oy since 1986. Served A. Ahlström Oy as General Counsel, Administrative Director of Paper Industry and Member of the Executive Board responsible for the Paper Industry 1970–1986.

## Piia-Noora Kauppi

Member since 2013  
Member of the Audit Committee  
Independent of the Company and significant shareholders  
Born 1975  
LL.M.

Managing Director of the Federation of Finnish Financial Services since 2009. Member of the European Parliament and member of various parliamentary committees 1999–2008, Head of the Finnish Delegation in the EPP-ED Group 2004–2008. Legal advisor for the Parliamentary Group of the National Coalition Party Kokoomus 1997–1999.

Board member of Sulava Oy and the Finnish Financial Ombudsman Bureau. Member of the Supervisory Board of Helsinki Deaconess Institute and HSE Foundation. Chairman of the Executive Committee of European Banking Federation.

## Wendy E. Lane

Member since 2005  
Member of the Audit Committee  
Independent of the Company and significant shareholders  
Born 1951  
MBA, Harvard Graduate School of Business Administration

Chairman of the Board of the American investment firm Lane Holdings, Inc. since 1992. Managing Director and Principal at Donaldson, Lufkin & Jenrette Securities Corp. 1981–1992. Banking Associate at Goldman, Sachs & Co. 1977–1980.

Board member of Laboratory Corporation of America and Willis Group Holdings PLC.

## Jussi Pesonen

Member since 2007  
Independent of significant shareholders, non-independent of the Company  
Born 1960  
M.Sc. (Eng.)

President and CEO of UPM-Kymmene Corporation since 2004. COO of the Paper Divisions and Deputy to the President and CEO 2001–2004. Several management positions in UPM Paper Divisions 1987–2001.

Chairman of the Board of Ilmarinen Mutual Pension Insurance Company and the Finnish Forest Industries Federation (FFIF). Co-Chairman of the Forest Solutions Group (FSG) in World Business Council for Sustainable Development (WBCSD). Board member of the Confederation of European Paper Industries (CEPI) and East Office of Finnish Industries Oy.

## Ursula Ranin

Member since 2006  
Member of the Remuneration Committee  
Independent of the Company and significant shareholders  
Born 1953  
LL.M., B.Sc. (Econ.)

Employed by Nokia Group within the legal function 1984–2005. Vice President and General Counsel 1994–2005 and, since 1996, also secretary of the Board of Directors.

## Veli-Matti Reinikkala

Member since 2007  
Member of the Remuneration Committee  
Independent of the Company and significant shareholders  
Born 1957  
eMBA

President of ABB Process Automation Division and Member of the Group Executive Committee of ABB Ltd since 2006. Business Area Manager for ABB Process Automation 2005. Automation Technologies Division Manager in ABB China 2003–2004. Manager for ABB Drives 1997–2002. CFO of ABB Industry 1994–1996. Before 1994, various positions in paper and packaging companies in Finland.

## Kim Wahl

Member since 2012  
Member of the Audit Committee  
Independent of the Company and significant shareholders  
Born 1960  
MBA, Harvard Graduate School of Business Administration  
BA, Business Economics (University of San Diego)

Chairman of the Board of the investment firm Stromstangen AS since 2009. Deputy Chairman and Cofounder of the European private equity firm IK Investment Partners 1989–2009. Associate, Corporate Finance, Goldman, Sachs & Co. 1986–1989. Prior to 1986, positions in International Marketing and Financial Analyst at Trade Commission of Norway, Merrill Lynch and Norsk Hydro, Petroleum Division.

Board member of DNB Bank ASA and Intermediate Capital Group plc. Chairman of Voxtra AS and Voxtra Foundation. Adjunct Professor at INSEAD business school.

# Group Executive Team



## Jussi Pesonen

President and CEO  
M.Sc. (Eng.)  
Born 1960  
Member of the Group Executive Team since 2001.  
Employed by UPM-Kymmene Corporation since 1987.

Several management positions in the UPM Paper Divisions 1987–2001. COO of the Paper Divisions and Deputy to the President and CEO 2001–2004. President and CEO since 2004.

Chairman of the Board of Ilmarinen Mutual Pension Insurance Company and the Finnish Forest Industries Federation (FFIF). Co-Chairman of the Forest Solutions Group (FSG) in World Business Council for Sustainable Development (WBCSD). Board member of the Confederation of European Paper Industries (CEPI) and East Office of Finnish Industries Oy.

## Tapio Korpeinen

CFO, Executive Vice President, UPM Energy  
M.Sc. (Tech.), MBA  
Born 1963  
Member of the Group Executive Team since 2008.  
Employed by UPM-Kymmene Corporation since 2005.

Several management positions at Jaakko Pöyry Consulting in Finland and North America 1991–1998 and 1999–2005. A.T. Kearney in Finland 1998–1999 and McKinsey & Company in Sweden 1988–1990. Vice President, Corporate Development and Senior Vice President, Strategy, UPM 2005–2008. President, Energy and Pulp Business Group, 2008–2010. CFO since 2010.

Chairman of Pohjolan Voima Oy. Board member of Teollisuuden Voima Oyj and Kemijoki Oy. Supervisory board member of Varma Mutual Pension Insurance Company.

## Heikki Vappula

Executive Vice President, UPM Biorefining  
M.Sc. (Econ.)  
Born 1967  
Member of the Group Executive Team since 2010.  
Employed by UPM-Kymmene Corporation since 2006.

Sales Manager, Balance Consulting Oy 1992–1993. Management Accountant, Nokia Group, Finland 1993–1995. Several management positions at Nokia Networks Corporation in Finland, Denmark, the UK and Hungary 1996–2002. Vice President of Nokia Mobile Phones Supply Line Management 2002–2006. Senior Vice President, UPM Sourcing 2006–2010. President, Energy and Pulp Business Group 2010–2013.

Board member of the Finnish Forest Industries Federation (FFIF).

## Tapio Kolunsarka

Executive Vice President, UPM Raflatac  
M.Sc. (Eng.), M.Sc. (Econ.)  
Born 1975  
Member of the Group Executive Team since 2013.  
Employed by UPM-Kymmene Corporation since 2002.

Associate, McKinsey & Company 2000–2002. Several management positions at UPM Raflatac in Finland and in the USA 2002–2008. Senior Vice President, UPM Raflatac, Europe 2008–2011. Senior Vice President, UPM Raflatac, Europe, Middle-East and Africa 2011–2013.

## Kim Poulsen

Executive Vice President, UPM Paper Asia  
M.Sc. (Econ.)  
Born 1966  
Member of the Group Executive Team since 2013.  
Employed by UPM-Kymmene Corporation since 2011.

General Manager, Koskisen Ltd. 1993–1996. Several management positions at Finnforest Ltd. in Finland, United Kingdom and Germany 1996–2006. President and CEO, Paloheimo Group and Fenestra Ltd. 2006–2010. Senior Vice President, UPM Plywood 2011–2013. Executive Vice President, Paper Business Asia Pacific and Corporate Relations 2013.

## Bernd Eikens

Executive Vice President, UPM Paper ENA  
Ph.D. (Eng.)  
Born 1965  
Member of the Group Executive Team since 2013.  
Employed by UPM-Kymmene Corporation since 1998.

Senior Process Engineer, International Paper Co. 1996–1998. Several management positions at UPM Nordland Papier 1998–2005. President, UPM-Kymmene Inc. North America 2005–2008. Senior Vice President, Supply Chain, Paper Business Group 2008–2013.

Chairman of EUROGRAPH, the European Association of Graphic Paper Producers and the Owners' Committee of Madison Paper Industries. Board member of Johann Bunte Bauunternehmung GmbH & Co. KG.

## Mika Sillanpää

Executive Vice President, UPM Plywood  
M.Sc. (Eng.)  
Born 1958  
Member of the Group Executive Team since 2013.  
Employed by UPM-Kymmene Corporation since 1985.

Several management positions at UPM Raflatac in Finland and in France 1985–2000. Vice President, UPM Raflatac Europe 2001–2003. Senior Vice President, Strategic Development, UPM Raflatac Group 2003–2008. Vice President, Sourcing at UPM Raflatac Group 2008–2013.

## Kari Ståhlberg

Executive Vice President, Strategy  
M.Sc. (Eng.)  
Born 1971  
Member of the Group Executive Team since 2013.  
Employed by UPM-Kymmene Corporation since 2007.

Management Consultant at Jaakko Pöyry Consulting Oy 1998–2000. M&A Advisor at JP Capital International Limited in the UK 2000–2006. Investment Manager at Finnish Industry Investment Ltd 2006–2007. Director, M&A, UPM-Kymmene Corporation 2007–2010. Senior Vice President, Corporate Strategy 2010–2013.

## Juha Mäkelä

General Counsel  
LL.M.  
Born 1962  
Member of the Group Executive Team since 2008.  
Employed by UPM-Kymmene Corporation since 2005.

Several positions in law firms 1991–1996. Positions as legal counsel and senior legal counsel in KONE Corporation 1997–2004.

Supervisory Board member of Kemijoki Oy.

## Jyrki Ovaska

Executive Vice President, Technology  
M.Sc. (Eng.)  
Born 1958  
Member of the Group Executive Team since 2002.  
Employed by UPM-Kymmene Corporation since 1984.

Several management positions at United Paper Mills Ltd and UPM in the Printing Papers Division 1984–2001. President, Fine and Speciality Papers Division 2002–2003. President, Magazine Paper Division 2004–2008. President, Paper Business Group 2008–2013.

Board member of AmCham Finland (The American Chamber of Commerce in Finland).

## Riitta Savonlahti

Executive Vice President, Human Resources  
M.Sc. (Econ.)  
Born 1964  
Member of the Group Executive Team since 2004.  
Employed by UPM-Kymmene Corporation since 2004.

HR Specialist positions at ABB 1990–1994. Human Resources Manager at Nokia Mobile Phones, Salo Operations 1995–2000. Senior Vice President, Human Resources at Raisio Group 2000–2001. Senior Vice President, Human Resources at Elcoteq Network Corporation 2001–2004.

Board member of Itella Corporation and Management Institute of Finland MIF Ltd.

## Pirkko Harrela

Executive Vice President, Stakeholder Relations  
M.A.  
Born 1960  
Member of the Group Executive Team since 2004.  
Employed by UPM-Kymmene Corporation since 1985.

Several positions in Communications in Finnmap and UPM Paper Division 1985–2002. Vice President, Corporate Communications of UPM 2003. Executive Vice President, Corporate Communications 2004–2013.

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# Report of the Board of Directors

## Market environment in 2013

Growth in the global economy in 2013 remained largely on the same low level as in the previous year. Slowing growth in the US offset strengthening sentiment in the Euro area, while growth in large developing economies such as China, India and Brazil remained on the previous year's level. Global GDP growth was approximately 3% in 2013.

The Euro area climbed out of recession during the second quarter and confidence in growth prospects improved during the second half of the year. Although growth improved slightly during the second half, 2013 was revealed to be almost as weak as 2012. The real economy was held back by austerity programmes and weak labour markets, as the area recovered gradually from the sovereign debt crisis.

In the US, the avoidance of the fiscal cliff and the expansion of monetary easing, along with a continued recovery in the housing and labour markets improved growth prospects. The US economy sustained moderate growth in 2013, albeit at a slightly lower rate than in 2012.

In China, growth was on the same level as in the previous year, and the government strived to rebalance the economy by reducing dependence on investments and exports in favour of consumption.

The Euro strengthened against many important currencies in 2013, which weakened the competitiveness of European exporters. Against the US dollar, the Euro strengthened during the second half of the year, and was on average 3% stronger compared to the previous year. Likewise, the Euro strengthened against the British pound sterling, and considerably against the Japanese yen. Emerging market currencies depreciated in 2013 amid talks of tightening monetary stimulus in the US.

In UPM's businesses, the recession in the Euro area continued to have a negative impact on the European graphic paper markets in particular during the first half of 2013. In the global pulp and label materials markets business conditions remained favourable, with growing demand during the year. The hydrological situation in Finland normalised after a record year in 2012, resulting in lower hydropower availability. During the second half of the year there were also some early signs of improving demand in certain construction-related products in Europe.

## New reportable segments

UPM adopted a new business structure as of 1 November 2013. Financial reporting according to the new structure has taken place from Q4 2013 onwards. The financial figures for the comparison periods have been restated according to the new business and reportable segments structure.

## Key figures

	2013	2012
Sales, EURm	10,054	10,492
EBITDA, EURm <sup>1)</sup>	1,155	1,312
% of sales	11.5	12.5
Operating profit (loss), EURm	548	-1,318
excluding special items, EURm	683	556
% of sales	6.8	5.3
Profit (loss) before tax, EURm	475	-1,271
excluding special items, EURm	610	471
Net profit (loss) for the period, EURm	335	-1,122
Earnings per share, EUR	0.63	-2.14
excluding special items, EUR	0.91	0.74
Diluted earnings per share, EUR	0.63	-2.13
Return on equity, %	4.5	neg.
excluding special items, %	6.4	4.2
Return on capital employed, %	4.8	neg.
excluding special items, %	6.0	4.2
Operating cash flow per share, EUR	1.39	1.98
Equity per share at end of period, EUR	14.08	14.18
Gearing ratio at end of period, %	41	43
Net interest-bearing liabilities at end of period, EURm	3,040	3,210
Capital employed at end of period, EURm	11,583	11,603
Capital expenditure, EURm	362	357
Capital expenditure excluding acquisitions and shares, EURm	329	347
Personnel at end of period	20,950	22,180

<sup>1)</sup> EBITDA is operating profit before depreciation, amortisation and impairment charges, excluding the change in fair value of biological assets, excluding the share of results of associated companies and joint ventures, and special items.

Information on key financial and share-related indicators is presented in financial statements.

## Results 2013 compared with 2012

Sales in 2013 were EUR 10,054 million, 4% lower than the EUR 10,492 million in 2012. Sales decreased due to a reduction in paper deliveries and prices.

EBITDA was EUR 1,155 million, 11.5% of sales (1,312 million, 12.5% of sales). The decrease in EBITDA was mainly attributable to the UPM Paper ENA business area, as a result of lower average paper prices and lower delivery volumes. Fixed and variable costs in the UPM Paper ENA business decreased significantly but, in the early part of the year, could not compensate for lower paper prices and deliveries.

The Group's fixed costs decreased by EUR 134 million from the comparison period.

Operating profit excluding special items was EUR 683 million, 6.8% of sales (556 million, 5.3%). Reported operating profit was EUR 548 million, 5.5% of sales (loss of EUR 1,318 million). Depreciation totalled EUR 545 million (2,614 million), and excluding special items EUR 542 million (803 million).

Operating profit includes net charges totalling EUR 135 million as special items. The UPM Paper ENA business area recognised net restructuring charges of EUR 59 million, mainly related to the restructuring of UPM Docelles mill and closures of paper machines Rauma PM3 and Ettringen PM4. The UPM Raflatac business area recognised restructuring charges of EUR 15 million. The streamlining of global functions and other actions under UPM's profit improvement pro-

gramme resulted in net restructuring charges of EUR 27 million in Other operations. UPM booked a EUR 40 million write-down of receivables due to the Finnish Customs' decision to dismiss UPM's application for the statutory refund of energy taxes for the year 2012. UPM has appealed against the decision of the authorities.

The increase in the fair value of biological assets net of wood harvested was EUR 68 million (45 million).

Profit before tax was EUR 475 million (loss of EUR 1,271 million) and excluding special items EUR 610 million (471 million). Net interest and other finance costs were EUR 84 million (2 million including the dividend of EUR 105 million from Pohjolan Voima Oy as special income). Exchange rate and fair value gains and losses resulted in a gain of EUR 10 million (11 million).

Income taxes were EUR 140 million (149 million positive). The net impact of special items in income taxes was EUR 10 million negative (230 million positive), including charges of EUR 120 million related to a change in estimated recoverability of deferred tax assets in Canada and income of EUR 76 million related to the corporate income tax rate change from 24.5% to 20.0% in Finland.

Profit for 2013 was EUR 335 million (loss of EUR 1,122 million) and earnings per share were EUR 0.63 (-2.14). Earnings per share excluding special items were EUR 0.91 (0.74).

Operating cash flow per share was EUR 1.39 (1.98).

## Financing

In 2013, cash flow from operating activities before capital expenditure and financing totalled EUR 735 million (1,040 million). Working capital increased by EUR 128 million (decreased by EUR 34 million) during the period, mainly due to the decrease in current liabilities.

The gearing ratio as of 31 December 2013 was 41% (43%). Net interest-bearing liabilities at the end of the period came to EUR 3,040 million (3,210 million).

On 31 December 2013, UPM's cash funds and unused committed credit facilities totalled EUR 1.8 billion.

## Personnel

In 2013, UPM had an average of 21,898 employees (23,151). At the beginning of the year the number of employees was 22,180, and at as 31 December 2013 it was 20,950.

More information (unaudited) on personnel is published in UPM's Annual Report 2013.

## Capital expenditure

In 2013, capital expenditure excluding investments in shares was EUR 329 million, 3.3% of sales (347 million, 3.3% of sales). Operational capital expenditure totalled EUR 209 million (248 million).

UPM is investing in a biorefinery, which will produce renewable diesel from crude tall oil in Lappeenranta, Finland. The biorefinery will produce approximately 100,000 tonnes of advanced renewable diesel for transport each year. Diesel production is expected to begin in summer 2014. The total investment will amount to approximately EUR 150 million.

UPM is building a new combined heat and power plant at the UPM Schongau mill in Germany. The target is to significantly reduce energy costs as well as to secure the mill's energy supply. Start-up is planned for the end of 2014. Total investment is approximately EUR 85 million.

The rebuilding of the UPM Pietarsaari pulp mill's effluent treatment plant was completed in December 2013. Total investment was EUR 32 million.

UPM is building a new woodfree speciality paper machine at the UPM Changshu mill in China. The new paper machine will be capable of producing label papers and uncoated woodfree grades. The total investment cost is CNY 3,000 million (approximately EUR 390 million), and the machine is expected to start up in 2015.

In June, UPM announced that it is participating in the share issue from Pohjolan Voima Oy to finance the Olkiluoto 3 nuclear power plant project. UPM's share of the issue is EUR 119 million, of which EUR 31

million was paid in Q2 2013. The remaining part of the share issue will be implemented during the coming years based on the financing needs of the project.

## Restructuring in Paper and streamlining of functions

In January 2013, UPM announced that it is planning to permanently reduce paper production capacity in Europe by 850,000 tonnes during 2013. UPM also announced plans to streamline the European paper operations and the Group's global functions. The restructuring plans were estimated to result in annual fixed cost savings of EUR 90 million. The one-off cash restructuring cost was estimated to be EUR 100 million. EUR 82 million of the restructuring costs were recognised in the 2013 results.

Production at the UPM Stracel mill was ceased in January 2013. The mill produced 270,000 tonnes of coated magazine paper annually. The assets and part of the land at the mill site were sold to Blue Paper SAS in May. The new owner will convert the mill to produce recycled fibre-based fluting and test-liner.

Paper machine 3 at the UPM Rauma mill in Finland and paper machine 4 at the UPM Ettringen mill in Germany were permanently closed in April 2013. Both machines produced uncoated magazine paper; in total 420,000 tonnes annually.

Paper production at the UPM Docelles paper mill in France was permanently discontinued in January 2014. Docelles produced 160,000 tonnes of uncoated woodfree paper annually.

## New business structure to sharpen operational focus and facilitate portfolio change

On 6 August 2013, UPM announced that it would implement a new business structure to drive clear improvement in profitability. The company also seeks to simplify and further develop its business portfolio.

UPM's new structure consists of the following business areas and reporting segments: UPM Biorefining, UPM Energy, UPM Raflatac, UPM Paper Asia, UPM Paper ENA (Europe and North America) and UPM Plywood. Forests and wood procurement are reported in Other operations. The new structure has been valid as of 1 November 2013.

The new Paper business areas are located at the centres of their markets. UPM Paper Asia is headquartered in Shanghai, China, and UPM Paper ENA in Augsburg, Germany. The Group Head Office remains in Helsinki, Finland.

Through the new business structure, the company aims to sharpen the targets and required actions for each business. The new structure will also increase the transparency of company performance.

UPM will also seek to simplify its business portfolio and uncover the value of its assets. These opportunities will be explored in parallel with the profitability improvement and growth initiatives and may involve changes in ownership structures.

## Profit improvement through simplified business structure

On 6 August 2013, UPM announced that it had identified actions with an overall profit improvement impact of EUR 200 million in its existing businesses. Each business is implementing a profit improvement programme with a simplified business model and variable and fixed cost savings. These planned actions do not include additional capacity closures at this time.

The profit improvement programme includes the remaining part of the EUR 90 million savings announced in January 2013, as well as further actions resulting from the new business structure and consequent profit improvement measures.

The full impact of the programme is expected to materialise by the end of 2014 as compared with the Q2 2013 results.

In Q4 2013, the actions under the profit improvement programme reduced UPM's costs by EUR 24 million, i.e. approximately 48% of the annualised savings had been achieved.

UPM has conducted employee consultations in UPM Paper ENA, Global Functions and in UPM Wood Sourcing and Forestry. The combined estimated total impact of the plans was a maximum of 275 positions, of which 195 in Finland and 80 in other countries. The realised impact is expected to be approximately 215 positions, of which 135 in Finland and 80 in other countries during 2014-2015.

UPM will follow and update the progress of the programme in its quarterly reporting.

### Growth initiatives for the next three years

On 6 August 2013, UPM announced quantified targets for its growth initiatives in the coming three years.

Biofuels, woodfree specialty papers in China and continued growth in UPM Raflatac are expected to provide top line growth for UPM in the coming years. In addition, opportunities have been identified to expand production capacity in UPM's existing pulp mills by approximately 10%. With these growth initiatives, the company is targeting additional EBITDA contribution of EUR 200 million when in full operation.

The total investment requirement in these projects is EUR 680 million, including the earlier-announced EUR 540 million in the Changshu paper machine and Lappeenranta biorefinery. EUR 132 million has already been invested, and the total remaining capital expenditure in the coming three years would be EUR 548 million.

### Events after the balance sheet date

On 22 January 2014, UPM announced that it will permanently close down the UPM Docelles paper mill in France. The production ceased by the end of January. Employee information and consultation negotiations were completed on 13 December 2013 and the Social Plan was approved by the French authorities on 13 January 2014.

Docelles mill employed 161 people and produced 160,000 tonnes of uncoated woodfree papers annually. Charges of EUR 25 million have been recognised related to the restructuring of the mill in Q4 2013.

### Outlook for 2014

Growth in the European economy is expected to remain low in 2014, but improve from last year. Growth in the US and in the developing economies is expected to continue to outperform Europe.

This environment is expected to be supportive for the global pulp and label materials demand, as well as paper demand in Asia. The slight improvement in the European economy may moderate the negative demand development seen in the European graphic paper market in the past two years and stimulate European demand for wood products. The current hydrological situation in Finland is close to the long-term average level, and the forward electricity prices in Finland for H1 2014 are somewhat lower than the realised market prices in H1 2013.

UPM's business outlook for H1 2014 is broadly stable.

In H1 2014, UPM's performance is expected to be underpinned by stable overall outlook for UPM Energy, UPM Raflatac, UPM Paper Asia and UPM Plywood, as compared to H2 2013.

Profitability in UPM Paper ENA is expected to improve due to the on-going cost reduction measures. In H1 2014 compared to H2 2013, however, performance is negatively impacted by lower delivery volumes, including seasonal factors.

UPM Biorefining is starting the year in a stable market. Capacity additions in the global pulp market may impact the pulp market balance unfavourably during 2014, depending on the timing of the new start-ups.

### Business area reviews

#### UPM Biorefining

##### 2013 compared with 2012

Operating profit excluding special items for UPM Biorefining increased to EUR 300 million (248 million). Sales increased by 1% to EUR 1,988 million (1,970 million). Pulp deliveries increased by 1% to 3,163,000 tonnes (3,128,000).

Operating profit increased due to higher pulp sales prices and increased deliveries. In sawmill operations cost efficiency improved as a result of restructuring. Fixed costs decreased in spite of preparation for the commercial launch of UPM BioVerno – UPM's renewable diesel.

In July, UPM sold the Pestovo sawmill in Russia.

UPM Biorefining	2013	2012
Sales, EURm	1,988	1,970
EBITDA, EURm <sup>1)</sup>	435	391
% of sales	21.9	19.8
Change in fair value of biological assets and wood harvested, EURm	15	15
Share of results of associated companies and joint ventures, EURm	1	2
Depreciation, amortisation and impairment charges, EURm	-152	-191
Operating profit, EURm	306	205
% of sales	15.4	10.4
Special items, EURm <sup>2)</sup>	6	-43
Operating profit excl. special items, EURm	300	248
% of sales	15.1	12.6
Pulp deliveries, 1,000 t	3,163	3,128
Capital employed (average), EURm	2,825	2,806
ROCE (excl. special items), %	10.6	8.8

<sup>1)</sup> EBITDA is operating profit before depreciation, amortisation and impairment charges, excluding the change in fair value of biological assets and wood harvested, the share of results of associated companies and joint ventures, and special items.

<sup>2)</sup> In 2013, special charges of EUR 2 million relate to restructuring measures and special income of EUR 8 million to a capital gain from a sale of property, plant and equipment. In 2012, special items of EUR 43 million relate to the restructuring of sawn timber and further processing operations including an impairment charge of EUR 31 million.

#### Market review

Chemical pulp market prices increased during the first half of 2013. Softwood pulp (NBSK) and hardwood pulp (BHKP) market prices diverged during the second half of the year. Balanced market conditions supported additional price increases for softwood market pulp during the second half of 2013. The euro-denominated price remained stable as the USD/EUR exchange rate weakened. In hardwood pulp, market prices decreased during the second half of the year as new capacity entered the market, impacting the supply-demand balance.

In 2013, the average softwood pulp (NBSK) market price was EUR 646/tonne (634/tonne) and the average hardwood pulp (BHKP) market price was EUR 596/tonne (585/tonne). At the end of the year, the softwood pulp market price was EUR 656/tonne (613/tonne) and the hardwood pulp market price was EUR 557/tonne (587/tonne).

Global chemical pulp shipments increased by 2% from the previous year. Shipments to China and North America increased by 5%, while shipments to Western Europe remained the same.

Sawn timber demand increased in 2013. The increase was led by exports to Asia and North Africa. Demand in Europe remained fairly stable.

#### UPM Energy

##### 2013 compared with 2012

Operating profit excluding special items for UPM Energy decreased to EUR 186 million (217 million). Sales decreased by 3% to EUR 466 million (482 million). The total electricity sales volume was 8,925 GWh (9,486 GWh).

The decrease in operating profit was mainly due to lower hydro-power generation volumes. The average electricity sales price increased by 2% to EUR 46.1/MWh (45.2/MWh).

UPM Energy	2013	2012
Sales, EURm	466	482
EBITDA, EURm <sup>1)</sup>	198	228
% of sales	42.5	47.3
Share of results of associated companies and joint ventures, EURm	-1	-
Depreciation, amortisation and impairment charges, EURm	-11	-11
Operating profit, EURm	186	217
% of sales	39.9	45.0
Special items, EURm	-	-
Operating profit excl. special items, EURm	186	217
% of sales	39.9	45.0
Electricity deliveries, GWh	8,925	9,486
Capital employed (average), EURm	2,882	3,266
ROCE (excl. special items), %	6.5	6.6

<sup>1)</sup> EBITDA is operating profit before depreciation, amortisation and impairment charges, excluding the change in fair value of biological assets and wood harvested, the share of results of associated companies and joint ventures, and special items.

#### Market review

The hydrological balance in Finland fluctuated in 2013 and was on average lower than in 2012. During the first half of the year the balance remained above the long-term average. However, a prolonged period of dry weather deteriorated the hydrological balance during the third quarter, whereas wet weather conditions in the fourth quarter restored the balance to close to normal levels by the year-end.

The average Finnish area spot price on the Nordic electricity exchange in 2013 was EUR 41.2/MWh, 13% higher than during the same period the previous year (36.6/MWh). The Finnish area price was above the Nord Pool system price as transmission cable maintenance work between Finland and Sweden limited imports, and at the same time imports from Russia remained low.

Coal prices were lower than in the previous year. The CO<sub>2</sub> emission allowance price was EUR 4.7/tonne at the end of the period, 30% lower than on the same date the previous year (EUR 6.7/tonne). The Finnish area front-year forward price closed at EUR 38.9/MWh in December, 11% lower than on the same date the previous year (43.5/MWh).

#### UPM Raflatac

##### 2013 compared with 2012

Operating profit excluding special items for UPM Raflatac was EUR 75 million (81 million). Sales increased by 1% to EUR 1,213 million (1,202 million).

Operating profit decreased from the previous year, mainly due to the lower sales margin. Expanded operations enabled volume growth, more than offsetting the increase in fixed costs.

In July, UPM announced plans to reduce labelstock production capacity in Europe, South Africa and Australia.

UPM Raflatac	2013	2012
Sales, EURm	1,213	1,202
EBITDA, EURm <sup>1)</sup>	109	115
% of sales	9.0	9.6
Depreciation, amortisation and impairment charges, EURm	-36	-34
Operating profit, EURm	60	78
% of sales	4.9	6.5
Special items, EURm <sup>2)</sup>	-15	-3
Operating profit excl. special items, EURm	75	81
% of sales	6.2	6.7
Capital employed (average), EURm	532	524
ROCE (excl. special items), %	14.1	15.5

<sup>1)</sup> EBITDA is operating profit before depreciation, amortisation and impairment charges, excluding the change in fair value of biological assets and wood harvested, the share of results of associated companies and joint ventures, and special items.

<sup>2)</sup> In 2013, special items of EUR 15 million relate to restructuring charges, including impairments of EUR 2 million. In 2012, special items of EUR 3 million relate to restructuring charges.

#### Market review

Along with a gradual, albeit slow, improvement in the macro-economic environment, growth in the global demand for self-adhesive labelstock improved over the year. Demand in Western Europe is estimated to have improved slightly, especially during the second half of the year, whereas in North America demand is estimated to have experienced modest growth during the course of the year. In Eastern Europe, Asia and Latin America growth continued, but at a lower level.

#### UPM Paper Asia

##### 2013 compared with 2012

Operating profit excluding special items for UPM Paper Asia was EUR 80 million (101 million).

Sales were EUR 1,108 million (1,131 million). Paper deliveries remained virtually on the previous year's level of 1,378,000 tonnes (1,370,000).

The operating profit decreased in 2013 mainly due to lower fine paper prices. Deliveries remained on the same level as the previous year.

UPM Paper Asia	2013	2012
Sales, EURm	1,108	1,131
EBITDA, EURm <sup>1)</sup>	161	185
% of sales	14.5	16.4
Depreciation, amortisation and impairment charges, EURm	-81	-84
Operating profit, EURm	80	101
% of sales	7.2	8.9
Special items, EURm	-	-
Operating profit excl. special items, EURm	80	101
% of sales	7.2	8.9
Paper deliveries, 1,000 t	1,378	1,370
Capital employed (average), EURm	882	915
ROCE (excl. special items), %	9.1	11.0

<sup>1)</sup> EBITDA is operating profit before depreciation, amortisation and impairment charges, excluding the change in fair value of biological assets and wood harvested, the share of results of associated companies and joint ventures, and special items.



damages. Metsäliitto and Metsä Board sold a 24.9% holding in Metsä Fibre to Itochu Corporation for EUR 472 million. In connection with the transaction with Itochu, Metsäliitto exercised a call option to purchase UPM's remaining 11% ownership in Metsä Fibre for EUR 150 million. The arbitral tribunal is expected to render its final decision during Q1 2014. No receivables have been recorded by UPM on the basis of claims presented in the arbitration proceedings.

Neste Oil Oyj, a Finnish company producing traffic fuels (Neste), has filed an action for declaratory judgment against UPM in June 2013 in the Helsinki District Court. Neste seeks a declaration from the court that Neste enjoys protection on the basis of its patent against the technology that Neste alleges UPM intends to use at the biorefinery which is being constructed at UPM's Kaukas mill site. The said action relates to the same Neste patent concerning which UPM has filed an invalidation claim in December 2012. The invalidation claim was filed as a procedural precautionary measure to avoid unfounded legal processes. UPM considers Neste's action to be without merit.

In Finland, UPM is participating in a project to construct a new nuclear power plant unit (Olkiluoto 3) through its shareholdings in Pohjolan Voima Oy. Pohjolan Voima Oy is a majority shareholder of Teollisuuden Voima Oyj (TVO), holding 58.47% of its shares. UPM's indirect share of Olkiluoto 3 is approximately 31%. Originally the commercial electricity production of the Olkiluoto 3 plant was scheduled to start at the end of April 2009. The completion of the project, however, has been delayed. Based on the progress reports received from the AREVA-Siemens Consortium (Supplier), which is constructing Olkiluoto 3 under a fixed-price turnkey contract, TVO has announced that it will prepare for the possibility that the start of regular electricity production may be postponed until the year 2016. The Supplier is responsible for the schedule. In December 2008, the Supplier initiated arbitration proceedings before an International Chamber of Commerce (ICC) arbitration tribunal in relation to the delay of Olkiluoto 3 and related costs. At the end of 2013, the Supplier submitted its updated claim to the ICC arbitration proceedings concerning the delay of the project and the ensuing costs. The updated quantification until the end of June 2011, together with the earlier claim, is in total approximately EUR 2.7 billion. Among other things, the sum includes approximately EUR 70 million of payments delayed by TVO under the plant contract as well as approximately EUR 700 million of penalty interest and approximately EUR 120 million of alleged loss of profit. The Supplier's previous monetary claim was approximately EUR 1.9 billion. TVO has considered and found the earlier claim by the Supplier to be unfounded and without merit. TVO will scrutinise the new material and respond to it in due course. TVO has submitted a claim and defence in the arbitration proceedings concerning the delay and the ensuing costs incurred in the Olkiluoto 3 project. The quantification estimate of TVO's costs and losses in the claim that TVO submitted in the arbitration in September 2012 was approximately EUR 1.8 billion, which included TVO's actual claim and estimated part. The arbitration proceedings may continue for several years, and the claimed and counter-claimed amounts may change. No receivables or provisions have been recorded by TVO on the basis of claims presented in the arbitration proceedings.

## Risks

### Risk management

UPM regards risk management as a systematic and proactive means to analyse and manage the opportunities and threats related to its business operations. This includes also risks avoided by careful planning and evaluation of future projects and business environment.

UPM seeks to transfer insurable risks through insurance arrangements if the risks exceed the defined tolerance. The insurance cover is always subject to the applicable insurance conditions.

The main risk factors that can materially affect the company's business and financial results are set out below. They have been classified as strategic risks, operational risks, financial risks and hazard risks.

### Strategic risks

*Competition, markets and customers.* The energy, pulp, timber, paper, label, plywood and biofuels markets are cyclical and highly competitive. In all of these markets the price level is determined as a combination of demand and supply, and shocks to either demand (decrease/increase in end-use demand, change in customer preferences etc.) or supply (e.g. new production capacity entering the market or old capacity being closed) may impact both the volume and the price level for UPM. Also competitor behaviour influences the market price development.

UPM performance is also impacted by the performance of substitute or alternative products. Most notably, the demand in graphical papers in the mature markets is forecasted to continue to decline, due to the shift away from print media to electronic media.

Consumers' environmental awareness has also increased, and this may have either a positive or negative impact on the consumption of UPM's products, depending on the product area.

UPM sells a proportion of its products to several major customers. The largest customer in terms of sales represented approximately 3% of UPM's sales in 2013, and the ten largest customers represented approximately 14% of such sales.

*M&A and changes in the business portfolio.* UPM's strategic direction is to increase the share of growing businesses with positive long-term fundamentals. This may require acquisitions of new businesses or divestments of existing businesses. Participation in M&A involves risks such as successful implementation of a divestment and the ability to integrate and manage acquired operations and personnel successfully, as well as to achieve the economic targets set for an acquisition/divestment.

*Regulation.* UPM is exposed to a wide range of laws and regulations. The performance of UPM businesses, for example the biofuels business, the paper businesses and the energy business, are to a high degree dependent on the current regulatory framework, and changes to regulation, direct and indirect taxation or subsidies would have a direct impact on the performance of UPM. In addition, regulation may structurally restrict or exacerbate UPM's ability to compete for raw material.

UPM's environment related processes and management are based on full compliance with such laws and regulations, and environmental investments, audits and measurements are carried out on a continuous basis. UPM is currently not involved in any major proceeding concerning environmental matters, but the risk of substantial environmental costs and liabilities is inherent in industrial operations.

*Political and economical risks.* UPM has major manufacturing locations in Finland, Germany, the UK, France and the US. In these countries, the slow development of the individual economies and/or of Europe as a whole influences adversely UPM's performance. Furthermore, policies (on European and/or national level) that hamper economic growth or lower the competitiveness of UPM (for example through adverse regulation or increase in direct or indirect taxation) may have an adverse impact on UPM's performance. In the developed countries, the low transparency and predictability of the political system and regulation may lead to an increasing uncertainty and risk level when investing in or operating in these countries.

UPM has manufacturing operations in a number of emerging market countries, such as China, Uruguay, Russia and Brazil. In the emerging market countries, the lack of transparency and predictability of the political, economic and legal systems may lead to an increasing uncertainty and risk level when investing in, or operating in these countries. These uncertainties may materialize as unfavourable taxation treatment, trade restrictions, inflation, currency fluctuations and nationalization of assets.

### Operational risks

*Earnings uncertainty.* The main short-term uncertainties in UPM's earnings relate to sales prices and delivery volumes of the Group's products, as well as to changes in the main input cost items and exchange rates. Most of these items are dependent on general economic developments.

The main earnings sensitivities and the Group's cost structure are presented in the Annual Report of 2013, on page 11.

*Availability and price of major inputs.* In 2013, third-party suppliers accounted for approximately 85% of UPM's wood requirements. Other production inputs, such as chemicals, fillers and recovered paper, are obtained from third-party suppliers. Disruptions in the supply of key inputs would impact upon manufacturing operations, for example, by interrupting or resulting in the downscaling of production or a change in the product mix. They could also cause price increases for critical inputs or shifts in the availability and price of wood. It is also uncertain how the EU energy policies may impact upon the availability and costs of fibre and energy.

*Project execution.* Investment projects in UPM businesses such as energy, pulp, paper or biofuels are often large and take one or more years to complete. UPM has experience in such projects in various businesses and locations around the world, and applies vigorous planning, project management and follow-up processes. Participation in large projects involves risks such as cost overruns or delays, as well as achievement of the economic targets set for the investment.

*Partnerships.* UPM currently works together with many partners without control over strategic direction and operational output. The highly competitive market situation and, for example, new developments in biofuels or bioenergy are likely to increase the importance of partnerships in the search for higher efficiency or new products and businesses. Partnerships, however, may create risks to the profitability, for example, through changes occurring within the partner entity or changes in how the partnership operates.

*Ability to recruit and retain skilled employees.* To meet the challenges of sustaining growth and improving the effectiveness of operations, a skilled workforce is necessary. UPM is continuously evaluating its recruitment, compensation and career development policies and taking measures to attract and retain skilled personnel, thereby seeking to avoid shortages of appropriately skilled personnel in the future.

### Financial risks

*Changes in exchange and interest rates.* Exchange rate exposure primarily affects export operations when sales are denominated in currencies other than those in which manufacturing costs are incurred. Part of UPM's sales and purchases are denominated in currencies other than the euro (primarily the US dollar and the British pound sterling). To manage exposure to such exchange rate fluctuations, close monitoring of the exposure to currency risks is carried out simultaneously with the hedging of such risks, using financial instruments including forward foreign exchange agreements and currency swaps. Furthermore, changes in interest rates may have a considerable impact on the values of the company's assets (e.g. biological assets or available-for-sale investments, such as energy assets), which are valued on a discounted cash flow model.

*Availability of capital and liquidity.* Availability of capital to UPM is dependent on conditions of the financial markets and the Group's financial health. If either or both of these factors were to change dramatically for the worse, the cost and availability of capital would be at risk. To mitigate possible materialisation of these risks, the UPM has liquidity reserves in the form of committed multi-year loan facilities. UPM's available-for-sale investments are recognised at fair value in the balance sheet. Changes in the assumptions used (e.g. electricity price estimate and start-up schedule of the Olkiluoto 3 nuclear power plant) might have a significant impact on UPM's financial position.

*Payment defaults.* There is a risk of non-payment or non-performance by the Group's customers in connection with the sale of products. UPM has various programmes in place to monitor and mitigate customer credit risk, and insurance policies cover most of the trade receivables.

Additional information about financial risks and the maturity of long term debt is disclosed in the consolidated financial statements (Notes 3 and 31).

### Hazard risks

UPM operates a significant number of manufacturing facilities globally, mostly UPM-owned, and is also the largest private owner of forestland in Finland. UPM is exposed to risks in areas such as occupational health and safety, environment, fire, natural events and site security. These risks are managed through established management procedures and loss prevention programmes. UPM's insurance programme also provides coverage for insurable hazard risks, subject to terms and conditions.

### Research and development

The versatile use of renewable wood biomass, combined with innovation, resource efficiency and sustainability, is the cornerstone of UPM's Biofore strategy. Innovations are at the forefront in the creation and development of new products that can be used to replace non-renewable materials with renewable, recyclable and low-impact alternatives and provide resource-efficient alternatives for the future.

In 2013, UPM's direct expenditure on research and development was approximately EUR 38 million (45 million), or 0.4% (0.4%) of the Group's sales. The majority of UPM's R&D input is focused on new technologies and businesses. In total, UPM spent approximately EUR 155 million (81 million) on research and development for existing and developing businesses including negative operating cash flow and capital expenditures in developing businesses, corresponding 20.6% (8.0%) of UPM's operating cash flow.

### Biofuels

In Biofuels UPM focused strongly on the preparatory work for the market entry of the UPM BioVerno renewable diesel. UPM carried out comprehensive emission, performance and wear tests together with the Technical Research Centre of Finland (VTT). In the long term, research work aims to extend biofuel production to new processes and raw materials, such as pyrolysis oils and solid biomass.

### Biocomposites

In Biocomposites UPM combined its two composite units, UPM ProFi and UPM Formi. Their principal ingredients are cellulose fibres and polymers, which can be either virgin or recycled. The composites can be recycled and are non-toxic.

In 2013, the UPM ProFi decking product portfolio was expanded to include a new solid profile deck.

UPM Formi is used to replace plastic in many applications, from furniture to consumer electronics and high-end speakers. UPM Formi is manufactured from cellulose fibre and plastics. Around half of the oil-based plastic is replaced with cellulose fibres in the biocomposite.

In 2013, UPM Biocomposites developed material and coating technologies mixing the two different composites in order to improve product quality and the cost effectiveness of the production processes.

### Biochemicals

In 2013, UPM combined its biochemicals-related business initiatives to form UPM Biochemicals. The unit develops wood-based chemical building blocks, performance chemicals and biofibrils.

Product development at UPM Biochemicals is at the pre-commercial phase, and UPM is actively developing and testing industrial applications with its partners in Finland and abroad in order to create mill-scale industrial concepts.

In 2013, the R&D work on biofibrils for developing pilot- and plant-scale industrial applications continued. UPM signed a co-operative agreement with Ashland Inc. to develop and commercialise products containing UPM's biofibrils technology.

UPM also signed a joint development agreement with Renmatix Inc. to further develop Renmatix's water-based Plantrose™ process to convert woody biomass into intermediates for subsequent downstream processing into biochemicals. The long-term goal of the initiative is to offer cost competitive alternatives for selected petrochemicals on an industrial scale.

### External networks

Tekes, the Finnish Funding Agency for Technology and Innovation, is an important partner for UPM, as it is supporting several research projects, such as the development of biofuels, energy-saving technologies and biochemical competence and biofibrils technology.

In 2013, the European Commission and the industries within the bioeconomy launched the Public Private Partnership (PPP) programme, which aims to support biorefinery concepts and the growth of the bioeconomy in Europe. The PPP is an important funding element for speeding up the implementation of future investments in new areas such as biochemicals, biocomposites and biofibrils.

In recent years, UPM's intellectual property rights applications have increased significantly. The importance of patent registration highlights the progress in new businesses.

UPM is a shareholder in the Finnish Bioeconomy Cluster (FIBIC). The Cluster's research programmes focus on the bioeconomy and products based on renewable materials, thus supporting UPM's internal R&D activities.

### Businesses

#### UPM Biorefining

UPM has reduced process water consumption significantly in its pulp mills. In UPM's newest mill, UPM Fray Bentos, Uruguay, the consumption of process water is among the lowest in the industry.

In plantations operations, development work focuses on strengthening the tree breeding programme and developing new frost-tolerant eucalyptus clones in order to create more value and improve productivity.

UPM Pulp intensified joint development activities with customers, mainly in Europe and China, in 2013.

#### UPM Energy

UPM Energy focuses on improving the efficiency and cost competitiveness of biomass-based energy technologies.

To reach its target, UPM Energy participates in several research programmes. These programmes are looking for new innovative solutions to improve the design and operation of large-scale energy conversion systems using biomass fuel mixtures.

#### UPM Raflatac

In the specialty business, UPM Raflatac focused on developing new high added value products to its range. During 2013 new adhesive solutions for the wine industry and various new security-labelling solutions were introduced. The product capabilities were also expanded to gummed and pressure sensitive postage stamps as well as multilayer film laminates.

In the standard products a large number of paper-based products were re-engineered for greater cost efficiency and improved performance. This re-engineering activity was particularly focused on the Asian markets. New thinner film products were also introduced in order to improve the cost competitiveness of the filmic products.

#### UPM Paper Asia

UPM R&D centre based in Changshu concentrates to support UPM's production units in China and in the Asia Pacific region, with main focus being R&D work for paper products. Label paper R&D focuses on customer specific solutions, efficiency improvements and technologies for sustainable solutions.

#### UPM Paper ENA

The R&D work focuses on improving cost efficiency through the material efficiency programme launched in 2011. One key target is to reduce water consumption at the paper mills. UPM is also studying ways to exploit deinking process waste and recycle surplus materials coming from paper mills to use waste streams more efficiently.

### UPM Plywood

UPM Plywood's product and technology development work focused on creating new customer-based solutions in addition to commercialising and piloting applications developed previously.

One of the key areas was to improve the properties of the current LNG containment system.

For concrete forming end uses, R&D work concentrated on creating new customer-focused products that are more economic with good functional properties.

Development of rigid structures for vehicle flooring continued with pilot installations for selected customers. In addition, plywood with high friction surface was in the development pipeline.

UPM plywood also developed new patent pending vision technology machine for veneer production. The new measuring technology enables improved raw material utilisation and new type of product solutions.

### Environmental performance

In 2013, UPM's environmental investments totalled EUR 29 million (35 million). The largest investment was the rebuild of the biological effluent treatment plant at the UPM Pietarsaari pulp mill in Finland.

UPM's environmental costs, which were mainly attributable to effluent treatment and waste management, totalled EUR 134 million (133 million), including depreciation.

No significant environmental incidents occurred in 2013. However, there were several minor temporary deviations from permit conditions. These deviations were reported to the relevant authorities immediately, and corrective and preventive measures were taken. The measures are part of the company's internal Clean run campaign, which aims to improve environmental performance further and to promote and maintain environmental awareness.

### Taking care of the entire lifecycle

UPM's products are sustainably made from renewable, biodegradable and recyclable raw materials. UPM businesses have adopted an ecodesign approach in their product development processes, which means systematic integration of environmental aspects into product design at an early stage, covering the whole lifecycle.

The majority of UPM's production sites, as well as its forestry operations, are covered by environmental, quality and health and safety systems, which are certified in accordance with the ISO 9001, ISO 14001 and OHSAS 18001 standards respectively. UPM has certified all its European pulp and paper mills and the UPM Fray Bentos pulp mill in Uruguay in accordance with the voluntary EU Eco-Management and Audit Scheme (EMAS). In 2013, the UPM Changshu paper mill became the first paper mill in China to be certified by EMAS.

UPM is the largest producer of EU Ecolabelled newsprint, graphic and copying papers. In 2013, UPM was awarded the EU Ecolabel Communication Award for increasing public awareness and knowledge of the EU Ecolabel.

### More waste reduction through recycling and reuse

Today, over 90% of all UPM's production waste is reused or recycled. UPM has developed innovative ways to reduce its own waste and reuse waste in new products such as UPM BioVerno, UPM's renewable diesel and UPM ProFi composite which utilises partly waste from the production of self-adhesive label materials. UPM is also the world's largest user of recovered paper for the production of graphic papers, consuming 3.5 million tonnes of paper for recycling in 2013.

The total amount of solid waste sent to landfill has decreased by over 10% in the last ten years. However, from 2012 to 2013 the total amount of waste to landfills increased significantly. The reason is that former re-use possibilities at one site ceased. New ways of re-used are being investigated.

### UPM ensures that all wood and wood fibre is sustainably sourced

All of UPM's own forests and eucalyptus plantations are certified according to the FSC and/or PEFC certification schemes. All of UPM's wood supplies are covered by third-party-verified chains of custody. 80% (77%) of all wood used by UPM is sourced from certified forests. 83% of UPM's paper is produced using fibre that meets the criteria of either the FSC or the PEFC forest certification scheme.

In connection with the biodiversity programme, UPM carried out several projects with stakeholders in 2013. UPM became a network partner in the "Biodiversity in Good Company" initiative in Germany as part of the UN Decade Office for Biodiversity. UPM continued its co-operation with the WWF's New Generation Plantations Project in Uruguay to develop and promote sustainable plantation practices.

### Climate actions recognised and energy saved

Since 1990, specific CO<sub>2</sub> (carbon dioxide) emissions per tonne of paper have been reduced by approximately 25%. UPM has a wide range of energy sources and it maximises the use of carbon-neutral energy. Biomass-based fuels make up 84% of the fuels used by UPM in Finland and 67% of those used worldwide. UPM is the second-largest generator of biomass-based electricity in Europe.

The largest ongoing projects are the new combined heat and power (CHP) plant at the UPM Schongau mill in Germany, due to be com-

pleted by the end of 2014, and the refurbishment of the company's own hydropower production assets in Finland. In 2013, the UPM Korkeakoski sawmill in Finland introduced a new bio heating plant that uses only bark for heat energy generation.

### More results with responsible water management

UPM has reduced wastewater volumes per tonne of paper by 25% and per tonne of chemical pulp by 20 % over the last ten years. The COD load has decreased by 30% per tonne of paper, and by 50% per tonne of pulp, over the last ten years.

The material efficiency programme, launched in 2011, continued at the paper mills. The objective is to reduce process water consumption and suspended solids. In 2013, the rebuild of the effluent treatment plant at the UPM Pietarsaari pulp mill in Finland was completed. UPM completed a project with the aim of improving the existing pulp mill processes and developing the next-generation pulp process, where the process water requirement per tonne of pulp is further reduced from the current level.

### Corporate Governance Statement

UPM presents the Corporate Governance Statement as a separate report which is available in UPM's Annual Report 2013 on pages 136-138 and on the company's website [www.upm.com](http://www.upm.com).



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ACCOUNTS



## Board of Directors' proposal for the distribution of profits

The Board of Directors proposes to the Annual General Meeting of UPM-Kymmene Corporation to be held on 8 April 2014 that based on the adopted balance sheet as per 31 December 2013 a dividend of EUR 0.60 per share be paid. The dividend will be paid to a shareholder registered in the Company's shareholders' register held by Euroclear Finland Ltd on the record date for dividend payment being 11 April 2014. The Board of Directors proposes that the dividend be paid on 24 April 2014.

On 31 December 2013, the distributable funds of the parent company were EUR 2,923,698,889.92. On the dividend proposal date, 30 January 2014, the Company's registered number of shares is 529,301,897.

The aforementioned number of shares includes 230,737 treasury shares held by the Company. Treasury shares held by the Company do not entitle to dividend. Based on this, the proposed dividend would total EUR 317.4 million.

No material changes have taken place in respect of the Company's financial position after the balance sheet date. In the opinion of the Board of Directors the proposed distribution of profits does not risk the solvency of the Company.

Signatures of the annual accounts and the report of the Board of Directors for the year 2013

Helsinki, 30 January 2014

Björn Wahlroos  
Chairman

Berndt Brunow

Matti Alahuhta

Karl Grotenfelt

Piia-Noora Kauppi

Wendy E. Lane

Jussi Pesonen  
President and CEO

Ursula Ranin

Veli-Matti Reinikkala

Kim Wahl

## Consolidated financial statements, IFRS Consolidated income statement

EURm	Note	Year ended 31 December 2012	
		2013	Restated <sup>1)</sup>
<b>Sales</b>	4	10,054	10,492
Other operating income	6	60	110
Costs and expenses	7	-9,091	-9,353
Change in fair value of biological assets and wood harvested	8	68	45
Share of results of associated companies and joint ventures	9	2	2
Depreciation, amortisation and impairment charges	10	-545	-2,614
<b>Operating profit (loss)</b>	4	548	-1,318
Gains on available-for-sale investments, net	11	1	38
Exchange rate and fair value gains and losses	12	10	11
Interest and other finance costs, net	12	-84	-2
<b>Profit (loss) before tax</b>		475	-1,271
Income taxes	13	-140	149
<b>Profit (loss) for the period</b>		335	-1,122
<b>Attributable to:</b>			
Owners of the parent company		335	-1,122
Non-controlling interests		-	-
		335	-1,122
<b>Earnings per share for profit (loss) attributable to owners of the parent company</b>			
Basic earnings per share, EUR	14	0.63	-2.14
Diluted earnings per share, EUR	14	0.63	-2.13

## Consolidated statement of comprehensive income

EURm	Note	Year ended 31 December 2012	
		2013	Restated <sup>1)</sup>
<b>Profit (loss) for the period</b>		335	-1,122
<b>Other comprehensive income for the period, net of tax:</b>			
<b>Items that will not be reclassified to income statement:</b>			
Actuarial gains and losses on defined benefit obligations		69	-98
<b>Items that may be reclassified subsequently to income statement:</b>			
Translation differences		-219	-14
Net investment hedge		77	4
Cash flow hedges		-28	46
Available-for-sale investments		58	-672
		-112	-636
<b>Other comprehensive income for the period, net of tax</b>	13, 27	-43	-734
<b>Total comprehensive income for the period</b>		292	-1,856
<b>Total comprehensive income attributable to:</b>			
Owners of the parent company		292	-1,856
Non-controlling interests		-	-
		292	-1,856

The income tax relating to each component of other comprehensive income is disclosed in Note 13.

Disclosure of components of other comprehensive income is presented in Note 27.

The notes are an integral part of these consolidated financial statements.

<sup>1)</sup> Retrospective application of new and revised IFRS.

# Consolidated balance sheet

EURm	Note	As at 31 December 2012		As at 1 January 2012
		2013	Restated <sup>1)</sup>	Restated <sup>1)</sup>
<b>Assets</b>				
<b>Non-current assets</b>				
Goodwill	16	219	222	1,022
Other intangible assets	17	342	366	467
Property, plant and equipment	18	4,757	5,089	6,505
Investment property	19	40	39	39
Biological assets	20	1,458	1,476	1,513
Investments in associated companies and joint ventures	21	22	20	28
Available-for-sale investments	22	2,661	2,587	3,345
Other non-current financial assets	23	282	441	423
Deferred tax assets	28	564	739	529
Other non-current assets	24	142	87	81
		10,487	11,066	13,952
<b>Current assets</b>				
Inventories	25	1,327	1,388	1,439
Trade and other receivables	26	1,948	1,982	2,016
Income tax receivables		50	21	26
Cash and cash equivalents	3	787	486	512
		4,112	3,877	3,993
Assets classified as held for sale		-	-	24
<b>Total assets</b>		14,599	14,943	17,969
<b>Equity and liabilities</b>				
<b>Equity attributable to owners of the parent company</b>				
Share capital	27	890	890	890
Treasury shares		-2	-2	-2
Translation differences		6	148	158
Fair value and other reserves	27	2,256	2,232	2,857
Reserve for invested non-restricted equity		1,226	1,207	1,199
Retained earnings		3,073	2,980	4,511
		7,449	7,455	9,613
<b>Non-controlling interests</b>		6	6	6
<b>Total equity</b>		7,455	7,461	9,619
<b>Non-current liabilities</b>				
Deferred tax liabilities	28	501	612	702
Retirement benefit obligations	29	680	745	641
Provisions	30	189	207	327
Interest-bearing liabilities	31	3,485	3,724	3,972
Other liabilities	32	164	142	79
		5,019	5,430	5,721
<b>Current liabilities</b>				
Current interest-bearing liabilities	31	643	417	906
Trade and other payables	33	1,419	1,566	1,682
Income tax payables		63	69	37
		2,125	2,052	2,625
Liabilities related to assets classified as held for sale		-	-	4
<b>Total liabilities</b>		7,144	7,482	8,350
<b>Total equity and liabilities</b>		14,599	14,943	17,969

The notes are an integral part of these consolidated financial statements.

<sup>1)</sup> Retrospective application of new and revised IFRS.

# Consolidated statement of changes in equity

EURm	Note	Attributable to owners of the parent company								
		Share capital	Treasury shares	Translation differences	Fair value and other reserves	Reserve for invested non-restricted equity	Retained earnings	Total	Non-controlling interests	Total equity
<b>Balance at 1 January 2012</b>										
		890	-2	161	129	1,199	5,084	7,461	16	7,477
		-	-	-3	2,728	-	-573	2,152	-10	2,142
		890	-2	158	2,857	1,199	4,511	9,613	6	9,619
<b>Balance at 1 January 2012 (restated <sup>1)</sup>)</b>										
		-	-	-	-	-	-1,122	-1,122	-	-1,122
		-	-	-	-	-	-98	-98	-	-98
		-	-	-14	-	-	-	-14	-	-14
		-	-	4	-	-	-	4	-	4
		-	-	-	46	-	-	46	-	46
		-	-	-	-672	-	-	-672	-	-672
		-	-	-10	-626	-	-1,220	-1,856	-	-1,856
<b>Total comprehensive income for the period</b>										
		-	-	-	-	8	-	8	-	8
		-	-	-	1	-	5	6	-	6
	15	-	-	-	-	-	-315	-315	-	-315
		-	-	-	-	-	-1	-1	-	-1
		-	-	-	1	8	-311	-302	-	-302
		27	890	-2	148	2,232	1,207	2,980	6	7,461
<b>Balance at 31 December 2012</b>										
<b>Balance at 1 January 2013</b>										
		890	-2	148	2,232	1,207	2,980	7,455	6	7,461
		-	-	-	-	-	335	335	-	335
		-	-	-	-	-	69	69	-	69
		-	-	-219	-	-	-	-219	-	-219
		-	-	77	-	-	-	77	-	77
		-	-	-	-28	-	-	-28	-	-28
		-	-	-	58	-	-	58	-	58
		-	-	-142	30	-	404	292	-	292
<b>Total comprehensive income for the period</b>										
		-	-	-	-	19	-	19	-	19
		-	-	-	-6	-	9	3	-	3
	15	-	-	-	-	-	-317	-317	-	-317
		-	-	-	-	-	-3	-3	-	-3
		-	-	-	-6	19	-311	-298	-	-298
		27	890	-2	6	2,256	1,226	3,073	6	7,455
<b>Balance at 31 December 2013</b>										

The notes are an integral part of these consolidated financial statements.

<sup>1)</sup> Retrospective application of new and revised IFRS.

# Consolidated cash flow statement

EURm	Note	Year ended 31 December 2012	
		2013	Restated <sup>1)</sup>
<b>Cash flow from operating activities</b>			
Profit (loss) for the period		335	-1,122
Adjustments	5	750	2,278
Interest received		3	7
Interest paid		-50	-83
Dividends received		2	15
Other financial items, net		-20	-16
Income taxes paid		-157	-73
Change in working capital	5	-128	34
<b>Net cash generated from operating activities</b>		<b>735</b>	<b>1,040</b>
<b>Cash flow from investing activities</b>			
Capital expenditure		-337	-379
Acquisition of businesses and subsidiaries, net of cash acquired	5	-	-10
Acquisition of shares in associated companies and joint ventures		-1	-
Acquisition of available-for-sale investments		-31	-
Proceeds from sale of tangible and intangible assets		33	100
Proceeds from disposal of subsidiaries	5	-2	-7
Proceeds from disposal of shares in associated companies and joint ventures		-	3
Proceeds from disposal of available-for-sale investments		1	150
Change in other non-current assets		40	-39
Dividends received		-	110
<b>Net cash used in investing activities</b>		<b>-297</b>	<b>-72</b>
<b>Cash flow from financing activities</b>			
Proceeds from non-current liabilities		553	140
Payments of non-current liabilities		-323	-937
Change in current liabilities		-64	110
Share options exercised		19	8
Dividends paid		-317	-315
<b>Net cash used in financing activities</b>		<b>-132</b>	<b>-994</b>
<b>Change in cash and cash equivalents</b>		<b>306</b>	<b>-26</b>
Cash and cash equivalents at beginning of period		486	512
Foreign exchange effect on cash and cash equivalents		-5	-
Change in cash and cash equivalents		306	-26
<b>Cash and cash equivalents at end of period</b>		<b>787</b>	<b>486</b>

The notes are an integral part of these consolidated financial statements.

<sup>1)</sup> Retrospective application of new and revised IFRS.

# Notes to the consolidated financial statements

(In the notes all amounts are shown in millions of euros unless otherwise stated.)

## 1 Accounting policies

The principal accounting policies applied in the preparation of the consolidated financial statements are set out below:

### Principal activities

UPM-Kymmene Corporation (“the parent company” or “the company”) together with its consolidated subsidiaries (“UPM” or “the Group”) is a global paper and forest products group, mainly engaged in the production of paper, with an emphasis on the manufacture and sale of printing and writing papers. UPM reports financial information for the following business areas (segments): UPM Biorefining, UPM Energy, UPM Rafalatac, UPM Paper Asia, UPM Paper ENA, UPM Plywood and Other operations. The Group’s activities are centred in European Union countries, North and South America and Asia with production plants in 14 countries.

UPM-Kymmene Corporation is a Finnish limited liability company, domiciled in Helsinki in the Republic of Finland. The address of the company’s registered office is Alvar Aallon katu 1, 00100 Helsinki, where a copy of the consolidated financial statements can be obtained.

The parent company is listed on NASDAQ OMX Helsinki Ltd. These Group consolidated financial statements were authorised for issue by the Board of Directors on 30 January 2014. According to the Finnish Companies Act, the General Meeting of Shareholders is entitled to decide on the adoption of the company’s financial statements.

### Basis of preparation

These consolidated financial statements of UPM are prepared in accordance with International Financial Reporting Standards as adopted by the European Union (IFRS as adopted by the EU) and IFRIC Interpretations.

The consolidated financial statements have been prepared under the historical cost convention as modified by the revaluation of biological assets, available-for-sale investments and certain other financial assets and financial liabilities. Share-based payments are recognised at fair value on the grant date.

The preparation of financial statements requires the use of accounting estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Accounting estimates are employed in the financial statements to determine reported amounts, including the realisable value of certain assets, the useful lives of tangible and intangible assets, income tax and other items. Although these estimates are based on management’s best knowledge of current events and actions, actual results may ultimately differ from them. The preparation of financial statements also requires management to exercise its judgement in the process of applying the Group’s accounting policies. The most significant critical judgements are summarised in Note 2.

### Consolidation principles

#### Subsidiaries

The consolidated financial statements of UPM include the financial statements of the parent company, UPM-Kymmene Corporation, and its subsidiaries. Subsidiaries are those entities in which the Group has control. The Group has control over an entity if it has power over the entity; it is exposed or has rights to variable returns from its involvement with the entity and has the ability to use its power to affect the amount

of its returns from the entity.

Business combinations are accounted for by using the acquisition method of accounting. The consideration transferred in a business combination is the fair value of the assets transferred, the liabilities incurred and the equity instruments issued at the acquisition date. The consideration transferred includes the fair value of any assets or liabilities resulting from a contingent consideration arrangement. Transaction costs related to an acquisition are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. For each business combination, the Group measures any non-controlling interest in the acquiree either at fair value or at the non-controlling interest’s proportionate share of the acquiree’s net assets.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets of the subsidiary acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in the income statement (see below “Intangible assets” for goodwill accounting policy).

Subsidiaries are fully consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date when control ceases.

All intercompany transactions, receivables, liabilities and unrealised profits, as well as intragroup profit distributions, are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

When the Group ceases to have control in subsidiary, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in income statement.

#### Joint operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The Group accounts in relation to its interest for the assets, liabilities, revenues and expenses related to a joint operation in accordance with IFRS applicable for the particular item. Transactions with joint operations are recognised in the consolidated financial statements only to the extent of other parties’ interests in the joint operation.

#### Associated companies and joint ventures

Associated companies are entities over which the Group has significant influence but no control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Joint ventures are joint arrangements whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement.

Interests in associated companies and joint ventures are accounted for using the equity method of accounting and are initially recognised at cost. Under this method the Group’s share of the associated company and joint venture profit or loss for the period is recognised in the income statement and its share of movements in other comprehensive income is recognised in other comprehensive income. The Group’s interest in an

associated company and joint venture is carried on the balance sheet at an amount that reflects its share of the net assets of the associated company and joint venture together with goodwill on acquisition (net of any accumulated impairment loss), less any impairment in the value of individual investments. Unrealised gains and losses on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associated company and joint venture, unless the loss provides evidence of an impairment of the asset transferred. Associated company and joint venture accounting policies have been changed where necessary to ensure consistency with the policies adopted by the Group. Equity accounting is discontinued when the carrying amount of the investment in an associated company or interest in a joint venture reaches zero, unless the Group has incurred or guaranteed obligations in respect of the associated company or joint venture.

**Non-controlling interests**

The profit or loss attributable to owners of the parent company and non-controlling interests is presented on the face of the income statement. Non-controlling interests are presented in the consolidated balance sheet within equity, separately from equity attributable to owners of the parent company.

Transactions with non-controlling interests are treated as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses of disposals to non-controlling interests are also recorded in equity.

**Foreign currency transactions**

Items included in the financial statements of each Group subsidiary are measured using the currency of the primary economic environment in which the subsidiary operates ("the functional currency"). The consolidated financial statements are presented in euros, which is the functional and presentation currency of the parent company.

Foreign currency transactions are translated into the functional currency using the exchange rate prevailing at the date of transaction. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement, except when recognised in other comprehensive income as qualifying cash flow hedges and qualifying net investment hedges.

Foreign exchange differences relating to ordinary business operations of the Group are included in the appropriate line items above operating profit and those relating to financial items are included in a separate line item in the income statement and as a net amount in total finance costs.

Income and expenses for each income statement of subsidiaries that have a functional currency different from the Group's presentation currency are translated into euros at quarterly average exchange rates. Assets and liabilities of subsidiaries for each balance sheet presented are translated at the closing rate at the date of that balance sheet. All resulting translation differences are recognised as a separate component in other comprehensive income. On consolidation, exchange differences arising from the translation of net investment in foreign operations and other currency instruments designated as hedges of such investments, are recognised in other comprehensive income. When a foreign entity is partially disposed of, sold or liquidated, translation differences accrued in equity are recognised in the income statement as part of the gain or loss on sale.

**Derivative financial instruments and hedging activities**

Derivatives are initially recognised on the balance sheet at fair value and thereafter remeasured at their fair value. The method of recognising the resulting gain or loss is dependent on whether the derivative is designated as a hedging instrument, and on the nature of the item being hedged.

On the date a derivative contract is entered into, the Group designates certain derivatives as either hedges of the fair value of a recognised assets or liabilities or a firm commitment (fair value hedge), hedges of a highly probable forecasted transaction or cash flow variability in functional currency (cash flow hedge), or hedges of net investment in a foreign operation (net investment hedge). The fair value of derivative financial instrument is classified as a non-current asset or liability when the remaining maturity is more than 12 months and as a current asset or liability when the remaining maturity is less than 12 months.

The Group applies fair value hedge accounting for hedging fixed interest risk on interest-bearing liabilities. Changes in the fair value of derivatives that are designated and qualify as fair value hedges and that are highly effective both prospectively and retrospectively are recorded in the income statement under financial items, along with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The carrying amounts of hedged items and the fair values of hedging instruments are included in interest-bearing assets or liabilities. Derivatives that are designated and qualify as fair value hedges mature at the same time as hedged items. If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest method is used is amortised to profit or loss over the period to maturity.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income. Amounts deferred in equity are transferred to the income statement and classified as income or expense in the same period as that in which the hedged item affects the income statement (for example, when the forecast external sale to the Group that is hedged takes place). The period when the hedging reserve is released to sales after each derivative has matured is approximately one month. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset (for example, fixed assets) the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset. The deferred amounts are ultimately recognised in depreciation of fixed assets.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognised when the committed or forecast transaction is ultimately recognised in the income statement. However, if a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the income statement.

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. The fair value changes of forward exchange contracts that reflect the change in spot exchange rates are recognised in other comprehensive income. Any gain or loss relating to the interest portion of forward exchange contracts is recognised immediately in the income statement under financial items. Gains and losses accumulated in equity are included in the income statement when the foreign operation is partially disposed of or sold.

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

Certain derivative transactions, while providing effective hedges under the Group Treasury Policy, do not qualify for hedge accounting. Such derivatives are classified held for trading, and changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognised immediately in the income statement as other operating income or under financial items.

**Segment reporting**

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the President and CEO.

The accounting policies used in segment reporting are the same as those used in the consolidated accounts, except for that the joint operation Madison Paper Industries (MPI) is presented as subsidiary in UPM Paper ENA segment reporting. The costs and revenues as well as assets and liabilities are allocated to segments on a consistent basis. All inter-segment sales are based on market prices, and they are eliminated on consolidation.

**Revenue recognition**

Group's sales mainly comprises of sale of energy, pulp, sawn timber, papers, self-adhesive label materials and plywood.

Sales are recognised when it is probable that future economic benefits will flow to the entity, the associated costs and the amount of revenue can be measured reliably and the following criteria are met: evidence of an arrangement exists, delivery has occurred or services have been rendered, price to the buyer is fixed or determinable, and collectibility is reasonably assured. Delivery is not considered to have occurred until the customer takes title and assumes the risks and rewards of ownership and the Group has neither continuing managerial involvement with the goods nor a continuing right to dispose of the goods nor effective control of those goods. The timing of revenue recognition is largely dependent on delivery terms. Group terms of delivery are based on Incoterms 2010, the official rules for interpretation of trade terms issued by the International Chamber of Commerce. Revenue is recorded when the product is delivered to the destination point for terms designated Delivered Duty Paid ("DDP") or Delivered at Place ("DAP"). For sales transactions designated Free on Carrier ("FCA"), Carriage paid to ("CPT") or Carriage and Insurance Paid to ("CIP"), revenue is recorded at the time of shipment.

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

Sales are recognised net of indirect sales taxes, discounts, rebates and exchange differences on sales under hedge accounting. The costs of distributing products sold are included in costs and expenses.

Dividend income is recognised when the right to receive a payment is established.

Interest income is recognised by applying the effective interest rate method.

**Income taxes**

The Group's income taxes include current income taxes of Group companies based on taxable profit for the financial period, together with tax adjustments for previous periods and the change of deferred income taxes.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred income taxes are not recognised if they arise from initial recognition of goodwill; deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that, at the time of the transaction, does not affect either accounting or taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries, associated companies and joint ventures, except where the timing of the reversal of the temporary difference is

controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets are recognised to the extent that it is probable that there will be future taxable profits against which the temporary differences can be utilised.

**Special items**

Certain financial performance indicators have been reported excluding special items. These indicators are non-GAAP measures applied in the Group's financial statements to eliminate the income statement impact of certain significant transactions which are unusual or infrequent in nature. The Group believes that non-GAAP measures enhance the understanding of the historical performance. Any measures derived with eliminating special items are not measures of financial reporting under the IFRS, and they may not be comparable to other similarly titled measures of other companies.

In the UPM Biorefining, UPM Paper Asia and UPM Paper ENA segments the transaction (income or expense) is considered to be special item, if the impact is one cent (EUR 0.01) after tax per share or more, and if it arises from asset impairments, asset sales or restructuring measures, or relate to changes in legislation or legal proceedings. In other segments the impact is considered to be significant if it exceeds EUR 1 million pre-tax.

**Intangible assets**

Intangible assets with finite lives are carried at historical cost less amortisation. Amortisation is based on the following estimated useful lives:

Computer software	3–5 years
Other intangible assets	5–10 years

Goodwill and other intangible assets that are deemed to have an indefinite life are not amortised, but are tested annually for impairment.

**Goodwill**

Goodwill represents the excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets of the acquired subsidiary, associated company or joint arrangement at the date of acquisition. Goodwill on acquisitions of subsidiaries is included in intangible assets. Goodwill on acquisitions of associated companies and joint ventures is included in investments in associated companies and joint ventures and is tested for impairment as part of the overall balance. Goodwill is initially recognised as an asset at cost and is subsequently measured at cost less any accumulated impairment losses.

Cash-generating units to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than the carrying amount of the unit, the difference is an impairment loss, which is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to other assets of the unit. An impairment loss recognised for goodwill is not reversed in a subsequent period.

**Research and development**

Research and development costs are expensed as incurred, except for certain development costs, which are capitalised when it is probable that a development project will generate future economic benefits, and the cost can be measured reliably. Capitalised development costs are amortised on a systematic basis over their expected useful lives, usually not exceeding five years.

**Computer software**

Costs associated with maintaining computer software programmes and costs related to the preliminary project phase of internally developed

software are recognised as an expense as incurred. Development costs relating to the application development phase of internally developed software are capitalised as intangible assets. Capitalised costs include external direct costs of material and services and an appropriate portion of the software development teams' relevant overheads. Computer software development costs recognised as assets are amortised using the straight-line method over their useful lives.

**Other intangible assets**

Separately acquired patents, trademarks and licences with a finite useful life are recognised at cost less accumulated amortisation and impairment. Contractual customer relationships or other intangible assets acquired in a business combination are recognised at fair value at the acquisition date. Amortisation is calculated using the straight-line method over their estimated useful lives. Other intangible assets that are deemed to have an indefinite life are not amortised and are tested annually for impairment.

**Emission rights**

The Group participates in government schemes aimed at reducing greenhouse gas emissions. Emission rights received from governments free of charge are initially recognised as intangible assets based on market value at the date of initial recognition. Emission rights are not amortised but are recognised at an amount not exceeding their market value at the balance sheet date. Government grants are recognised as deferred income in the balance sheet at the same time as emission rights and are recognised in other operating income in the income statement, systematically, over the compliance period to which the corresponding emission rights relate. The emissions realised are expensed under other operating costs and expenses in the income statement and presented as a provision in the balance sheet. Emission rights and associated provisions are derecognised when disposed. Any profit or loss on disposal is recognised in the income statement.

**Property, plant and equipment**

Property, plant and equipment acquired by Group companies are stated at historical cost. Assets of acquired subsidiaries are stated at fair value at the date of acquisition. Depreciation is calculated on a straight-line basis and the carrying value is adjusted for impairment charges, if any. The carrying value of property, plant and equipment on the balance sheet represents the cost less accumulated depreciation and any impairment charges.

Borrowing costs incurred for the construction of any qualifying assets are capitalised during the period of time required to complete and prepare the asset for its intended use. Other borrowing costs are expensed.

Land is not depreciated. Depreciation of other assets is based on the following estimated useful lives:

Buildings	25–40 years
Heavy machinery	15–20 years
Light machinery and equipment	5–15 years

Expected useful lives of assets are reviewed at each balance sheet date and, where they differ significantly from previous estimates, depreciation periods are changed prospectively.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that the future economic benefit associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to the income statement during the financial period in which they are incurred. Major renovations are depreciated over the remaining useful life of the related asset or to the date of the next major renovation, whichever is sooner.

Gains and losses on disposals are determined by comparing the disposal proceeds with the carrying amount and are included in operating

profit. Assets accounted under IFRS 5 that are to be disposed of are reported at the lower of the carrying amount and the fair value less selling costs.

**Government grants**

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with the attached conditions. Government grants relating to the purchase of property, plant and equipment are deducted from the acquisition cost of the asset and recognised as a reduction to the depreciation charge of the related asset. Other government grants are recognised in the income statement in the period necessary to match them with the costs they are intended to compensate.

**Investment property**

Investment property includes real estate investments such as flats and other premises occupied by third parties.

Investment property is treated as a long-term investment and is stated at historical cost. Depreciation is calculated on a straight-line basis and the carrying value is adjusted for impairment charges, if any. Useful lives are the same as for property, plant and equipment. The balance sheet value of investment property reflects the cost less accumulated depreciation and any impairment charges.

**Biological assets**

Biological assets (i.e. living trees) are measured at their fair value less estimated costs to sell. The fair value of biological assets other than young seedling stands is based on discounted cash flows from continuous operations. The fair value of young seedling stands is the actual reforestation cost of those stands. Continuous operations, the maintenance of currently existing seedling stands and the felling of forests during one rotation, are based on the Group's forest management guidelines. The calculation takes into account growth potential, environmental restrictions and other forests conditions. Felling revenues and maintenance costs are calculated on the basis of actual costs and prices, taking into account the Group's projection of future price development.

Periodic changes resulting from growth, felling, prices, discount rate, costs and other premise changes are included in operating profit on the income statement.

**Financial assets**

Financial assets have been classified into the following categories: financial assets at fair value through profit or loss, loans and receivables and available-for-sale investments. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of financial assets at initial recognition.

Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

Financial assets at fair value through profit or loss are financial assets held for trading. Derivatives are categorised as held for trading, unless they are designated as hedges. These are measured at fair value and any gains or losses from subsequent measurement are recognised in the income statement. The Group has not used the option of designating financial assets upon initial recognition as financial assets at fair value through profit or loss.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in non-current assets unless they mature within 12 months of the balance sheet date. Loan receivables that have a fixed maturity are measured at amortised cost using the effective interest method. Loan receivables are impaired if the carrying amount is greater than the estimated recoverable amount.

Trade receivables are non-derivatives that are recognised initially at fair value and subsequently measured at amortised cost, less provision

for impairment. Provision for impairment is charged to the income statement when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy, or default or delinquency in payments more than 90 days overdue are considered indicators that the trade receivable may be irrecoverable. Subsequent recoveries of amounts previously written off are credited to the income statement.

Available-for-sale investments are non-derivatives that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless they are intended to be disposed of within 12 months of the balance sheet date. Purchases and sales of financial investments are recognised on the settlement date, which is the date that the asset is delivered to or by the Group. Investments are initially recognised at cost, including transaction costs, and subsequently carried at fair value.

Unrealised gains and losses arising from changes in the fair value of investments classified as available-for-sale are recognised in other comprehensive income. When investments classified as available-for-sale are sold or impaired, the accumulated fair value adjustments in equity are included in the income statement as gains and losses from available-for-sale investments.

The Group assesses at each balance sheet date whether there is objective evidence that a financial asset or a group of financial assets is impaired. In the case of equity investments classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered when determining whether the investments are impaired. If any such evidence exists for available-for-sale investments, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in profit or loss – is removed from equity and recognised in the income statement. Impairment losses recognised in the income statement on equity investments are not subsequently reversed through the income statement.

**Impairment of non-financial assets**

Assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation (or depreciation) are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and its value in use. The value in use is determined by reference to discounted future cash flows expected to be generated by the asset. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units).

Non-financial assets, other than goodwill, that have suffered impairment are reviewed for possible reversal of the impairment at each reporting date. Where an impairment loss is subsequently reversed, the carrying amount of the asset is increased to the revised estimate of its recoverable amount, but the increased carrying amount will not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years.

**Leases**

Leases of property, plant and equipment where the Group, as a lessee, has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are recognised as assets and liabilities in the balance sheet at the commencement of lease term at the lower of the fair value of the leased property and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges. The corresponding rental obligations, net of finance charges, are included in other long-term interest-bearing liabilities. The interest element of the finance cost is charged to the income statement over the

lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. Property, plant and equipment acquired under finance leases are depreciated over the shorter of the asset's useful life and the lease term.

Leases where the lessor retains substantially all the risks and rewards of ownership are classified as operating leases. Payments made as a lessee under operating leases are charged to the income statement on a straight-line basis over the period of the lease.

**Inventories**

Inventories are stated at the lower of cost and net realisable value. Cost is determined by the method most appropriate to the particular nature of inventory, the first-in, first-out (FIFO) or weighted average cost. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity) but excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less the costs of completion and selling expenses.

**Cash and cash equivalents**

Cash and cash equivalents comprise cash in hand, deposits held at call with banks and other short-term highly liquid investments with original maturities of three months or less. Bank overdrafts are included within current interest-bearing liabilities in the balance sheet.

**Treasury shares**

Where any Group company purchases the parent company's shares (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income taxes), is deducted from equity attributable to the owners of the parent company until the shares are cancelled or reissued. Where such shares are subsequently reissued, any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the owners of the parent company.

**Interest-bearing liabilities**

Interest-bearing liabilities are recognised initially at fair value, net of transaction costs incurred. In subsequent periods, interest-bearing liabilities are stated at amortised cost using the effective interest method; any difference between proceeds (net of transaction costs) and the redemption value is recognised in the income statement over the period of the interest-bearing liabilities. The Group has not used the option of designating financial liabilities upon initial recognition as financial liabilities at fair value through profit or loss.

Most non-current interest-bearing liabilities are designated as hedged items in a fair value hedge relationship. Fair value variations resulting from hedged interest rate risk are recorded to adjust the carrying amount of the hedged item and reported in the income statement under finance income and expenses. If hedge accounting is discontinued, the carrying amount of the hedged item is no longer adjusted for fair value changes attributable to the hedged risk and the cumulative fair value adjustment recorded during the hedge relationship is amortised based on a new effective interest recalculation through the income statement under finance income and expenses.

Interest-bearing liabilities are classified as non-current liabilities unless they are due for settlement within 12 months of the balance sheet date.

**Trade payables**

Trade payables are obligations due to acquisition of inventories, fixed assets, goods and services in the ordinary course of business from suppliers. Such operating items are classified as current liabilities if they are due to be settled within the normal operating cycle of the business or within 12 months from the balance sheet date. Trade payables are recognised initially at fair value and subsequently at amortised cost using the effective interest method.

## Employee benefits

### Pension obligations

The Group operates a mixture of pension schemes in accordance with local conditions and practices in the countries in which it operates. These programmes include defined benefit pension schemes with retirement, disability and termination benefits. Retirement benefits are usually a function of years of employment and final salary with the company. Generally, the schemes are either funded through payments to insurance companies or to trustee-administered funds as determined by periodic actuarial calculations. In addition, the Group also operates defined contribution pension arrangements. Most Finnish pension arrangements are defined contribution plans.

The liability recognised in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating the term of the related pension liability. The cost of providing pensions is charged to the income statement as personnel expenses so as to spread the cost over the service lives of employees. Changes in actuarial assumptions and actuarial gains and losses arising from experience adjustments are charged or credited in other comprehensive income in the period in which they arise. Past service costs and gains or losses on settlement are recognised immediately in income when they occur.

For defined contribution plans, contributions are paid to pension insurance companies. Once the contributions have been paid, there are no further payment obligations. Contributions to defined contribution plans are charged to the income statement in the period to which the contributions relate.

### Other post-employment obligations

Some Group companies provide post-employment medical and other benefits to their retirees. The entitlement to healthcare benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period. The expected costs of these benefits are accrued over the period of employment, using an accounting methodology similar to that for defined benefit pension plans. Valuations of these obligations are carried out by independent qualified actuaries.

### Share-based compensation

Under the Group's long term incentive plans the Group has granted share options to executive management and key personnel. From 2011 the Group's long term incentive plans are long-term share incentive plans, a Performance Share Plan for senior executives and a Deferred Bonus Plan for other key employees. These compensation plans are recognised as equity-settled or cash-settled share-based payment transactions depending on the settlement. The fair value of the granted options and shares are recognised as indirect employee costs over the vesting period.

The fair values of the options granted are determined using the Black-Scholes valuation model on the grant date. Non-market vesting conditions are included in assumptions about the number of options expected to vest. Estimates of the number of exercisable options are revised quarterly and the impact of the revision of original estimates, if any, is recognised in the income statement and equity.

The proceeds received, net of any directly attributable transaction costs, are credited to equity when the options are exercised.

Under the Performance Share Plan the UPM shares are awarded based on the Group's financial performance and under the Deferred Bonus Plan share incentives are based on the participants' short-term incentive targets. Shares are valued using the market rate on the grant date. The settlement is a combination of shares and cash. The Group

may obtain the necessary shares by using its treasury shares or may purchase shares from the market.

### Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events and it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate of the amount can be made. Where the Group expects a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when such reimbursement is virtually certain.

### Restructuring and termination provisions

Restructuring provisions are recognised in the period in which the Group becomes legally or constructively committed to payment and when the restructuring plan has been announced publicly. Employee termination charges are recognised when the Group has communicated the plan to the employees affected. Costs related to the ongoing activities of the Group are not provisioned in advance.

### Environmental provisions

Expenditures that result from remediation of an existing condition caused by past operations and that do not contribute to current or future revenues are expensed. The recognition of environmental provisions is based on current interpretations of environmental laws and regulations. Such provisions are recognised when it is likely that the liability has been incurred and the amount of such liability can be reasonably estimated. Amounts provisioned do not include third-party recoveries.

### Emission rights

Emission obligations are recognised in provisions when the obligation to return emission rights has incurred, based on realised emissions. The provision is recognised based on the carrying amount of emission rights held. In case of deficit in emission rights, the shortage is valued at the market value at the balance sheet date.

### Non-current assets held for sale and discontinued operations

Non-current assets (or disposal groups) are classified as assets held for sale and stated at the lower of carrying amount and fair value less costs to sell, if their carrying amount is recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. Non-current assets classified as held for sale, or included within a disposal group that is classified as held for sale, are not depreciated.

A discontinued operation is a component of an entity that either has been disposed of, or that is classified as held for sale and represents a separate major line of business or geographical area of operations, or is a part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations, or is a subsidiary acquired exclusively with a view to resale. The post-tax profit or loss from discontinued operations is shown separately in the consolidated income statement.

### Dividends

Dividend distribution to the owners of the parent company is recognised as a liability in the Group's consolidated financial statements in the period in which the dividends are approved by the parent company's shareholders.

### Earnings per share

The basic earnings per share are computed using the weighted average number of shares outstanding during the period. Diluted earnings per share are computed using the weighted average number of shares outstanding during the period plus the dilutive effect of share options.

## Adoption of new and revised International Financial Reporting Standards interpretations and amendments to existing standards

### New and revised standards, interpretations and amendments to existing standards effective in 2013

In 2013, the Group has adopted and early adopted the following new, revised and amended standards and interpretations:

The amendment to IAS 19 Employee Benefits eliminates the corridor approach and calculates interest costs on a net funding basis. Upon the adoption the Group has retrospectively recognised all actuarial gains and losses arising from its defined benefit plans and replaced interest cost and expected return of plan assets with a net interest amount that is calculated by applying the discount rate to the net defined benefit liability.

New IFRS 10 builds on existing principles by identifying the concept of control as the determining factor in whether an entity should be included within the consolidated financial statements of the parent company. The standard provides additional guidance to assist in the determination of control where this is difficult to assess. New IFRS 11 provides for a more realistic reflection of joint arrangements by focusing on the rights and obligations of the arrangement, rather than its legal form. Under IFRS 11, joint arrangements are classified as joint operations or joint ventures, depending on the rights and obligations of the parties to the arrangements. In addition, proportional consolidation of joint ventures is no longer allowed. IFRS 12 is a new and comprehensive standard on disclosure requirements for all forms of interests in other entities, including joint arrangements, associates, special purpose vehicles and other off balance sheet vehicles. Revised IAS 27 standard includes the provisions on separate financial statements that are left after the control provisions of IAS 27 have been included in the new IFRS 10 and revised IAS 28 standard includes the requirements for joint ventures, as well as associates, to be equity accounted following the issue of IFRS 11. The adoption of the new and revised standards resulted into a change of the accounting treatment of Pohjolan Voima Oy (PVO) hydropower (A), nuclear power (B, B2) and thermal power (C, C2, H, M and V) shares, Kemijoki Oy and Länsi-Suomen Voima Oy (LSV) shares that are recognised as financial assets (available -sale investments) at fair value. PVO's combined heat and power plant Wisapower Oy (G7 shares) is consolidated as subsidiary under IFRS 10. UPM's interest in other PVO's combined heat and power plants (G, G2, G3, G4 and G9 shares), 50% interest in Madison Paper Industries (MPI), a paper mill in the United States and some other investments are consolidated as joint operations under IFRS 11. Previously, all PVO shares have been accounted for as an associated company and MPI as joint venture, using equity method and LSV has been accounted for as a subsidiary.

The amendment IAS 1 Presentation of Financial Statements – Other Comprehensive Income requires entities to group items presented in 'other comprehensive income' (OCI) based on whether they are potentially reclassifiable to profit or loss subsequently. The amended standard has changed the presentation of items of OCI in Group's financial statements.

New IFRS 13 Fair Value Measurement standard aims to improve consistency and reduce complexity by providing a precise definition of fair value and a single source of fair value measurement and disclosure requirements for use across IFRSs. The requirements do not extend the use of fair value accounting but provide guidance on how it should be applied where its use is already required or permitted by other standards within IFRSs.

The amendment to IAS 12: Currently IAS 12 requires an entity to estimate, which part of the carrying value of an item measured at fair value is recovered through use and which part through sale. The amendment introduces a presumption that certain assets measured at fair value are recovered entirely by sale. Presumption applies to deferred tax arising from investment properties, property, plant and equipment or intangible assets that are measured using the fair value model or revaluation model.

The amendment has not had an impact on the Group's financial statements.

Interpretation IFRIC 20 Stripping Cost in the Production Phase of a Surface Mine is not relevant for the Group's operations.

The amendment to IFRS 7 Disclosures – Offsetting Financial Assets and Financial Liabilities requires information about all recognised financial instruments that are set off in accordance with paragraph 42 of IAS 32 and all recognised financial instruments subject to enforceable master netting arrangements and similar agreements even if they are not set off under IAS 32.

The amendment to IFRS 10, 11 and 12 Transition Guidance provides additional transition relief by limiting the requirement to provide adjusted comparative information to only the preceding comparative period. For disclosures related to unconsolidated structured entities, the amendment will remove the requirement to present comparative information for periods before IFRS 12 is first applied. The amendment has not had an impact on the Group's financial statements.

The amendments related to Improvements to IFRSs (2009–2011) relate to five different standards and one interpretation. The amendments have not had impacts on the Group's financial statements.

The impact of the changes in accounting policies on the 2012 Group consolidated financial statements are presented below:

### Impact on consolidated income statement

EURm	Q1-Q4/ 2012
Sales	54
Other operating income	2
Costs and expenses	-13
Share of results of associated companies and joint ventures	16
Depreciation, amortisation and impairment charges	-27
Operating profit (loss)	32
Interest and other finance costs, net	103
Profit (loss) before tax	135
Income taxes	-3
Profit (loss) for the period	132
Basic earnings per share, EUR	0.25
Diluted earnings per share, EUR	0.25

### Impact on consolidated statement of comprehensive income

EURm	Q1-Q4/ 2012
Profit (loss) for the period	132
Actuarial gains and losses on defined benefit obligations	-98
Available-for-sale investments	-635
Other comprehensive income for the period, net of tax	-733
Total comprehensive income for the period	-601

**Impact on consolidated balance sheet**

EURm	31.12.2012	1.1.2012
<b>ASSETS</b>		
<b>Non-current assets</b>		
Other intangible assets	9	9
Property, plant and equipment	243	263
Investments in associated companies and joint ventures	-569	-689
Available-for-sale investments	2,440	3,085
Other non-current financial assets	10	8
Deferred tax assets	53	21
Other non-current assets	-163	-157
	2,023	2,540
<b>Current assets</b>		
Inventories	11	10
Trade and other receivables	-2	13
Cash and cash equivalents	18	17
	27	40
<b>Total assets</b>	2,050	2,580
<b>EQUITY AND LIABILITIES</b>		
<b>Equity attributable to owners of the parent company</b>		
Translation differences	-3	-3
Fair value and other reserves	2,093	2,728
Retained earnings	-540	-573
	1,550	2,152
<b>Non-controlling interests</b>	-10	-10
<b>Total equity</b>	1,540	2,142
<b>Non-current liabilities</b>		
Deferred tax liabilities	15	27
Retirement benefit obligations	269	151
Provisions	2	1
Interest-bearing liabilities	203	222
Other liabilities	-2	-
	487	401
<b>Current liabilities</b>		
Current interest-bearing liabilities	21	23
Trade and other payables	2	15
Income tax payables	-	-1
	23	37
<b>Total liabilities</b>	510	438
<b>Total equity and liabilities</b>	2,050	2,580

**Impact on consolidated cash flow statement**

EURm	Q1-Q4/2012
<b>Cash flow from operating activities</b>	
Profit (loss) for the period	132
Adjustments	-93
Interest paid	-3
Change in working capital	-10
<b>Net cash generated from operating activities</b>	26
<b>Cash flow from investing activities</b>	
Capital expenditure	-5
Change in other non-current assets	-2
<b>Net cash used in investing activities</b>	-7
<b>Cash flow from financing activities</b>	
Proceeds from non-current liabilities	14
Payments of non-current liabilities	-27
Change in current liabilities	-5
<b>Net cash used in financing activities</b>	-18
<b>Change in cash and cash equivalents</b>	1
Cash and cash equivalents at beginning of period	17
Change in cash and cash equivalents	1
<b>Cash and cash equivalents at end of period</b>	18

**New and revised standards, interpretations and amendments to existing standards that are not yet effective and have not yet been early adopted by the Group**

IFRS 9 Financial Instruments includes requirements for recognition and measurement, derecognition and hedge accounting. The IASB is adding to the standard as it completes the various phases of its comprehensive project on financial instruments, and so it will eventually form a complete replacement for IAS 39. IFRS 9 retains but simplifies the mixed measurement model and establishes two primary measurement categories for financial assets: amortised cost and fair value. The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the financial asset. The accounting and presentation for financial liabilities shall remain the same except for those financial liabilities for which fair value option is applied. IFRS 9 introduces a new hedge accounting model that will allow entities to better reflect their risk management activities in the financial statements. An effective date for IFRS 9 will be added to the standard when all phases of the project are complete and a final version of IFRS 9 is issued.

The IFRS 9 standard is expected to have some impacts on accounting for Group's financial assets. The standard is not yet endorsed by the EU.

The amendment to IAS 32 Offsetting Financial Assets and Financial Liabilities is effective for annual periods beginning on or after 1 January 2014. The amendment provides clarifications on the application of the offsetting rules. The Group is assessing the impact of the amendment on the Group's financial statements.

The amendment to IFRS 10 Consolidated financial statements is effective for annual periods beginning on or after 1 January 2014. Many funds and similar entities will be exempted from consolidating controlled investees under amendments to IFRS 10, 'Consolidated financial statements'. Amendments have been made to IFRS 10, IFRS 12 and IAS 27. The amendment is not relevant for the Group.

Interpretation IFRIC 21 Levies is effective for annual periods beginning on or after 1 January 2014. IFRIC 21 clarifies the criteria when to recognise a liability for a levy imposed by a government, both for levies that are accounted for in accordance with IAS 37 and those where the timing and amount of the levy is certain. The interpretation is not expected to have a material impact on the Group's financial statements. The interpretation is not yet endorsed by the EU.

Amendment to IAS 36 Impairment of assets: recoverable amount disclosures for non-financial assets, is effective for annual periods beginning on or after 1 January 2014. IFRS 13 amended IAS 36 to require disclosures about the recoverable amount of impaired assets. The new amendment clarifies that the scope of those disclosures is limited to the recoverable amount of impaired assets that is based on fair value less costs of disposal. The amendment is not expected to have an impact on the Group's financial statements.

Amendment to IAS 39 is effective for annual periods beginning on or after 1 January 2014. A narrow-scope amendment that allows hedge accounting to continue in a situation where a derivative, which has been designated as a hedging instrument, is novated to effect clearing with a central counterparty as a result of laws or regulation, if specific conditions are met. The amendment is not expected to have impact on the Group's financial statements.

Amendments to IAS 19 Defined benefit plans: employee contributions are effective for annual periods beginning on or after 1 July 2014. The amendments clarify the requirements that relate to how contributions from employees or third parties that are linked to service should be attributed to periods of service. In addition, it permits a practical expedient if the amount of the contributions is independent of the number of years of service. The amendments are not expected to have material impacts on the Group's financial statements. The amendments are not yet endorsed by the EU.

Annual improvements to IFRSs 2010–2012 cycle, a collection of amendments to IFRSs, in response to issues addressed during the 2010–2012 cycle are effective for annual periods beginning on or after 1 July 2014. Seven standards are affected by the amendments. The amendments

are not expected to have material impacts on the Group's financial statements. The amendments are not yet endorsed by the EU.

Annual improvements to IFRSs 2011–2013 cycle, a collection of amendments to IFRSs, in response to issues addressed during the 2011–2013 cycle are effective for annual periods beginning on or after 1 July 2014. Four standards are affected by the amendments. The amendments are not expected to have material impacts on the Group's financial statements. The amendments are not yet endorsed by the EU.

**2 Critical judgements in applying accounting policies and key sources of estimation uncertainty****Impairment of non-current assets**

Goodwill, intangible assets not yet available for use and intangible assets with indefinite useful lives are tested at least annually for impairment. Other long-lived assets are reviewed when there is an indication that impairment may have occurred. Estimates are made of the future cash flows expected to result from the use of the asset and its eventual disposal. If the balance sheet carrying amount of the asset exceeds its recoverable amount, an impairment loss is recognised. Actual cash flows could vary from estimated discounted future cash flows. The long useful lives of assets, changes in estimated future sales prices of products, changes in product costs and changes in the discount rates used could lead to significant impairment charges. Details of the impairment tests are provided in Note 16.

**Biological assets**

The Group owns about 1.1 million hectares of forest land and plantations. Biological assets (i.e. living trees) are measured at their fair value at each balance sheet date. The fair value of biological assets other than young seedling stands is based on discounted cash flows from continuous operations. The fair value of biological assets is determined based among other estimates on growth potential, harvesting, price development and discount rate. Changes in any estimates could lead to recognition of significant fair value changes in income statement. Biological assets are disclosed in Note 20.

**Employee benefits**

The Group operates a mixture of pension and other post-employment benefit schemes. Several statistical and other actuarial assumptions are used in calculating the expense and liability related to the plans. These factors include, among others, assumptions about the discount rate, expected return on plan assets and changes in future compensation. Statistical information used may differ materially from actual results due to, among others, changing market and economic conditions, or changes in service period of plan participants. Significant differences in actual experience or significant changes in assumptions may affect the future amounts of the defined benefit obligation and future expense. Retirement benefit obligations are disclosed in Note 29.

**Environmental provisions**

Operations of the Group are based on heavy process industry which requires large production facilities. In addition to basic raw materials, considerable amount of chemicals, water and energy is used in processes. The Group's operations are subject to several environmental laws and regulations. The Group aims to operate in compliance with regulations related to the treatment of waste water, air emissions and landfill sites. The Group has provisions for normal environmental remediation costs. Unexpected events occurred during production processes and waste treatment could cause material losses and additional costs in the Group's operations. Provisions are disclosed in Note 30.

**Income taxes**

Management judgement is required for the calculation of provision for income taxes and deferred tax assets and liabilities. The Group reviews at each balance sheet date the carrying amount of deferred tax assets. The Group considers whether it is probable that the subsidiaries will have sufficient taxable profits against which the unused tax losses or unused tax credits can be utilised. The factors used in estimates may differ from actual outcome which could lead to significant adjustment to deferred tax assets recognised in the income statement. Income taxes are disclosed in Note 13 and deferred income taxes in Note 28.

**Legal contingencies**

Management judgement is required in measurement and recognition of provisions related to pending litigation. Provisions are recorded when the Group has a present legal or constructive obligation as a result of past event, an unfavourable outcome is probable and the amount of loss can be reasonably estimated. Due to inherent uncertain nature of litigation, the actual losses may differ significantly from the originally estimated provision. Details of legal contingencies are presented in Note 39.

**Available-for-sale investments**

Group's available-for-sale investments include investments in unlisted equity shares that are measured at fair value in the balance sheet. The fair valuation requires management's assumptions and estimates of number of factors (e.g. discount rates, electricity price, start-up schedule of Olkiluoto 3 nuclear power plant), that may differ from the actual outcome which could lead to significant adjustment to the carrying amount of the available-for-sale investment and equity. Fair value estimation of financial assets is disclosed in Note 3 and available-for-sale investments in Note 22.

**3 Financial risk management**

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk and interest rate risk), credit risk and liquidity risk.

The objective of financial risk management is to protect the Group from unfavourable changes in financial markets and thus help to secure profitability. The objectives and limits for financing activities are defined in the Group Treasury Policy approved by the company's Board of Directors.

In financial risk management various financial instruments are used within the limits specified in the Group Treasury Policy. Only such instruments whose market value and risk profile can be continuously and reliably monitored are used for this purpose.

Financial services are provided and financial risk management carried out by a central treasury department, Treasury and Risk Management (TRM). The centralisation of Treasury functions enables efficient financial risk management, cost-efficiency and efficient cash management.

**Foreign exchange risk**

The Group is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the USD the GBP and the JPY. Foreign exchange risk arises from future commercial transactions, from recognised assets and liabilities and from translation exposure.

The objective of foreign exchange risk management is to limit the uncertainty created by changes in foreign exchange rates on the future value of cash flows and earnings as well as in the Group's balance sheet by hedging foreign exchange risk in forecast cash flows and balance sheet exposures.

### Transaction exposure

The Group hedges transaction exposure related to highly probable future commercial foreign currency cash flows on a rolling basis over the next 12-month period based on the units' forecasts. According to the Group's Treasury Policy 50% hedging is considered risk neutral. Some highly probable cash flows have been hedged for longer than 12 months ahead while deviating from the risk neutral hedging level at the same time. Forward contracts are used in transaction exposure management. Most of the derivatives entered into to hedge foreign currency cash flows meet the hedge accounting requirements. At 31 December 2013, 46% (51%) of the forecast 12-month currency flow was hedged.

The table below shows the nominal values of all cash flow hedging instruments at 31 December 2013 and 2012.

### Nominal values of hedging instruments

Currency	2013 EURm	2012 EURm
USD	462	457
GBP	196	255
JPY	142	279
AUD	41	40
Others	10	17
Total	851	1,048

External forwards are designated at group level as hedges of foreign exchange risk of specific future foreign currency sales on gross basis.

The Group has several currency denominated assets and liabilities in its balance sheet such as foreign currency loans and deposits, accounts payable and receivable and cash in other currencies than functional currency. The aim is to hedge this balance sheet exposure fully using financial instruments. The Group might, however, within the limits set in the Group Treasury Policy have unhedged balance sheet exposures. At 31 December 2013 unhedged balance sheet exposures in interest-bearing assets and liabilities amounted to EUR 7 million (16 million). In addition the Group has non-interest-bearing accounts receivable and payable balances denominated in foreign currencies. The nominal values of the hedging instruments used in accounts payable and receivable hedging were EUR 675 million (723 million).

### Translation exposure

The Group has net investments in foreign subsidiaries that are subject to foreign currency translation differences. The exchange risks associated with net investments in foreign subsidiaries are hedged in Canada, China and Uruguay. The net investments of all other foreign operations are not hedged.

### Foreign exchange risk sensitivity

At 31 December 2013, if Euro had weakened/strengthened by 10% against the USD with all other variables held constant, pre-tax profit for the year would have been EUR 8 million lower/higher (11 million higher/lower) due to balance sheet foreign exchange exposure. The effect in equity would have been EUR 42 million (61 million) lower/higher, arising mainly from foreign currency forwards used to hedge forecasted foreign currency flows.

As of 31 December 2013, if Euro had weakened/strengthened by 10% against the GBP with all other variables held constant, pre-tax profit for the year would have been EUR 0 million (0 million) higher/lower due to balance sheet foreign exchange exposure. The effect in equity would have been EUR 20 million (25 million) lower/higher, arising mainly from foreign currency forwards used to hedge forecasted foreign currency flows.

As of 31 December 2013, if Euro had weakened/strengthened by 10% against the JPY with all other variables held constant, pre-tax profit for the year would have been EUR 1 million higher/lower (14 million lower/higher). The effect in equity would have been EUR 14 million (13 million) lower/higher, arising mainly from foreign currency forwards used to hedge forecasted foreign currency flows.

The following assumptions were made when calculating the sensitivity to changes in the foreign exchange risk:

- The variation in exchange rates is 10%.
- Major part of non-derivative financial instruments (such as cash and cash equivalents, trade receivables, interest bearing-liabilities and trade payables) are either directly denominated in the functional currency or are transferred to the functional currency through the use of derivatives i.e. the balance sheet position is close to zero. Exchange rate fluctuations have therefore minor or no effects on profit or loss.
- The position includes foreign currency forward contracts that are part of the effective cash flow hedge having an effect on equity.
- The position includes also foreign currency forward contracts that are not part of the effective cash flow hedge having an effect on profit.
- The position excludes foreign currency denominated future cash flows.

### Interest rate risk

The interest-bearing debt exposes the Group to interest rate risk, namely repricing and fair value interest rate risk caused by interest rate movements. The objective of interest rate risk management is to reduce the fluctuation of the interest expenses caused by the interest rate movements.

The management of interest rate risk is based on the 6-month average duration of the net debt portfolio as defined in the Group Treasury Policy. This relatively short duration is based on the assumption that on average yield curves will be positive. Thus this approach reduces interest cost in the long term. The duration may deviate between 3 and 12 months. At 31 December 2013 the average duration was 6 months (7 months). The Group uses interest rate derivatives to change the duration of the net debt.

The Group's net debt per currency corresponds to the parent company's and subsidiaries' loan portfolios in their functional currencies. The nominal values of the Group's interest-bearing net debts including derivatives by currency at 31 December 2013 and 2012 were as follows:

Currency	2013 EURbn	2012 EURbn
EUR	4.0	4.2
USD	0.1	0.2
GBP	-0.2	-0.1
CAD	-0.7	-0.8
Others	-0.2	-0.3
Total	3.0	3.2

Most of the long-term loans and the interest rate derivatives related to them meet hedge accounting requirements.

### Interest rate risk sensitivity

At 31 December 2013, if the interest rate of net debt had been 100 basis points higher/lower with all other variables held constant, pre-tax profit for the year would have been EUR 4 million (2 million) lower/ higher, mainly as a result of higher/lower interest expense on floating rate interest-bearing liabilities. There would be no effect on equity.

The following assumptions were made when calculating the sensitivity to changes in interest rates:

- The variation of interest rate is assumed to be 100 basis points parallel shift in applicable interest rate curves.
- In the case of fair value hedges designated for hedging interest rate risk, the changes in the fair values of the hedged items and the hedging instruments attributable to the interest rate movements balance out almost completely in the income statement in the same period. However, the possible ineffectiveness has an effect on the profit of the year.

- Fixed rate interest-bearing liabilities that are measured at amortised cost and which are not designated to fair value hedge relationship are not subject to interest rate risk sensitivity.
- Variable rate interest-bearing liabilities that are measured at amortised cost and which are not designated as hedged items are included in interest rate sensitivity analysis.
- Changes in the market interest rate of interest rate derivatives (interest rate futures, swaps and cross currency swaps) that are not designated as hedging instruments in hedge accounting affect the financial income or expenses (net gains or losses from remeasurement of the financial assets and liabilities to fair value) and are therefore included in the income-related sensitivity analysis.

### Liquidity and refinancing risk

The Group seeks to maintain adequate liquidity under all circumstances by means of efficient cash management and restricting investments to those that can be readily converted into cash. The Group utilises commercial paper programmes for short term financing purposes. Committed credit facilities are used to secure financing under all circumstances and as a backup for commercial paper programmes.

Refinancing risks are minimised by ensuring balanced loan portfolio maturing schedule and sufficient long maturities. The average loan maturity at 31 December 2013 was 5.1 years (5.9 years).

UPM has some financial agreements which have Gearing as financial covenant. According to this covenant gearing should not exceed 110% (31.12.2013 gearing was 41%).

### Liquidity

EURm	2013	2012
Cash at bank	462	386
Cash equivalents	325	100
Committed facilities	1,025	1,400
of which used	-	-
Used uncommitted credit lines	-49	-115
Long-term loan repayment cash flow	-506	-271
Liquidity	1,257	1,500

The most important financial programmes in use are:

- Uncommitted:
- Domestic commercial paper programme, EUR 1,000 million
- Committed:
- Revolving Credit Facility, EUR 500 million (matures 2016)

The contractual maturity analysis for financial liabilities is presented in Note 31.

### Credit risk

#### Financial counterparty risk

The financial instruments the Group has agreed with banks and financial institutions contain an element of risk of the counterparties being unable to meet their obligations. According to the Group Treasury Policy derivative instruments and investments of cash funds may be made only with counterparties meeting certain creditworthiness criteria. The Group minimises counterparty risk also by using a number of major banks and financial institutions. Creditworthiness of counterparties is constantly monitored by TRM.

#### Operational credit risk

With regard to operating activities, the Group has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. Open trade receivables, days of sales outstanding (DSO) and overdue trade receivables are followed on monthly basis.

Potential concentrations of credit risk with respect to trade and other receivables are limited due to the large number and geographic dispersion of companies that comprise the Group's customer base. Customer credit limits are established and monitored, and ongoing evalua-

tions of customers' financial condition are performed. Most of the receivables are covered by credit risk insurances. In certain market areas, measures to reduce credit risks include letters of credit, prepayments and bank guarantees. The ageing analysis of trade receivables is disclosed in Note 26. The Group considers that no significant concentration of customer credit risk exists. The ten largest customers accounted for approximately 17% (18%) of the Group's trade receivables as at 31 December 2013 – i.e., approximately EUR 240 million (260 million). The credit risk relating to the commitments is disclosed in Note 39.

### Electricity price risk

UPM is hedging both power production and consumption in the markets. UPM's sensitivity to electricity market price is dependent on the electricity production and consumption levels and the hedging levels.

In the Nordic and Central European market areas the operative risk management is done by entering into electricity derivatives contracts. In addition to hedging UPM is also trading electricity forwards and futures. As well as hedging, proprietary trading risks are monitored on a daily basis. Value-At-Risk levels are set to limit the maximum risk at any given time. Cumulative maximum loss is limited by stop-loss limits.

### Electricity derivatives price sensitivity

Sensitivity analysis for financial electricity derivatives is based on position on 31 December 2013. Sensitivities change over time as the overall hedging and trading positions change. Underlying physical positions are not included in the sensitivity analysis. Sensitivity analysis is calculated separately for the hedge accounted and non-hedge accounted volumes. In the analysis it is assumed that forward quotation in NASDAQ OMX Commodities and EEX would change EUR 1/MWh throughout the period UPM has derivatives.

EURm	Effect	2013	2012
+/- EUR 1/MWh in electricity forward quotations			
Effect on profit before taxes	+ / -	9.6	5.1
Effect on equity	+ / -	5.8	0.8

### Capital risk management

The Group's objective in managing its capital is to ensure maintenance of flexible capital structure to enable the Group to operate in capital markets.

To measure a satisfactory capital balance between equity investors and financial institutions the Group has set a target for the ratio of net interest-bearing liabilities and total equity (gearing). To ensure sufficient flexibility, the aim is to keep the gearing ratio well below 90%.

The following capitalisation table sets out the Group's total equity and interest-bearing liabilities and gearing ratios:

EURm	As at 31 December 2013	2012
Equity attributable to owners of the parent company	7,449	7,455
Non-controlling interests	6	6
Total equity	7,455	7,461
Non-current interest-bearing liabilities	3,485	3,724
Current interest-bearing liabilities	643	417
Interest-bearing liabilities, total	4,128	4,141
Total capitalisation	11,583	11,602
Interest-bearing liabilities, total	4,128	4,141
Less: Interest-bearing financial assets, total	-1,088	-931
Net interest-bearing liabilities	3,040	3,210
Gearing ratio, %	41	43

### Fair value estimation

The different levels of fair value hierarchy used in fair value estimation have been defined as follows:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.



Level 2: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).

Level 3: inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

The fair values of commodity derivatives traded in active markets are based on quoted market rates and included in Level 1

Fair values of Level 2 financial instruments (e.g. over-the-counter derivatives) have been estimated as follows: Interest forward rate agreements and futures contracts are fair valued based on quoted market rates on the balance sheet date; forward foreign exchange contracts are fair valued based on the contract forward rates in effect on the balance sheet date; foreign currency options are fair valued based on quoted market rates on the balance sheet date; interest and currency swap agreements are fair valued based on discounted cash flows; and commodity derivatives are fair valued based on quoted market rates on the balance sheet date. The fair values of non-traded derivatives such as embedded derivatives are assessed by using valuation methods and assumptions that are based on market quotations existing at each balance sheet date. Embedded derivatives that are identified are monitored by the Group and the fair value changes are reported in other operating income in the income statement.

The Group's fair valuation procedures and processes are set by the Group management. Fair valuations are performed quarterly by respective business areas or functions. Fair valuations are reviewed by the Group's Finance & Control management and overseen by the Audit Committee.

Available-for-sale investments categorised in Level 3 are disclosed in Note 22 and biological assets categorised in Level 3 in Note 20.

The following table analyses financial instruments carried at fair value, by valuation method.

#### Financial assets and liabilities measured at fair value

EURm	Fair values as at 31 December 2013			
	Level 1	Level 2	Level 3	Total balance
<b>Assets</b>				
Trading derivatives	1	56	-	57
Derivatives used for hedging	101	307	-	408
Available-for-sale investments	-	-	2,661	2,661
At 31 Dec.	102	363	2,661	3,126
<b>Liabilities</b>				
Trading derivatives	20	166	-	186
Derivatives used for hedging	104	43	-	147
At 31 Dec.	124	209	-	333

EURm	Fair values as at 31 December 2012			
	Level 1	Level 2	Level 3	Total balance
<b>Assets</b>				
Trading derivatives	1	92	-	93
Derivatives used for hedging	78	417	-	495
Available-for-sale investments	-	-	2,587	2,587
At 31 Dec.	79	509	2,587	3,175
<b>Liabilities</b>				
Trading derivatives	12	124	-	136
Derivatives used for hedging	66	38	-	104
At 31 Dec.	78	162	-	240

There have been no transfers between levels.

#### The following table presents the changes in Level 3 instruments for the year ended 31 December 2013

EURm	Available-for-sale investments
Opening balance	2,587
Additions	31
Transfers into Level 3	1
Transfers from Level 3	-
Gains and losses	
Recognised in income statement, under gains on available-for-sale investments	-1
Recognised in statement of comprehensive income, under available-for-sale investments	43
Closing balance	2,661

#### The following table presents the changes in Level 3 instruments for the year ended 31 December 2012

EURm	Available-for-sale investments	Other receivables	Total
Opening balance	3,345	3	3,348
Additions	33	-	33
Transfers into Level 3	-	-	-
Transfers from Level 3	-	-	-
Gains and losses			
Recognised in income statement, under gains on available-for-sale investments	-109	-3	-112
Recognised in statement of comprehensive income, under available-for-sale investments	-682	-	-682
Closing balance	2,587	-	2,587

## 4 Segment Information

The Group's management has determined the operating segments based on management reporting regularly reviewed by the Group's chief operating decision maker. The chief operating decision maker has been identified as the Group's President and CEO.

The operating segments are organised on a product basis.

In August 2013, UPM announced that it implements a new business structure to drive clear improvement in profitability. The company also seeks to simplify and further develop its business portfolio. As of 1 November 2013, UPM's business structure consists of the following business areas and reporting segments: UPM Biorefining, UPM Energy, UPM Raflatac, UPM Paper Asia, UPM Paper ENA (Europe and North America) and UPM Plywood. Forests and wood sourcing, UPM Bio-composites, UPM Biochemicals business units and Group services are reported in Other operations. Financial reporting according to the new structure has taken place from Q4 2013 onwards. The financial figures for the comparison period have been restated according to the new business and reportable segments structure.

### Reportable segments

#### UPM Biorefining

UPM Biorefining segment consists of pulp, timber and biofuels businesses. It has an annual capacity of 3.3 million tonnes of chemical pulp, produced by four modern pulp mills in Finland and Uruguay, plantation operations, four efficient sawmills in Finland and a biorefinery under construction in Lappeenranta, Finland.

#### UPM Energy

UPM Energy segment operates in power generation and physical and derivatives trading. The segment consist of UPM's hydro power assets in Finland and shareholdings in energy companies, with total electricity generation capacity of 1.6 GW.

#### UPM Raflatac

UPM Raflatac segment manufactures self-adhesive label materials for product and information labelling.

#### UPM Paper Asia

UPM Paper Asia segment consists of UPM Changshu paper mill in China and label paper operations in the Tervasaari and Jämsänkoski mills in Finland. The production capacity of UPM Paper Asia is 1.4 million tonnes of fine and label papers.

#### UPM Paper ENA

UPM Paper ENA segment produces magazine paper, newsprint and fine paper in 19 modern paper mills in Europe and North America. The production capacity of UPM Paper ENA is 10.2 million tonnes.

#### UPM Plywood

UPM Plywood segment is capable of producing approximately one million cubic metres of plywood and veneer products in Finland, Russia and Estonia.

#### Other operations

Other operations include forests and wood sourcing, UPM Bio-composites, UPM Biochemicals business units and Group services.

The information reported for each segment is the measure of what the Group's President and CEO uses internally for evaluating segment performance and deciding on how to allocate resources to operating segments.

The performance of an operating segment is evaluated primarily based on the segment's operating profit. The joint operation Madison Paper Industries (MPI) is reported as subsidiary in UPM Paper ENA segment reporting. In addition, the changes in fair value of unrealised commodity hedges are not allocated to segments. Otherwise the segment's operating profit is measured on a basis consistent with the consolidated financial statements. Sales between the segments are based on market prices.

The amounts provided to the President and CEO in respect of segment assets and liabilities are measured on a basis consistent with consolidated financial statements. Assets and liabilities are allocated to the segments based on segment operations. Unallocated assets and liabilities comprise other than energy shares under available-for-sale investments, non-current financial assets, deferred tax assets and liabilities, other non-current assets, income tax receivables and payables, cash and cash equivalents, assets classified as held for sale and related liabilities, retirement benefit obligations, provisions, interest-bearing liabilities and other liabilities and payables.

## Segment information for the year ended 31 December 2013

EURm	UPM Biorefining	UPM Energy	UPM Raflatac	UPM Paper Asia	UPM Paper ENA	UPM Plywood	Other operations	Eliminations and reconciliations <sup>8)</sup>	Group
External sales	1,299	222	1,210	914	5,451	402	496	60	10,054
Internal sales	689	244	3	194	109	27	-6	-1,260	-
Total sales <sup>1)</sup>	1,988	466	1,213	1,108	5,560	429	490	-1,200	10,054
Share of results of associates and joint ventures	1	-1	-	-	1	-	1	-	2
Operating profit	306	186	60	80	-59	21	-42	-4	548
Finance costs, net									-73
Income taxes									-140
Profit (loss) for the period									335
Special items in operating profit <sup>2)</sup>	6	-	-15	-	-59	-	-67	-	-135
Operating profit excluding special items	300	186	75	80	-	21	25	-4	683
Assets <sup>3)</sup>	2,946	2,984	616	937	3,013	299	1,677	-247	12,225
Unallocated assets									2,374
Total assets									14,599
Liabilities <sup>4)</sup>	156	22	108	67	451	25	214	-196	847
Unallocated liabilities									6,297
Total liabilities									7,144
Other items									
Depreciation and amortisation	152	11	33	81	229	22	13	-3	538
Impairment charge	-	-	3	-	4	-	-	-	7
Capital expenditure <sup>5)</sup>	159	39	13	22	97	10	23	-1	362
Capital expenditure, excluding acquisitions and shares	158	7	13	22	92	9	29	-1	329
Capital employed, 31 December <sup>6)</sup>	2,790	2,962	508	870	2,562	274	1,463	154	11,583
Capital employed, average	2,825	2,882	532	882	2,672	286	1,533	-19	11,593
Return on capital employed, excluding special items % <sup>7)</sup>	10.6	6.5	14.1	9.1	-	7.3	1.6	21.1	6.0
Personnel at year end	2,376	92	2,869	1,457	11,081	2,455	735	-115	20,950
Personnel, average	2,539	95	2,905	1,510	11,695	2,507	760	-113	21,898

<sup>1)</sup> The Group's sales comprise mainly of product sales.

<sup>2)</sup> In 2013, special charges of EUR 2 million in the UPM Biorefining segment relate to restructuring measures and special income of EUR 8 million to a capital gain from a sale of property, plant and equipment. In the UPM Raflatac segment special items of EUR 15 million relate to restructuring charges, including impairments of EUR 2 million. In the UPM Paper ENA segment special items include charges of EUR 25 million related to the restructuring of the UPM Docelles mill in France and net charges of EUR 34 million mainly related to the ongoing restructurings. In the Other operations special items of EUR 40 million relate to write-down of receivable due to the Finnish Customs' decision to dismiss UPM's application for the statutory refund of energy taxes for the year 2012. In addition, special items include charges of EUR 27 million mainly related to the streamlining of global functions.

<sup>3)</sup> Segment assets include goodwill, other intangible assets, property, plant and equipment, investment property, biological assets and investments in associated companies and joint ventures, available-for-sale investments, inventories and trade receivables.

<sup>4)</sup> Segment liabilities include trade payables and advances received.

<sup>5)</sup> Capital expenditure includes goodwill arising from business combinations, other intangible assets, property, plant and equipment, investment property, and investments in associated companies and joint ventures and other shares.

<sup>6)</sup> Capital employed is segment assets less segment liabilities. Eliminations and reconciliations include unallocated assets and unallocated non-interest-bearing liabilities.

<sup>7)</sup> Formulae for calculation of the return on capital employed; for segments: Operating profit excluding special items/Capital employed (average) x 100, for the Group: (Profit before tax + interest expenses and other financial expenses-special items)/(Total equity+interest bearing liabilities (average)) x 100.

<sup>8)</sup> Eliminations and reconciliations include the elimination of internal sales and internal inventory margin and the consolidation of MPI as a joint operation. In addition the changes in fair value of unrealised commodity hedges that are not allocated to segments are included in reconciliations.

## Segment information for the year ended 31 December 2012

EURm	UPM Biorefining	UPM Energy	UPM Raflatac	UPM Paper Asia	UPM Paper ENA	UPM Plywood	Other operations	Eliminations and reconciliations <sup>8)</sup>	Group
External sales	1,110	253	1,202	967	6,171	371	536	-118	10,492
Internal sales	860	229	-	164	21	22	4	-1,300	-
Total sales <sup>1)</sup>	1,970	482	1,202	1,131	6,192	393	540	-1,418	10,492
Share of results of associates and joint ventures	2	-	-	-	1	-	-1	-	2
Operating profit	205	217	78	101	-1,905	2	13	-29	-1,318
Finance costs, net									47
Income taxes									149
Profit (loss) for the period									-1,122
Special items in operating profit <sup>2)</sup>	-43	-	-3	-	-1,824	-	-4	-	-1,874
Operating profit excluding special items	248	217	81	101	-81	2	17	-29	556
Assets <sup>3)</sup>	2,944	2,917	654	969	3,307	315	1,727	-219	12,614
Unallocated assets									2,329
Total assets									14,943
Liabilities <sup>4)</sup>	172	27	129	83	510	22	200	-173	970
Unallocated liabilities									6,512
Total liabilities									7,482
Other items									
Depreciation and amortisation	160	11	34	84	472	22	13	-2	794
Impairment charge	31	-	-	-	1,788	-	1	-	1,820
Capital expenditure <sup>5)</sup>	95	6	36	28	152	15	25	-	357
Capital expenditure, excluding acquisitions and shares	95	6	26	28	148	15	29	-	347
Capital employed, 31 December <sup>6)</sup>	2,772	2,890	525	886	2,798	293	1,527	-88	11,603
Capital employed, average	2,806	3,266	524	915	4,732	300	1,561	-299	13,805
Return on capital employed, excluding special items % <sup>7)</sup>	8.8	6.6	15.5	11.0	-1.7	0.7	1.1	9.7	4.2
Personnel at year end	2,674	101	2,873	1,504	11,861	2,531	747	-111	22,180
Personnel, average	2,862	100	2,770	1,543	12,549	2,583	854	-110	23,151

<sup>1)</sup> The Group's sales comprise mainly of product sales.

<sup>2)</sup> In 2012, special items of EUR 43 million in the UPM Biorefining segment relate to the restructuring of sawn timber and further processing operations including impairment charge of EUR 31 million. In UPM Raflatac segment special items of EUR 3 million relate to restructuring charges. In the UPM Paper ENA segment special items include impairment charges of EUR 1,771 million, including EUR 783 million related to goodwill and EUR 988 million related to fixed assets in European graphic paper operations, restructuring charges of EUR 60 million and impairment charges of EUR 8 million related to the Stracel mill closure, and other restructuring charges of EUR 20 million. In addition, special items include a net gain of EUR 35 million including a capital gain of EUR 51 million from the sale of the packaging paper operations of the Pietarsaari and Tervasaari mills and a charge of EUR 16 million from goodwill allocated to the operations sold. In the Other operations special items include restructuring charges of EUR 22 million, reimbursement of fine of EUR 6 million, and a capital gain of EUR 12 million from the sale of RFID business.

<sup>3)</sup> Segment assets include goodwill, other intangible assets, property, plant and equipment, investment property, biological assets and investments in associated companies and joint ventures, available-for-sale investments, inventories and trade receivables.

<sup>4)</sup> Segment liabilities include trade payables and advances received.

<sup>5)</sup> Capital expenditure includes goodwill arising from business combinations, other intangible assets, property, plant and equipment, investment property, and investments in associated companies and joint ventures and other shares.

<sup>6)</sup> Capital employed is segment assets less segment liabilities. Eliminations and reconciliations include unallocated assets and unallocated non-interest-bearing liabilities.

<sup>7)</sup> Formulae for calculation of the return on capital employed; for segments: Operating profit excluding special items/Capital employed (average) x 100, for the Group: (Profit before tax + interest expenses and other financial expenses-special items)/(Total equity+interest bearing liabilities (average)) x 100.

<sup>8)</sup> Eliminations and reconciliations include the elimination of internal sales and internal inventory margin and the consolidation of MPI as a joint operation. In addition the changes in fair value of unrealised commodity hedges that are not allocated to segments are included in reconciliations.

**Geographical information**

**External sales by destination**

EURm	Year ended 31 December	
	2013	2012
Germany	1,788	1,885
Finland	1,011	952
United Kingdom	915	1,035
France	454	534
Other EU countries	1,900	2,023
Other European countries	563	558
United States	1,077	1,121
Canada	50	48
China	715	677
Uruguay	43	48
Rest of world	1,538	1,611
<b>Total</b>	<b>10,054</b>	<b>10,492</b>

**Total assets by country**

EURm	As at 31 December	
	2013	2012
Germany	1,252	1,369
United Kingdom	294	317
Finland	9,344	9,247
France	152	151
Other EU countries	347	350
Other European countries	96	111
United States	421	463
Canada	20	164
China	767	753
Uruguay	1,626	1,725
Rest of world	280	293
<b>Total</b>	<b>14,599</b>	<b>14,943</b>

**Capital expenditure by country**

EURm	Year ended 31 December	
	2013	2012
Germany	52	55
United Kingdom	9	11
Finland	242	197
France	5	7
Poland	1	7
Other European countries	6	17
North America	7	19
China	21	16
Uruguay	17	26
Rest of world	2	2
<b>Total</b>	<b>362</b>	<b>357</b>

**5 Acquisitions and disposals and notes to the cash flow statement**

**Acquisitions**

In 2013, no acquisitions were made.  
 On 31 August 2012 UPM acquired the labelstock business operations of Gascogne Laminates Switzerland of the Gascogne Group. The acquisition supports UPM’s growth in special labelstock products in Europe.

If the business had been included in the Group from 1 January 2012, it would have increased Group’s sales by EUR 20 million.

The following table summarises the consideration paid for business and the amounts of the assets acquired and liabilities assumed recognised at the acquisition date:

EURm	At 31 August 2012
Total consideration transferred, cash	10
Intangible assets (Note 17)	1
Property, plant and equipment (Note 18)	5
Inventory	5
Non-current liabilities	-1
Deferred taxes, net (Note 28)	0
<b>Total identifiable net assets</b>	<b>10</b>
Goodwill	0

**Disposals**

In 2013, there were no disposals.  
 In March 2012, UPM completed the sale of its RFID business to SMARTRAC N.V. UPM became an indirect shareholder of SMART-RAC with a 10.6% economic interest through the company OEP Technologie B.V., a holding company controlled by One Equity Partners and one of the major shareholders of SMARTRAC. The capital gain on disposal of EUR 12 million was recognised on the sale. The assets and liabilities related to UPM’s RFID companies, UPM RFID Oy, UPM RFID Inc. and UPM Raflatac RFID Co. Ltd., were part of the Other operations and were classified as assets held for sale and related liabilities as at 31 December 2011.

In August 2012, UPM sold the closed Papierfabrik Albruck GmbH to the German Karl Group. UPM permanently ceased graphic paper production at the mill in January 2012. Albruck was part of the Paper segment.

The following table summarises the aggregate amount of assets and liabilities related to the businesses sold during 2012:

EURm	2012
Other intangible assets (Note 17)	3
Property, plant and equipment (Note 18)	19
Deferred tax assets (Note 28)	7
Other non-current assets	1
Trade and other receivables	21
Cash and cash equivalents	7
Assets classified as held for sale	24
Retirement benefit obligations (Note 29)	-20
Provisions (Note 30)	-32
Trade and other payables	-4
Liabilities related to assets classified as held for sale	-4
<b>Net assets</b>	<b>22</b>
Gain on disposals	11
<b>Total consideration</b>	<b>33</b>
Settled with shares	-32
<b>Settled in cash and cash equivalents</b>	<b>1</b>
Cash in subsidiaries disposed	-8
<b>Net cash arising from disposals</b>	<b>-7</b>

**Notes to the consolidated cash flow statement**

**Adjustments**

EURm	Year ended 31 December	
	2013	2012
Change in fair value of biological assets and wood harvested	-68	-45
Share of results of associated companies and joint ventures	-2	-2
Depreciation, amortisation and impairment charges	545	2,614
Capital gains on sale of non-current assets, net	-19	-87
Finance costs, net	74	-9
Taxes	140	-149
Change in restructuring provisions	-13	-77
Other adjustments (in 2013 includes reversal of energy tax receivable)	93	33
<b>Total</b>	<b>750</b>	<b>2,278</b>

**Change in working capital**

EURm	Year ended 31 December	
	2013	2012
Inventories	33	51
Current receivables	12	-54
Current non-interest-bearing liabilities	-173	37
<b>Total</b>	<b>-128</b>	<b>34</b>

The total amount of taxes paid in 2013 amounted to EUR 161 million (87 million), of which taxes of EUR 157 million (73 million) in operating activities and EUR 4 million (14 million) in investing activities.

**6 Other operating income**

EURm	Year ended 31 December	
	2013	2012
Gains on sale of non-current assets	19	59
Rental income, investment property	5	4
Rental income, other	10	11
Emission rights received (Note 7)	16	22
Derivatives held for trading	32	5
Exchange rate gains and losses	-36	-10
Other	14	19
<b>Total</b>	<b>60</b>	<b>110</b>

**7 Costs and expenses**

EURm	Year ended 31 December	
	2013	2012
Change in inventories of finished goods and work in progress	37	1
Production for own use	-9	-17
<b>Materials and services</b>		
Raw materials, consumables and goods	5,801	5,991
Derivatives designated as cash flow hedges	13	42
External services <sup>1)</sup>	902	853
<b>Total</b>	<b>6,716</b>	<b>6,886</b>

EURm	Year ended 31 December	
	2013	2012
<b>Personnel expenses</b>		
Salaries and fees	1,047	1,068
<b>Share-based payments (Note 37)</b>	<b>8</b>	<b>8</b>
<b>Indirect employee costs</b>		
Pension costs-defined benefit plans (Note 29)	27	31
Pension costs-defined contribution plans	119	120
Other post-employment benefits (Note 29)	2	1
Other indirect employee costs <sup>2)</sup>	123	140
	271	292
<b>Other operating costs and expenses</b>		
Rents and lease expenses	59	62
Emission expenses (Note 6)	9	7
Losses on sale of non-current assets	2	6
Other operating expenses <sup>3)</sup>	951	1,040
	1,021	1,115
<b>Costs and expenses, total</b>	<b>9,091</b>	<b>9,353</b>

- <sup>1)</sup> External services mainly comprise distribution costs of products sold.
- <sup>2)</sup> Other indirect employee expenses primarily include other statutory social expenses, excluding pension expenses.
- <sup>3)</sup> Other operating expenses include, among others, energy and maintenance expenses as well as expenses relating to services and the Group’s administration.

The research and development costs included in costs and expenses were EUR 38 million (45 million).

**Government grants**

In 2013, the Group recognised government grants of EUR 1 million (1 million) as reduction of non-current assets, relating to environmental investments in Germany and materials recovery facility in UK. Government grants recognised as deduction of costs and expenses, related mainly to compensations for research and development costs, totalled to EUR 11 million (11 million) in 2013. In addition, the Group received emission rights from governments, Note 17.

**Remuneration paid to members of the Board of Directors and the Group Executive Team**

In accordance with the decision made by the 2013 Annual General Meeting, the fees of Board members who do not form part of operative management were as follows: the Chairman of the Board of Directors received a fee of EUR 175,000 (175,000) for the year, the Deputy Chairman of the Board of Directors and the Chairman of the Audit Committee a fee of EUR 120,000 (120,000) each, and the other members of the Board of Directors a fee of EUR 95,000 (95,000). Of this fee in 2013 and 2012 60% was paid in cash and 40% in the form of the company shares purchased on the members’ behalf. In 2013, 8,925 (7,216) company shares were paid to the Chairman, 6,120 (4,948) shares to the Deputy Chairman of the Board of Directors and the Chairman of the Audit Committee respectively and 4,845 (3,917) shares to each of the other members of the Board of Directors, except for Jussi Pesonen.

## Shareholdings (no. of shares) and fees of the Board of Directors

	Shareholdings 31 Dec. 2013 <sup>1)</sup>	Fees (EUR 1,000) 2013 2012	
<b>Board members</b>			
Björn Wahlroos, Chairman	244,654	175	175
Berndt Brunow, Deputy Chairman	296,867	120	120
Matti Alahuhta	55,954	95	95
Karl Grotenfelt	54,121	120	120
Piia-Noora Kauppi	5,145	95	–
Wendy E. Lane	27,612	95	95
Ursula Ranin	27,534	95	95
Veli-Matti Reinikkala	30,784	95	95
Kim Wahl	8,762	95	95
Jussi Pesonen, President and CEO	195,294	–	–
<b>Total</b>	<b>946,727</b>	<b>985</b>	<b>890</b>

<sup>1)</sup> The above shareholdings include shares held by closely related persons and/or organisations in which the persons exercise control.

## Salaries, fees and other benefits of the Group Executive Team

EUR 1,000	Year ended 31 December 2013 2012	
<b>President and CEO Jussi Pesonen</b>		
Salaries and benefits		
Salaries	1,059	1,059
Incentives	553	508
Benefits	26	36
<b>Total</b>	<b>1,638</b>	<b>1,603</b>
Pension costs		
Finnish statutory pension scheme	282	276
Voluntary pension plan	677	672
<b>Total</b>	<b>959</b>	<b>948</b>

In addition, a single premium of EUR 1.1 million has been paid in 2013, into the President and CEO's voluntary pension plan to cover past service pension liabilities.

Group Executive Team (excluding the President and CEO) <sup>1)</sup>

Salaries and benefits		
Salaries	3,396	2,975
Incentives	1,067	496
Benefits	137	121
<b>Total</b>	<b>4,600</b>	<b>3,592</b>
Pension costs		
Statutory pension scheme	740	522
Voluntary pension plan	531	456
<b>Total</b>	<b>1,271</b>	<b>978</b>

<sup>1)</sup> 11 members in 2013, 8 members in 2012.

The total remuneration of the President and CEO and the members of the Group Executive Team consists of base salary and benefits, short-term incentives and long-term incentives under the share reward plans and stock option programme.

The short-term incentive plan for the President and CEO and the members of the Group Executive Team has been linked with achievement of the predetermined financial targets of the Group or Business Group and individual targets of the executive amounting to a maximum annual incentive of 100% of annual base salary to the members of the Group Executive Board and 70% of annual base salary to the members of the Group Executive Team. For the President and CEO the maximum annual incentive amounts to 150% of the annual base salary.

The expenses recognised in income statement in respect of share-based payments for the Group Executive Team were EUR 1.4 million (2.2 million).

In accordance with the service contract of the President and CEO the retirement age of the President and CEO, Jussi Pesonen, is 60 years. For the President and CEO, the target pension is 60% of average indexed earnings calculated according to the Finnish statutory pension scheme from the last ten years of employment. The costs of lowering the retirement age to 60 years is covered by supplementing statutory pension with a voluntary defined benefit pension plan. Should the President and CEO leave the company prior to the age of 60, immediate vesting right corresponding to 100% of earned pension (pro rata) will be applied. The retirement age of the other members of the Group Executive Team is 63 years. The expenses of the President and CEO's defined benefit pension plan in 2013 were EUR 0.5 million (0.3 million), and the plan assets amounted to EUR 4.6 million and obligation to EUR 3.8 million. Other Group Executive Team members are under defined contribution plans.

In case the notice of termination is given to the President and CEO, a severance pay of 24 months' fixed salary will be paid in addition to the salary for six months' notice period. Should the President and CEO give a notice of termination to the company, no severance pay will be paid in addition to the salary for the notice period. For other members of the Group Executive Team, the period for additional severance compensation is 12 months, in addition to the six months' salary for the notice period, unless notice is given for reasons that are solely attributable to the employee.

If there is a change in the control over the company, as defined in the employment or service contracts, the President and CEO may terminate his service contract within three months and each member of the Group Executive Team may terminate his/her service contract within one month, from the date of the event that triggered the change of control and shall receive compensation equivalent to 24 months' base salary.

## Auditor's fees

EURm	Year ended 31 December 2013 2012	
Audit	2.6	2.9
Audit-related	0.1	–
Tax consulting	0.9	1.0
Other services	0.1	0.5
<b>Total</b>	<b>3.7</b>	<b>4.4</b>

## 8 Change in fair value of biological assets and wood harvested

EURm	Year ended 31 December 2013 2012	
Wood harvested	–88	–98
Change in fair value	156	143
<b>Total</b>	<b>68</b>	<b>45</b>

## 9 Share of results of associated companies and joint ventures

EURm	Year ended 31 December 2013 2012	
Associated companies	3	1
Joint ventures	–1	1
<b>Total</b>	<b>2</b>	<b>2</b>

## 10 Depreciation, amortisation and impairment charges

EURm	Year ended 31 December 2013 2012	
<b>Amortisation of intangible assets</b>		
Intangible rights	17	30
Other tangible assets	28	46
	45	76
<b>Depreciation of property, plant and equipment</b>		
Buildings	81	110
Machinery and equipment	390	579
Other tangible assets	19	27
	490	716
<b>Depreciation of investment property</b>		
Buildings	3	2
<b>Impairment charges of intangible assets</b>		
Goodwill	–	783
Intangible rights	–	49
Other intangible assets	–	26
Emission allowances	4	8
	4	866
<b>Impairment charges of property, plant and equipment</b>		
Land areas	–	34
Buildings	–	301
Machinery and equipment	3	603
Other tangible assets	–	16
	3	954
<b>Total</b>	<b>545</b>	<b>2,614</b>

In July 2013, UPM Raflatac announced that it will reduce labelstock production capacity in Europe, South-Africa and Australia. Impairment charges of EUR 3 million were recognised in UPM Raflatac segment's property, plant and equipment.

In the fourth quarter 2012, UPM conducted goodwill impairment test in the former Paper segment. The continuing challenges in European economy have significantly impacted the consumption of paper, exacerbating the effect of structural changes in paper end-uses and resulting in further decline in the demand of graphic papers in Europe. High costs and significant overcapacity continue to challenge the industry operators. In these circumstances, UPM has not been able to improve the profitability of its European graphic paper business as much as targeted.

UPM management did not expect significant enough improvement in the segment's profitability in the foreseeable future. As a result of the test calculation, UPM recognised impairment charges of EUR 783 million related to goodwill and EUR 988 million related to property, plant and equipment, intangible rights and other intangible assets in European graphic paper operations in the UPM Paper ENA segment. Fair value less costs to sell method was used in the calculation with an inflation rate of 2%, a negative sales growth rate of 2.9% in real terms, and a post-tax discount rate of 7.81%.

In addition, other impairment charges of EUR 8 million were recognised in the UPM Paper ENA segment's property, plant and equipment.

In June 2012, UPM announced that it will restructure its sawn timber operations, and further processing operations in Finland. Impairment charges of EUR 31 million were recognised on the UPM Biorefining segment's property, plant and equipment and other intangible assets.

## 11 Gains on available-for-sale investments, net

EURm	Year ended 31 December 2013 2012	
Fair value gains and losses	–	4
Net gains and losses on disposals <sup>1)</sup>	1	34
<b>Total</b>	<b>1</b>	<b>38</b>

<sup>1)</sup> In 2012, includes a tax exempt capital gain of EUR 34 million on the sales of Metsä Fibre Oy shares.

## 12 Finance costs

EURm	Year ended 31 December 2013 2012	
<b>Exchange rate and fair value gains and losses</b>		
Derivatives held for trading	–190	–14
Fair value gains/losses on derivatives designated as fair value hedges	–124	–12
Fair value adjustment of borrowings attributable to interest rate risk	126	8
Foreign exchange gains/losses on financial liabilities measured at amortised cost	105	39
Foreign exchange gains/losses on loans and receivables	93	–10
	10	11
<b>Interest and other finance costs, net</b>		
Interest expense on financial liabilities measured at amortised cost	–146	–170
Interest income on derivative financial instruments	85	85
Interest income on loans and receivables	5	7
Gains on other non-current financial assets, net	–	–9
Dividend income from available-for-sale investments	–	117
Other financial expenses	–28	–32
	–84	–2
<b>Total</b>	<b>–74</b>	<b>9</b>

## Net gains and losses on derivative financial instruments included in the operating profit

EURm	Year ended 31 December 2013 2012	
Derivatives designated as cash flow hedges	75	–45
Derivatives held for trading	32	5
<b>Total</b>	<b>107</b>	<b>–40</b>

## The aggregate foreign exchange gains and losses included in the consolidated income statement

EURm	Year ended 31 December 2013 2012	
Sales	56	–75
Other operating income	–36	–10
Net financial items	4	–
<b>Total</b>	<b>24</b>	<b>–85</b>

## 13 Income taxes

EURm	Year ended 31 December	
	2013	2012
<b>Major components of tax expenses</b>		
Current tax expense	123	125
Change in deferred taxes (Note 28)	17	-274
Income taxes, total	140	-149
<b>Income tax reconciliation statement</b>		
Profit (loss) before tax	475	-1,271
Computed tax at Finnish statutory rate of 24.5%	116	-311
Difference between Finnish and foreign rates	-6	-58
Non-deductible expenses and tax-exempt income	-42	78
Tax loss with no tax benefit	32	97
Results of associated companies	-	1
Change in tax legislation	-80	-6
Change in recoverability of deferred tax assets	129	53
Other	-9	-3
Income taxes, total	140	-149
Effective tax rate	29.5%	11.7%

Profit before taxes for 2013 and 2012 include income not subject to tax from subsidiary operating in tax free zone.

In 2013, change in tax legislation includes a tax income of EUR 76 million from tax rate change in Finland and a tax income of EUR 5 million from tax rate change in UK. Change in recoverability of deferred tax assets relates to reassessment of estimated recoverability of EUR 120 million related to deferred tax assets in Canada.

In 2012, profit before tax includes a tax-exempt capital gain of EUR 34 million from the sale of Metsä Fibre Oy shares and a tax-exempt dividend income of EUR 11 million from Metsä Fibre and EUR 105 million from Pohjolan Voima Oy. In addition, profit before tax includes impairment charges of EUR 591 million from UPM Paper ENA segment's goodwill with no related deferred tax. Change in tax legislation includes a tax income of EUR 6 million from tax rate changes in UK. Tax loss with no tax benefit and change in recoverability of deferred tax assets relate mainly to reassessment of deferred tax assets in connection with the UPM Paper ENA segment's asset impairments.

### Tax effects of components of other comprehensive income

EURm	Year ended 31 December					
	2013		2012			
	Before tax	Tax	After tax	Before tax	Tax	After tax
Actuarial gains and losses on defined benefit obligations	103	-34	69	-136	38	-98
Translation differences	-219	-	-219	-14	-	-14
Net investment hedge	102	-25	77	5	-1	4
Cash flow hedges	-36	8	-28	58	-12	46
Available-for-sale investments	43	15	58	-682	10	-672
Other comprehensive income	-7	-36	-43	-769	35	-734

## 14 Earnings per share

	Year ended 31 December	
	2013	2012
Profit (loss) attributable to owners of the parent company, EURm	335	-1,122
Weighted average number of shares (1,000)	527,818	525,434
Basic earnings per share, EUR	0.63	-2.14
For the diluted earnings per share the number of shares is adjusted by the effect of the share options.		
Profit (loss) attributable to owners of the parent company, EURm	335	-1,122
Profit (loss) used to determine diluted earnings per share, EURm	335	-1,122
Weighted average number of shares (1,000)	527,818	525,434
Effect of options <sup>1)</sup>	-	1,042
Weighted average number of shares for diluted earnings per share (1,000)	527,818	526,476
Diluted earnings per share, EUR	0.63	-2.13

<sup>1)</sup> The dilution effect is calculated to determine the number of shares that could have been acquired at fair value (the average price for shares traded) based on the monetary subscription rights of the outstanding options. The number of shares calculated as above is compared with the number of shares that would have been issued assuming exercise of the options. 5.0 million (9.0 million) shares exercisable with options were excluded from the calculation of diluted earnings per share as they were not dilutive.

## 15 Dividend per share

The dividends paid in 2013 were EUR 317 million (EUR 0.60 per share) and in 2012 EUR 315 million (EUR 0.60 per share). The Board of Directors proposes to the Annual General Meeting that a dividend of EUR 317 million, EUR 0.60 per share, will be paid in respect of 2013.

## 16 Goodwill

EURm	As at 31 December	
	2013	2012
Carrying value at 1 Jan.	222	1,022
Translation differences	-3	-1
Disposals	-	-16
Impairment charges	-	-783
Carrying value at 31 Dec.	219	222

### Goodwill by reporting segment

EURm	As at 31 December	
	2013	2012
UPM Biorefining	198	201
UPM Rafflatac	7	7
UPM Plywood	13	13
Other operations	1	1
Total	219	222

## Impairment tests

The Group prepares impairment test calculations at operating segment or at lower business unit level annually. The key assumptions for calculations are those regarding business growth outlook, product prices, cost development, and the discount rate.

The business growth outlook is based on general forecasts for the business in question. Ten-year forecasts are used in these calculations as the nature of the Group's business is long-term, due to its capital intensity, and is exposed to cyclical changes. In estimates of product prices and cost development, forecasts prepared by management for the next three years and estimates made for the following seven years are taken into consideration. The Group's recent profitability trend is taken into account in the forecasts. In addition, when preparing estimates, consideration is given to the investment decisions made by the Group as well as profitability programmes that the Group has implemented and the views of knowledgeable industry experts on the long-term development of demand and prices.

In 2012, in Paper (the former operating segment), UPM recognised impairment charges of EUR 783 million related to goodwill and EUR 988 million related to property, plant and equipment, intangible rights and other intangible assets in European graphic paper operations. After the charge, there is no goodwill in paper operations. The valuation method Fair value less costs to sell was based on discounted cash flows. Key assumptions used in the calculation were: inflation rate of 2%, negative sales growth rate of 2.9% over the forecast period in real terms, and post-tax discount rate of 7.81%.

In annual impairment tests, the recoverable amount of groups of cash generating units is determined based on value in use calculations.

The discount rate is estimated using the weighted average cost of capital on the calculation date adjusted for risks specific to the business in question. The pre-tax discount rate used in 2013 for pulp operations Finland was 10.06% (10.83%), and for pulp operations Uruguay 8.48% (8.63%). The recoverable amount is most sensitive to pulp sales prices and the cost of wood raw material. As at 31 December 2013, for pulp operations Finland, a decrease of more than 11.4% in pulp prices would result in recognition of impairment loss against goodwill. The Group believes that no reasonable change in wood cost would cause the aggregate carrying amount to exceed the recoverable amount. For pulp operations Uruguay, a decrease of more than 4.5% in pulp prices or an increase of more than 13% in wood cost would result in recognition of impairment loss against goodwill. A decrease of more than 6% in pulp prices or an increase of more than 18% in wood cost would result in a write-down of the entire goodwill.

## 17 Other intangible assets

EURm	As at 31 December	
	2013	2012
<b>Intangible rights</b>		
Acquisition cost at 1 Jan.	536	530
Additions	3	3
Disposals	-1	-5
Companies sold	-	-1
Reclassifications	2	10
Translation differences	-4	-1
Acquisition cost at 31 Dec.	536	536

EURm	As at 31 December	
	2013	2012
Accumulated amortisation and impairment at 1 Jan.		
Amortisation	-17	-30
Impairment charges	-	-49
Disposals	2	6
Reclassifications	8	-8
Translation differences	1	1
Accumulated amortisation and impairment at 31 Dec.	-300	-294

Carrying value at 1 Jan.	242	316
Carrying value at 31 Dec.	236	242

### Other intangible assets <sup>1)</sup>

Acquisition cost at 1 Jan.	669	661
Additions	13	34
Companies acquired	-	1
Disposals	-15	-30
Companies sold	-	-5
Reclassifications	8	8
Translation differences	-2	-
Acquisition cost at 31 Dec.	673	669

Accumulated amortisation and impairment at 1 Jan.	-582	-547
Amortisation	-28	-45
Impairment charges	-	-26
Disposals	15	28
Companies sold	-	5
Reclassifications	2	3
Translation differences	2	-
Accumulated amortisation and impairment at 31 Dec.	-591	-582

Carrying value at 1 Jan.	87	114
Carrying value at 31 Dec.	82	87

### Advance payments and construction in progress

Acquisition cost at 1 Jan.	12	15
Additions	7	10
Reclassifications	-6	-13
Acquisition cost at 31 Dec.	13	12

Carrying value at 1 Jan.	12	15
Carrying value at 31 Dec.	13	12

### Emission rights

Acquisition cost 1 Jan.	40	30
Additions <sup>2)</sup>	2	36
Disposals and settlements	-24	-23
Companies sold	-	-3
Acquisition cost 31 Dec.	18	40

Accumulated amortisation and impairment at 1 Jan.	-15	-8
Impairment charges	-4	-8
Disposals	12	-
Companies sold	-	1
Accumulated amortisation and impairment at 31 Dec.	-7	-15

Carrying value at 1 Jan.	25	22
Carrying value at 31 Dec.	11	25

Other intangible assets, total	342	366
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<sup>1)</sup> Other intangible assets consist primarily of capitalised software assets.

<sup>2)</sup> Additions include emission rights received free of charge.

## Water rights

Intangible rights include EUR 189 million (189 million) in respect of the water rights of hydropower plants belonging to the UPM Energy segment that are deemed to have an indefinite useful life as the company has a contractual right to exploit water resources in the energy production of these power plants. The values of these water rights are tested annually for impairment based on expected future cash flows of each separate hydropower plant.

## 18 Property, plant and equipment

EURm	As at 31 December	
	2013	2012
<b>Land and water areas</b>		
Acquisition cost at 1 Jan.	683	694
Additions	11	19
Disposals	-5	-8
Companies sold	-	-9
Reclassifications	-3	-7
Translation differences	-16	-6
Acquisition cost at 31 Dec.	670	683
Accumulated depreciation and impairment at 1 Jan.	-34	-12
Impairment charges	-	-34
Disposals	-	1
Companies sold	-	4
Reclassifications	-	7
Accumulated depreciation and impairment at 31 Dec.	-34	-34
Carrying value at 1 Jan.	649	682
Carrying value at 31 Dec.	636	649
<b>Buildings</b>		
Acquisition cost at 1 Jan.	3,598	3,739
Additions	17	15
Companies acquired	-	4
Disposals	-105	-112
Companies sold	-	-27
Reclassifications	9	-22
Translation differences	-30	1
Acquisition cost at 31 Dec.	3,489	3,598
Accumulated depreciation and impairment at 1 Jan.	-2,352	-2,121
Depreciation	-81	-110
Impairment charges	-	-301
Disposals	101	107
Companies sold	-	27
Reclassifications	-14	46
Translation differences	13	-
Accumulated depreciation and impairment at 31 Dec.	-2,333	-2,352
Carrying value at 1 Jan.	1,246	1,618
Carrying value at 31 Dec.	1,156	1,246

EURm	As at 31 December	
	2013	2012
<b>Machinery and equipment</b>		
Acquisition cost at 1 Jan.	15,184	16,580
Additions	84	136
Companies acquired	-	1
Disposals	-691	-636
Companies sold	-	-505
Reclassifications	32	-390
Translation differences	-105	-2
Acquisition cost at 31 Dec.	14,504	15,184
Accumulated depreciation and impairment at 1 Jan.	-12,291	-12,699
Depreciation	-390	-579
Impairment charges	-6	-603
Disposals	684	613
Companies sold	-	492
Reclassifications	32	487
Translation differences	71	-2
Accumulated depreciation and impairment at 31 Dec.	-11,900	-12,291
Carrying value at 1 Jan.	2,893	3,881
Carrying value at 31 Dec.	2,604	2,893
<b>Other tangible assets</b>		
Acquisition cost at 1 Jan.	910	971
Additions	5	4
Disposals	-44	-62
Companies sold	-	-3
Reclassifications	5	-
Translation differences	-3	-
Acquisition cost at 31 Dec.	873	910
Accumulated depreciation and impairment at 1 Jan.	-770	-791
Depreciation	-19	-27
Impairment charges	-	-16
Disposals	43	63
Companies sold	-	2
Reclassifications	-7	-1
Translation differences	1	-
Accumulated depreciation and impairment at 31 Dec.	-752	-770
Carrying value at 1 Jan.	140	180
Carrying value at 31 Dec.	121	140
<b>Advance payments and construction in progress</b>		
Acquisition cost at 1 Jan.	161	144
Additions	216	138
Disposals	-66	-1
Reclassifications	-70	-120
Translation differences	-1	-
Acquisition cost at 31 Dec.	240	161
Carrying value at 1 Jan.	161	144
Carrying value at 31 Dec.	240	161
Property, plant and equipment, total	4,757	5,089

## Finance lease arrangements

Property, plant and equipment includes property that is acquired under finance lease contracts:

EURm	As at 31 December	
	2013	2012
<b>Buildings</b>		
Acquisition cost	3	3
Accumulated depreciation	-2	-
Carrying value at 31 Dec.	1	3
<b>Machinery and equipment</b>		
Acquisition cost	330	335
Accumulated depreciation	-126	-112
Carrying value at 31 Dec.	204	223
Leased assets, total	205	226

## Capitalised borrowing costs

In 2013, the borrowing costs capitalised as part of non-current assets amounted to EUR 2 million (1 million). In 2013, amortisation of capitalised borrowing costs was EUR 4 million (6 million). In 2013 and 2012 there were no capitalised borrowing costs associated with sold assets.

The average interest rate used was 2.33% (3.95%), which represents the costs of the loan used to finance the projects.

## 19 Investment property

EURm	As at 31 December	
	2013	2012
Acquisition cost at 1 Jan.	67	75
Additions	5	7
Disposals	-	-7
Reclassifications	-1	-8
Acquisition cost at 31 Dec.	71	67
Accumulated depreciation and impairment at 1 Jan.	-28	-36
Depreciation	-3	-2
Disposals	-	3
Reclassifications	-	7
Accumulated depreciation and impairment at 31 Dec.	-31	-28
Carrying value at 1 Jan.	39	39
Carrying value at 31 Dec.	40	39

The fair value of investment property is determined annually on 31 December by the Group. Fair value is based on active market prices, adjusted, if necessary, for any difference in the nature of the specific asset.

The fair value of investment property in Finland at 31 December 2013 was EUR 31 million (29 million) and the fair value of investment property in other countries at 31 December 2013 was EUR 11 million (11 million).

## The amounts recognised in the income statement

EURm	Year ended 31 December	
	2013	2012
Rental income	5	4
Direct operating expenses arising from investment properties that generate rental income	-3	-2

There were no contractual obligations for future repair and maintenance or purchase of investment property.

All assets under investment property are leased to third parties under operating leasing contracts.

## 20 Biological assets

EURm	As at 31 December	
	2013	2012
At 1 Jan.	1,476	1,513
Additions	8	10
Disposals	-38	-44
Wood harvested	-88	-98
Change in fair value	108	101
Reclassifications	2	-
Translation differences	-10	-6
At 31 Dec.	1,458	1,476

The Group owns approximately 820,000 and 75,000 hectares forests in Finland and in the United States, respectively, and 234,000 hectares plantations in Uruguay. Biological assets (living trees) are measured at fair value less costs to sell. The fair value is determined using discounted cash flow models. Main factors used in the valuation are estimates for growth and wood harvested, stumpage prices and discount rates. Stumpage price forecasts are based on the current prices adjusted by the management's estimates for the full remaining productive lives of the trees, up to 100 years for forests in Finland and in the US and up to 10 years for plantations in Uruguay. The cash flows are adjusted by selling costs and risks related to the future growth. Young seedling stands are valued at cost.

The pre-tax discount rates used in to determine fair value in 2013 were 7.50% (7.50%) for Finnish forests and 10.00% (10.00%) for Uruguayan plantations. A decrease (increase) of one percentage point in discount rate would increase (decrease) the fair value of biological assets by approximately EUR 210 million.

## 21 Investments in associated companies and joint ventures

EURm	As at 31 December	
	2013	2012
At 1 Jan.	20	28
Additions	1	-
Disposals	-	-3
Share of results after tax (Note 9)	2	2
Dividends received	-1	-7
At 31 Dec.	22	20

Investments in associated companies at 31 December 2013 include goodwill of EUR 1 million (1 million).

## Associated companies and joint ventures

EURm	As at 31 December	
	2013	2012
Associated companies	16	13
Joint ventures	6	7
At 31 Dec.	22	20

UPM has no individually material associated companies or joint ventures.

### Transactions and balances with associated companies and joint ventures

EURm	Year ended 31 December	
	2013	2012
Sales	2	4
Purchases	80	80
Non-current receivables	8	7
Trade and other receivables	1	4
Trade and other payables	2	4

### Loan receivables from associated companies and joint ventures <sup>1)</sup>

At 1 Jan.	7	4
Loans granted	1	3
At 31 Dec.	8	7

<sup>1)</sup> Loans to associated companies and joint ventures include current and non-current loan receivables.

## 22 Available-for-sale investments

EURm	As at 31 December	
	2013	2012
At 1 Jan.	2,587	3,345
Additions	31	33
Disposals	-1	-147
Reclassification	1	-
Changes in fair values	43	-644
At 31 Dec.	2,661	2,587

At 31 December 2013, the available-for-sale investments include only investments in unlisted shares.

### Principal available-for-sale investments

	Number of shares	Group holding %	Carrying value, EURm	
			2013	2012
Pohjolan Voima Oy, A serie	8,176,191	61.24	407	387
Pohjolan Voima Oy, B serie	4,140,132	58.11	1,313	1,264
Pohjolan Voima Oy, B2 serie	1,303,570	50.69	306	311
Kemijoki Oy	100,797	4.13	443	446
Länsi-Suomen Voima Oy	10,220	51.10	109	93
OEP Technologie B.V.	243,670	10.86	35	34
Other <sup>1)</sup>	-	-	48	52
At 31 Dec.			2,661	2,587

<sup>1)</sup> Includes C, H, M and V series of Pohjolan Voima Oy.

Fair valuation of available-for-sale investments in the UPM Energy segment (Pohjolan Voima Oy's A, B, B2, C, C2, H, M and V-shares, Kemijoki Oy shares, and Länsi-Suomen Voima Oy shares) is based on discounted cash flows model. The Group's electricity price estimate is based on fundamental simulation of Finnish area price. A change of +/-5% in the electricity price used in the model would change the total value of the assets by +/- EUR 356 million. The discount rate of 5.79% used in the valuation model is determined using the weighted average cost of capital method. A change of +/- 0.5% in the discount rate would change the total value of the assets by approximately +/- EUR 340 million. Other uncertainties and risk factors in the value of the assets relate to start-up schedule of the fixed price turn-key Olkiluoto 3 nuclear power plant project and the on-going arbitration proceedings between the plant supplier AREVA-Siemens Consortium and the plant owner Teollisuuden Voima Oyj (TVO). UPM's indirect share of the capacity of Olkiluoto 3 is approximately 31%, through its PVO B2 shares. The possible outcome of the arbitration proceedings has not been taken into

account in the valuation. Changes in regulatory environment or taxation could also have an impact on the value of the energy generating assets.

Fair value of the sale and leaseback contract included in available-for-sale investments was EUR 14 million.

Fair value of the OEP Technologie B.V. shares is based on the discounted value of sales option related to the shareholding.

Pohjolan Voima Oy B and B2 series relate to shareholdings in Teollisuuden Voima Oyj, which operates and constructs nuclear power plants in Olkiluoto, Finland. The operation of a nuclear power plant involves potential costs and liabilities related to decommissioning and dismantling of the nuclear power plant and storage and disposal of spent fuel and, furthermore, is governed by international, European Union and local nuclear regulatory regimes. Pursuant to the Finnish Nuclear Liability Act, the operator of a nuclear facility is strictly liable for damage resulting from a nuclear incident at the operator's installation or occurring in the course of transporting nuclear fuels. Shareholders of power companies that own and operate nuclear power plants are not subject to liability under the Nuclear Liability Act. In Finland, the future costs of conditioning, storage and final disposal of spent fuel, management of low and intermediate level radioactive waste and nuclear power plant decommissioning are the responsibility of the operator. Reimbursement of the operators' costs related to decommissioning and dismantling of the power plant and storage and disposal of spent fuel are provided for by state-established funds funded by annual contributions from nuclear power plant operators. The contributions to such funds are intended to be sufficient to cover estimated future costs which have been taken into consideration in the fair value of the related available-for-sale investments.

## 23 Other non-current financial assets

EURm	As at 31 December	
	2013	2012
Loan receivables from associated companies	8	7
Other loan receivables	35	42
Derivative financial instruments	239	392
At 31 Dec.	282	441

The maximum exposure to credit risk in regard to other loan receivables is their carrying amount.

## 24 Other non-current assets

EURm	As at 31 December	
	2013	2012
Defined benefit plans (Note 29)	88	30
Other non-current assets	54	57
At 31 Dec.	142	87

## 25 Inventories

EURm	As at 31 December	
	2013	2012
Raw materials and consumables	565	568
Work in progress	39	44
Finished products and goods	684	737
Advance payments	39	39
At 31 Dec.	1,327	1,388

## 26 Trade and other receivables

EURm	As at 31 December	
	2013	2012
Trade receivables	1,398	1,426
Loan receivables	10	6
Prepayments and accrued income	154	131
Derivative financial instruments	226	196
Other receivables	160	223
At 31 Dec.	1,948	1,982

### Ageing analysis of trade receivables

EURm	As at 31 December	
	2013	2012
Undue	1,191	1,200
Past due up to 30 days	137	164
Past due 31–90 days	37	35
Past due over 90 days	33	27
At 31 Dec.	1,398	1,426

In determining the recoverability of trade receivables the Group considers any change to the credit quality of trade receivables. There are no indications that the debtors will not meet their payment obligations with regard to trade receivables that are not overdue or impaired at 31 December 2013. In 2013, impairment of trade receivables amounted to EUR 17 million (14 million) and is recorded under other costs and expenses. Impairment is recognised when there is objective evidence that the Group is not able to collect the amounts due.

Maximum exposure to credit risk, without taking into account any credit enhancements, is the carrying amount of trade and other receivables.

### Main items included in prepayments and accrued income

EURm	As at 31 December	
	2013	2012
Personnel expenses	11	8
Interest income	2	1
Other items	141	122
At 31 Dec.	154	131

## 27 Equity and reserves

### Share capital

EURm	Number of shares (1,000)	Share capital
At 1 Jan. 2012	524,973	890
Exercise of share options	1,151	-
At 31 Dec. 2012	526,124	890
Exercise of share options	3,177	-
At 31 Dec. 2013	529,302	890

### Shares

At 31 December 2013, the number of the company's shares was 529,301,897. Each share carries one vote. The shares do not have any nominal counter value. The shares are included within the book entry system for securities.

### Reserve for invested non-restricted equity

Reserve for invested non-restricted equity includes, under the Companies' Act, the exercise value of shareholders' investments in the company unless otherwise decided by the company.

### Treasury shares

The Annual General Meeting held on 4 April 2013 authorised the Board of Directors to acquire no more than 51,000,000 of the company's own shares. The authorisation is valid for 18 months from the date of the decision.

As at 31 December 2013, the company held 230,737 (230,737) of its own shares, 0.04% (0.04%) of the total number of shares. 211,481 of the shares were returned upon their issue in 2011 to UPM without consideration as part of the contractual arrangements relating to the Myllykoski transaction and 19,256 shares in accordance with the Group's share reward scheme due to the termination of employment contracts in 2012.

### Authorisations to increase the number of shares

The Annual General Meeting, held on 4 April 2013, authorised the Board of Directors to decide on the issuance of shares and/or the transfer of the company's own shares held by the company and/or the issue of special rights entitling holders to shares in the company as follows: (i) The maximum number of new shares that may be issued and the company's own shares held by the company that may be transferred is, in total, 25,000,000 shares. This figure also includes the number of shares that can be received on the basis of the special rights. (ii) The new shares and special rights entitling holders to shares in the company may be issued and the company's own shares held by the company may be transferred to the company's shareholders in proportion to their existing shareholdings in the company, or in a directed share issue, deviating from the shareholder's pre-emptive subscription right. This authorisation is valid until 4 April 2016.

Based on decisions of the Annual General Meeting of 27 March 2007, at 31 December 2013, the company has one option series 2007C that would entitle the holders to subscribe for a total 5,000,000 shares. Aside from the above, the Board of Directors has no current authorisation to issue shares, convertible bonds or share options.

In 2013, 3,175,987 (1,151,572) shares were subscribed for through exercising 2007B share options and 1,500 shares through exercising 2007C options.

The share subscription period for share options 2007B ended on 31 October 2013. During the entire share subscription period 4,330,009 shares were subscribed, for through exercising 2007B share options.

If all remaining 4,998,500 share options issued in 2007 are fully exercised, the number of the company's shares will increase by a total of 4,998,500, i.e. by 0.94%.

The shares available for subscription under the Board's share issue authorisation and through the exercise of share options may increase the total number of the company's shares by 5.67%, i.e. by 29,998,500 shares, to 559,300,397 shares.

### Redemption clause

Under § 12 of UPM-Kymmene Corporation's Articles of Association, a shareholder who, alone or jointly with another shareholder owns 33 1/3 percent or 50 percent or more of all the company's shares or their associated voting rights shall, at the request of other shareholders, be liable to redeem their shares and any securities that, under the Companies Act, carry the right to such shares, in the manner prescribed in § 12.

A resolution of a general meeting of shareholders to amend or delete this redemption clause must be carried by shareholders representing not less than three-quarters of the votes cast and shares represented at the meeting.

**Fair value and other reserves**

EURm	As at 31 December 2013	2012
Fair value reserve of available-for-sale investments	2,152	2,094
Hedging reserve	-21	7
Legal reserve	53	53
Share premium reserve	50	50
Share-based compensation	22	28
At 31 Dec.	2,256	2,232

**Changes in hedging reserve**

EURm	Year ended 31 December	
	2013	2012
Hedging reserve at 1 Jan.	7	-39
Gains and losses on cash flow hedges	33	25
Transfers to sales	-85	9
Transfers to costs and expenses	14	25
Transfers to financial costs	2	2
Tax on gains and losses on cash flow hedges	-9	-15
Tax on transfers to income statement	17	-
Hedging reserve at 31 Dec.	-21	7

**Components of other comprehensive income**

EURm	Year ended 31 December	
	2013	2012
Actuarial gains and losses on defined benefit obligations	69	-98
Translation differences	-219	-14
Net investment hedge	77	4
Cash flow hedges		
gains/losses arising during the year	24	10
reclassification adjustments	-52	36
	-28	46
Available-for-sale investments		
gains/losses arising during the year	58	1
reclassification adjustments	-	-673
	58	-672
Other comprehensive income	-43	-734

**28 Deferred income taxes****Reconciliation of the movements of deferred tax asset and liability balances during the year 2013**

EURm	As at 1 Jan. 2013	Charged to the income statement	Charged to OCI	Translation differences	Acquisitions and disposals	As at 31 Dec. 2013
<b>Deferred tax assets</b>						
Intangible assets and property, plant and equipment	221	-8	-	-	-	213
Inventories	40	-13	-	-	-	27
Retirement benefit obligations and provisions	164	-12	-18	1	-	135
Other temporary differences	68	-39	-	1	-	30
Tax losses and tax credits carried forward	368	-103	-	-13	-	252
Deferred tax assets, total	861	-175	-18	-11	-	657
<b>Deferred tax liabilities</b>						
Intangible assets and property, plant and equipment	366	-127	-	-	-	239
Biological assets	224	-26	-	-	-	198
Retirement benefit obligations and provisions	5	-3	16	-	-	18
Other temporary differences	139	-2	2	-	-	139
Deferred tax liabilities, total	734	-158	18	-	-	594
<b>The amounts recognised in the balance sheet</b>						
Deferred tax assets	739	-146	-18	-11	-	564
Deferred tax liabilities	612	-129	18	-	-	501
Deferred tax liabilities, less deferred tax assets	-127	17	36	11	-	-63

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 taxes relate to the same fiscal authority.

**Reconciliation of the movements of deferred tax asset and liability balances during the year 2012**

EURm	As at 1 Jan. 2012	Charged to the income statement	Charged to OCI	Translation differences	Acquisitions and disposals	As at 31 Dec. 2012
<b>Deferred tax assets</b>						
Intangible assets and property, plant and equipment	77	146	-	-	-2	221
Inventories	23	17	-	-	-	40
Retirement benefit obligations and provisions	135	-2	36	-1	-4	164
Other temporary differences	42	27	-	-	-1	68
Tax losses and tax credits carried forward	407	-38	-	-1	-	368
Deferred tax assets, total	684	150	36	-2	-7	861
<b>Deferred tax liabilities</b>						
Intangible assets and property, plant and equipment	471	-105	-	-	-	366
Biological assets	232	-8	-	-	-	224
Retirement benefit obligations and provisions	7	-	-2	-	-	5
Other temporary differences	147	-11	3	-	-	139
Deferred tax liabilities, total	857	-124	1	-	-	734
<b>The amounts recognised in the balance sheet</b>						
Deferred tax assets	529	183	36	-2	-7	739
Deferred tax liabilities	702	-91	1	-	-	612
Deferred tax liabilities, less deferred tax assets	173	-274	-35	2	7	-127

At 31 December 2013, net operating loss carry-forwards for which the Group has recognised a deferred tax asset amounted to EUR 831 million (1,250 million), of which EUR 678 million (569 million) was attributable to German subsidiaries and EUR 74 million (569 million) to a Canadian subsidiary. In Germany the net operating loss carry-forwards do not expire. In other countries net operating loss carry-forwards expire at various dates and in varying amounts. The net operating loss carry-forwards for which no deferred tax asset is recognised due to uncertainty of their utilisation amounted to EUR 903 million (373 million) in 2013. These net operating loss carry-forwards are mainly attributable to a Canadian subsidiary and certain German subsidiaries.

No deferred tax liability has been recognised for the undistributed profits of Finnish subsidiaries and associated companies as such earnings can be distributed without any tax consequences.

In addition the Group does not recognise a deferred tax liability in respect of undistributed earnings of non-Finnish subsidiaries to the extent that such earnings are intended to be permanently reinvested in those operations or such earnings can be distributed without any tax consequences.

**29 Retirement benefit obligations**

The Group operates a number of defined benefit and contribution plans in accordance with local conditions and practices in the countries in which it operates. About 90 % of the defined benefit arrangements exist in Finland, in the UK and in Germany. The Group has defined benefit obligations also in Austria, Holland, France, Canada and in US. Globally about one quarter of employees belong to defined benefit arrangements.

In Finland employers have to insure their employees for statutory benefits, as determined in Employee's Pension Act (TyEL). Under TyEL, the benefits that are funded during employment are old age benefit and disability benefit. The benefits can be insured in an insurance company or employer can establish a fund or a foundation to manage the statutory benefits. Approximately 92% of UPM's Finnish employees are insured with an insurance company and these arrangements are regarded as defined contribution plans. In addition, Group operates a TyEL foundation to fulfil the requirement for approximately 8% of employees. The TyEL foundation, Kymen Eläkesäätiö, is regarded as defined benefit plan for the benefits that are based on employee's average salary scheme. The TyEL Foundation is administered by the representatives of both the employer and the employees. The foundation has named an authorised representative to take care of its regular operations. The Plan is supervised by Financial Supervisory Authority.

In the UK, the Group operates a defined benefit scheme, which is closed both to new members and future accrual. A defined contribution section is also in operation and is open to all current employees. The UK Pension Scheme operates under a single Trust which is independent from the Group.

In Germany employees within defined benefit arrangements are entitled to annual pensions on retirement based on their service and final salary. The members also receive benefits on disability and on death.



## Post-employment and other long-term benefits as at 31 December 2013

EURm	Pension benefits	Other post-employment benefits	Other long-term employee benefits	Total
Present value of funded obligations	736	-	-	736
Present value of unfunded obligations	503	29	-	532
Fair value of plan assets	-717	-	-	-717
Net defined benefit liability	522	29	-	551
Other long-term employee benefits	-	-	41	41
Defined benefit asset reported in the assets (Note 24)	88	-	-	88
Total liability in the balance sheet	610	29	41	680

## Post-employment and other long-term benefits as at 31 December 2012

EURm	Pension benefits	Other post-employment benefits	Other long-term employee benefits	Total
Present value of funded obligations	727	-	-	727
Present value of unfunded obligations	569	31	-	600
Fair value of plan assets	-659	-	-	-659
Net defined benefit liability	637	31	-	668
Other long-term employee benefits	-	-	47	47
Defined benefit asset reported in the assets (Note 24)	30	-	-	30
Total liability in the balance sheet	667	31	47	745

## The net liability of pension and other post-employment benefits by country as at 31 December 2013

EURm	Finland	Germany	UK	Other countries	Total
Present value of funded obligations	294	29	381	32	736
Present value of unfunded obligations	-	447	-	85	532
Fair value of plan assets	-380	-2	-305	-30	-717
Net liability	-86	474	76	87	551

## The net liability of pension and other post-employment benefits by country as at 31 December 2012

EURm	Finland	Germany	UK	Other countries	Total
Present value of funded obligations	314	-	366	47	727
Present value of unfunded obligations	-	515	-	85	600
Fair value of plan assets	-342	-	-289	-28	-659
Net liability	-28	515	77	104	668

## Present value of obligation and fair value of plan assets 2013

EURm	Present value of obligation			Fair value of plan assets			Net
	Pension benefits	Other post-employment benefits	Total	Pension benefits	Other post-employment benefits	Total	
At 1 Jan. 2013	1,296	31	1,327	-659	-	-659	668
Current service cost	12	1	13	-	-	-	13
Curtailements	-3	-	-3	-	-	-	-3
Past service cost and gains and losses from settlements	1	-	1	-	-	-	1
Interest expense (+) income (-)	39	1	40	-22	-	-22	18
Total included in personnel expenses (Note 7)	49	2	51	-22	-	-22	29
Actuarial gains and losses on defined benefit obligation arising from changes in demographic assumptions	-	-1	-1	-	-	-	-1
Actuarial gains and losses on defined benefit obligation arising from changes in financial assumptions	-51	-	-51	-	-	-	-51
Actuarial gains and losses on defined benefit obligation arising from experience adjustments	4	1	5	-	-	-	5
Actuarial gains and losses on plan assets	-	-	-	-56	-	-56	-56
<b>Total remeasurement gains (-) and losses (+) included in other comprehensive income</b>	<b>-47</b>	<b>-</b>	<b>-47</b>	<b>-56</b>	<b>-</b>	<b>-56</b>	<b>-103</b>
Benefits paid	-50	-3	-53	46	3	49	-4
Settlements	-	-	-	3	-	3	3
Contributions by the employer	-	-	-	-35	-3	-38	-38
Translation differences	-9	-1	-10	6	-	6	-4
At 31 Dec. 2013	1,239	29	1,268	-717	-	-717	551

## Present value of obligation and fair value of plan assets 2012

EURm	Present value of obligation			Fair value of plan assets			Net
	Pension benefits	Other post-employment benefits	Total	Pension benefits	Other post-employment benefits	Total	
At 1 Jan. 2012	1,119	31	1,150	-595	-	-595	555
Current service cost	11	-	11	-	-	-	11
Curtailements	-3	-	-3	-	-	-	-3
Past service cost and gains and losses from settlements	1	-	1	-	-	-	1
Interest expense (+) income (-)	49	1	50	-27	-	-27	23
Total included in personnel expenses (Note 7)	58	1	59	-27	-	-27	32
Actuarial gains and losses on defined benefit obligation arising from changes in demographic assumptions	1	-1	-	-	-	-	-
Actuarial gains and losses on defined benefit obligation arising from changes in financial assumptions	186	5	191	-	-	-	191
Actuarial gains and losses on defined benefit obligation arising from experience adjustments	-8	-	-8	-	-	-	-8
Actuarial gains and losses on plan assets	-	-	-	-47	-	-47	-47
<b>Total remeasurement gains (-) and losses (+) included in other comprehensive income</b>	<b>179</b>	<b>4</b>	<b>183</b>	<b>-47</b>	<b>-</b>	<b>-47</b>	<b>136</b>
Benefits paid	-46	-5	-51	46	5	51	-
Settlements	-1	-	-1	2	-	2	1
Contributions by the employer	-	-	-	-33	-3	-36	-36
Contributions by the plan participants	-	-	-	-	-2	-2	-2
Companies sold (Note 5)	-20	-	-20	-	-	-	-20
Translation differences	7	-	7	-5	-	-5	2
At 31 Dec. 2012	1,296	31	1,327	-659	-	-659	668

**The significant weighted actuarial assumptions used as at 31 December**

	Finland		Germany		UK		Other countries	
	2013	2012	2013	2012	2013	2012	2013	2012
Discount rate %	2.95	2.50	2.95	2.50	4.50	4.65	3.62	3.02
Inflation rate %	2.00	2.00	2.00	2.00	2.25	2.35	2.05	2.05
Rate of salary increase %	2.50	3.00	2.50	2.50	N/A	N/A	2.63	2.64
Rate of pension increase %	2.26	2.26	2.00	2.00	3.25	3.20	1.10	1.09
Expected average remaining working years of participants	10.3	11.2	12.6	12.5	12.0	13.0	9.1	8.7

**The sensitivity analysis of the defined benefit obligation to changes in the significant weighted assumptions**

	Change in assumption	Impact on defined benefit obligation	
		Increase in assumption	Decrease in assumption
Discount rate %	0.5%	Decrease by 7.3%	Increase by 8.5%
Rate of salary increase %	0.5%	Increase by 1.1%	Decrease by 0.9%
Rate of pension increase %	0.5%	Increase by 4.5%	Decrease by 4.0%
Life expectancy	Increase by 1 year	Increase by 3.3%	-

The weighted average duration of defined benefit obligation is 16.7 years.

The above analyses assume that assumption changes occur in isolation, holding all other assumptions constant. The same method (projected unit method) has been applied when calculating the pension liability as well as these sensitivities.

**The main categories of pension and other post-employment benefit plan assets**

	2013			2012		
	Quoted %	Unquoted %	Total %	Quoted %	Unquoted %	Total %
<b>Money market</b>						
Europe	2	-	2	-	-	-
<b>Debt instruments</b>						
Europe	29	-	29	31	-	31
US	2	-	2	-	-	-
Other	3	-	3	4	-	4
<b>Equity instruments</b>						
Europe	14	-	14	19	-	19
US	12	-	12	9	-	9
Other	31	-	31	29	-	29
<b>Property</b>						
Europe	-	7	7	-	8	8
<b>Total</b>	<b>93</b>	<b>7</b>	<b>100</b>	<b>92</b>	<b>8</b>	<b>100</b>

In Finland, plan assets include the company's ordinary shares with a fair value of EUR 0.7 million (0.5 million). In 2014 contributions to the Group's defined pension plans are expected to be EUR 31 million and to other post-employment plans EUR 3 million.

**Main risk areas related to defined benefit plans**

The main risks related to the Group's defined benefit plans are changes in discount rate, asset volatility, inflation, changes in salaries and longevity of the beneficiaries.

**Discount rates**

The discount rates are based on corporate bond yields as at reporting date. A decrease in yields increases the defined benefit obligation. The decrease of 0.5% in discount rate would increase Group's defined benefit obligation by EUR 108 million.

**Asset volatility**

The Group is exposed to changes of assets' values especially in the investments of the foundations and schemes in Finland and in the UK. The asset values of these arrangements constitute 90% of total asset values in defined benefit plans within Group.

**Inflation risk**

In Finland, the plan's benefits in payment are tied to TyEL index which depends 80% on inflation and 20% on common salary index. Higher inflation increases the TyEL index which increases the employer's pay-

ments to the pooling system. Index increments do not increase directly the plan's liabilities as they are covered through the pooling system.

In the UK the pensions in payment are tied to Retail Price Index whilst being tied to Consumer Price Index during deferment. An increase of 0.5% in indexes will increase the liabilities by some EUR 26 million.

In Germany the pensions have to be adjusted in accordance with the Consumer Price Index.

**Salary risk**

In Finland the salary risk is only related to 8% of employees that are insured through TyEL foundation.

As all UK defined benefit arrangements are closed to future accrual, changes in salary levels have no impact on the funding position.

In Germany the salaries affect directly to benefit cost in part of the plans and to part of the plans salary changes have no impact.

**Life expectancy**

Adjustments in mortality assumption have an impact on Group's defined benefit obligation. An increase in life expectancy by one year will increase liabilities in Finland of EUR 11 million, in the UK of EUR 10 million and in Germany of EUR 17 million.

**30 Provisions**

EURm	Restructuring provisions	Termination provisions	Environmental provisions	Emission rights provision	Other provisions	Total
At 1 Jan. 2013	73	84	25	10	15	207
Additional provisions and increases to existing provisions	19	81	-	8	7	115
Reclassification	-3	3	-	-	-	-
Utilised during year	-25	-62	-3	-9	-3	-102
Unused amounts reversed	-14	-13	-2	-	-2	-31
At 31 Dec. 2013	50	93	20	9	17	189
At 1 Jan. 2012	147	118	23	15	23	326
Additional provisions and increases to existing provisions	36	55	7	8	6	112
Companies sold	-31	-	-1	-	-	-32
Reclassification	-2	2	-	-	-	-
Utilised during year	-72	-88	-4	-12	-11	-187
Unused amounts reversed	-5	-3	-	-1	-3	-12
At 31 Dec. 2012	73	84	25	10	15	207

**Provisions**

Restructuring provisions include charges related primarily to mill closures. Termination provisions are concerned with operational restructuring primarily in Germany, Finland and France. In Finland provisions include also unemployment arrangements and disability pensions.

Unemployment pension provisions are recognised 2-3 years before the granting and settlement of the pension.

In 2013, additions in provisions are mainly related to restructuring of UPM Docelles mill and closures of paper machines Rauma PM3 and Ettringen PM4 in UPM Paper ENA segment and the restructuring in the UPM Raffatac segment. In addition, provisions were recognised due to the streamlining of global functions and other actions under UPM's profit improvement programme.

In 2012, additions in provisions relate mainly to the closure of the Stracel paper mill in France and restructuring of UPM Paper ENA segment, and to the restructuring of sawmill and further processing operations in Finland.

Environmental provisions include expenses relating to closed mills and the remediation of industrial landfills.

The company takes part in government programmes aimed at reducing greenhouse gas emissions. In 2013, the Group has recognised provisions amounting to EUR 9 million (10 million) to cover the obligation to return emission rights. The company possesses emission rights worth EUR 11 million (25 million) as intangible assets and has recognised current receivables of EUR 14 million due to the delayed distribution of 2013 emission rights.

**Allocation between non-current and current provisions**

EURm	As at 31 December	
	2013	2012
Non-current provisions	83	100
Current provisions	106	107
<b>Total</b>	<b>189</b>	<b>207</b>

**31 Interest-bearing liabilities**

EURm	As at 31 December	
	2013	2012
<b>Non-current interest-bearing liabilities</b>		
Bonds	955	1,492
Loans from financial institutions	1,655	1,178
Pension loans	323	414
Finance lease liabilities	270	310
Derivative financial instruments	100	106
Other loans	171	214
Other liabilities	11	10
	<b>3,485</b>	<b>3,724</b>

**Current interest-bearing liabilities**

Current portion of non-current liabilities	512	269
Derivative financial instruments	82	33
Other liabilities <sup>1)</sup>	49	115
	<b>643</b>	<b>417</b>
<b>Total interest-bearing liabilities</b>	<b>4,128</b>	<b>4,141</b>

<sup>1)</sup> In 2012, includes issued commercial papers of EUR 75 million.



## 34 Financial instruments by category

2013 EURm Balance sheet item	Financial assets/ liabilities at fair value through profit or loss	Loans and receivables	Available for sale financial assets	Derivatives used for hedging	Financial liabilities measured at amortised cost	Carrying amounts by balance sheet item	Fair values	Note
<b>Non-current financial assets</b>								
Available-for-sale investments	-	-	2,661	-	-	2,661	2,661	22
Non-current financial assets								
Loan receivables	-	43	-	-	-	43	43	23
Derivative financial instruments	3	-	-	236	-	239	239	23
						282	282	23
<b>Current financial assets</b>								
Trade and other receivables								
Trade and other receivables	-	1,568	-	-	-	1,568	1,568	26
Prepayments and accrued income	-	154	-	-	-	154	154	26
Derivative financial instruments	54	-	-	172	-	226	226	26
						1,948	1,948	
Carrying amount by category	57	1,765	2,661	408	-	4,891	4,891	
<b>Non-current financial liabilities</b>								
Non-current interest-bearing liabilities								
Non-current interest-bearing liabilities								
Derivative financial instruments	75	-	-	25	3,385	100	100	31
						3,485	3,589	31
Other liabilities								
Other liabilities	-	-	-	-	98	98	98	32
Derivative financial instruments	7	-	-	59	-	66	66	32
						164	164	32
<b>Current financial liabilities</b>								
Current interest-bearing liabilities								
Interest-bearing liabilities								
Derivative financial instruments	82	-	-	-	561	82	82	31
						643	643	31
Trade and other payables								
Trade and other payables	-	-	-	-	920	920	920	33
Accrued expenses and deferred income	-	-	-	-	414	414	414	33
Derivative financial instruments	22	-	-	63	-	85	85	33
						1,419	1,419	
Carrying amount by category	186	-	-	147	5,378	5,711	5,815	

2012 EURm Balance sheet item	Financial assets/ liabilities at fair value through profit or loss	Loans and receivables	Available for sale financial assets	Derivatives used for hedging	Financial liabilities measured at amortised cost	Carrying amounts by balance sheet item	Fair values	Note
<b>Non-current financial assets</b>								
Available-for-sale investments	-	-	2,587	-	-	2,587	2,587	22
Non-current financial assets								
Loan receivables	-	49	-	-	-	49	49	23
Derivative financial instruments	4	-	-	388	-	392	392	23
						3,028	3,028	23
<b>Current financial assets</b>								
Trade and other receivables								
Trade and other receivables	-	1,655	-	-	-	1,655	1,655	26
Prepayments and accrued income	-	131	-	-	-	131	131	26
Derivative financial instruments	89	-	-	107	-	196	196	26
						1,982	1,982	
Carrying amount by category	93	1,835	2,587	495	-	5,010	5,010	
<b>Non-current financial liabilities</b>								
Non-current interest-bearing liabilities								
Non-current interest-bearing liabilities								
Derivative financial instruments	82	-	-	24	3,618	106	106	31
						3,724	3,451	31
Other liabilities								
Other liabilities	-	-	-	-	89	89	89	32
Derivative financial instruments	6	-	-	47	-	53	53	32
						142	142	32
<b>Current financial liabilities</b>								
Current interest-bearing liabilities								
Interest-bearing liabilities								
Derivative financial instruments	33	-	-	-	384	33	33	31
						417	417	31
Trade and other payables								
Trade and other payables	-	-	-	-	1,078	1,078	1,078	33
Accrued expenses and deferred income	-	-	-	-	440	440	440	33
Derivative financial instruments	15	-	-	33	-	48	48	33
						1,566	1,566	
Carrying amount by category	136	-	-	104	5,609	5,849	5,576	

Fair values of long-term loans, have been estimated as follows:

The fair value of quoted bonds is based on the quoted market value as of 31 December. The fair value of fixed rate and market-based floating rate loans is estimated using the expected future payments discounted at market interest rates.

The carrying amounts of current financial assets and liabilities approximate their fair value.



## 38 Related party transactions

### The Board of Directors and the Group Executive Team

There have not been any material transactions between UPM and its members of the Board of Directors or the Group Executive Team (key management personnel) or persons closely associated with these members or organisations in which these individuals have control or significant influence. There are no loans granted to any members of the Board of Directors or the Group Executive Team at 31 December 2013 and 2012. Shares and share options held by members of the Board of Directors and members of the Group Executive Team are disclosed in pages 56 and 59. Remuneration to members of the Board of Directors and the Group Executive Team are disclosed in Note 7.

### Associated companies and joint ventures

The Group's recovered paper purchases in 2013 from associated companies and joint ventures were close to 610,000 tonnes (590,000 tonnes). In Finland, the Group organises its producer's responsibility of recovered paper collection through Paperinkeräys Oy, in which the Group has 33.1% interest. Austria Papier Recycling G.m.b.H purchases recovered paper in Austria, in which the Group has a 33.3% equity interest. LCI s.r.l. is an Italian recovered paper purchasing company in which the Group has a 50.0% interest. The purchases from those three companies represented approximately 64% (75%) of total recovered papers purchase amount from associated companies and joint ventures. Recovered paper purchases are based on market prices.

The balances with the Group's associated companies and joint ventures are presented in Note 21.

### Pension Funds

In Finland, UPM has a pension foundation, Kymin Eläkesäätiö, which is a separate legal entity. Pensions for about 8% of the Group's Finnish employees are arranged through the foundation. In 2013 the contributions paid by UPM to the foundation amounted to EUR 11 million (11 million). The foundation manages and invests the contributions paid to the plan. The fair value of the foundation's assets at 31 December 2013 was EUR 337 million (300 million), of which 51% was in the form of equity instruments, 37% in the form of debt instruments and 12% invested in property and money market.

In the UK, all UPM Pension Schemes now operate under a single Trust which is independent from the Company. The Trust consists of various Defined Benefit sections, all of which are closed to future accrual and one common Defined Contribution section which is open to all UPM employees in the UK. The Group made contributions of EUR 5 million (5 million) to the Defined Benefit sections of the Scheme in 2013 and following completion of the triennial Actuarial Valuation in April 2013 has agreed to an increase in annual contributions from EUR 5 million to EUR 6 million per annum with effect from March 2014. The next UK actuarial valuation will be in April 2016. The fair value of the UK Defined Benefit fund assets at 31 December 2013 was EUR 305 million (288 million), of which 66% was invested in equity instruments, 28% in debt instruments and 6% in property and money market.

### Subsidiaries and joint operations

The Group's principal subsidiaries and joint operations are disclosed in Note 36.

## 39 Commitments and contingencies

### Contingent liabilities

The Group is a defendant or plaintiff in a number of legal proceedings incidental to its operations. These lawsuits primarily involve claims arising from commercial law issues.

On 31 March 2011, Metsähallitus (a Finnish state enterprise which administers state-owned land) filed a claim for damages against UPM and two other Finnish forest companies. The claim relates to the Finnish Market Court decision of 3 December 2009 whereby the defendants were deemed to have breached competition rules in the Finnish round-wood market. In addition to Metsähallitus, individuals and companies, as well as municipalities and parishes, have filed claims relating to the Market Court decision. The capital amount of all of the claims total EUR 208 million in the aggregate jointly and severally against UPM and two other companies; alternatively and individually against UPM, this represents EUR 38 million in the aggregate. In addition to the claims on capital amounts, the claimants are also requesting compensation relating to value added tax and interests. UPM considers all the claims unfounded in their entirety. No provision has been made in UPM's accounts for any of these claims.

In November 2012, UPM commenced arbitration proceedings against Metsäliitto Cooperative and Metsä Board Corporation due to their breaches of UPM's tag-along rights under the shareholders' agreement concerning Metsä Fibre Oy in connection with the sale of the shares in Metsä Fibre to Itochu Corporation. UPM claims jointly from Metsäliitto and Metsä Board a capital amount of EUR 58.5 million in damages. Metsäliitto and Metsä Board sold a 24.9% holding in Metsä Fibre to Itochu Corporation for EUR 472 million. In connection with the transaction with Itochu, Metsäliitto exercised a call option to purchase UPM's remaining 11% ownership in Metsä Fibre for EUR 150 million. The arbitral tribunal is expected to render its final decision during Q1 2014. No receivables have been recorded by UPM on the basis of claims presented in the arbitration proceedings.

Neste Oil Oyj, a Finnish company producing traffic fuels (Neste), has filed an action for declaratory judgment against UPM in June 2013 in the Helsinki District Court. Neste seeks a declaration from the court that Neste enjoys protection on the basis of its patent against the technology that Neste alleges UPM intends to use at the biorefinery which is being constructed at UPM's Kaukas mill site. The said action relates to the same Neste patent concerning which UPM has filed an invalidation claim in December 2012. The invalidation claim was filed as a procedural precautionary measure to avoid unfounded legal processes. UPM considers Neste's action to be without merit.

In Finland, UPM is participating in a project to construct a new nuclear power plant unit (Olkiluoto 3) through its shareholdings in Pohjolan Voima Oy. Pohjolan Voima Oy is a majority shareholder of Teollisuuden Voima Oyj (TVO), holding 58.47% of its shares. UPM's indirect share of Olkiluoto 3 is approximately 31%. Originally the commercial electricity production of the Olkiluoto 3 plant was scheduled to start at the end of April 2009. The completion of the project, however, has been delayed. Based on the progress reports received from the AREVA-Siemens Consortium (Supplier), which is constructing Olkiluoto 3 under a fixed-price turnkey contract, TVO has announced that it will prepare for the possibility that the start of regular electricity production may be postponed until the year 2016. The Supplier is responsible for the schedule. In December 2008, the Supplier initiated arbitration proceedings before an International Chamber of Commerce (ICC) arbitration tribunal in relation to the delay of Olkiluoto 3 and related costs. At the end of 2013, the Supplier submitted its updated claim to the ICC arbitration proceedings concerning the delay of the project and the ensuing costs. The updated quantification until the end of June 2011, together with the earlier claim, is in total approximately EUR 2.7 billion. Among other things, the sum includes approximately EUR 70 million of payments delayed by TVO under the plant contract as well as approximately EUR

700 million of penalty interest and approximately EUR 120 million of alleged loss of profit. The Supplier's previous monetary claim was approximately EUR 1.9 billion. TVO has considered and found the earlier claim by the Supplier to be unfounded and without merit. TVO will scrutinise the new material and respond to it in due course. TVO has submitted a claim and defence in the arbitration proceedings concerning the delay and the ensuing costs incurred in the Olkiluoto 3 project. The quantification estimate of TVO's costs and losses in the claim that TVO submitted in the arbitration in September 2012 was approximately EUR 1.8 billion, which included TVO's actual claim and estimated part. The arbitration proceedings may continue for several years, and the claimed and counter-claimed amounts may change. No receivables or provisions have been recorded by TVO on the basis of claims presented in the arbitration proceedings.

### Commitments

In the normal course of business, UPM enters into various agreements providing financial or performance assurance to third parties. The maximum amounts of future payments for which UPM is liable is disclosed in the table below under "Other commitments".

The Group has also entered into various agreements to provide financial or performance assurance to third parties on behalf of certain companies in which the Group has a non-controlling interest. These agreements are entered into primarily to support or enhance the creditworthiness of these companies. The Group has no collateral or other recourse provisions related to these guarantees. The maximum amounts of future payments by UPM on behalf of its associated companies under these guarantees are disclosed in the table below under "Guarantees on behalf of associated companies". It is the Group's policy not to give guarantees on behalf of third parties.

### Commitments

EURm	As at 31 December	
	2013	2012
<b>On own behalf</b>		
Mortgages and pledges	357	570
<b>On behalf of others</b>		
Guarantees	5	5
<b>Other commitments, own</b>		
Operating leases, due within 12 months	57	57
Operating leases, due after 12 months	339	365
Other commitments	141	123
<b>Total</b>	<b>899</b>	<b>1,120</b>
<b>Mortgages and pledges</b>	<b>357</b>	<b>570</b>
<b>Guarantees</b>	<b>5</b>	<b>5</b>
<b>Operating leases</b>	<b>396</b>	<b>422</b>
<b>Other commitments</b>	<b>141</b>	<b>123</b>
<b>Total</b>	<b>899</b>	<b>1,120</b>

Property under mortgages given as collateral for own commitments include property, plant and equipment, industrial estates and forest land.

In addition, UPM has committed to participate in the share issue from Pohjolan Voima Oy to finance the Olkiluoto 3 nuclear power plant project. UPM's total commitment of the share issue is EUR 119 million, of which EUR 31 million was paid in Q2 2013. The remaining part of the share issue will be implemented during the coming years based on the financing needs of the project.

### Operating lease commitments, where a Group company is the lessee

The Group leases office, manufacturing and warehouse space through various non-cancellable operating leases. Certain contracts contain renewal options for various periods of time.

### The future aggregate minimum lease payments under non-cancellable operating lease contracts

EURm	As at 31 December	
	2013	2012
No later than 1 year	57	57
1-2 years	42	45
2-3 years	35	37
3-4 years	31	32
4-5 years	29	29
Later than 5 years	202	222
<b>Total</b>	<b>396</b>	<b>422</b>

### Capital commitments at the balance sheet date but not recognised in the financial statements; major commitments under construction listed below

EURm	Commitment		
	Total cost	as at 31 December 2013	2012
Changshu PM3	390	381	388
Biorefinery/Kaukas	150	27	123
Power plant/Schongau	85	40	74
Modernisation of fibreline/Pietarsaari	13	11	-

## 40 Events after the balance sheet date

On 22 January 2014, UPM announced that it will permanently close down the UPM Docelles paper mill in France. The production ceased by the end of January. Employee information and consultation negotiations were completed on 13 December 2013 and the Social Plan was approved by the French authorities on 13 January 2014.

Docelles mill employed 161 people and produced 160,000 tonnes of uncoated woodfree papers annually. Charges of EUR 25 million have been recognised related to the restructuring of the mill in Q4 2013.









# Information on shares

## Changes in number of shares 1 January 2009 – 31 December 2013

	Number of shares
<b>2008</b>	
Number of shares at 31 Dec. 2008	519,970,088
<b>2009</b>	
Options exercised	–
Number of shares at 31 Dec. 2009	519,970,088
<b>2010</b>	
Options exercised	–
Number of shares at 31 Dec. 2010	519,970,088
<b>2011</b>	
Share issue	5,000,000
Options exercised	2,750
Number of shares at 31 Dec. 2011	524,972,838
<b>2012</b>	
Options exercised	1,151,572
Number of shares at 31 Dec. 2012	526,124,410
<b>2013</b>	
Options exercised	3,177,487
Number of shares at 31 Dec. 2013	529,301,897

### Stock exchange trading

UPM's shares are listed on NASDAQ OMX Helsinki Ltd. The company's ADSs are traded on the U.S. over-the-counter (OTC) market under a Level 1 sponsored American Depositary Receipt programme.

A total of 563.4 million UPM-Kymmene Corporation shares were traded on the Helsinki stock exchange in 2013 (601.0 million). This represented 106.7% (114.4%) of the total number of shares. The highest quotation was EUR 13.02 in November and the lowest EUR 7.30 in June. The total value of shares traded in 2013 was EUR 5,308 million (5,534 million).

During the year, 2.9 million 2007B share options were traded for EUR 8.2 million (3.3 million, EUR 9.5 million) and 5.4 million 2007C share options were traded for EUR 6.1 million (0.2 million, EUR 0.1 million).

### Treasury shares

As at 31 December 2013, the company held 230,737 (230,737) of its own shares, 0.04% (0.04%) of the total number of shares. Of these shares 211,481 were returned upon their issue to UPM without consideration as part of Myllykoski transaction and 19,256 shares in accordance with the Group's share reward scheme due to the termination of employment contracts.

### Shares and options held by the Board of Directors and the Group Executive Team

At the end of the year, the members of the Board of Directors including President and CEO owned a total of 946,727 (896,192 ) UPM-Kymmene Corporation shares, including shares held by persons closely associated with him or her or by organisations of which the person has control. These represent 0.18% (0.17%) of the shares and 0.18% (0.17%) of the voting rights. At the end of the year, President and CEO Jussi Pesonen owned 195,294 shares and 200,000 share options. Exercise of these options would increase the number of the company's shares by 200,000, which at 31 December 2013 would have represented 0.04% of the company's shares and voting rights.

At the end of the year, the other members of the Group Executive Team owned a total of 249,278 shares and 245,875 share options. Exercise of these options would increase the number of the company's shares by 245,875 which at 31 December 2013 would have represented 0.05% of the company's shares and voting rights.

## Biggest registered shareholders at 31 December 2013

	Shares at 31 December 2013	% of shares	% of votes
Varma Mutual Pension Insurance Company	11,574,488	2.19	2.19
Ilmarinen Mutual Pension Insurance Company	10,369,552	1.96	1.96
Mandatum Life Insurance Company	9,531,219	1.80	1.80
The State Pension Fund	4,730,000	0.89	0.89
The Local Government Pensions Institution	4,521,794	0.85	0.85
Svenska litteratursällskapet i Finland	3,868,600	0.73	0.73
Pension Fennia	3,450,600	0.65	0.65
Swiss National Bank	3,318,495	0.63	0.63
Etera Mutual Pension Insurance Company	2,658,612	0.50	0.50
Skagen Global Verdipapirfond	1,796,493	0.34	0.34
Nominees & registered foreign owners	320,089,242	60.47	60.47
Others	153,392,902	28.99	28.99
<b>Total</b>	<b>529,301,897</b>	<b>100.00</b>	<b>100.00</b>

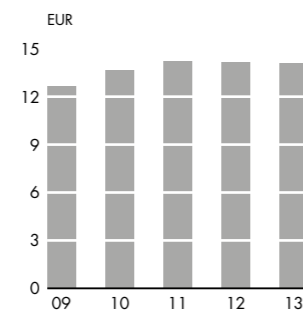
During 2013, the company received the following notifications of changes in holdings pursuant to Chapter 9, Section 10 of the Securities Market Act: UPM has received an announcement according to which BlackRock Inc.'s indirect holding in UPM has fallen below the threshold of 5% of UPM's shares and voting rights on 15 February 2013. UPM has received an announcement according to which BlackRock Inc.'s indirect holding in UPM has gone above the threshold of 5% on 21 February 2013. UPM has received an announcement according to which BlackRock Inc.'s indirect holding in UPM has fallen below the threshold of 5% on 25 February 2013. UPM has received an announcement according to which BlackRock Inc.'s indirect holding in UPM has gone above the threshold of 5% on 27 February 2013. UPM has received an announcement according to which BlackRock Inc.'s indirect holding in UPM has fallen below the threshold of 5% on 28 February 2013. UPM has received an announcement according to which BlackRock Inc.'s indirect holding in UPM has gone above the threshold of 5% on 5 March 2013. UPM has received an announcement according to which BlackRock Inc.'s indirect holding in UPM has fallen below the threshold of 5% on 19 March 2013. UPM has received an announcement according to which Norges Bank's (The Central Bank of Norway) holding in UPM has fallen below the threshold of 5% on 4 April 2013 after a share

lending transaction where Norges Bank is the lender. UPM has received an announcement according to which BlackRock Inc.'s indirect holding in UPM has gone above the threshold of 5% on 9 April 2013. UPM has received an announcement according to which Norges Bank's holding in UPM has exceeded the threshold of 5% on 12 April 2013 after a share lending transaction where Norges Bank is the lender. UPM has received an announcement according to which BlackRock, Inc.'s indirect holding in UPM has gone below the threshold of 5% on 16 April 2013. UPM has received an announcement according to which BlackRock, Inc.'s indirect holding in UPM has gone above the threshold of 5% on 17 April 2013. UPM has received an announcement according to which BlackRock, Inc.'s indirect holding in UPM has gone below the threshold of 5% on 10 May 2013. UPM has received an announcement according to which BlackRock, Inc.'s indirect holding in UPM has gone above the threshold of 5% on 18 June 2013. UPM has received an announcement according to which BlackRock, Inc.'s indirect holding in UPM has gone below the threshold of 5% on 19 July 2013. UPM has received an announcement according to which JPMorgan Chase & Co.'s indirect holding in UPM has exceeded the threshold of 5% on 5 November 2013.

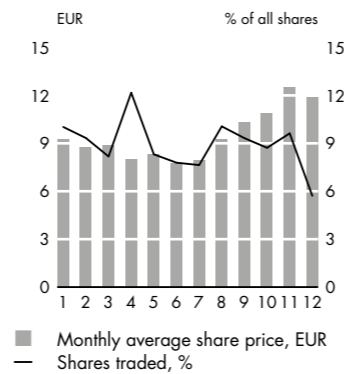
Share price in 2013



Equity per share



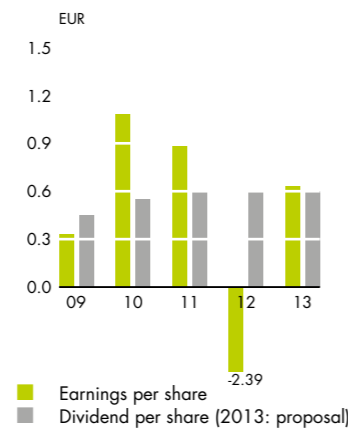
Monthly average share price and shares traded 1-12/2013



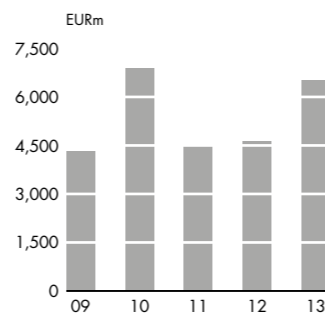
UPM share price 2009-2013 compared with indices



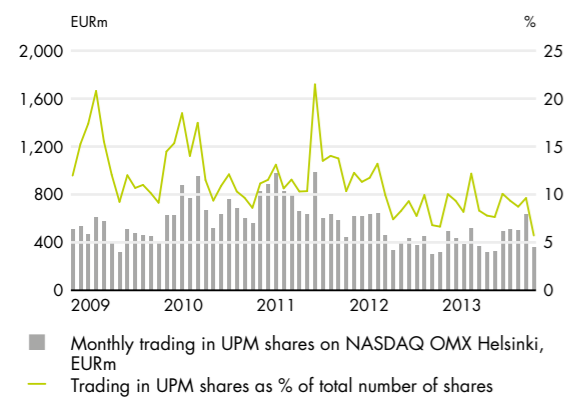
Earning and dividend per share



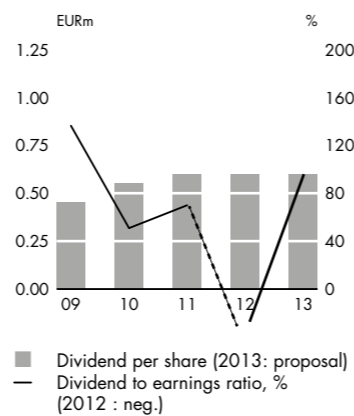
Market capitalisation



Shares traded on Helsinki stock exchange 2009-2013



Dividend per share (EUR) and dividend to earnings ratio (%)



Distribution of shareholders at 31 December 2013

Size of shareholding	Number of shareholders	% of shareholders	Number of shares, million	% of shares
1 - 100	20,697	21.89	1.3	0.2
101 - 1,000	53,247	56.30	22.7	4.3
1,001 - 10,000	18,928	20.02	52.4	9.9
10,001 - 100,000	1,531	1.62	36.5	6.9
100,001 -	165	0.17	106.8	20.2
<b>Total</b>	<b>94,568</b>	<b>100.00</b>	<b>219.7</b>	<b>41.5</b>
Nominee-registered			309.4	58.5
Not registered as book entry units			0.2	0.0
<b>Total</b>			<b>529.3</b>	<b>100.0</b>

Shareholder breakdown by sector at 31 December, %

	2013	2012	2011	2010	2009
Companies	3.2	4.3	4.2	4.1	3.8
Financial institutions and insurance companies	4.1	5.4	6.5	5.1	4.6
Public bodies	7.8	7.9	11.3	9.8	8.5
Non-profit organisations	5.7	6.2	6.3	6.4	6.3
Households	18.7	19.9	19.9	18.4	17.5
Non-Finnish nationals	60.5	56.3	51.8	56.2	59.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

UPM's share option programmes

Options	Number of options	Number of shares	Exercise price per share		Subscription period	Options exercised 2013
			at date of issue EUR	at 31 Dec. 2013 EUR		
2007C	5,000,000	5,000,000	10.49	10.49	1.10.2012-31.10.2014	1,500

Charts in this page are unaudited.





# Auditor's report (Translation from the Finnish Original)

To the Annual General Meeting of UPM-Kymmene Corporation

We have audited the accounting records, the financial statements, the report of the Board of Directors and the administration of UPM-Kymmene Corporation for the year ended 31 December, 2013. The financial statements comprise the consolidated statement of financial position, income statement, statement of comprehensive income, statement of changes in equity and statement of cash flows, and notes to the consolidated financial statements, as well as the parent company's balance sheet, income statement, cash flow statement and notes to the financial statements.

## Responsibility of the Board of Directors and the Managing Director

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, as well as for the preparation of financial statements and the report of the Board of Directors that give a true and fair view in accordance with the laws and regulations governing the preparation of the financial statements and the report of the Board of Directors in Finland. The Board of Directors is responsible for the appropriate arrangement of the control of the company's accounts and finances, and the Managing Director shall see to it that the accounts of the company are in compliance with the law and that its financial affairs have been arranged in a reliable manner.

## Auditor's Responsibility

Our responsibility is to express an opinion on the financial statements, on the consolidated financial statements and on the report of the Board of Directors based on our audit. The Auditing Act requires that we comply with the requirements of professional ethics. We conducted our audit in accordance with good auditing practice in Finland. Good auditing practice requires that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and the report of the Board of Directors are free from material misstatement, and whether the members of the Board of Directors of the parent company or the Managing Director are guilty of an act or negligence which may result in liability in damages towards the company or whether they have violated the Limited Liability Companies Act or the articles of association of the company.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements and the report of the Board of Directors. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of financial statements and report of the Board of Directors that give a true and fair view 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 company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements and the report of the Board of Directors.

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

## Opinion on the Consolidated Financial Statements

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

## Opinion on the Company's Financial Statements and the Report of the Board of Directors

In our opinion, the financial statements and the report of the Board of Directors give a true and fair view of both the consolidated and the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of the financial statements and the report of the Board of Directors in Finland. The information in the report of the Board of Directors is consistent with the information in the financial statements.

## 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 profit shown in the balance sheet is in compliance with the Limited Liability Companies Act. We support that the Members of the Board of Directors and the Managing Director of the parent company should be discharged from liability for the financial period audited by us.

Helsinki 14 February 2014

**PricewaterhouseCoopers Oy**  
Authorised Public Accountants

*Juha Wahlroos*  
Authorised Public Accountant

# Corporate Governance Statement 2013

UPM complies with all recommendations of the Finnish Corporate Governance Code issued by the Securities Market Association, which entered into force on 1 October 2010 and which is publicly available on the Securities Market Association's website [www.cgfinland.fi](http://www.cgfinland.fi).

UPM-Kymmene Corporation's Corporate Governance Statement for the financial year 2013 has been prepared in accordance with Recommendation 54 of the Finnish Corporate Governance Code. UPM presents the statement as a separate report, distinct from the Report of the Board of Directors. The statement is available on the corporate website [www.upm.com](http://www.upm.com) in the Investors section under Governance. The Report of the Board of Directors is presented on pages 67–77 of UPM's Annual Report 2013, which is also available on the corporate website.

## Composition of the Board of Directors

The company's Board of Directors is composed of at least five but no more than twelve Directors elected by the Annual General Meeting. On 31 December 2013, the company's Board of Directors comprised the following ten members, elected by the Annual General Meeting held on 4 April 2013:

Director	Director since	Born	Education	Nationality	Independence*	Main occupation
Björn Wahlroos, Chairman	2008, Chairman since 2008	1952	Ph.D. (Econ.)	Finnish	Independent of the company and significant shareholders	Chairman of the Board of Directors of Sampo Plc
Berndt Brunow, Deputy Chairman	2002, Deputy Chairman since 2005	1950	B.Sc. (Econ.)	Finnish	Independent of the company and significant shareholders	Chairman of the Board of Directors of Oy Karl Fazer Ab
Matti Alahuhta	2008	1952	D.Sc. (Eng.)	Finnish	Independent of the company and significant shareholders	President and CEO of KONE Corporation
Karl Grotenfelt	2004	1944	LL.M.	Finnish	Independent of the company and significant shareholders	Chairman of the Board of Directors of Famigro Oy
Piia-Noora Kauppi	2013	1975	LL.M.	Finnish	Independent of the company and significant shareholders	Managing Director of the Federation of Finnish Financial Services
Wendy E. Lane	2005	1951	MBA (Harvard Graduate School of Business Administration)	US	Independent of the company and significant shareholders	Chairman of the Board of Directors of Lane Holdings, Inc.
Jussi Pesonen	2007	1960	M.Sc. (Eng.)	Finnish	Non-independent of the company, independent of significant shareholders	President and CEO of UPM-Kymmene Corporation
Ursula Ranin	2006	1953	LL.M., B.Sc. (Econ.)	Finnish	Independent of the company and significant shareholders	Counsel
Veli-Matti Reinikkala	2007	1957	eMBA	Finnish	Independent of the company and significant shareholders	President of ABB Process Automation Division
Kim Wahl	2012	1960	MBA, B.A., (Business Economics)	Norwegian	Independent of the company and significant shareholders	Chairman of the Board of Directors of Stromstangen AS

\*1 The independence of Directors has been determined based on the independence criteria of the Finnish Corporate Governance Code.

This is UPM-Kymmene Corporation's Corporate Governance Statement for the financial year 2013. The statement has been reviewed by UPM's Audit Committee and PricewaterhouseCoopers Oy, UPM's auditor, has checked that the statement has been issued and that the description of the main features of the internal control and risk management systems relating to the financial reporting process is consistent with the Financial Statements. A more comprehensive description of the company's corporate governance is presented on pages 54–64 of UPM's Annual Report 2013.

## Board responsibilities

The duties and responsibilities of the Board of Directors and its committees are defined in the Board and Committee Charters. The Board of Directors reviewed the Charters during 2013. This review resulted in the clarification of committee duties and responsibilities and the division of these duties and responsibilities between the committees. The amended Charters are available on the corporate website [www.upm.com](http://www.upm.com) in the Investors section under Governance.

Pursuant to its Charter, the Board of Directors handles all matters pertaining to its area of responsibility under Finnish law. Under the Finnish Companies Act, the Board of Directors is responsible for the appropriate arrangement of control of the company's accounts and finances. Further responsibilities of the Board of Directors include:

- Evaluating and approving the company's strategic direction
- Approving the strategic plans of the company and its business areas and evaluating the implementation of such plans
- Reviewing and approving financial objectives and major corporate plans and transactions
- Establishing acceptance limits for capital expenditures, investments, divestitures and financial commitments
- Overseeing strategic and operational risk management and internal control
- Appointing the President and CEO and members of the Group Executive Team, and approving their compensation
- Determining the dividend policy and presenting a proposal for payment of the dividend to the Annual General Meeting

The Board held nine meetings in 2013. On average, the Directors attended 97.8% of the meetings.

**BOARD OF DIRECTORS' COMMITTEES 2013**

Committees	Audit Committee	Remuneration Committee	Nomination and Governance Committee
Members	Karl Grotenfelt (Ch.) Pia-Noora Kauppi (as of 4 April) Wendy E. Lane Kim Wahl	Berndt Brunow (Ch.) Ursula Ranin Veli-Matti Reinikkala	Björn Wahlroos (Ch.) Matti Alahuhta Karl Grotenfelt
Number of meetings	5	6	4
Attendance-%	95	100	100

**Composition and responsibilities of the committees of the Board of Directors**

The Board of Directors has established three committees composed of its members: the Audit Committee, the Remuneration Committee (previously the Human Resources Committee) and the Nomination and Governance Committee (previously the Nomination and Corporate Governance Committee).

The table above contains information on the composition, number of meetings and attendance for each of the committees in 2013.

**Audit Committee**

The Board has defined the duties of the Audit Committee in accordance with Recommendation 27 of the Finnish Corporate Governance Code.

According to the Audit Committee Charter, desirable qualifications for committee members include an appropriate understanding of accounting practices and financial reporting, which may have been gained through education or experience in performing or overseeing related functions. The expertise and qualifications of Audit Committee members are assessed annually by the Nomination and Governance Committee prior to making its recommendation to the Board for the appointment of committee members.

Pursuant to its amended charter, the primary purposes of the Audit Committee are: to oversee the accounting and financial reporting processes; monitor the statutory audits of the financial statements; and assist the Board of Directors in overseeing matters pertaining to financial reporting, internal control and risk management.

Further responsibilities include:

- Monitoring the effectiveness of internal control, internal audit and risk management systems
- Evaluating the qualifications and independence of the statutory auditor
- Preparing the proposal for the election of the statutory auditor
- Evaluating the performance of the internal audit
- Reviewing compliance with legal and regulatory requirements and with the company's Code of Conduct

**Remuneration Committee**

Pursuant to its amended charter, the primary purposes of the Remuneration Committee are: to assist the Board of Directors in the assessment and remuneration of the President and CEO and other members of the senior management reporting directly to the President and CEO; to oversee the company's remuneration policies, compensation plans and programmes; and to review procedures for appropriate succession planning for senior management.

**Nomination and Governance Committee**

Pursuant to its amended charter, the primary purposes of the Nomination and Governance Committee are to identify individuals qualified to serve as directors and to prepare a proposal to the Annual General Meeting regarding the election or re-election of the members of the Board of Directors and their remuneration. The committee is also responsible for identifying individuals qualified to serve as the President and CEO, and to develop and recommend a set of corporate governance principles (i.e. Board Charter) to the Board of Directors, and review the general corporate governance of the company.

The Committee also assists the Board in monitoring compliance with the independence requirements applicable to directors of publicly listed companies in Finland, and in the assessment of the directors' ability to devote the necessary time and attention to the company. In addition, the committee annually reviews the independence and qualifications of committee members.

**President and CEO**

UPM's Board of Directors appoints the President and CEO and decides on the terms and conditions of his/her service contract. Jussi Pesonen, M.Sc. (Eng.), born in 1960, has served as UPM-Kymmene Corporation's President and CEO since January 2004. He has also been a member of UPM's Board of Directors since March 2007.

The President and CEO is responsible for developing the company's strategic and business plans for submission to the Board and for the day-to-day management of the company's affairs in accordance with the instructions and orders given by the Board of Directors.

The President and CEO is responsible for the company's accounts complying with the law and the company's financial administration and management being organised in a reliable manner. The President and CEO provides the Board of Directors with the information required to perform its duties.

The President and CEO may take measures that are considered unusual or extensive in view of the scope and nature of the company's business only with authorisation from the Board of Directors, unless the time required to obtain such authorisation would cause substantial harm to the company, in which case the President and CEO must first consult with the Chairman of the Board of Directors.

# Internal control and risk management pertaining to financial reporting

UPM's Board of Directors has approved the Risk Management Policy, which sets out the principles, roles and responsibilities regarding risk management within the Group's organisation, and defines the risk management process.

UPM's internal control framework is based on the internal control framework issued by the Committee of Sponsoring Organisations of the Treadway Commission in 1992 (COSO). During 2014, UPM plans to evaluate the effects of the updated COSO 2013 framework.

The process-level internal control structure has been created using a top-down, risk-based approach.

Controls pertaining to financial reporting are part of the Internal Control framework.

Effectiveness of internal control is ensured also in the context of using outsourced service providers.

The maturity level of internal controls at UPM is assessed every other year and the results of the assessment are reported to the Audit Committee.

The five (COSO) components in the internal control framework are:

**Control environment**

The company's values and Code of Conduct lay the foundations and set the tone for the internal control framework at UPM.

The framework consists of:

- A group-level structure
- Group-level processes
- Group-level controls
- Business and support function controls

The Board's Audit Committee monitors the internal control of the Group.

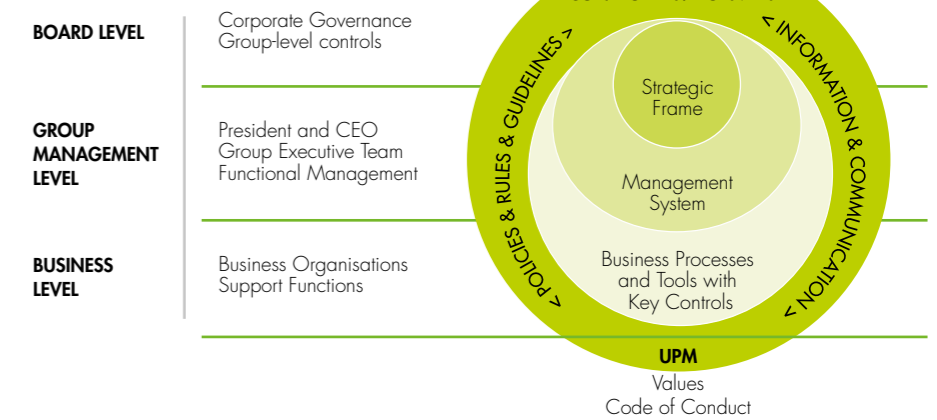
**Risk assessment**

UPM's risk assessment with regard to financial reporting is aimed at identifying and evaluating the most significant risks that affect internal control over financial reporting in the Group companies, business areas and processes. The risk assessment is used to create control targets to ensure that the fundamental demands placed on financial reporting are fulfilled and provide the basis for how risks are managed within the various control structures. The risk assessment is updated annually together with the planned control actions and control targets based on the assessment. The development of the risk assessment and the planned and executed actions are reported to the Audit Committee on a regular basis.

**Control activities**

The company has developed and implemented a comprehensive internal control system that covers business and financial reporting processes. Internal control activities are led centrally by the Finance and Control function with an annual schedule and defined roles and responsibilities in the control process. The head

**MAIN FEATURES OF THE INTERNAL CONTROL AND RISK MANAGEMENT PROCESS IN UPM**



of each unit or function organises the internal control of his or her unit or organisation. The Finance and Control function is responsible for monitoring business, function and unit-level control processes. The aim of establishing control measures and setting up uniform testing and monitoring processes is to ensure that potential errors or deviations are prevented or detected and corrected accordingly.

Controls in joint operations managed by UPM are performed and tested in the same way as in other UPM companies. Joint operations not managed by UPM are not under UPM internal control processes. Annual management certification is requested from all joint operations to ensure compliant accounting practices and proper control processes pertaining to financial reporting.

An essential part of the internal control environment is the control over UPM's IT applications and IT infrastructure. A special set of internal controls aims to ensure the reliability of UPM's IT systems and the segregation of duties in the IT environment.

With regard to financial reporting, the Group Accounting Manual sets out the instructions and guidelines for the preparation of consolidated financial statements. The Finance and Control function specifies the design of the control points in the business processes, and the internal controls are implemented in the financial reporting process. Periodic control procedures are an essential part of the monthly and interim reporting process and include the reconciliations and analytical reviews required to ensure that the reported data is correct.

The results of the control risk assessment and testing of the process-level controls are analysed, and reported to the Audit Committee.

**Information and communication**

Internal controls are documented and filed in the internal control database. The internal control process is reviewed on an ongoing

basis, including possible changes to internal controls. Regular communication from internal control process owners ensures detailed definitions of the controls and the minimum requirements for the relevant internal control are provided.

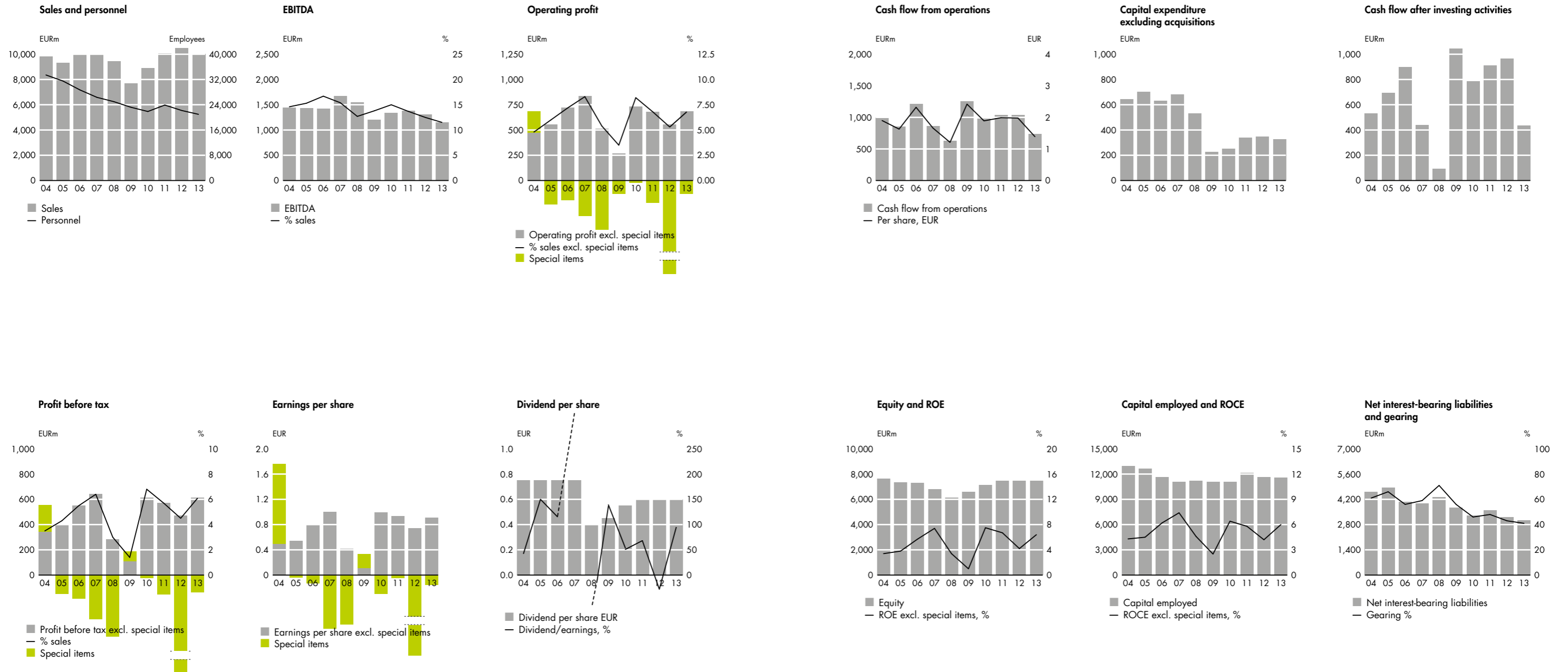
**Monitoring**

The Board of Directors, the Audit Committee, the President and CEO, Group Management, the Finance and Control function, and the business areas and Group companies are responsible for monitoring, thus ensuring the effectiveness of internal controls relating to financial reporting. The effectiveness of the process for assessing risks and of the execution of control activities is reviewed on an ongoing basis at various levels. Monitoring and reviewing includes following up monthly and quarterly financial reports compared with budgets and targets, key performance indicators and other analytical procedures.

The internal audit monitors and utilises the risk assessment and the test results from management's control work. The internal control planning procedures and results are documented and made available for the internal and external auditors, and for management, during the annual process. The results are reported to the Audit Committee, business management and the control owners.

The internal controls are also assessed in the performance review. The corporate and business-level controller teams are accountable for assessing the effectiveness of the internal controls for which they are responsible. Self-assessment is a common practice at UPM. Key controls are also tested regularly by independent parties. The internal audit compares its audit work against control test results. External auditors evaluate and test UPM's internal controls as part of their audit work, and recommendations and observations that they make are taken into consideration when maintaining and developing the internal control.

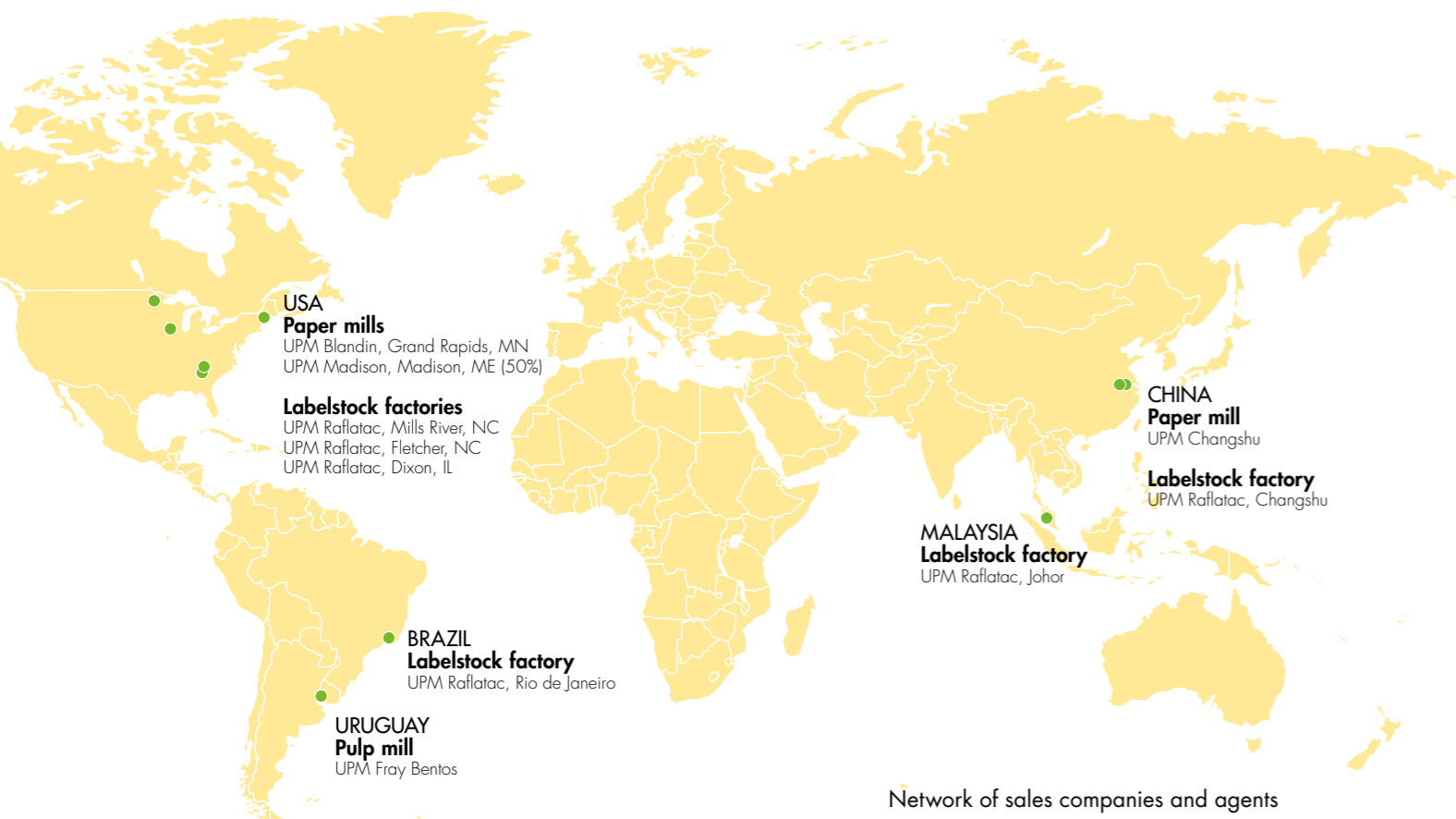
# Key financial information 2004–2013





# Production plants and sales network

UPM has production plants in 14 countries and a global sales network. Logistics form the foundation for the company's on-time deliveries of products and raw materials.



## Network of sales companies and agents

### North America

- Canada
- Mexico
- Panama
- United States

### South America

- Argentina
- Brazil
- Chile
- Colombia
- Peru
- Uruguay
- Venezuela

### Europe

- Austria
- Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Iceland
- Ireland
- Italy
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Russia
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- Ukraine
- United Kingdom

### Asia

- China
- Hong Kong
- India
- Indonesia
- Israel
- Japan
- Jordan
- Kuwait
- Lebanon
- Pakistan
- Republic of Korea
- Saudi Arabia
- Singapore
- Sri Lanka
- Syria
- Thailand
- United Arab Emirates
- Vietnam

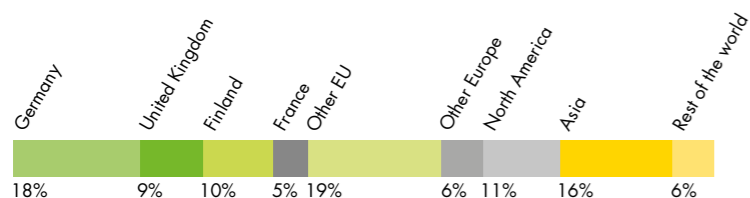
### Africa

- Algeria
- Egypt
- South Africa

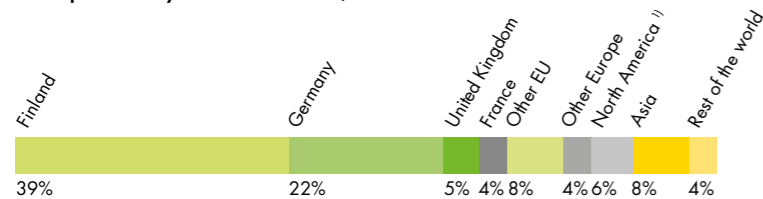
### Oceania

- Australia
- New Zealand

UPM's sales by market 2013 EUR 10,054 million



UPM's personnel by area 31.12.2013 20,950



<sup>1)</sup> USA, Canada and Mexico

# Addresses

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UPM does not publish a separate environmental and corporate responsibility report but has integrated the contents into this annual report. Various highlights from the year 2013 can be found under the sections for each business area. The GRI content index is on pages 51–52. To find out more about UPM's responsibility agenda, please visit [www.upm.com/responsibility](http://www.upm.com/responsibility).



# Annual General Meeting

UPM-Kymmene Corporation will hold its Annual General Meeting on Tuesday 8 April 2014 at 14:00, at the Exhibition and Convention Centre, Messuaukio 1, 00520 Helsinki, Finland. Instructions for those wishing to attend are given in the notice to the meeting, which is available on the company's website at [www.upm.com](http://www.upm.com).

## Dividend

The Board of Directors has decided to propose to the Annual General Meeting that a dividend of EUR 0.60 per share be paid for the 2013 financial year. The dividend will be paid to the shareholders who are registered in the company's shareholder register held by Euroclear Finland Ltd. on 11 April 2014, which is the record date for the dividend payment. The Board of Directors proposes that the dividend will be paid on 24 April 2014.

## Financial information in 2014

UPM will publish the interim reports in 2014 as follows:

The Interim Report for January–March 2014 on 29 April 2014  
 The Interim Report for January–June 2014 on 5 August 2014  
 The Interim Report for January–September 2014 on 28 October 2014



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