

METSÄ GROUP

SUSTAINABLY FROM THE FOREST



NORTHERN BIOPRODUCTS TO THE WORLD

METSÄ GROUP produces renewable products from northern forests that provide a substitute for the use of fossil-based raw materials. We use the best raw material in the world responsibly and wisely. We focus on wood supply and forest services, wood products, pulp, fresh fibre paperboard, as well as tissue and cooking papers.

All our business areas have good growth and profitability outlooks. Metsä Group's investments in 2015–2017 totalled EUR 2 billion, of which approximately 85 per cent related to investments in Finland. In future, these investments will increase our annual sales by approximately 20 per cent. We are growing worldwide – in Europe, North America, Asia and Oceania.

METSÄ FIBRE

High-quality and sustainable bioproducts: pulp, sawn timber, biochemicals and renewable energy for growing global markets

METSÄ FOREST

Forestry, nature management and wood trade services for forest owners. Wood deliveries to the Group's production units and other industrial customers

METSÄ TISSUE

Lambi, Serla, Mola and Tento tissue papers for consumers and Katrin products and hygiene solutions for public facilities, and SAGA baking and cooking papers for home and professional use

METSÄ BOARD

Folding boxboard, food service boards and white kraftliners for consumer goods, retail-ready and food service packaging

METSÄ WOOD

Kerto® LVL products, birch and spruce plywood for the construction, industrial and distribution sectors

YEAR 2017

SALES
EUR MILLION

5,040

+8%

2016: 4,658

COMPARABLE
OPERATING RESULT
EUR MILLION

566

+29%

2016: 439

COMPARABLE RETURN
ON CAPITAL EMPLOYED
%

12.3

2016: 10.2

INVESTMENTS
EUR MILLION

608

PRODUCTION IN **7** COUNTRIES
AND **29** FACILITIES

72%
OF THE ENERGY USED IN
PRODUCTION IS RENEWABLE

100%
TRACEABLE WOOD

88%
OF SOURCED WOOD IS CERTIFIED

METSÄ GROUP

SALES* **5.0** EUR BILLION

PERSONNEL **9,100**

METSÄLIITTO COOPERATIVE

GROUP'S PARENT COMPANY

OWNED BY 104,000
FINNISH FOREST OWNERS

METSÄ FOREST

**WOOD SUPPLY AND
FOREST SERVICES**

Sales **EUR 1.6 billion**
Personnel **850**

Holding
Metsäliitto Cooperative 100%

METSÄ WOOD

WOOD PRODUCTS

Sales **EUR 0.5 billion**
Personnel **1,400**

Holding
Metsäliitto Cooperative 100%

METSÄ FIBRE

**PULP AND
SAWN TIMBER**

Sales **EUR 1.9 billion**
Personnel **1,200**

Holding
Metsäliitto Cooperative 50.1%
Itochu Corporation 25.0%
Metsä Board Corporation 24.9%

METSÄ BOARD

PAPERBOARD

Sales **EUR 1.8 billion**
Personnel **2,350**

Holding
Metsäliitto Cooperative 41.5%;
61.4% of votes

METSÄ TISSUE

**TISSUE AND
COOKING PAPERS**

Sales **EUR 1.0 billion**
Personnel **2,800**

Holding
Metsäliitto Cooperative 100%

* internal sales eliminated

RENEWABLE ENERGY 24 TWh

YEAR 2017 HIGHLIGHTS



**METSÄ
TISSUE**

CUSTOMER-ORIENTED PRODUCT DEVELOPMENT

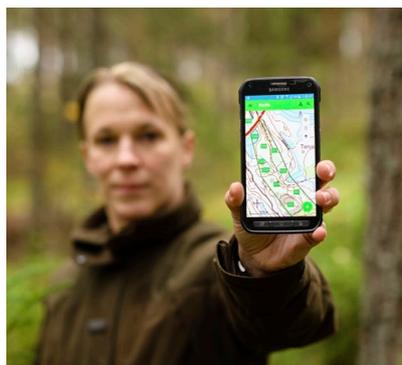
During 2017, Metsä Tissue introduced many new consumer and large-scale consumer products to the market. Lambi continues to be the most popular tissue paper brand in the Nordic countries, and strong position was supported by new product launches. Serla re-designed the household paper category by launching several products for different end-uses. Mola and Tento have a strong position in Eastern-Central Europe and this was strengthened by several launches. In the large-scale consumer market, Katrin Hand Towels introduced a new compression pattern to improve the softness and absorption of the product. In Finland, SAGA launched a new product particularly suitable for cold cooking in industrial kitchens.



SUSTAINABILITY

FIRST-CLASS ENVIRONMENTAL PERFORMANCE

Metsä Group's mills use the best available technology. The environmental performance of our mills is world-class and we are continuously striving to improve. For example, our fossil CO₂ emissions per product tonne have decreased by 38% compared to the level in 2009.



**METSÄ
FOREST**

A FORERUNNER IN DEVELOPING DIGITAL SERVICES

More than 25% of the wood trade of Metsä Group's wood supply and more than 35% of the sales of the forest management services were conducted digitally in 2017. The value of the wood trade in Metsä Group's digital Metsäverkko service over a period of roughly two years totals more than EUR 200 million. The new virtual forest demonstration allows a forest owner to compare the impact that different felling alternatives could have on their income and on the forest scenery.



**METSÄ
BOARD**

EXTRUSION COATING LINE STARTED UP AT HUSUM

Metsä Board's new extrusion coating line, started up in 2017, expanded the product selection for food service packaging with a PE-coated paperboard. The annual production capacity of the production line in Husum, Sweden is 100,000 tonnes. The paperboards meet the strict requirements for food and food service packaging in terms of, product safety, purity and the protection of the product. PE is the most widely used barrier against moisture and water in food and food service packaging.





**METSÄ
FIBRE**

NEXT-GENERATION BIOPRODUCT MILL



Metsä Group's next-generation bioproduct mill was completed precisely on schedule and on budget. The mill's annual capacity is 1.3 million tonnes of pulp. Deliveries started at the beginning of September 2017, and the mill will achieve its nominal capacity within a year from its start-up. Besides pulp, the mill also produces other

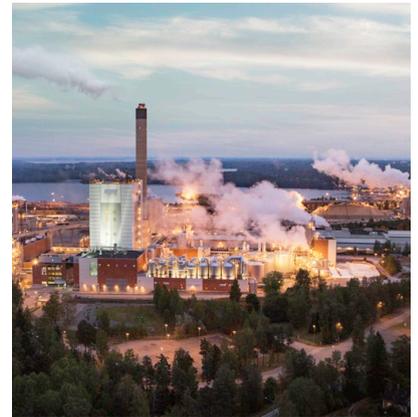
bioproducts, including tall oil, turpentine and energy. The new bioproducts manufactured at the bioproduct mill or in the industrial ecosystem around the mill include product gas from bark, sulphuric acid made from the mill's odorous gases, as well as biogas and biofuel pellets refined from sludge. Metsä Fibre is investigating several different processes and product paths, which will be implemented in phases. Potential new bioproducts include biocomposites, textile fibres and lignin products.



SUSTAINABILITY

MORE RENEWABLE ENERGY

Metsä Group utilises its production side streams efficiently, either as material or energy. We have systematically invested in technologies that support the use of renewable energy. 88% of the fuels used in our production in 2017 were biobased. We also produced 15% of the renewable energy in Finland.



**METSÄ
WOOD**

FASTER, LIGHTER AND GREENER

The benefits of wood construction – faster construction, the lightness of the material and a smaller impact on the environment – give it great possibilities in urban environments. Metsä Wood invests in improving the competitiveness of its Kerto® LVL production in Finland. In 2017, a new Kerto LVL production line started its operation at Lohja and a new production line at the Punkaharju mill is planned to start up in the first half of 2019.

STRATEGY OF GROWTH

Metsä Group produces products from northern wood that millions of people around the world need. The world's population is growing and competition for energy and natural resources is becoming tighter, which is why resources must be used more efficiently. As a forerunner of the bioeconomy, the changes in the operating environment create versatile opportunities for Metsä Group.

RENEWABLE RAW MATERIAL

Our business is based on the use of high-quality, renewable northern wood, the origin of which we always know. We source the majority of the wood we use from our Finnish owner-members. Our business areas form a strong value chain, where we always utilise wood as efficiently as possible for the use that creates the most value.

A RESPONSIBLE EXPERT

Our core business consists of wood supply and forest services, wood products, pulp, paperboard, as well as tissue and cooking papers. We focus our operations in areas where we have a clear competitive advantage and where the outlook for growth and profitability are good. The owner-members of our parent company, Metsäliitto Cooperative, bring continuity and long-term focus to our operations.

A FORERUNNER IN BIOECONOMY

Our products offer a unique combination of customer focus, innovation and sustainability. Our premium-quality products have been developed to promote the well-being of people and the environment. Our products, made of renewable and recyclable raw materials, offer sustainable solutions for global challenges.

PROFITABLE GROWTH

Thanks to carefully planned investments, our production units are at the cutting edge of the industry, whether measured by environmental performance, energy efficiency or profitability. Our global sales network is actively seeking new applications together with our customers.

VALUES



RELIABILITY



COOPERATION



RESPONSIBLE PROFITABILITY



RENEWAL



POPULATION GROWTH

By 2050 the world population is forecasted to grow by a further 2 billion. Due to the increased consumption and resource use resulting from population growth, we need biobased products to substitute products made of fossil-based raw materials.

RESOURCE SCARCITY

Bioproducts made of renewable wood material are sustainable and resource-wise solutions that meet the challenge of increasing demand. Resource-wise production enables making more out of less.

URBANISATION

Urbanisation and related lifestyles change consumer behaviour and needs. Therefore we need sustainable and recyclable solutions for everyday living, such as packaging and construction.

CLIMATE CHANGE

From the climate perspective, recyclable and compostable bioproducts made of renewable raw material are one of the best options. Wood is a renewable raw material that binds carbon dioxide even when it is manufactured into a product.

SUSTAINABILITY TARGETS

The foundation of Metsä Group's sustainability work consists of four themes covering all our operations and eight targets that guide our everyday work. Sustainability is part of everything we do.



Read more about Metsä Group's sustainability themes and targets from our Sustainability Report 2017



WE OFFER SUSTAINABLE CHOICES

PRODUCTS AND SERVICES

- Sustainable, safe and recyclable products from renewable wood
- Customer-focused services and solutions
- Innovations and renewal

ETHICAL BUSINESS

Coverage of Code of Conduct training for personnel:

TARGET	PERFORMANCE 2017
100%	91%

SAFETY AT WORK

Lost-time accidents frequency annually (LTA1: 5.9):

TARGET	PERFORMANCE 2017
-10%	-20%

WELL-BEING

Sickness absenteeism:

TARGET	PERFORMANCE 2017
<3%	3.9%



WE CREATE WELL-BEING

STAKEHOLDERS AND SOCIAL IMPACTS

- Ethical business practices
- Responsible employer
- Safety at work
- Partnerships and industrial ecosystems
- Value creation in society



WE BRING THE FOREST TO YOU

RAW MATERIALS AND SUPPLY CHAIN

- Sustainable forest management, biodiversity, multiple use of forests
- Traceability of raw materials
- Sustainable supply chain

8 DECENT WORK AND ECONOMIC GROWTH



13 CLIMATE ACTION



15 LIFE ON LAND



WE WORK FOR A BETTER CLIMATE AND ENVIRONMENT

RESOURCE EFFICIENCY AND ENVIRONMENTAL IMPACTS

- Efficient use of raw materials, energy and water
- Valuable side streams
- Renewable energy
- Emissions to water and air

6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY INNOVATION AND INFRASTRUCTURE



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



WOOD

The share of certified wood:

TARGET

>80%

PERFORMANCE 2017

88%

LOGISTICS

Ensure sustainability of the main logistics flows:

TARGET

100%

STATUS 2017

In the end of 2017, all 481 main logistics partners included in the sustainability survey fulfilled Metsä Group's sustainability criteria.

CLIMATE

Fossil CO₂ emissions per product tonne 2009–2020:

TARGET

-30%

PERFORMANCE 2017

-38%

ENERGY

Energy efficiency improvement 2009–2020:

TARGET

10%

PERFORMANCE 2017

7%

RESOURCE EFFICIENCY

Process water use per product tonne 2010–2020:

TARGET

-17%

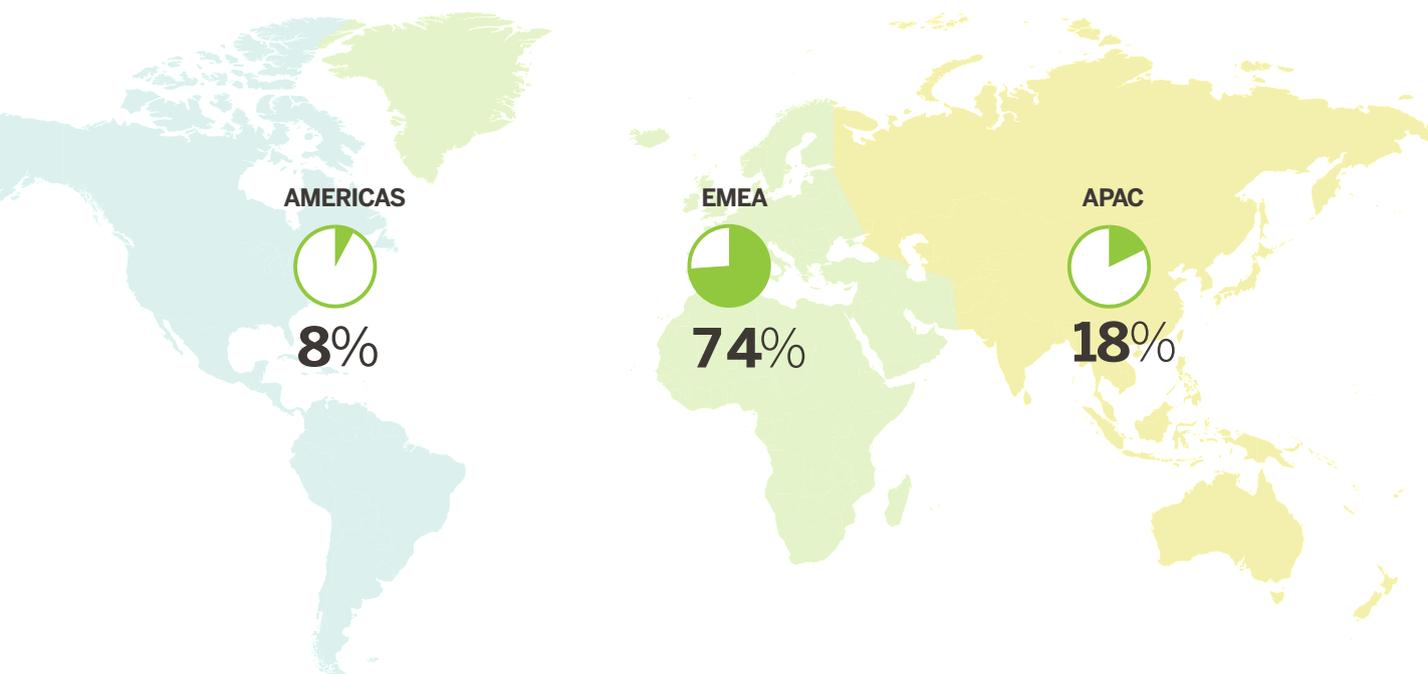
PERFORMANCE 2017

-15%

SUSTAINABLE PRODUCTS ARE IN DEMAND

Metsä Group's business areas create a strong value chain where wood is used efficiently. The side streams generated in the production are utilised either as material or in energy production. Products made from renewable raw materials can replace the use of fossil raw materials.

SALES BY AREA



METSÄ FOREST

- Renewable and sustainably grown raw material
- The wood is fully traceable; certified and/or controlled



METSÄ WOOD

- Strong, lightweight wood products of a consistent quality
- Construction with wood products is fast, and the products store carbon



METSÄ FIBRE

- Premium pulp, sawn timber and other bioproducts
- Fibre expertise, services and long-term cooperation create added value for customers



METSÄ BOARD

- Pure, safe and lightweight paperboards
- Lightweight paperboards have a smaller environmental impact and they generate less waste



METSÄ TISSUE

- Tissue papers that improve hygiene and well-being
- Baking and cooking papers that reduce food waste and the consumption of energy and water



METSÄ
FOREST



METSÄ
WOOD



METSÄ
FIBRE

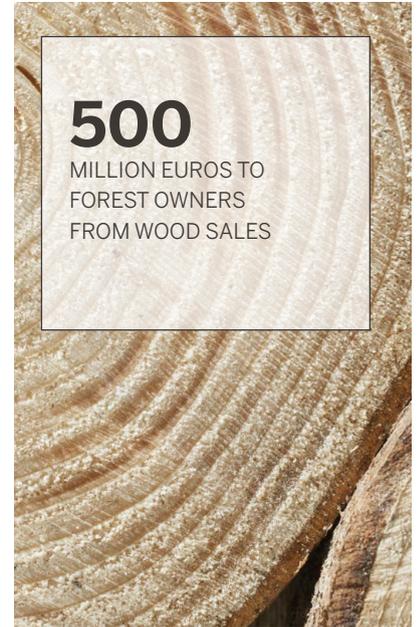


METSÄ
BOARD



METSÄ
TISSUE

FORERUNNER IN FOREST ASSET MANAGEMENT



500

MILLION EUROS TO
FOREST OWNERS
FROM WOOD SALES

METSÄ FOREST represents Metsä Group's wood supply, nature management and forest services. Metsä Forest serves forest owners and industries that use wood.

Metsä Forest is responsible for purchasing, harvesting and measuring wood, and for its transportation to our production units and other selected customers.

Wood Supply purchases more than 32 million cubic metres of wood every year, the majority of which is supplied by Finnish forest owners. In addition to Finland, we purchase wood from Sweden, the Baltic countries and Russia.

With us, forest owners can increase their forest holdings sustainably. Metsä Forest is Finland's biggest purchaser of wood and a forerunner in digital services for forest owners – now and in the future.



METSÄ
FOREST



METSÄ
WOOD



METSÄ
FIBRE

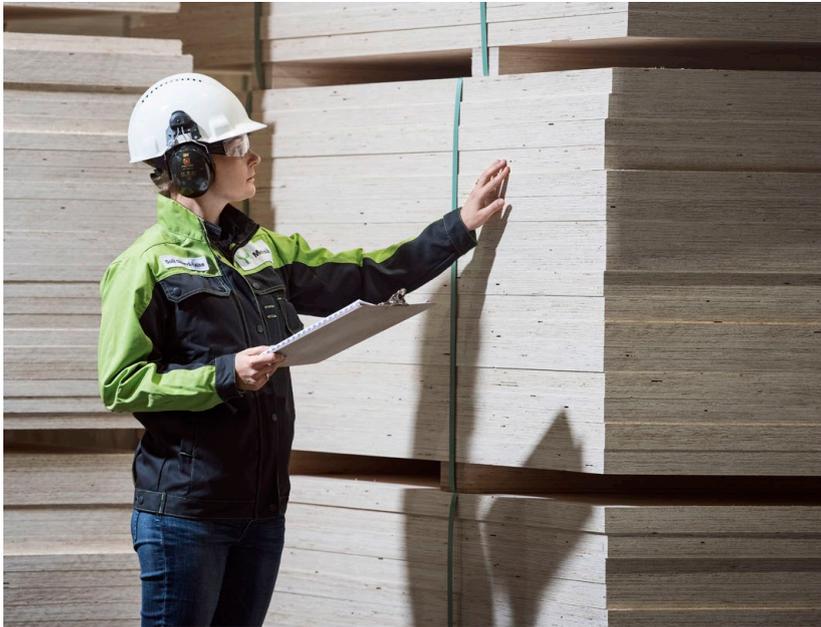


METSÄ
BOARD



METSÄ
TISSUE

WOOD PRODUCTS WITH INDUSTRIAL EFFICIENCY



KERTO® LVL CAPACITY
GROWS TO

195,000

CUBIC METRES

METSÄ WOOD manufactures industrial-scale wood products for the construction, industrial and distribution sectors.

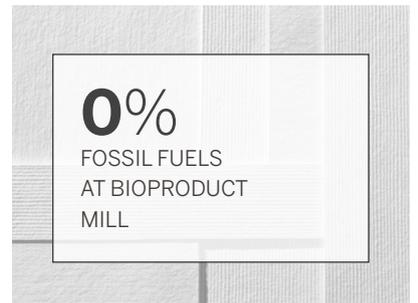
Metsä Wood's main products are Kerto® LVL as well as birch and spruce plywood. In addition, Metsä Wood sells sawn timber produced by Metsä Fibre.

Made from spruce veneer, Kerto® LVL is the best choice for fast, light and environmentally friendly construction. Birch plywood products are suitable for various uses in the transport and construction industries, for example. Spruce plywood sheets with special surface treatments are easy to use on construction sites.

Metsä Wood works with close cooperation with its customers in a partnership network to create increasingly efficient products that meet their needs even better than before.

Metsä Wood has a strong position in Europe and ambitious global growth targets.

BIOPRODUCTS TO GROWING MARKETS



METSÄ FIBRE is the world's biggest producer of softwood market pulp and Finland's biggest producer of sawn timber.

The bleached softwood and birch pulps of Metsä Fibre's Botnia product family have been developed for the manufacturing of high-quality paperboard, tissue paper, printing paper and speciality products. Metsä Fibre also produces sawn timber, biochemicals and renewable energy.

The sawmills use the best properties of high-quality raw material and, with the help of cutting edge production technology, sawn timber can be customised according to the individual wishes of each customer.

Metsä Fibre's fibre expertise, services and long-term cooperation create added value for customers.

The profitable business operations generate growth, of which the next-generation bioproduct mill at Äänekoski is an excellent example. The bioproduct mill is bringing growth to Finland and will increase the annual value of Finland's exports by roughly EUR 0.5 billion.

PREMIUM PAPERBOARDS FOR PACKAGING



GLOBAL DEMAND FOR FOLDING BOXBOARD AND WHITE KRAFTLINER GROWS BY SOME
3-4%
 ANNUALLY

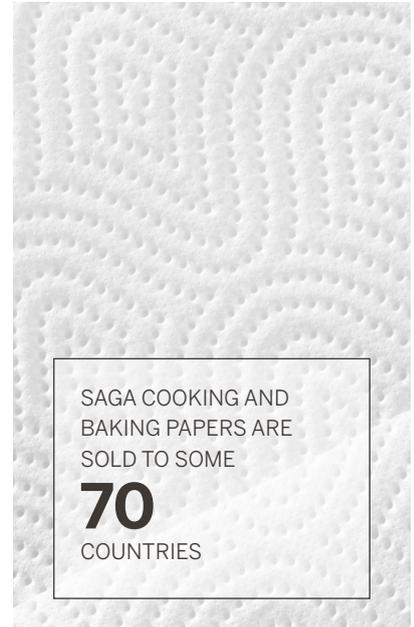
METSÄ BOARD is a leading European producer of premium and lightweight fresh fibre paperboards.

Metsä Board's product range includes folding boxboard and food service paperboards, as well as white kraftliner. Metsä Board's lightweight, safe and eco-friendly paperboards are suitable for food, cosmetics, pharmaceutical and electronic appliance packaging, as well as for various kinds of retail sales racks and packaging.

The product range is complemented by a range of expert services in packaging analysis and design, technical expertise as well as in research and product development.

Metsä Board is growing profitably and globally together with brand owners, converters and merchant customers in businesses that benefit from safe and sustainable paperboards.

CONVENIENCE WITH HIGH-QUALITY TISSUE AND COOKING PAPERS



SAGA COOKING AND BAKING PAPERS ARE SOLD TO SOME
70
 COUNTRIES

METSÄ TISSUE manufactures tissue paper products and cooking paper products for households and professionals.

Metsä Tissue's consumer brands – Lambi, Serla, Mola and Tento – offer a comprehensive range of toilet papers and household towels as well as handkerchiefs. SAGA's multi-purpose cooking and baking papers, deli bags and other products have been designed for use in cooking and baking at home and in big professional kitchens and bakeries.

The Katrin product line, designed for industrial-scale kitchens and professional use, includes hand towels, toilet papers, facial tissues, paper napkins and industrial wipes, as well as dispensers, soaps and accessories. Metsä Tissue also manufactures products for customers' private labels.

Metsä Tissue's growth is driven by the systematic development of product brands.

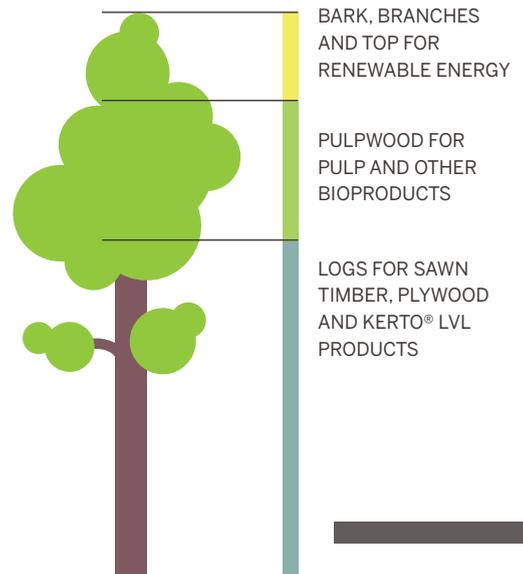
MAKING THE MOST OF WOOD

Metsä Group is a forerunner in sustainable bioeconomy. Our operations are based on efficient circulations and resource-wise utilisation of our renewable raw material, northern wood.

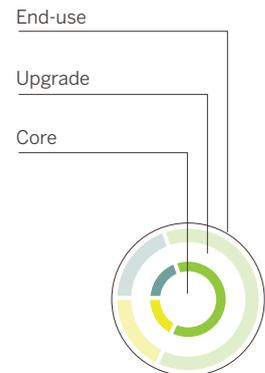
We use every part of the tree as effectively as possible for the purpose which creates the most value. Every production side stream is important and barely nothing goes to waste.

Circular economy works best in industrial ecosystems. These networks consist of partners manufacturing products for various end-uses. Thanks to this variety of requirements someone's waste can be another's valuable raw material. Industrial ecosystems create conditions for developing applications where wood can be used in a new innovative way.

Wood is a versatile material which, in addition to traditional wood products, can be used in textiles and the electronics industry, for example. Renewable wood is one of the best building blocks for resource-wise bioeconomy.



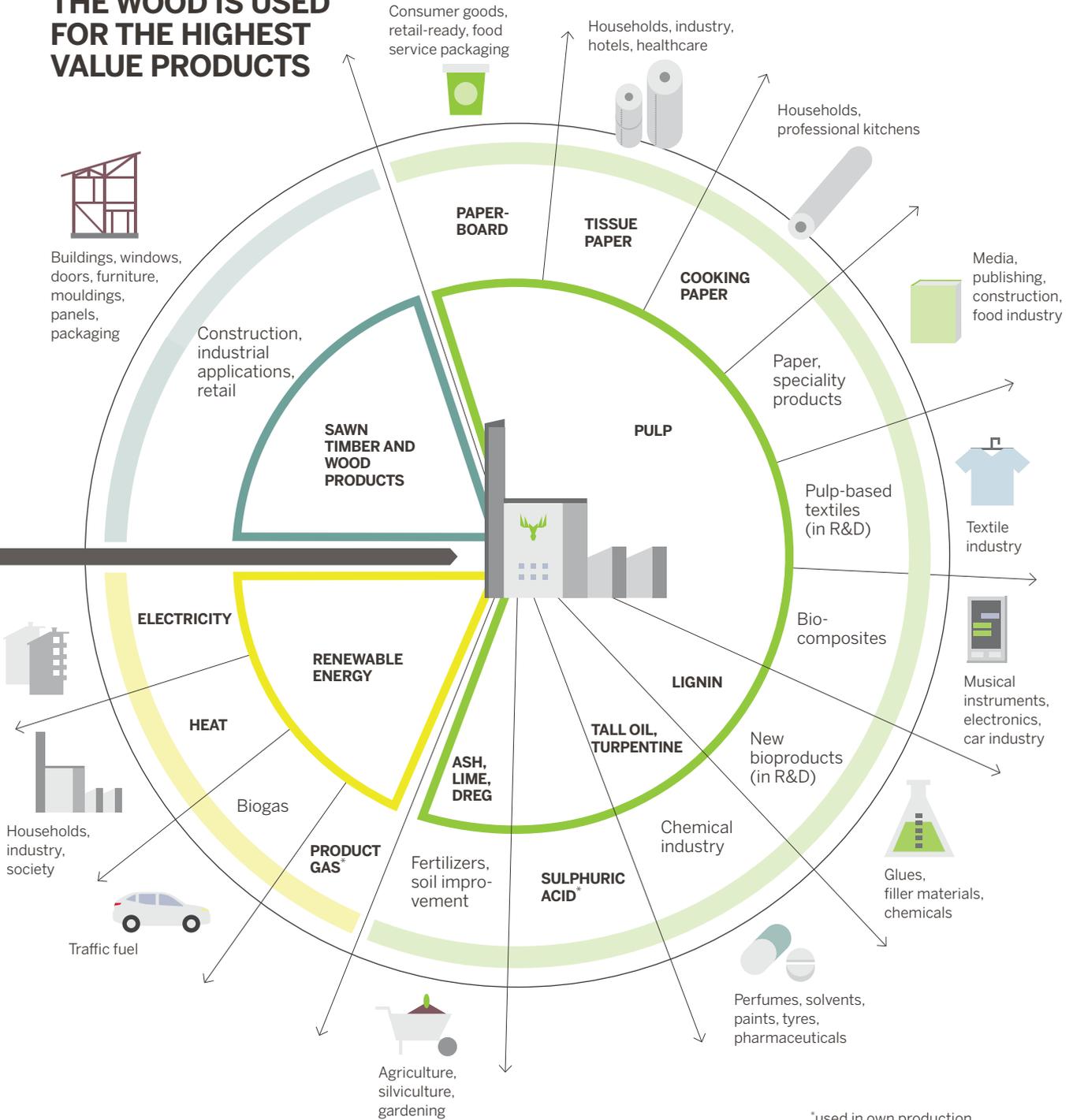
OVER
90%
OF OUR PRODUCTION
SIDE STREAMS
ARE USED AS
MATERIAL OR ENERGY



All products in **BOLD** are manufactured by Metsä Group.

All other products are manufactured within the industrial ecosystem.

EACH PART OF THE WOOD IS USED FOR THE HIGHEST VALUE PRODUCTS



*used in own production

WE CREATE VALUE

Metsä Group creates value, both economic and social, to stakeholders through its operations at a local, national and international level.

We provide jobs for over 9,000 employees and our purchases indirectly enable thousands of jobs, for example, in the harvesting and transportation sectors.

In addition, our contribution to Finnish exports is significant and we also produce renewable energy for Finland.

We strive to operate responsibly and be an important member of society. We also expect our partners to act sustainably.

RESOURCES AND COMPETENCES

SECURE SUPPLY

COOPERATIVE OWNERSHIP

- Steady wood flow secured by **104,000 forest-owner members**

PERSONNEL

- **9,126** employees in **26** countries
- Retention rate **97%**



EFFICIENT USE OF RESOURCES

WOOD

- Procuring 32 million m³ of wood with **100% traceability**

WATER

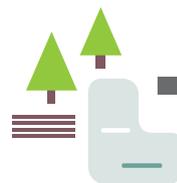
- **99.6%** surface water – **no impact on water scarcity**

ENERGY

- **72%** of the energy used in production is renewable

PRODUCTION

- **29** production facilities in **7** countries in Europe



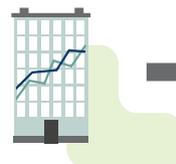
STEADY OUTLOOK FOR FUTURE

FINANCIAL

- In liquidity and undrawn credits **EUR 2,091 million**
- Capital employed **EUR 5,033 million**

RESEARCH, DEVELOPMENT AND INNOVATIONS

- **EUR 626 million** in investments and research and development



STAKEHOLDERS

- Local communities
- Schools and universities
- Metsäliitto Cooperative's owner-members
- Other forest owners
- NGOs
- Customers and consumers
- Associations
- Corporate networks
- Media
- Authorities, legislators and political decision-makers
- Own personnel
- Shareholders
- Investors and analysts
- Research organisations
- Subcontractors and suppliers

LOCAL VALUE



93% permanent employees | **over 1,000** summer jobs

EUR 621 million in wages, salaries and benefits

Each forest industry job creates **3 new ones indirectly**

EUR 500 million to Finnish forest owners from wood sales

EUR 330 million to harvesting and transportation entrepreneurs in Finland

~30 million seedlings delivered to forest owners annually

NATIONAL VALUE



The value of exports from Metsä Group's Finnish mills is **EUR 2.8 billion**, corresponding to **5% of Finnish exports**

Producing **15%** of renewable energy in Finland

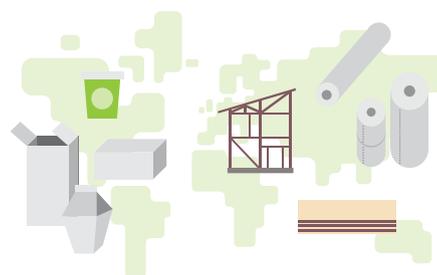
Partnering in circular economy: **92%** of production side streams utilised

92% of wood and **85%** of other purchases from production countries in Europe

Ensuring biodiversity by leaving **at least 2 biodiversity stumps** per hectare in forests

63 million paid as interests to Metsäliitto Cooperative's owner-members

INTERNATIONAL VALUE



Reducing the dependence on fossil resources:

- Wood products that store carbon
- Pulp for recyclable products
- Paperboards for safe packaging
- Tissue papers for improving hygiene

Sales EUR 5.0 billion:

8% from Americas | **74%** from EMEA | **18%** from APAC

EUR 85 million as interest expenses

EUR 71 million as dividends

CERTIFICATION INDICATES SUSTAINABLE FOREST MANAGEMENT



Metsä Group procures wood from sustainably managed Northern forest areas where forest growth exceeds use. We always know the origin of the wood. 88% of the wood we procure is certified according to PEFC™ and/or FSC® systems. The majority of the wood we use comes from Finland which is known as a forerunner in sustainable forest management.

Forest certification ensures that the forest has been used legally and managed sustainably. It's proof of sustainable operations throughout the entire value chain, for both the forest owner as well as to the customer. Both forest certification schemes used by Metsä Group have comprehensive requirements for economic, social as well as environmental aspects.

DEGREE OF FOREST CERTIFICATION GLOBALLY

NORTH AMERICA



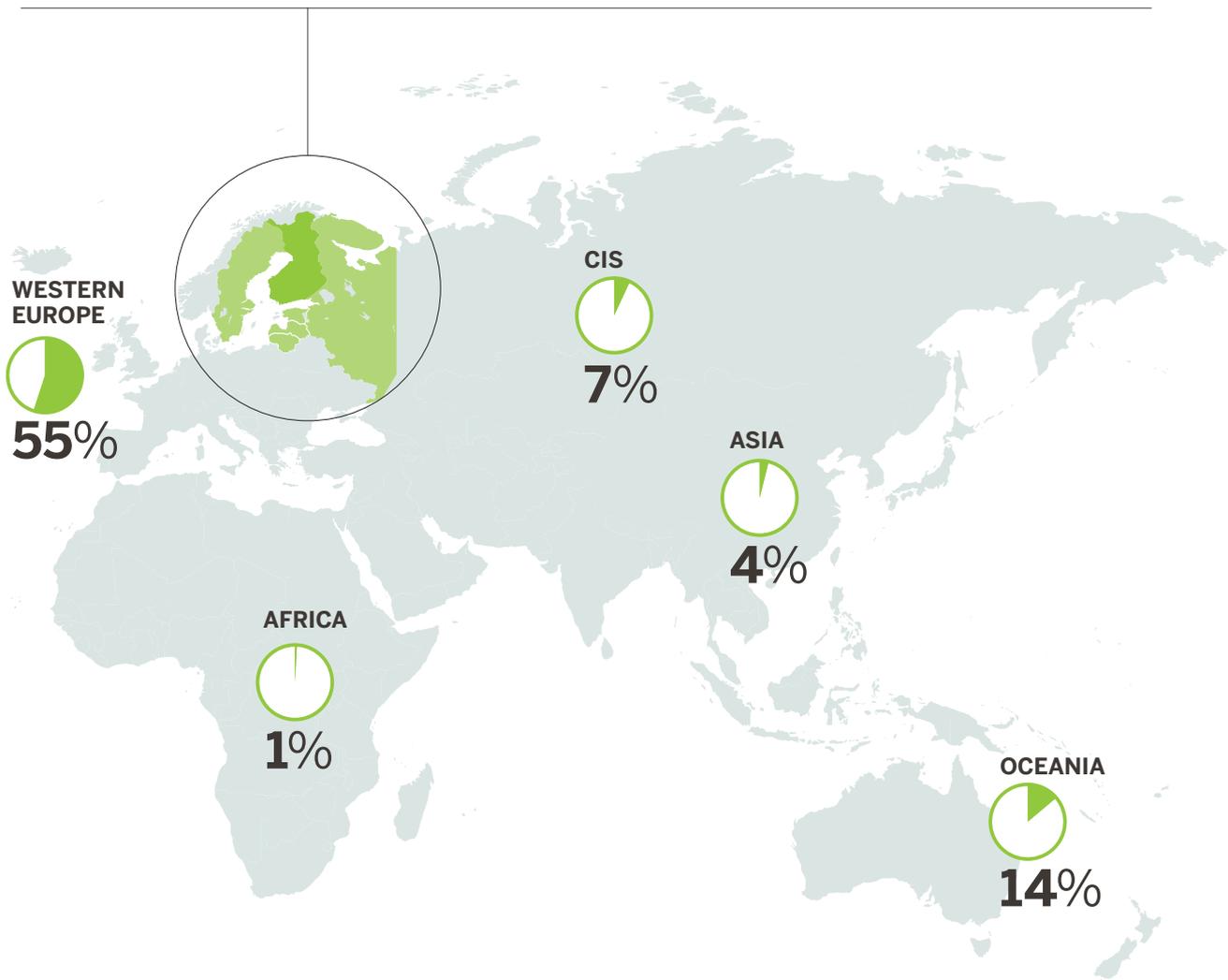
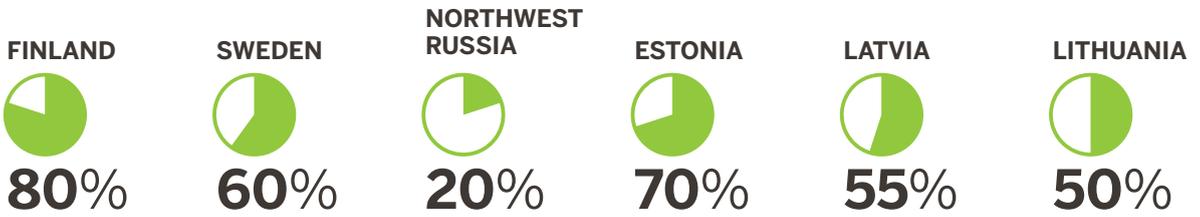
SOUTH AMERICA



88%
OF THE WOOD
PROCURED BY
METSÄ GROUP
IS CERTIFIED

APPROXIMATELY
10%
OF THE WORLD'S
FORESTS ARE
CERTIFIED

DEGREE OF FOREST CERTIFICATION IN METSÄ GROUP'S WOOD SUPPLY AREA

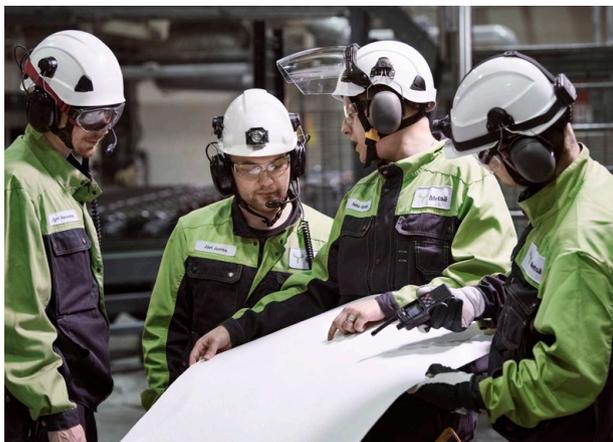


WE SUCCEEDED TOGETHER



MORE THAN
1,000
SUMMER EMPLOYEES

LONG TERMS OF
EMPLOYMENT,
ON AVERAGE
16.4
YEARS



We are proud of our skills at Metsä Group. Every one of us has the chance to be successful in our work and develop professionally.

Our success is supported by clear goals and supervisory work in line with our values. Renewal, cooperation, reliability and responsible profitability are the values that guide our work. We renew actively, learn from each other and carry the responsibility for our own work and competence.

We achieve results together, responsibly, for the good of our customers. We want to be a step ahead. By challenging ourselves and our partners continuously, we are building the future Metsä together.

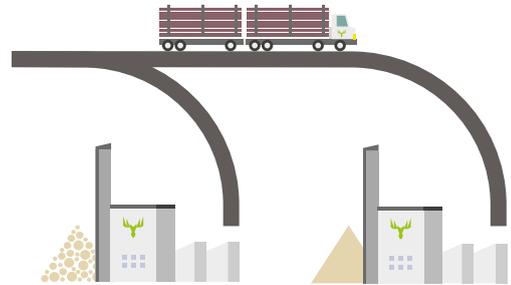
FROM FOREST TO BROCHURE

The covers of Metsä Group's 2017 reports are made from folding boxboard produced at Äänekoski, Finland.

The wood used in Metsä Group's products is traceable all the way to the stump. The value chain, traceable to the forest, guarantees the sustainability and safety of our products.



Approximately 88 per cent of the wood purchased by **Metsä Group** is certified.



Metsä Board's Joutseno mill produced the bleached chemi-thermomechanical pulp of the middle layer.

The chemical pulp for the surface and backing layer of the folding boxboard was produced at **Metsä Fibre's** Äänekoski bioproduct mill.



Metsä Board's Äänekoski mill produced the MetsäBoard Prime FBB Bright folding boxboard used for the covers of these publications. It is a coated paperboard made from pure fresh fibre and ideal for packaging and graphics end uses.



Metsä Group
Sustainably from
the forest



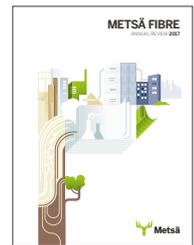
Metsä Group
Financial Statements
2017



Metsä Group
Sustainability Report
2017



Metsä Board
Annual Report
2017



Metsä Fibre
Annual Review
2017

PUBLISHER: METSÄ GROUP

This publication and further information are available online at www.metsagroup.com

Metsä Group's annual reporting comprises this brochure, the Financial Statements and the Sustainability Report all available in English.

The Financial Statements include a Corporate Governance Statement.

In addition, Metsä Board Corporation and Metsä Fibre Oy publish their own annual reports.

Please send your feedback to communications@metsagroup.com, or on social media [@MetsaGroup](https://twitter.com/MetsaGroup).

Make the most of Metsä



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