



## WE OFFER SUSTAINABLE CHOICES

Turning renewable wood  
into sustainable, safe and  
recyclable products

## WE BRING THE FOREST TO YOU

Promoting sustainable  
forest management,  
certification and  
enhancing sustainability  
in the value chain

p.18

p.24

p.40

p.32

## WE CREATE WELL-BEING

Ensuring ethical  
business practices,  
safety at work and  
contributing to  
local livelihoods  
and society

## WE WORK FOR A BETTER CLIMATE AND NATURE

Making efficient use of  
raw materials, energy,  
water and increasing the  
value of side streams

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**100%**

traceable, recyclable  
wood raw material

**-36%**

fossil CO<sub>2</sub> emissions  
per product tonne

## SUSTAINABLE THROUGHOUT THE VALUE CHAIN

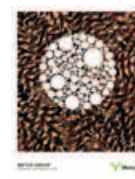
Metsä Group is a responsible forest industry group whose products' main raw material is renewable and sustainably grown northern wood. Metsä Group focuses on tissue and cooking papers, consumer packaging paperboards, pulp, wood products, and wood supply and forest services. Its safe, high-quality products combine renewable raw materials, customer-orientation, sustainability and innovation. Metsä Group's sales totalled EUR 5 billion in 2014, and it employs approximately 10,500 people. The Group operates in some 30 countries. Metsäliitto Cooperative is the parent company of Metsä Group and is owned by 122,000 Finnish forest owners.

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We value your opinion. Kindly send your feedback on Metsä Group's Sustainability Report to [sustainability@metsagroup.com](mailto:sustainability@metsagroup.com) or on Twitter @MetsaGroup

### READ ALSO:



Metsä Group  
Financial Report 2014



Metsä Group  
Annual Report 2014

# INTERNATIONAL AND EVOLVING METSÄ GROUP

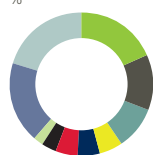
We are a Finnish forest industry group that operates on the international market. Our production units are at the top of the industry, and their efficiency and environmental performance are continuously being developed by a systematic investment programme. Sales companies, retailers and agents sell our products around the world. Europe is our main market area. We are seeking growth in Asia and North America.

METSÄ BOARD'S PAPER-  
BOARD DELIVERIES  
INCREASED MORE THAN

# 40%

IN NORTH  
AMERICA

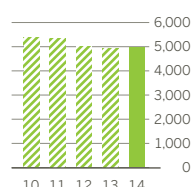
## SALES BY MARKET AREA %



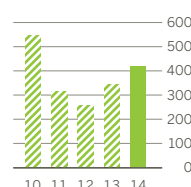
● FINLAND  
● GERMANY  
● UNITED KINGDOM  
● ITALY  
● FRANCE  
● SWEDEN  
● POLAND  
● NORWAY  
● REST OF EUROPE  
● OTHER COUNTRIES

19  
13  
10  
5  
5  
5  
3  
2  
18  
20

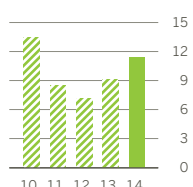
## SALES EUR MILLION



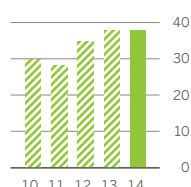
## OPERATING RESULT, EXCL. NON-RECURRING ITEMS EUR MILLION



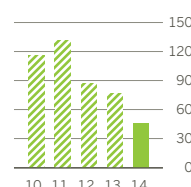
## RETURN ON CAPITAL EMPLOYED, EXCL. NON-RECURRING ITEMS %



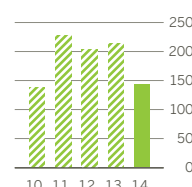
## EQUITY RATIO %



## NET GEARING RATIO %



## INVESTMENTS EUR MILLION



## KEY FIGURES

	2014	2013	2012	2011	2010
Sales, EUR million	4,970	4,938	5,001	5,346	5,377
Operating result, EUR million	417	335	241	29	497
Operating result, excl. non-recurring items, EUR million	418	343	256	314	547
Return on capital employed, %	11.1	8.9	6.7	1.1	11.8
Return on capital employed, excl. non-recurring items, %	11.4	9.1	7.1	8.5	13.4
Equity ratio, %	37.9	37.9	34.7	28.1	29.7
Net gearing ratio, %	46	77	87	132	116
Investments, EUR million	143	214	204	227	138
Personnel, 31 December	10,410	10,736	11,447	12,525	12,820
Share of certified wood, %	84	82	82	81	80
Lost-time accident rate, per million worked hours	11.2	13.2	15.7	18.3	17.3
Fossil CO <sub>2</sub> emissions, 1,000 tonnes	803	855	962	1,200	1,251



FOR FOREST OWNERS  
MORE THAN

**100**

SERVICE OFFICES  
IN FINLAND

SALES COMPANIES IN

**35**  
COUNTRIES

APPROXIMATELY

**25%**

OF METSÄ FIBRE'S PULP  
IS SOLD TO ASIA

● PRODUCTION

● SALES COMPANIES

**900**

SUMMER JOBS AND  
INTERNSHIPS IN 2014

**METSÄ GROUP**

SALES  
TOTAL

**5.0** EUR  
BILLION

PERSONNEL  
TOTAL

**10,500**

**METSÄLIITTO COOPERATIVE**

GROUP'S PARENT COMPANY

OWNED BY 122,000 FINNISH FOREST OWNERS

**METSÄ TISSUE**

**TISSUE AND  
COOKING PAPERS**

SALES  
**EUR 1.0 BILLION**

PERSONNEL  
**2,800**

OWNERSHIP OF METSÄLIITTO  
COOPERATIVE 91%

**METSÄ BOARD**

**PAPERBOARD**

SALES  
**EUR 2.0 BILLION**

PERSONNEL  
**3,100**

OWNERSHIP OF METSÄLIITTO  
COOPERATIVE 42,53%  
(HOLDING OF VOTES 62,15%)

**METSÄ FIBRE**

**PULP**

SALES  
**EUR 1.3 BILLION**

PERSONNEL  
**850**

OWNERSHIP OF METSÄLIITTO  
COOPERATIVE 50,2%,  
METSÄ BOARD 24,9%,  
ITOCHU CORPORATION 24,9%

**METSÄ WOOD**

**WOOD PRODUCTS**

SALES  
**EUR 0.9 BILLION**

PERSONNEL  
**2,300**

OWNERSHIP OF METSÄLIITTO  
COOPERATIVE 100%

**METSÄ FOREST**

**WOOD SUPPLY AND  
FOREST SERVICES**

SALES  
**EUR 1.6 BILLION**

PERSONNEL  
**900**

OWNERSHIP OF METSÄLIITTO  
COOPERATIVE 100%

# YEAR 2014 HIGHLIGHTS

EUR

# 1.1

BILLION

## BIOPRODUCT MILL

has been planned  
by Metsä Fibre to Äänekoski.

When materialised, it will be  
**THE LARGEST EVER INVESTMENT**  
in the forest industry in Finland.

Read more on page 49.



# -36%

FOSSIL CO<sub>2</sub> EMISSIONS  
PER PRODUCT TONNE  
FROM THE 2009 LEVEL

Read more on page 36.

# -11%

PROCESS WATER USED  
PER PRODUCT TONNE  
FROM THE 2010 LEVEL

Read more on page 33.

# 86%

OF THE FUELS WE USE  
ARE WOOD-BASED BIO-  
FUELS

Read more on page 36–37.

**METSÄ BOARD** was  
recognised by CDP as a leader  
in transparent reporting of  
environmental and climate  
effects.

Read more on page 50.

# 94%

OF WHITE-COLLAR  
EMPLOYEES TRAINED IN  
THE CODE OF CONDUCT

Read more on page 8.



**METSÄ TISSUE NOMINATED  
FOR INTERNATIONAL  
ENERGY EFFICIENCY  
AWARD 2014**

Read more on  
page 37.



**METSÄ  
GROUP'S**  
Sustainability  
Report 2013  
chosen as Student's  
Favorite in Finland.



**METSÄLIITTO  
COOPERATIVE** celebrated  
its 80<sup>th</sup> anniversary.

Read more on page 7.

SICKNESS  
ABSENTEEISM

# 4%

Read more on pages 42–43.

**WE ARE  
PART OF THE  
BIOECONOMY.**

Read more  
on pages 22–23.

**METSÄ BOARD'S** transformation to a paperboard company finalized  
with announcement of an EUR 170 million investment at Metsä Board  
Husum mill.

Read more on pages 6–7.



# -31%

**LESS ACCIDENTS**  
at Metsä Wood as LTA1fr  
compared to 2013.

Read more on page 48.



# TOWARDS BIOECONOMY TOGETHER WITH OUR STAKEHOLDERS



This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

## DEAR READER,

The year 2014 was a year of development at Metsä Group. We announced our plan to build the first next-generation bioproduct mill in Äänekoski, Finland, as well as a significant investment in our paperboard business in Husum, Sweden. Our sustainability work towards our set 2020 targets continued on a good track. Since 2009, we have been able to reduce our fossil CO<sub>2</sub> emissions by 36% per product tonne and increase energy efficiency by 6%. Our personnel's safety at work has been a specific focus area and a 15% improvement in safety records shows that consistent work pays off. We also updated our sustainability agenda based on an extensive materiality analysis conducted in 2014 with our internal and external stakeholders.

## UPDATED SUSTAINABILITY AGENDA

This Sustainability Report provides a comprehensive outlook of the most essential sustainability issues in our operations as well as to our stakeholders. We have divided our renewed sustainability agenda into four main themes that demonstrate how sustainability is an essential element in our products and services, our resource efficient way of operating, forest management and the supply chain, and how we create well-being in the communities and society we work in. In addition to the Group-level agenda, the report also reviews business area-related sustainability aspects in more depth.

**TODAY'S FOREST INDUSTRY IS A SIGNIFICANT PART OF BIOECONOMY.**

Comparing the analysis results with our previous assessment in 2011 provided us an opportunity to reflect on the development of different sustainability topics during past years both in our own operations and in the world at large. New topics, such as the circular economy, bioenergy and new bioproducts, are part of our agenda within the wider discussions on climate change, scarce global resources and population growth. Fundamental issues, such as safety at work and sustainable forest management, remain equally important as earlier.

## WORKING FOR SUSTAINABLE FOREST MANAGEMENT

Metsäliitto Cooperative, Metsä Group's parent company, celebrated its 80th anniversary in 2014. Its mission has remained the same since 1934: to promote the export of Finnish wood and support its 122,000 owner-members in sustainable forest management. As part of the trip down memory lane, we have created a sustainability timeline that highlights some of the key themes along our path.

Today, the wood we use is 100% traceable and 84% certified – which is exceptionally high in global scope. We promote sustainable forest management and wood-based products globally as a member of the World Business Council for Sustainable Development (WBCSD). The United Nations Global Compact Initiative, another important

## IN SOCIETY

The industrial use of forests for sawn timber and paper products began in the mid 19<sup>th</sup> century

The oil crisis speeded up the transition to increased use of natural gas and nuclear power

Emerging discussions about emissions to water and air

Rising environmental awareness and stricter environmental legislation

From environmental management to wider corporate responsibility with social and economic aspects

Raw material  
Energy  
Water  
Air  
Social

1970

1980

1990

## AT METSÄ GROUP

Metsä Group's first mills were founded in the 19<sup>th</sup> century

1934

Metsäliitto Cooperative was established

1984

A forerunner in water purification: modern biological water purification plants were built to the mills  
Other mills soon followed

1989

First Environmental Report published by Metsä-Serla

organization we are a participant of, provides a solid platform on which to build the Group's sustainability principles. In addition, we are active and open in our stakeholder relations and advocacy.

## PROMOTING BIOECONOMY

Today's forest industry is a leader in promoting the bioeconomy and offering renewable alternatives for fossil-based products. The range of current wood-based products is vast and new bio-based products are being developed. The planned bioproduct mill in Äänekoski, Finland will create a unique ecosystem of companies that process the valuable side streams of pulp manufacturing. When materialized, the more than EUR 1.1 billion investment will be the largest in Finnish forest industry's history.

So what will the new bioproducts include? As an example, the demand for wood-based textile fibres is expected to grow significantly in the future. Novel concepts enabling entry into this market is an example of a new bioproduct that could be integrated to the mill at a later stage.

Planning the investment has provided us with opportunities for close cooperation with various stakeholders. The Environmental Impact Assessment (EIA) process and applying for the environmental permit were done in close dialogue with local people living in the Äänekoski region as well as with authorities.

Metsä Board's significant investment of building a new folding boxboard machine at Husum mill, Sweden, will grow their core business. This investment will also support Metsä Board's strategy to exit the weak paper business.

## ENHANCING SUSTAINABILITY IN THE VALUE CHAIN

Our aim is to make sustainability a competitive advantage both for today and for tomorrow. Through our recyclable, traceable and safe products we are part of the daily lives of millions of people around the world. We are a solid first link in the long value chain from the forests to our customers, who we work closely with to assure sustainability throughout the chain.

Our work in 2015 will concentrate on taking our renewed sustainability agenda deeper into action at all levels of the organization. In our operations, our employees' safety and well-being at work, product safety and sustainable forest management are at the top of our agenda. Together with our suppliers and other partners, we are working for a sustainable supply chain with a target to audit all risk-rated raw material key vendors by the end of the year.

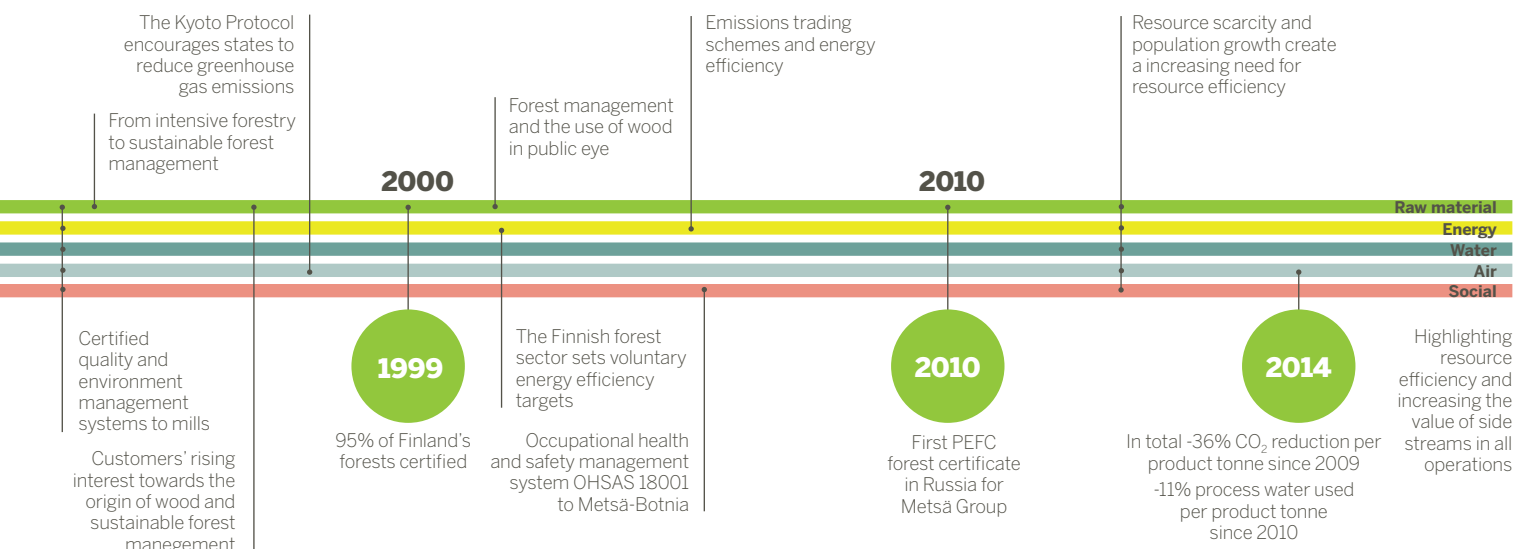
The solid foundation we have in place for our sustainability work is one that we can successfully build on together with our different stakeholders. I hope you enjoy reading this report. Visit our website to find out more about our sustainability work and let's connect on Twitter!



Sustainably yours,

**Riikka Joukio**

SVP, Sustainability and Corporate Affairs  
Metsä Group



# SUSTAINABILITY AND HIGH ETHICS ARE THE BASIS OF OUR COOPERATIVE

Metsäliitto Cooperative, Metsä Group's parent company, has been creating value for its owner-members since 1934. The Cooperative's primary mission has not changed: to support its owner-members in forest management and to follow the principles of sustainable development. Today, Metsä Group operates in the international market with the highest integrity and ethics.



## PARTICIPATING IN THE UN GLOBAL COMPACT

Metsä Group is committed to the ten principles of the UN Global Compact. The declaration's universally accepted principles that highlight the respect for human and labour rights, environmental responsibility and anti-corruption are also the basis for Metsä Group's Sustainability Principles and Code of Conduct.

While the Sustainability Principles draw the guidelines for Metsä Group's sustainability management, the Code of Conduct is the foundation of our ethical business practices. Additionally, several other policies and related instructions have been issued, including Environmental, Human Resources, Equal Opportunities and Purchasing policies as well as the Supplier Code of Conduct.

Attending the Code of Conduct training is a part of the orientation of a new Metsä Group employee. All Metsä Group employees

## ALL EMPLOYEES ARE TRAINED IN THE CODE OF CONDUCT.

are required to take a refresher course on the Code of Conduct and other mandatory policies every two years. White-collar employees follow an online course whereas blue-collar workers are trained by their superiors. The Group-level target is to train all employees. In 2014, in total 72% of our employees (94% of white-collar and 59% of blue-collar) were trained.

Anti-corruption is part of the Code of Conduct training. Training in other policies is also provided at Metsä Group. We also engage in a dialogue about anti-corruption with external stakeholders.

In 2014, special focus was on third parties, such as sales agents, acting on our behalf.

## MANAGING STRATEGIC AND OPERATIONAL RISKS IN THE VALUE CHAIN

Metsä Group's risk management covers all levels of the value chain – the Group, business areas, production units and supplier operations – from securing the supply of wood to being prepared for possible product liability cases.

Risk management is built on the internal identification of risks in the chain, cooperation with the insurance companies and comprehensive training to mitigate operational risks. Technical risk surveys focusing on key property damage as well as business interruption risks are conducted annually by insurance companies. Ensuring undisturbed and continuous operations through preventive risk management work is a priority. The major



hazard risks, such as fires, machine breakdowns and environmental damages, are covered by insurances.

Increasing demand for forest biomass for energy production is one of Metsä Group's identified risks. This may present challenges to today's forest products, if the government subsidies being granted to direct energy uses of wood effect on the availability of wood. This may disturb competition on raw material markets.

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## RESPONSIBLE PROFITABILITY IS ONE OF OUR VALUES.

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Additionally, further requirements are being put on resource use, energy sourcing, efficiency measures and environmental performance. By monitoring and contributing to regulatory environment we can anticipate possible impacts on business.

Both forest certification systems, PEFC and FSC, aim to manage the risks related to well-being of forests as well as waters and other natural values. Buffer zones are left by the waterline to decrease the effects of nutrient leakage to water. In Finland, legislation requires measures when procuring coniferous wood to restrain the potential damages caused by bark beetles for growing stock. Minimising the risks related to storms and other natural damages are taken to notice in when planning the logging operations. The dense network of Finnish forest roads enables

easy access to storm damaged areas and the efficient correction of damages.

Most of our mills are located near forests. Continental Europe is our main market and the sales of our products overseas are continuously increasing. Due to our remote, northern location, the need for energy and transportation is higher than the average in Europe. This may increase the risk of further restrictions in modes of transport and emissions. Water as an unevenly distributed resource may see increasingly tighter regulations in the future. By operating internationally, Metsä Group carefully follows global geo-political tendencies that may affect its business.

The average length of service for an employee at Metsä Group is 17 years. Since a substantial number of our employees will retire in the coming years, ensuring the required competencies through training and collecting tacit knowledge is highly important. All of our units have their own long-term plans for securing the availability of future employees.

### TRANSPARENT TAX POLICY

Metsä Group Tax Policy, approved by the Board of Directors, governs the main tax principles applied in the Group. All tax decisions made within Metsä Group and all other measures and actions which affect taxation have to be legal and in accordance with the applicable tax laws and regulations. All tax decisions are based on sound commercial reasons and they proactively support the goals of business activity. Corporate structures and other arrangements created only for tax reasons are not implemented. Read more about our tax strategy at [www.metsagroup.com/sustainability](http://www.metsagroup.com/sustainability).

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## THE UN GLOBAL COMPACT

### HUMAN RIGHTS

#### Businesses should:

- Principle 1** support and respect the protection of internationally proclaimed human rights; and
- Principle 2** make sure that they are not complicit in human rights abuses.

### LABOUR STANDARDS

- Principle 3** uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4** the elimination of all forms of forced and compulsory labour.
- Principle 5** effective abolition of child labour.
- Principle 6** the elimination of discrimination in respect of employment and occupation.

### ENVIRONMENT

- Principle 7** support a precautionary approach to environmental challenges;
- Principle 8** undertake initiatives to promote greater environmental responsibility; and
- Principle 9** encourage the development and diffusion of environmentally friendly technologies.

### ANTI-CORRUPTION

- Principle 10** work against all forms of corruption, including extortion and bribery.
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## Metsä Group's Code of Conduct encourages transparency

**THE GROUP'S CODE OF CONDUCT**, adopted in 2011, is a compilation of good practices – largely based on common sense and transparency – to ensure that appropriate ethical standards are applied to all situations. These practices were already in force at Metsä Group even before the Code of Conduct was introduced.

"The Code of Conduct encourages open discussion, a transparent flow of information and fairness in all situations," says Compliance Officer **Hanna Laakso**. "It also reminds us of the operating methods that are not permitted and lists the types of situations that may create conflicts of interest so that they can be prevented proactively."

Each supervisor is responsible for their employees' working methods. In unclear situations, everyone must consult their supervisor, the Group's General Counsel or the Compliance Officer on the appropriate way to operate and report any suspected misconduct. "Reporting on behaviour contrary to the Code of Conduct is the responsibility of each employee," says Laakso.



# SUSTAINABILITY THROUGH OPERATIONS AND BUSINESSES

At Metsä Group, sustainability governance extends to all operational levels. Guided by our values – responsible profitability, reliability, cooperation and renewal – sustainability is integrated into all Group’s business areas and operations.



The Cooperative’s Board of Directors is the highest body to approve the guiding policies as well as the outlines for sustainability. The annual Sustainability Report is presented to the Board.

The guiding policies of sustainability and advocacy are prepared by the Executive Management Team (EMT), which also monitors performance and annually revises the sustainability targets. The EMT also sets the key advocacy topics and follows their progress. There is a member of the EMT with responsibility for Sustainability and Corporate Affairs. The target-based sustainability measures are followed up in the business areas. Consolidated figures are reported to each business area’s Management Team.

Metsä Group’s internal Sustainability Steering Team (SST) plays an important role in managing sustainability at the operative business level. The SST is a network consisting of representatives from all the business areas as

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## COMMON SUSTAINABILITY PRINCIPLES APPLY GROUP-WIDE.

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well as the relevant business support functions. The SST steers the Group’s sustainability issues, identifies opportunities and risks as well as approves the working programme of the Sustainability and Corporate Affairs function. It also approves the sustainability report’s contents.

Corporate Affairs serves business areas on issues related to changing regulatory environment. It supervises and promotes the Group’s interests in legislation and trade policy issues. Corporate Affairs has a contact person in every business area and relevant corporate functions.

## GROUP-LEVEL SUSTAINABILITY FUNCTION

The Sustainability and Corporate Affairs function supports Metsä Group’s businesses in gaining competitive advantage and promotes sustainable operations in Metsä Group throughout the value chain from forest through production to end-products. The function is responsible for advising the businesses with the specified sustainability information at the product level; supporting the mills in questions related to environmental permits and side stream utilisation; promoting forest certification within the stakeholder networks as well as coordinating the Group’s advocacy according to the interest of the businesses. In addition, it communicates about sustainability and reports on the performance of our production.

## REPRESENTATION IN INTERNATIONAL BODIES

Sustainability and Corporate Affairs is also responsible for conducting and developing stakeholder relations with regard to sustainability. It represents Metsä Group in the World Business Council for Sustainable Development (WBCSD), the Programme for the Endorsement of Forest Certification (PEFC) for contributing to the work of the forest certification system and by having representative in the Board of Directors of PEFC International for the term 2015–2017; and the Forest Stewardship Council (FSC) with active participation and promotion of

FSC forest management group certification at both the national and international levels since affiliating with FSC International in 2014. The function also manages the cooperation with the World Wide Fund for Nature (WWF) Finland.

## GOVERNANCE CASES IN 2014

In March 2011, Metsähallitus filed a claim for damages at the District Court of Helsinki. It demanded that Metsäliitto Cooperative and two other forest industry companies jointly pay compensation for alleged damages caused by prohibited cooperation with regard to prices in the raw wood market. The claim is

pending and relates to the 3 December 2009 decision by the Market Court, according to which the above companies violated the Act on Competition Restrictions in the raw wood market from 1997 to 2004. In addition, some municipalities, parishes and a group of Finnish individuals have instituted similar proceedings. Metsäliitto Cooperative considers the claims unfounded in their entirety.

In June 2014, the Pirkanmaa District Court deemed two Metsä Tissue employees to have committed to an industrial safety offence in an accident in 2012. The court ordered the two employees each to pay 15-day fines.

## For sustainable land use at WBCSD

**THE WORLD BUSINESS COUNCIL** for Sustainable Development (WBCSD) is an organization that joins together the global business community to create a sustainable future. Metsä Group is an active member of the WBCSD, and its Forest Solutions Group (FSG) which is a global platform for strategic collaboration to bring more of the world's forests under sustainable management and expand markets for responsible forest based products.

With forests under increasing pressure globally, the work program of the FSG focuses strongly on best practices for sustainable forest management, such as promoting forest certification. Certification is a way to guarantee growth and vitality of forest resources also to future generations. In fact, today on average 90% of the forests owned or managed by members of the FSG are third-party certified for sustainable management, meanwhile only 10% of the forests globally have such certification. At Metsä Group 84% of the wood supplied is certified.

"As the global population is dramatically growing and demand for wood increases, sustainable land-use is a major topic for the forest and agricultural sectors as well as other industries. The coordination of both private and public sectors is needed to balance the use of scarce resources," says **Matthew Reddy**, the Director of the Forest Solutions Group at WBCSD. "This is one of the reasons why the FSG continuously engages in open dialogue with key stakeholders."



## METSÄ GROUP'S MISSION, VISION AND VALUES

### MISSION

To be a profitable and competitive forest industry group that uses wood grown by its owner-members

### VISION

To be a focused and profitable Finnish forest industry company that operates in the international market, and that integrates customer orientation, sustainability and innovations in a unique way

### VALUES

Responsible profitability  
Reliability  
Cooperation  
Renewal

## METSÄ GROUP'S POLICIES, PRINCIPLES AND CORPORATE GOVERNANCE MODEL

## SUSTAINABILITY GOVERNANCE

Metsäliitto Cooperative Board of Directors

Metsä Group Executive Management Team, permanent sponsor representation

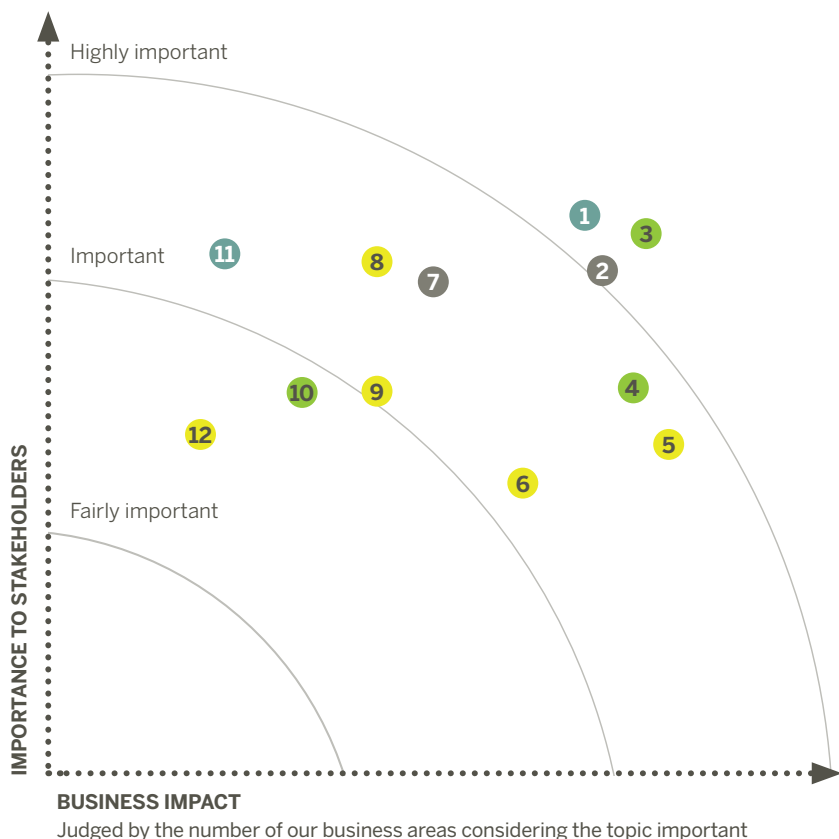
Sustainability Steering Team (SST), internal network

Sustainability and Corporate Affairs function



# OUR SUSTAINABILITY PRIORITIES

In 2014, Metsä Group re-vitalised and updated its understanding on the most essential sustainability topics. The materiality analysis helps us focus our efforts on the issues that are most important to our businesses and stakeholders.



## OUR WAY OF WORKING

Customer collaboration  
Responsible management and leadership  
Ethical business practices  
Partnerships  
Open sustainability communication

## OUR SUSTAINABILITY THEMES

- WE OFFER SUSTAINABLE CHOICES
- WE WORK FOR A BETTER CLIMATE AND NATURE
- WE BRING THE FOREST TO YOU
- WE CREATE WELL-BEING

- 1 Safety at work
- 2 Sustainable forest management
- 3 Product safety
- 4 Product and process innovation
- 5 Material and energy efficiency
- 6 Bioenergy
- 7 Sustainable supply chain
- 8 Emission to air and water
- 9 Circular economy
- 10 New bioproducts
- 11 Supporting local livelihoods and society
- 12 Water use

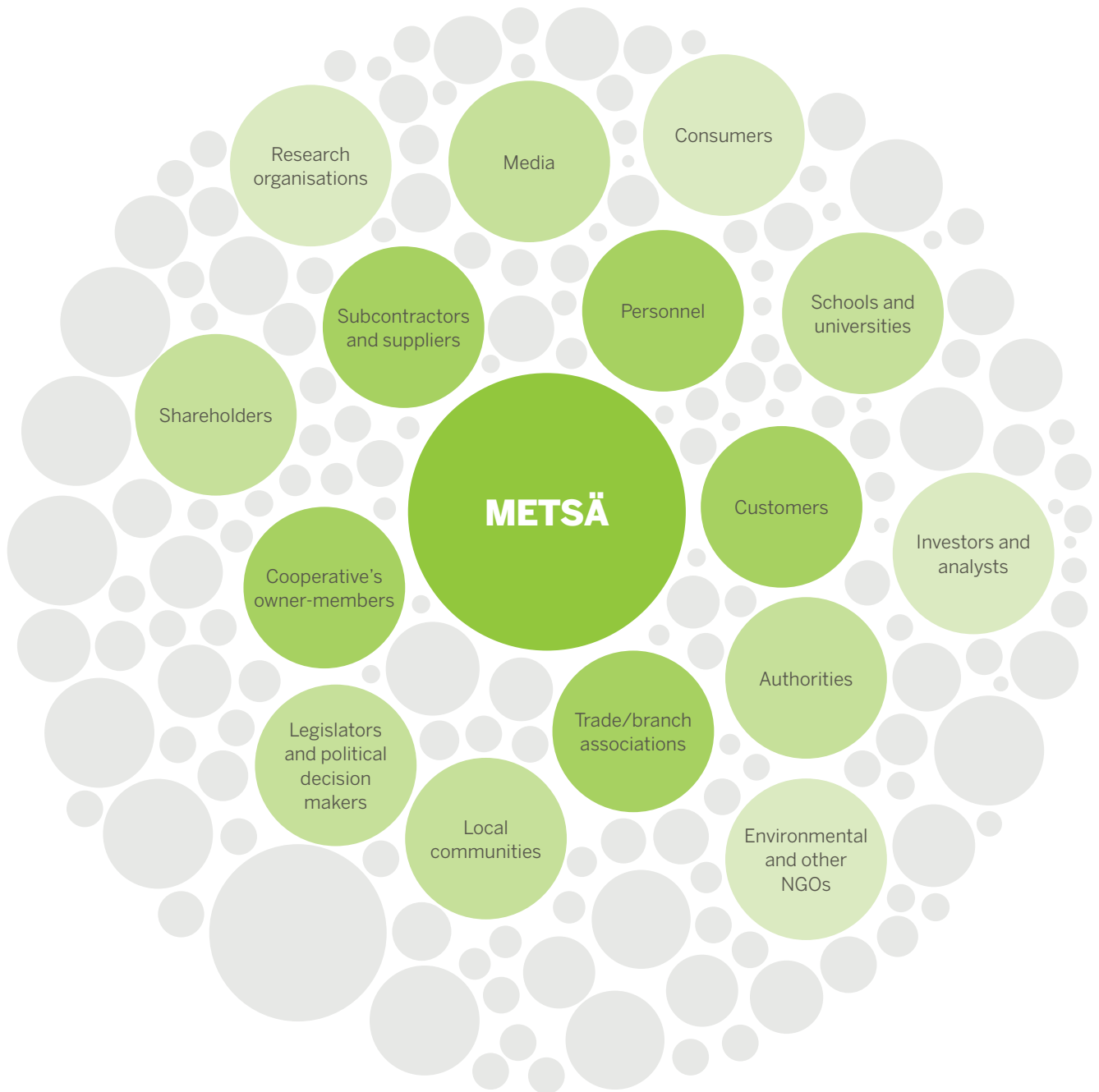


The materiality analysis integrates stakeholder expectations and our five business areas' views on business impact. The 2014 analysis was a continuation of an extensive Group-wide materiality analysis conducted in 2011 for the first time. Both analyses consisted of management and expert interviews, internal

workshops as well as an in-depth evaluation of sustainability trends, risks and best practices. Input from our stakeholders was a key part of the analysis, which also took into account the topics highlighted by the industry associations, regulatory and compliance drivers as well as general trends in the marketplace.

After mapping issues and several steps of evaluation and prioritisation, the results were validated at both businesses and Group level. The final results were approved by Metsä Group's Executive Management Team.

## WE ENGAGE WITH VARIOUS STAKEHOLDERS



### NEW BIOPRODUCTS AND THE CIRCULAR ECONOMY RISING TOPICS

Metsä Group's materiality grid consists of twelve topics that are notably important for Metsä Group's businesses as well as for internal and external stakeholders with varying emphasis. The 'Our way of working' topics present the cornerstones of our operations and are shared throughout the Group.

Since the 2011 analysis, we today see that the fundamental issues, such as safety at work and sustainable forest management remain equally important as earlier, while new topics such as circular economy and new bioproducts have been introduced to the grid with a rising importance. Sustainable supply chain from the forest to the customer and product safety have also gained more importance and the customer interest for the topics has only increased.

Our stakeholders expect us to manage sustainability issues proactively. The updated materiality prioritisation pointed out the issues our key stakeholders want us to focus on and at the same time clarified priorities for each of our businesses. Relevant key performance indicators and targets support the implementation of the most essential sustainability topics at Metsä Group.

# OPEN STAKEHOLDER DIALOGUE

Stakeholder relations are highly important to Metsä Group as it is an active player in networks building a well-functioning bioeconomy and a sustainable future. We create well-being through our operations and work to ensure the competitiveness of today's forest industry. Our stakeholder relations are based on high morals, integrity and transparency.



Sustainability megatrends, such as globalization, population growth, resource scarcity and climate change, form the framework for building an economically, environmentally and socially sustainable future. With its operations, products and investment plans, Metsä Group acts in versatile ways to meet the global needs.

## RECOGNISING WEAK SIGNALS FOR EFFECTIVE DIALOGUE

Close collaboration and active dialogue with various stakeholders are part of Metsä Group's way of working. Since 2013, we have been gathering weak signals from various stakeholders and will continue to do so. We widely follow and analyse the evolvement of topics related to our business and operational environment and act on the findings to support our business areas.

In 2014, we launched new interactive internal communication tools to further improve our well-established practices for dialogue with our personnel. Customer collaboration has been deepened in recent years, e.g. with local sales teams as well as

## ORIGIN OF WOOD IS AMONG THE KEY INTERESTS OF OUR STAKEHOLDERS.

through sustainability training, interviews, visits and surveys. Key topics of interest for our customers are the origin of wood, sustainable forest management, product safety and resource efficiency. The product-specific environmental product declarations that we offer also support our customers in evaluating the environmental footprint of the end-products. Supplier and subcontractor training and audits are run according to annual plans. As a part of the materiality analysis in 2014, we initiated meetings with non-governmental organisations, representatives of the academic world as well as international suppliers and partners, among others.

## BUILDING THE WAY FOR BIOECONOMY

The Finnish bioeconomy strategy, accepted in 2014, aims to make Finland a bioeconomy pioneer; one that is based on our vast renewable wood resources, a high level of expertise as well as industrial strengths. The objective of the strategy is to push the Finnish bioeconomy output up to EUR 100 billion by 2025 and to create 100,000 new jobs.

At the same time, the Finnish Forest Industry Federation (FFIF) invited Metsä Group and its other member companies to build a bioeconomy vision for the industry. The vision for 2025, Evolving Forest Industry – Prosperous Bioeconomy, was launched in November 2014.

## ACTIVE AND TRANSPARENT PARTICIPATION IN ADVOCACY

Metsä Group engages in dialogue with numerous stakeholders at the national, EU and international levels, and participates in the development of regulatory frameworks. Our focus is on the key policy areas that affect the Group's operational conditions and



market access, and which are strategic for its businesses.

The most central themes of our advocacy are climate change, energy and environmental policies, product and food safety, innovation and transport policies, trade policy, resource efficiency, circular economy and waste policies. We promote the sustainable and active use of forests to guarantee raw material for the needs of the bioeconomy; the use of renewable raw materials and wood construc-

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## WE PROMOTE ACTIVE USE OF FORESTS FOR THE NEEDS OF BIOECONOMY.

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tion; the efficient utilisation of production side streams and waste; and recyclable and safe bioeconomy products.

We advocate a level playing field for forest-based industries to promote a sustainable bioeconomy. The ultimate aim is to guarantee the availability of wood raw material and the global competitiveness of the European forest industry to maintain and increase industrial production in Europe, which is beneficial not only for the economy but also for the climate and the environment.

In 2014, Metsä Group announced its plans to invest in the first, next generation

bioproduct mill in the world. To explain the new bioproduct mill concept, its benefits and impacts on employment, wood supply and logistics, Metsä Group engaged in an extensive multi-stakeholder dialogue.

### COLLABORATION WITH THE INDUSTRY ASSOCIATIONS

We work closely with industry and trade associations to monitor, identify and analyse main policy developments at the national, European and international levels. Metsä Group is an active member of the FFIF. During the European Parliament election campaign and the EU institutional change over, the FFIF together with its members promoted issues important to forest industries.

Metsä Group actively participates in the work of the Confederation of European Paper Industries (CEPI). As the Chair of the Environment and Safety Committee of CEPI, Metsä Group promotes environmental policies, food contact issues and resource efficiency. We also participated in the completion of the bio-based industry Public Private Partnership, initiated by CEPI together with the European Commission and are a core member of the Bio-based Industries Consortium. The partnership provides funding for sector specific research and its first Call for Proposal was launched in 2014.

Metsä Group and its business areas also take part in several national forest industry

associations in the main operating countries as well as in several sector-specific organisations at the national and European level. In addition, we take direct actions and communicate our views to decision makers. We provide industry and trade associations as well as legislators and decision makers with information on the impacts of various legislative initiatives on our operational environment and on trade barriers in the countries where we operate. Read more on Metsä Group's memberships and associations at [www.metsagroup.com/sustainability](http://www.metsagroup.com/sustainability).

Metsä Group follows high morals, integrity and transparency in advocacy as described in the Group's Code of Conduct and Sustainability Principles. Metsäliitto Cooperative is also registered in the EU's Transparency Register, operated by the European Parliament and the European Commission, and has signed the Transparency Register Code of Conduct. The Register provides information on who is engaged in activities aiming at influencing the EU's decision-making processes, what interests are being pursued and how much resources are invested in these activities.

According to the Group-wide principles on sponsoring and donations, Metsä Group focuses on supporting youth and sustainability related projects. Support to political activities is subject to a separate approval by the Board of Directors. In 2014, Metsä Group did not give material support to political parties.

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## New forms of cooperation with authorities and other decision makers

In 2014 Metsä Group's subsidiary Metsä Fibre announced a plan to build a new bioproduct mill in the existing mill area in Äänekoski, Finland. When materialised, the project of approximately EUR 1.1 billion will be the largest ever investment in history of the Finnish forest industry. Read more about the plan on page 51.

As part of planning the investment, Metsä Fibre has been involved in a pilot project with the Ministry of the Environment. In the project, the Environmental Impact Assessment (EIA) and the environmental permit process are proceeding in parallel and are being fast-tracked. "Traditionally, the EIA process has to be ready before applying for the environmental permit for the mill," says Project Director **Timo Merikallio** from Metsä Fibre. "In this pilot, the processes for the EIA and applying for the environmental permit are running in parallel, with increased dialogue and information flow between the authorities, the decision makers and Metsä Fibre."

The aim of the pilot has been to develop the permit and appeal processes, and to improve the quality of the application and relevant clearance documents. The good practices will be collected and used by the Ministry of the Environment to develop permit application processes further. "Well-functioning cooperation with the authorities has boosted the process significantly," applauds Merikallio. "I believe that this kind of cooperation can have a positive effect on Finnish competitiveness in the global marketplace."



# SUSTAINABILITY AGENDA AND TARGETS

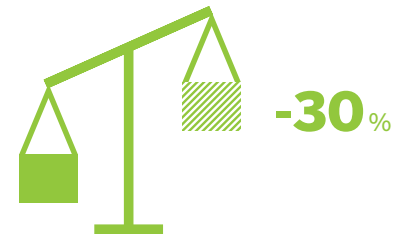
Metsä Group's sustainability agenda has been developed together with our stakeholders. It covers the entire value chain from the forest to our products.





## WE OFFER SUSTAINABLE CHOICES

- Turning renewable wood into sustainable, safe and recyclable products
- Providing customer-focused services and solutions
- Seeking and adopting innovations for continuous improvement and renewal
- Our products provide alternatives for fossil-based products and raw materials
- We fulfil the highest product safety standards



Our paperboards are over 30% lighter in weight than competing boards. This reduces their environmental footprint

## OUR TARGETS

## PERFORMANCE IN 2014



## WE BRING THE FOREST TO YOU

- Promoting sustainable forest management, certification and the diversity of forest nature
- Enhancing sustainability in the value chain
- Ensuring the traceability of raw materials
- Sustain the amount of certified wood above 80%
- Audit all of our risk-rated raw material key vendors against sustainability criteria by the end of 2015

### FOREST CERTIFICATION



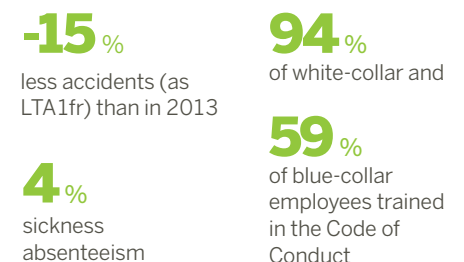
## WE WORK FOR A BETTER CLIMATE

- Making efficient use of raw materials, energy and water
- Increasing the value of side streams
- Maximizing the share of bioenergy
- Minimizing emissions to water and air
- Reduce fossil CO<sub>2</sub> emissions by 30% per product tonne by 2020 from the 2009 level
- Improve energy efficiency by 10% by 2020 from the 2009 level
- Reduce process water use by 10% per product tonne by 2020 from the 2010 level



## WE CREATE WELL-BEING

- Ensuring ethical business practices
- Improving safety at work
- Assuring responsible management
- Contributing to local livelihoods and society
- Train all employees in the Code of Conduct
- Decrease the lost-time accident frequency rate (LTA1fr) annually by 10%. Our long-term target is zero accidents
- Retain sickness absenteeism below 3%







## WE OFFER SUSTAINABLE CHOICES

# SUSTAINABLE CHOICES FOR CUSTOMERS AND CONSUMERS

Metsä Group offers products and services that enable our customers to make more sustainable choices and reduce their environmental footprint. Our high-quality products combine renewable raw materials, customer-orientation, sustainability and innovation. All products, made of sustainably managed northern wood, are safe for people and the environment.



## MORE OPTIONS TO FOREST MANAGEMENT

**METSÄ FOREST** From the beginning of 2014, Metsä Forest has offered forest owners the possibility to choose forest management based on selective or gap logging methods. Both methods aim to maintain an uneven-aged and multi-storied forest. These new logging methods, enabled by the new Forest Act, allow forest management to meet the forest owners' individual values better than before.

In selective logging, the largest trees are harvested whereas in gap logging, several small 'gaps' of around 0.2–0.3 hectares are logged in the stand. The logging methods can also be combined. In uneven-aged forest management, regular logging plays an important role in order to make space for seedlings and other young trees to grow.



## SUSTAINABILITY AS A COMPETITIVE EDGE IN NORTH AMERICA

**METSÄ BOARD** The quality, light weight, safety and unparalleled environmental properties of Metsä Board's paperboards have proven to be excellent selling points in North America, where Metsä Board is growing its business. Environmental matters and product safety are increasingly important in North America. The lighter paperboards require less material and thus result in environmental benefits for the customer's end product. Also the recyclability of the paperboards is important, and an important factor for choosing it as packaging material instead of plastic.

Metsä Board is the clear market leader in white-top fresh forest fibre linerboard in North America. During the past five years, linerboard delivery volumes to North America have grown more than 70%. Metsä Board has been the folding boxboard market leader in Europe for a long time. In North America, demand for cartonboard has focused on the traditional heavier grades. Folding boxboard has not been used much there, and Metsä Board's sales volumes were low for a long time. Nevertheless, in 2012 North America was selected as a strategic growth market for folding boxboard as well.



## SAGA COOK & CHILL COOKING PAPER REDUCES FOOD WASTE

**METSÄ TISSUE** Did you know that food waste always has a multiple environmental impact compared to food packaging? Metsä Tissue's SAGA Cook & Chill Cooking Paper is tackling the global problem of food waste. The product, which has been specifically designed for cook & chill processes in institutional kitchens, easily halves food waste levels.

SAGA Cook & Chill prevents food around the edges of cooking trays from burning. The entire portion is thus consumed by the diners instead of being thrown away. Tests confirm that the total food waste using SAGA Cook & Chill is half that of

conventional paperless processes. The fully biodegradable paper also reduces the amount of organic waste. At the same time it saves water, energy, detergents, labour and time by making dishwashing easier. All these savings and efficiency enhancements contribute to reducing the carbon footprint of the entire process. This also brings significant cost savings.

In institutional settings thousands of meals are prepared each day. As an example, in a kitchen preparing 20,000 portions of lasagne, saving up to 1.5 portions per dish reduces the amount of food waste by 675 kg – in one day.



## EXCELLENT RESISTANCE

**METSÄ WOOD'S** plywood is used in the cargo tanks of tankers for transporting liquefied natural gas (LNG). Plywood is an excellent technical material for use in these tankers as it is of uniform quality and sustainable. Plywood must be able to withstand both the constant stress of seafaring and high temperature differences.

Plywood is a load-bearing and supporting material in the tanks. LNG is stored at very high pressure, and an incompletely filled tank also causes impact forces on the tank structures.

Gas is transported at a temperature of  $-162^{\circ}\text{C}$ , while the external temperature can be as high as  $+40^{\circ}\text{C}$ . Even with these high temperature differences, birch plywood does not lose its strength, nor does it contract or expand, unlike metals.

A Mark III, one of the most commonly used tank types, requires a total of  $800\text{ m}^3$  of birch plywood in three layers. This means approximately 25 shipping containers of plywood – for a single tanker. This provides Metsä Wood with significant growth opportunities.



## THE BOTNIA FOX INDEX REVOLUTIONIZES THE CONCEPT OF PULP QUALITY

**METSÄ FIBRE** Consistent quality has always been a competitive edge for Metsä Fibre's pulp. The use of the Botnia FOX, a real-time pulp quality control method, has made the pulp even more uniform in quality. The tool has been used in process optimisation and material efficiency has been improved up to 2–3%.

The Botnia FOX quality index assesses the pulp manufacturing process in real time. An algorithm devised in a four-year R&D programme combines various measurements

into a single index figure describing pulp quality.

The resulting real-time quality information improves the efficiency throughout the value chain, as the quality anomalies can be addressed more effectively at the manufacturing process stage. Customers can access the information at once using the RFID delivery batch code, Metsä Fibre's groundbreaking RFID tracking system that makes every single pulp unit traceable from the mill to the customer's site.







**WE OFFER  
SUSTAINABLE  
CHOICES**

# SAFE PRODUCTS FOR DEMANDING USES

Delivering safe and sustainable products to customers requires fulfilling the highest safety standards. We manage the hygiene and product safety risks throughout the entire supply chain. Ensuring safety is of paramount importance, especially in products that are used in human or food contact such as packaging boards, cooking and baking papers as well as tissue papers.



## GUARANTEEING SAGA COOKING PAPER'S SAFETY THROUGH THE CHAIN

### SAFETY STARTS FROM THE RAW MATERIALS

Product safety starts from the raw materials and their approval procedure. Metsä Group is committed to using wood from sustainably managed forests and always knows the origin of the wood. Both the SAGA cooking paper and its package are certified according to the PEFC forest certification.

Metsä Board, Metsä Tissue, Metsä Fibre and Metsä Wood have systematically investigated the origin of the chemicals they use. An extensive database is maintained on the chemicals used in the production process.

In SAGA products from Mänttä mill in Finland, both the pulp and packaging board are manufactured by Metsä Group. This guarantees that product safety is fully in our control.



### NO HAZARDOUS MINERAL OILS IN FRESH FOREST FIBRE

As a fresh forest fibre-based product can be in direct contact with food, our products meet even the strictest standards concerning food safety. The risk of taint, odour or any harmful substance passing on to the food is minimised. Pulp, paper-board as well as baking and cooking papers are made of fresh fibres and additives approved according to German BfR recommendation XXXVI and the US FDA's regulations of 21 CFR, parts 170–189.

Moreover, Metsä Group does not use any genetically modified raw materials. We do not approve of nanotechnology-based new substances until more information on their safety becomes available.

### SAFE PULP FOR FOOD CONTACT

Pulp, the raw material for SAGA paper, needs to fulfil the requirements set for food contact. With the ISO 22000 product safety management system, possible risks are identified and mitigated.

The pulp quality has a great effect on the final product. In SAGA, the product's moist- and grease-proofness is the result of softwood pulp's mechanical refining.







## KNOWING AND SHOWING OUR PRODUCTS' ENVIRONMENTAL IMPACTS

Since knowing the environmental impacts of our products is essential to our customers, we use various methods to assess and communicate the impacts of our products and processes. In 2014, Life Cycle Assessments (LCA) and Life Cycle Inventories (LCI) were extended to cover a wider range of our products. Currently LCAs and LCIs are provided for Metsä Board's and Metsä Fibre's customers. LCA typically contain all relevant emissions and resource use as well as the whole production chain from material procurement to product delivery. Our customers can use these assessments and inventories as a part of their own LCAs when they convert our products further.

It is important that LCAs for the same product group have been calculated by using the same rules independent of the manufacturing company. To this end, Metsä Group actively follows the EU's Product Environmental Footprint Category Rules (PEFCR) pilot project for intermediate paper products including tissue, packaging boards and graphic papers that will be finalized in 2016.

Metsä Tissue has made internal comparisons between the environmental profiles of fresh and recycled fibre-based tissue products at the same time with the European Commission's work for paper products. Industries (CEPI) and the European Tissue Symposium (ETS) provide expertise in the work.

## KNOWING THE ENVIRONMENTAL IMPACTS OF PRODUCTS IS ESSENTIAL TO OUR CUSTOMERS.

In 2014, Metsä Wood completed Environmental Product Declarations (EPD) according to European Standards EN 16485 and EN 15804. It is possible that EPDs will be a legal requirement in the future, as stated in the EU's Construction Products Regulation 305/2011. EPDs were made for plywood, Kerto LVL and Finnjoist products.



## MANAGEMENT SYSTEMS AND TESTING ENSURE SAFETY AT THE MILLS

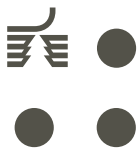
All products are manufactured in compliance with good manufacturing practice and management systems certified according to ISO 9001, ISO 14001 and ISO 22000. In addition to the approval of the additives, this means that the pulp, packaging board as well as the baking and cooking papers are tested according to the protocol accepted by the authorities. For example, SAGA paper has been tested to be suitable for baking and cooking purposes in microwaves and conventional ovens at temperatures of up to 220 °C. On top of this, management systems ensure that our products, which are in compliance with food contact requirements, are not contaminated during manufacture and transportation to customers.

## ECOLABELS HELP CUSTOMERS MAKE SUSTAINABLE CHOICES

Ecolabels are essential for both Metsä Tissue's products and Metsä Board's office paper range. Since Metsä Fibre and Metsä Board's pulps are also used as raw materials in various eco-labelled products, they must fulfil the same criteria.

The Nordic Ecolabel in SAGA paper products helps those consumers, who want to choose an environmentally transparent and sound process. New criteria for greaseproof paper Nordic Ecolabel, approved in the end of 2014, will be adopted by manufacturers by the end of 2015.





WE OFFER  
SUSTAINABLE  
CHOICES

# VALUE-CREATING INNOVATIONS CONTRIBUTING TO THE BIOECONOMY

Our expertise in creating value in the chain from the northern forests through processes to the end-user is unique. Our products respond to our customers' business requirements as well as their daily needs around the world. To meet the increasing need of fibre and biobased solutions, our R&D is focused on seeking and adopting innovations in our operations together with our customers.





As we operate in an international market, research and development are highly important for us. In 2014, Metsä Group invested about EUR 17.7 million in R&D, which accounts for 0.4% of total operating expenses (2013: 0.4%). Our R&D roadmap for 2020 is built on covering both internal and external potentials with three focus areas:

- Process efficiency and resource value
- Renewable raw material as a competitive advantage
- Value-added products and services

## SUSTAINABILITY THROUGH THE EFFICIENT UTILISATION OF RENEWABLE RESOURCES

Innovative utilisation of our main resources – raw materials, energy and water – is notable from the sustainability, quality and profitability points of view. Our businesses consist of processes, whose efficiency has direct impact on yield, productivity and costs. For this reason, we continuously keep looking for new, innovative ways to improve our opera-

tions. In addition to investments, innovations in our daily work bring enormous benefits and improve efficiency. Each year, all employees are invited to participate in the Metsä Group President and CEO's Productivity and Innovation Competition. In 2014, the main prize was awarded to a new bioproduct concept for food packaging. The concept combines Metsä Board's folding boxboards and fresh fibre linerboards with Metsä Tissue's cooking papers in an innovative manner.

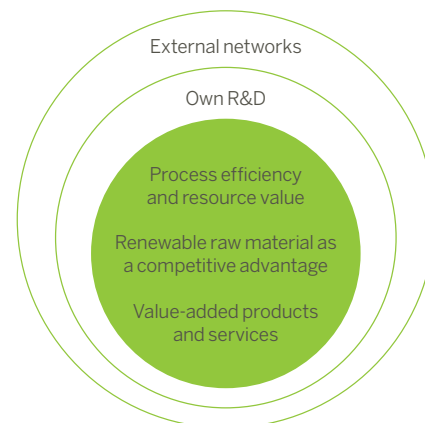
## BROAD RESEARCH COOPERATION FOR PROMOTING THE BIOECONOMY

Metsä Group is a founding member of various national and international research and development networks such as the Finnish Bioeconomy Cluster (FIBIC Ltd.) and the Biobased Industries Consortium (BIC). Sharing and developing expertise within the networks accelerates and widens Metsä Group's innovation process and promotes the implementation of the bioeconomy. The networks focus on developing e.g. new

sustainable processes for the production of new wood-based bioproducts for various bioeconomy value chains.

## RESEARCH COOPERATION

Metsä Group invests in seeking and adopting innovations internally as well as in external networks.



## Towards new bioproducts

**RESOURCE EFFICIENCY, BIOECONOMY AND THE CIRCULAR ECONOMY** are increasingly influencing the future opportunities of Metsä Group. Although not new to forest-based industries, these 'factors' are clearly playing a more important role due to global resource scarcity and climate change. With regard to Metsä Fibre, these factors have a clear impact on the planning of the new bioproduct mill in Äänekoski, so much so that the mill is called a 'bioproduct mill' instead of a pulp mill. Read more about the project on page 49.

In addition to conventional bioproducts, like pulp, tall oil and power, the new mill is expected to produce several new bioproducts – some for use by the mill itself and some for external sales. Regardless of the end-use, a key driver is resource efficiency; in other words, how to maximise the added value from the raw materials needed for pulp production.

"The new bioproducts will be implemented in stages, as their maturity varies greatly. Some will be proposed to be included in the first stage of the bioproduct mill, whereas others are still cooking in the laboratories and will thus be implemented later," explains **Niklas von Weymarn**, Vice President, Research, Metsä Fibre.

### NO FOSSIL FUELS

As the new mill is going to be 100% free of fossil energy sources, a bio-based fuel is needed for the lime kiln already in the first stage. In this context, bark gasification to make a bio-based fuel gas is a strong candidate. "This would be a 2-fold scale-up compared to the gasifier at our Joutseno mill. We are also studying the use of sludge as a co-fuel in gasification, which further complicates the concept as sludge contains many inorganics that are challenging in pulp production."

The demand for wood-based textile fibres is expected to grow significantly in the future. Novel concepts enabling entry into this market is thus an example of a new bioproduct that could be integrated to the bioproduct mill at a later stage. The current leading production process to convert wood into textile fibre – the viscous process – has many drawbacks, including the use of environmentally-harmful chemicals. Production processes based on chemicals that are more environmentally friendly are thus a focus for Metsä Fibre's R&D efforts in this field. The first test garments manufactured using the new lead technology show great promise, both quality-wise and environmentally speaking.

## BIOECONOMY

**Bioeconomy** refers to an economy that relies on renewable natural resources to produce food, energy, products and services. The bioeconomy will reduce our dependence on fossil natural resources, prevent biodiversity loss and create new economic growth and jobs in line with the principles of sustainable development.

Source: The Finnish Bioeconomy Strategy

## CIRCULAR ECONOMY

**Circular economy** systems keep the added value in products as long as possible and eliminate waste. They keep resources within the economy when a product has reached the end of its life, so that they can be productively used again and again and hence create further value. Transition to a more circular economy requires changes throughout the value chains, from product design to new business and market models, from new ways of turning waste into a resource to new modes of consumer behaviour.

Source: European Commission: Towards a circular economy: A zero waste programme for Europe





# 4FS – THERE'S MORE TO THE FOREST THAN MEETS THE EYE

The northern forests fulfil a wide range of unique tasks in the benefit of ecosystems and mankind. In addition to maintaining biodiversity, hydrological systems and the carbon cycle, they also offer employment, recreation possibilities, wood raw material and non-timber forest products such as game, berries and mushrooms.



Most of Metsä Group's wood originates from Finnish privately owned forests, about a half of which belong to the 122,000 owner-members of the cooperative. As a cooperative, Metsä Group has a long tradition of working closely with forest owners.

The cooperative's owner-members are provided with forestry services with the aims of enhancing the value of their forest assets and ensuring the future wood supply to Metsä Group's production units. At the same time, we also take care of future forest growth together with the forest owners. Since the 1970s, the growth of Finnish forests has annually exceeded the total removal by one fourth on average.

### JOINT DEVELOPMENT WITH PARTNERS

Forestry and transport entrepreneurs form a partner network that Metsä Group relies on.

Joint development projects have enabled finding the best practices and solutions in several forestry matters, often resulting in efficiency and cost-savings with less environmental impacts.

The role of forestry is very important in rural areas because the services in harvesting, transport and silviculture are purchased from local entrepreneurs.

The online training platform, launched by Metsä Group in 2013, was extended to cover forest services, harvesting, wood energy and wood transport contractors. The aim of the training tool is to ensure the competence in quality and environmental issues in wood supply.

### FROM TARGET SETTING TO CONCRETE ACTIONS

In addition to Finland, we purchase wood from Sweden, Russia and the Baltic countries.

Regardless of the country of origin, Metsä Group follows the same environmental requirements for wood supply. Targets and follow-ups are set to our main environmental influences in order to decrease them. One of the most important environmental goals in wood supply is the maintenance of biodiversity. In 2014, Metsä Group continued cooperation with WWF Finland in forest biodiversity issues. Biodiversity surveys continued in the forests managed by Metsä Group both in Russia and Finland.

### CHANGES IN THE OPERATIONAL ENVIRONMENT

Forest-related legislation has been under revision in Finland – the Forest Act and the Act on the Prevention of Insect and Fungi Damages in Forests entered into force at the beginning of 2014. Also, the revised Environmental Protection Act came into force.



## The Forest Dialogue in Finland

**IN 2014**, an international dialogue on food, fuel, fibre and forests (4Fs) took place in Finland. The leaders of the international forest sector discussed key themes such as the coordination of various stakeholders' land use needs, ecosystem services and the bioeconomy.

The aim of the event, co-hosted by Metsä Group, was to increase international influencers' knowledge of the Finnish forest sector and to present Finnish success factors in integrating different land-use in the forest. Experts from the forest, biofuel and agriculture sectors from all continents took part in the event.

"Finnish forests are an excellent example of multiple uses of forests. In addition to forest sector products, forests are an important source of bioenergy. They also provide recreation and food such as game, berries and mushrooms," says **Jussi Ripatti**, Environmental Director at Metsä Group.

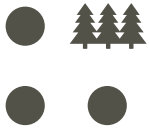
The Forest Dialogue, established in 1998, has already gathered 2,500 attendees from the forest industry, the forest economy, NGOs and the public sector. Its objective is to support open, multi-stakeholder discussions in order to solve disputes related to forests and land use.

The Act on the Financing of Sustainable Forestry and the Forest Management Association Act will both come into force in 2015.

A significant change from the point of view of decreasing emissions was the new legislation that allowed the use of bigger trucks in wood transport from 60 to 76 tonnes. Read more about them on page 31.

In 2014, Metsä Group passed its first official audit regarding the European Timber Regulation, conducted by Finland's competent authority the Agency for Rural Affairs.





WE BRING THE  
FOREST  
TO YOU

# OUR WOOD IS ALWAYS TRACEABLE

Regardless of the country of origin or whether it comes from certified or non-certified forests, Metsä Group always knows the origin of the wood it supplies, ensures its legality and takes measures to avoid wood supply from unacceptable sources. Metsä Group holds Chain of Custody certificates in all wood supply and production units.



Metsä Group's wood supply chain is constantly evaluated internally and by external auditors. In giving valuable feedback on both strengths and weaknesses, the evaluations are an important tool for continuous improvement.

## HIGHEST ACHIEVEMENTS IN FOREST CERTIFICATION SHARES

The target of Metsä Group is to sustain the amount of certified wood in our operations

**OVER 80% FROM  
CERTIFIED FORESTS.**

above 80%. In 2014, 84% (2013: 82%) of the wood supplied by Metsä Group was PEFC and/or FSC® (Licence Code FSC-C014476) certified, which is the highest share in

equivalent wood supply in semi-natural forests. Globally, only some 10% of the forests are certified.

In Finland, Metsä Group offers forest owners the possibility to join the Group's PEFC and/or FSC forest management group certifications. Metsä Group has taken the initiative in applying for forest management group certificates in Russia and Latvia, and they are expected to be certified during 2015.

## SAFEGUARDING RESPONSIBILITY IN WOOD SUPPLY



### FOREST REGENERATION

#### MOST RELEVANT POINTS FOR SUSTAINABILITY:

- Growth of the forest
- Safety at work
- Native tree species
- Secured and suitable origin of the seeds
- No use of GMOs
- Legality guaranteed

#### CONTROL:

- Company's own audits
- Forest Management audits (in certified forests)
- Quality and Environment Management System audits
- Authority inspections



### STANDING FOREST

#### MOST RELEVANT POINTS FOR SUSTAINABILITY:

- Growth of the forest
- Health of the forest
- Biodiversity safeguarded
- Legality guaranteed

#### CONTROL:

- Forest Management audits (in certified forests)
- Controlled sources audits (in non-certified forests)
- Authority inspections



## ACTIVE ROLE IN CONTINUOUS DEVELOPMENT

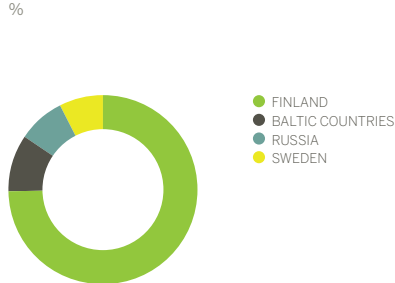
Together with other stakeholders, Metsä Group attended the PEFC forest management certification criteria revision in Finland. The criteria will be valid at the beginning of 2016 and training on the changes is to take place in 2015.

In 2014, Metsä Group became a member of FSC International. Previously, we have been members in the national FSC initiatives in Finland and Russia.

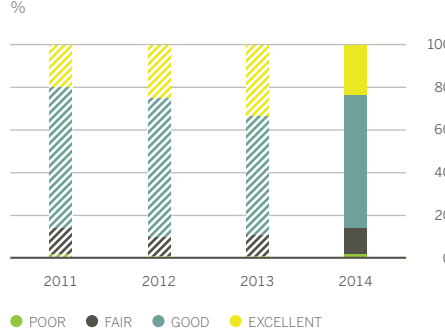
Throughout the year, the forest certification systems continued developing the Chain of Custody and Due Diligence systems.

Active involvement in the development of forest certification helps us to ensure and further evolve sustainability in the wood supply.

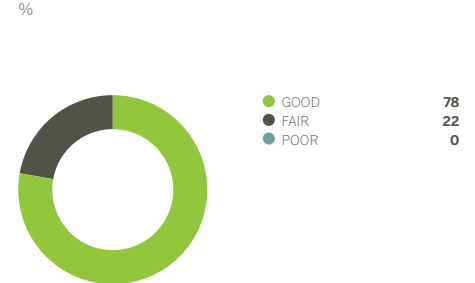
### THE GROUP'S WOOD SUPPLIES BY COUNTRY IN 2014



### EVALUATION OF NATURE MANAGEMENT IN HARVESTED STANDS (DONE BY METSÄ GROUP IN FINLAND)



### LOGGING SITE CLASSIFICATION IN RUSSIA AND THE BALTICS IN 2014



## Biodiversity prefers certified forests

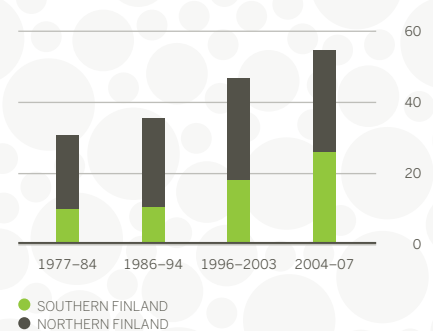
**FINLAND IS** one of the countries where forest certification was launched already some 15 years ago and is now starting to show its advantages.

Launched with a model suitable for small-scale forest ownership in 1999, forest certification has covered almost all commercial forests in Finland. The share of certified forests in Finland has been stable ever since, from 95–98%.

Retention trees – those left standing on the logging site after the harvesting to safeguard biodiversity – were a requirement of the forest certification standard and thus more widely introduced to Finnish forests in 1999. Regardless of other reasons, such as storm damage, data clearly show a significant increase in the amount of decaying wood in Finnish forests.

Decaying wood is one of the key factors for maintaining the biodiversity of forests, ensuring a continuum of deadwood in different stages that is vitally important to a great number of species such as beetles and polypores. Not only have the statistics shown an increase in the amounts of decaying wood, but also in the vitality of some species that are dependent on it.

### THE AMOUNT OF DEAD USABLE WOOD PER HECTARE IN FINLAND 1977–2007



Source: National forest inventory



## HARVESTING AREA

### MOST RELEVANT POINTS FOR SUSTAINABILITY:

- Growth of the forest
- Safety at work
- Protection of soil and water
- Health of the forest
- Biodiversity safeguarded
- Legality guaranteed

### CONTROL:

- Company's own audits
- Forest Management audits (in certified forests)
- Controlled origin audits (in non-certified forests)
- Quality and Environment Management System audits
- Authority inspections



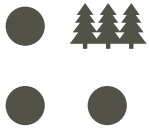
## SUPPLY CHAIN

### MOST RELEVANT POINTS FOR SUSTAINABILITY:

- Knowledge on the origin of wood
- Safety at work
- Transparency of the supply chain
- Emissions minimized
- Legality guaranteed

### CONTROL:

- Company's own audits
- Chain of Custody audits
- Quality and Environment Management System audits
- Authority inspections



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# ENHANCING SUSTAINABILITY IN THE VALUE CHAIN

For many years, Metsä Group has been focusing on ensuring sustainability in its supply chain. In 2011, we launched our Supplier Code of Conduct as we require all of our suppliers to commit to working according to the same high ethical standards as we do ourselves.





## 97% OF METSÄ GROUP'S PURCHASES ORIGINATE FROM EUROPE.

Metsä Group Purchasing is a cross-functional and cross-organisational entity based on 17 main categories. Out of these, seven are direct material categories (raw materials and packaging) and ten indirect materials and services such as energy, logistics, ICT and mill related support services. See the table below for more information.

Procuring wood raw material is the core business of Metsä Forest and is thus excluded from the scope of the Group Purchasing organisation. Wood is Metsä Group's main raw material and our wood procurement has been a forerunner in developing sustainability criteria and evaluating the performance of our suppliers and partners in harvesting operations through systematic auditing and training practices. Read more about sustainable forest management and the origin of wood on pages 24–27.

Metsä Group's total spend in external purchases is over EUR 2 billion annually, of which raw material purchases make up 28%. Our aim is to use local suppliers whenever

feasible. In total, 87% (2013: 87%) of our purchases are from countries where we have production sites. The majority of them, 97% (98%), are from Europe.

### FOCUSING ON SUSTAINABILITY OF OUR KEY SUPPLIERS

Metsä Group's suppliers are required to comply with our Supplier Code of Conduct and meet the requirements of our Sustainability Principles. Moreover, we expect them to be reliable, competitive, reputable,

## 2/3 OF OUR WOOD SUPPLY IN FINLAND COME FROM FAMILY-OWNED FORESTS.

environmentally sound and committed to meet our expectations. We have over 20,000 active supplier relationships, of which some 200 are defined as key vendors – suppliers who bring significant value to our business. Key vendors are selected based on strategic importance, a wide variety or unique products or services, strategic criticality, significant spend or a long-term partnership. Our key

vendors make up 42% of our total spend in external purchases.

Through our Supplier Code of Conduct, our aim is to ensure that we work with suppliers that are committed to sustainability, follow safe working practices and have a high standard of business ethics. It prohibits the use of forced or child labour, emphasises the respect for human rights as well as actions against corruption and bribery. The Supplier Code of Conduct was included in 335 contracts during 2014, which accounts for 70% of all new and renewed supplier contracts.

Last year, we also set a new target for our supply chain management – to audit all of our risk-rated raw material key vendors against sustainability criteria by the end of 2015. In order to meet this target, we have been working on developing a reliable tool to determine the sustainability performance of our key suppliers. The aim is to ensure that the Supplier Code of Conduct is followed in practice throughout the supply chain. As most of our purchases are in Europe, we operate in areas where the risk of labour or human rights abuses is minimal and where legal environmental regulations are strict.

Metsä Group has well-established auditing practices. In 2014, we performed 59 supplier audits (65).

### METSÄ GROUP PURCHASING

#### Direct material categories

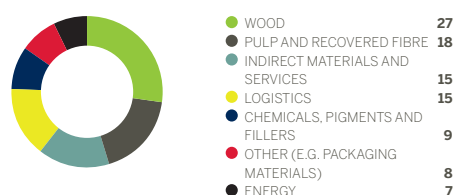
Pulp	Hardwood, softwood, BCTMP (bleached chemi-thermomechanical pulp). Used in the production of paper, tissue products and packaging boards
Recovered paper	Mixed office waste and other higher grades, old newsprint, old corrugated containerboard. Used only in some tissue products
Basic chemicals	Chemicals used in pulp manufacturing
Process chemicals	Chemicals used in paper and board manufacturing processes
Pigments	Pigments used as fillers and coating pigments in paper and board manufacturing
Binders and coatings	Binders are used for the retention of pigments, mainly in coating recipes. Binders can be divided into starches and latexes
Packaging materials	PE film and hoods, shrink and stretch film, corrugated boxes, roll packaging, cardboard boxes, core board, cores, pallets, labels and bale wire

#### Indirect material and service categories

Energy, Logistics, ICT, Communications, Human Resources, Production Consumables, MRO (Maintenance, Repair and Operation), Administrative Services, Mill related support services, and Investments

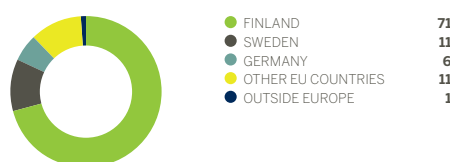
### COMPOSITION OF THE GROUP'S PURCHASES IN 2014

% OF MATERIAL AND SERVICE PURCHASES



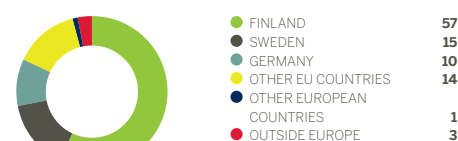
### THE GROUP'S PURCHASES FROM RAW MATERIAL KEY VENDORS<sup>1)</sup> BY COUNTRY IN 2014

%



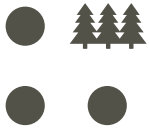
### THE GROUP'S EXTERNAL PURCHASES<sup>1)</sup> BY COUNTRY IN 2014

%



1) Wood procurement excluded (see page 27 for origin of wood information)





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# EFFICIENT, RELIABLE AND SUSTAINABLE LOGISTICS

Efficient and reliable logistics is essential for the forest industry to ensure the continuous flow of products to the customers and raw materials to the mills. Sustainability in the supply chain is an important element in guaranteeing long-term service to our customers.



A competitive forest industry supply chain from harvesting to customer requires reliable and efficient logistics. Various transport modes are required to deliver roundwood to the mills and products to customers. Metsä Group's products are transported to about 120 countries by road, rail and sea. The same

modes of transport are used in delivering roundwood from the Nordic and Baltic countries, and Russia. Efficient and reliable logistics would not be possible without our extensive network of more than 1,000 logistics service providers, mainly in continental Europe and Finland. As our mills in Finland

are located in remote areas, we are a significant employer in many fields; for example, our transportation and harvesting operations provide work for many local entrepreneurs.

Sustainability in the supply chain is an important element in guaranteeing long-term service to our customers. Metsä Group's

Supplier Code of Conduct is a required condition when making contracts with both roundwood and product logistics service providers. The Code of Conduct coverage is a key metric in logistics contract management. It also plays a central role in the systematic audits of our key logistics partners representing all transport modes and geographical regions.

## SIGNIFICANTLY LESS SULPHUR EMISSIONS IN MARINE TRANSPORT

Stricter provisions on sulphur emissions from shipping will enter into force at the beginning of 2015 due to amendments to the legislation required by the EU Sulphur Directive. The objective is to improve air quality, especially in coastal areas, and the state of the marine environment. The sulphur limit for marine fuels will be cut from current 1,0% to 0,1% in SOx emission control areas in the Baltic Sea, the North Sea and North America's coastal areas. In other European sea areas, the

maximum sulphur content of marine fuel will decrease from 3.5% to 0.5% by 2020. As the areas with stricter sulphur limits are important for our operations, the new requirements have a significant effect on Metsä Group's logistics cost.

The sea carriers delivering Metsä Group's products, for example, will meet with the new provisions by using low-sulphur fuel or by installing scrubbers. This will decrease SOx emissions to the air in the Baltic and North Seas caused by Metsä Group's maritime transports by 90% compared to 2014.

## SEVERAL MODES OF TRANSPORT DELIVER THE PRODUCT TO THE CUSTOMER

Over half of the product delivery cost is related to road transport, maritime transport one third, and rail the rest. A delivery from the mill to the customer may utilize all of the above. Roundwood is mainly delivered by road, or by both road and rail when distances are longer.



## Larger timber trucks make transport more efficient

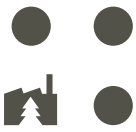
**ROAD TRANSPORT** is vital to Metsä Group because of the high number of wood supply locations and product destinations that cannot be feasibly covered by other transport modes such as the rail network. Finland allowed the use of heavier vehicles (76 tonnes instead of 60 tonnes) in 2013. How does this affect safety and emissions?

"Ordinary motorists will not really notice the change because the heavier trucks do not look much different. The most visible change is the larger number of axles in the vehicle combination," says Metsä Group's partner **Rauno Ikonen**, who has been upgrading his

transport equipment. "Steering in the new trucks is steadier because both the lorry and the trailer have one axle more than the 60-tonne vehicles. The truck is at least as safe as the previous models because the braking effort increases in relation to the weight of the load."

Ikonen, whose transport business is based in Kangasniemi, Finland, sees the change as having a positive effect on the profitability of the transport business: "Even increasing the maximum weight of the current equipment significantly increases the payload. The consumption of fuel is about one tenth less per tonne-kilometre, which in turn means lower CO<sub>2</sub> emissions."





# EFFICIENT USE OF RESOURCES FOR A BETTER CLIMATE AND NATURE

The world's growing population, urbanisation and consumption are increasing pressure on the use of global resources. The urge to minimise the utilisation of raw materials creates a need to move away from a linear economy where resources are not simply extracted, used and disposed of. The idea of a circular economy is to put resources back in the loop, keeping them in use longer. Resource efficiency and circular economy have an important role in future EU policies.



The forest industry has long been a benchmark for the efficient utilisation of materials, energy and water. At Metsä Group, our main raw material is sustainably managed wood from northern forests that today are growing more than they are being used. For us, material efficiency means that we use every part of the tree where it creates most value. We continuously work towards improving our energy and water utilisation in production. Even though the forest and water resources in our main operating countries are vast, efficient processes, advanced technologies, minimising material losses as well as systematic energy and water management are all instrumental in saving resources in production.

Discussions about resource scarcity in the society shape both the businesses' and consumers' behaviour. Wood-based products have several benefits compared to non-

renewable alternatives — they are safe to use, biodegradable and recyclable, and can be further processed or utilised as fuel at the end of their life cycle. Promising bioeconomy prospects lie in the efficient and innovative use of wood, and the main and side streams of its processing. Active R&D work in developing new bio-based products, such as new fibre-based solutions and wood-based biofuels, are opening up great new opportunities for growth in the bioeconomy.

Significant reductions have been achieved at Metsä Fibre's pulp mills where despite increased production, the process water use has decreased by almost 30% per tonne of pulp since 2005. In fact, all mills of Metsä Fibre are at the top of the EU's water consumption recommendations.

Efficient water treatment systems enable the water to be recycled several times in the

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### RAPID POPULATION GROWTH REQUIRES THE EFFICIENT USE OF ALL RESOURCES.

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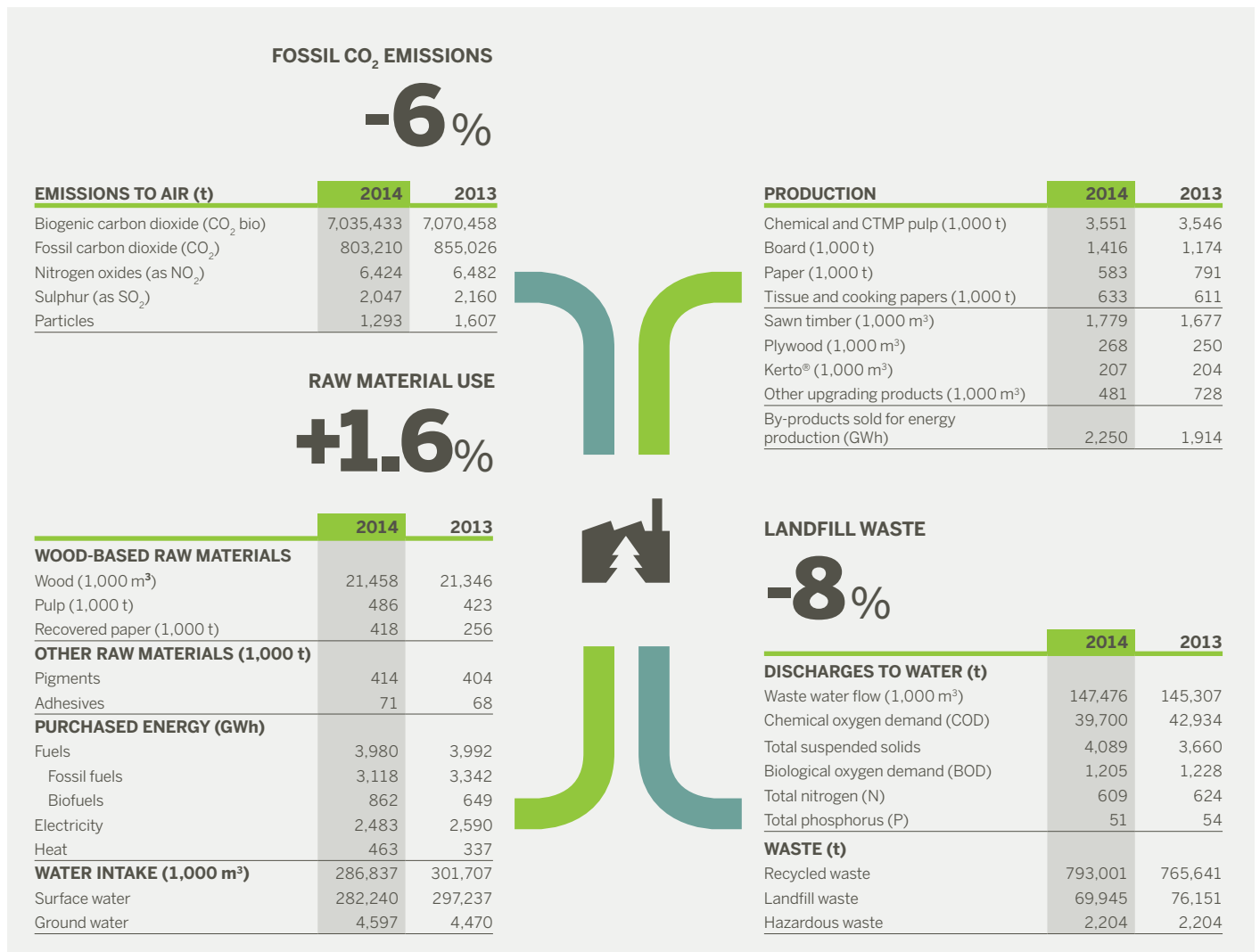
mills, thus reducing the total volume of water used. Finally, the water ends up at the biological waste water treatment plant. Treatment plants reduce the load of solids, oxygen-containing substances and nutrients, thus preventing eutrophication and lack of oxygen in the watercourse. Keeping the emissions at a sustainable level means that the mill does not limit other uses such as recreation activities or fishing in the surrounding rivers or lakes.

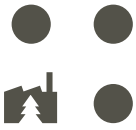


## WATER CONSUMPTION AT METSÄ GROUP



## METSÄ GROUP'S MATERIAL BALANCE

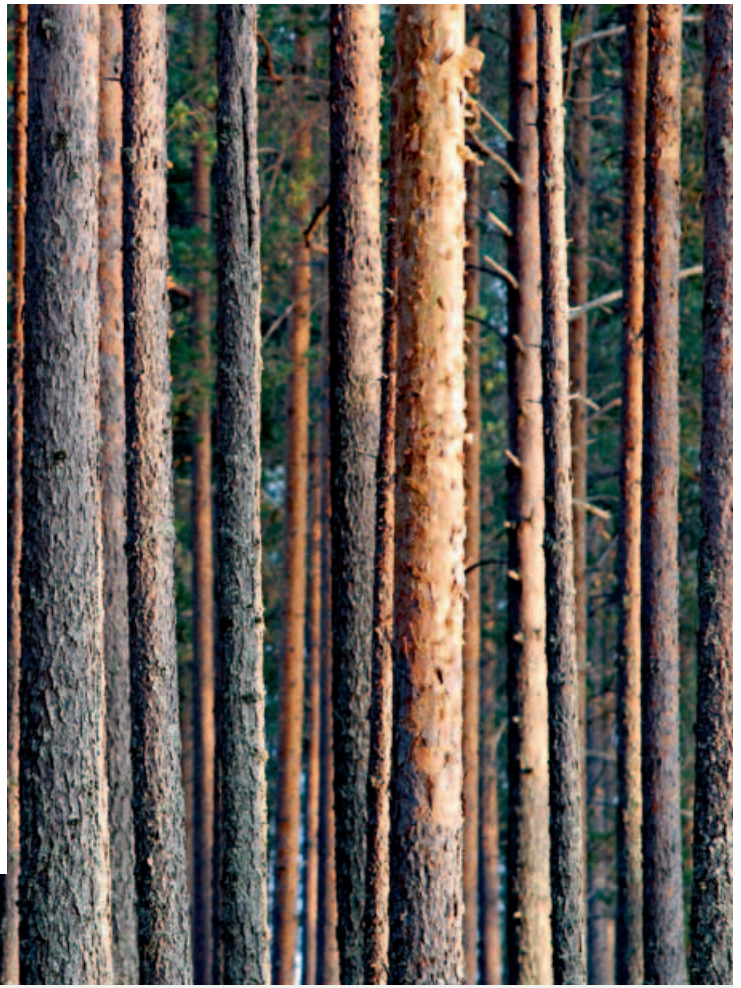




WE WORK FOR A  
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AND NATURE

# USING EVERY PART OF THE TREE FOR THE PURPOSE IT SUITS BEST

Metsä Group has made considerable investments in developing material efficiency. Our way of making more from less brings benefits both to us and our customers' processes and products. Resource efficiency is high on the list of our customers' sustainability agenda and when producing for example our pulp and paperboards efficiently, we can affect the environmental footprint of the entire chain.



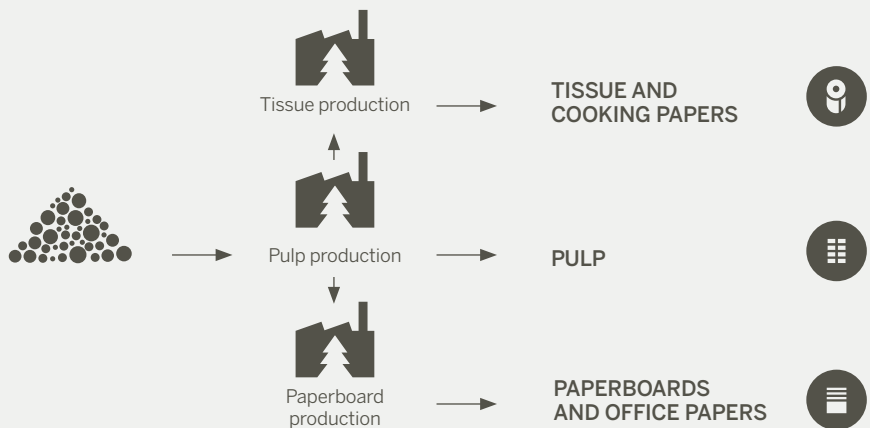
## FOREST ENERGY AND BY-PRODUCTS

Branches, crowns and stumps that cannot be used for pulp production are used as bioenergy to meet the heating and electrical energy needs of both the forest industry and communities.



## PULPWOOD

Metsä Fibre's and Metsä Board's pulp and BCTMP mills use pulpwood to produce high-quality raw materials for the manufacture of paperboard, paper and tissue.



## SAWLOGS

Metsä Wood's sawmills use sawlogs to produce sawn timber for the construction and furniture industries, and plywood and Kerto LVL™ for the construction and transport industries.



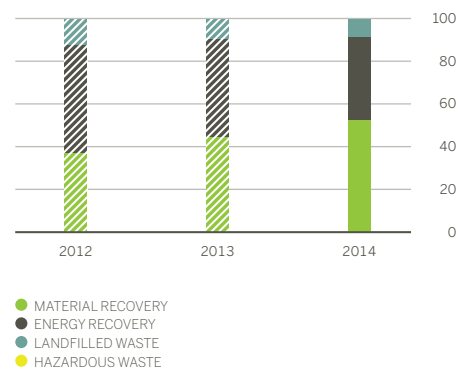
The majority of landfill waste from the pulp industry is green liquor sludge. The amount of the Group's landfilled waste is about 8% of the total waste. The rest, over 90%, is utilised as energy and materials.

Waste management by business area is reported at the Group's website [www.metsagroup.com/sustainability](http://www.metsagroup.com/sustainability).

**THE GROUP'S RESIDUES BY SOURCE IN 2014**  
%, COVERS 97% OF RESIDUES



**THE GROUP'S RESIDUES BY DESTINATION**  
%



## Continuous improvement enhances material efficiency at Renko sawmill

**METSÄ WOOD'S SAWMILL** in Renko, Finland, makes the most of the best renewable raw material in the world through continuously developing processes and daily work. Operations planning, technological improvements, log sorting, steering log supply as well as the know-how and commitment of the personnel have enabled a significant yield improvement. Since 2006, the material efficiency of the sawmill has improved by 10%, which has also generated significant cost savings.

## WASTE AND BY-PRODUCTS ARE VALUABLE RAW MATERIALS IN A ZERO-WASTE CIRCULAR ECONOMY

In 2014, the utilisation of fibre-based waste and by-products from production focused on geotechnical construction and their use as fertilisers. The heat and electricity generated from wood-based by-products are used by our mills and surrounding communities.

### ASH FOR FERTILISERS AND SOIL ENRICHMENT

The forest industry generates wood ash from bioenergy production, which can be used as forest fertiliser or soil enrichment. Ash fertilisation is used especially for peatland forests where the required nutrients for forest growth can be added to areas that are naturally lacking in them. Ash fertilisation recycles nutrients sustainably back to the forest and ensures the growth in the long term.

### BARK FOR ENERGY PRODUCTION OR LANDSCAPING

The bark generated in wood processing is mainly used in the industry's own energy production. Gritty mix bark can be used as such in landscaping or as a raw material in potting soil manufacturing.

### A BROAD RANGE OF BIOPRODUCTS FROM PULP MILLS

Pulp mills produce a broad range of bioproducts along with the high-quality pulp. About 10% of a pulp mill's net sales are already generated by bioenergy and biochemicals such as tall oil and turpentine. New bioproducts include for example biofuels, clothing fibres, and various ingredients of glues and paints. Read more about bioproducts on page 23.

### RECOVERED PAPER USED IN TISSUE MAKING

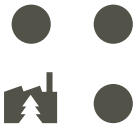
Recycled paper collected from households, offices and industry is used in the manufacture of tissue paper. The recycling and de-inking process of tissue paper generates fibre clay. It can be used in geotechnical construction, either as-is or mixed with the ash that

originates from our bioenergy production, for example.

### OUR FOCUS IN 2015 – WASTE PREVENTION AND THE UTILISATION OF SIDE STREAMS

During 2015, we will be focusing on actively utilising the organic side streams of our production. Another goal is to conduct a proactive analysis of the opportunities for waste prevention. We do not want to compromise on quality in the manufacture of our high-quality pulp, paperboard, tissue, cooking paper or wood products. It is essential, therefore, to engage in process development and steer side streams back into process use or for utilisation elsewhere. Analysing these opportunities will require a great deal of effort and a proactive approach.





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BETTER CLIMATE  
AND NATURE

# CONTINUING WORK FOR MORE EFFICIENT ENERGY PERFORMANCE

Having decreased fossil carbon dioxide emissions by 36% per product tonne during the past five years, Metsä Group continues its work to increase the share of bioenergy and improve energy efficiency. Metsä Group is a major bioenergy producer that supplies heat, electricity and wood-based biomass fuels to society. Energy efficiency improvements in production are achieved through investments and renewals as well as developing ways of working.



Energy is in close focus at Metsä Group as we operate in an energy intensive industry. The efficient utilisation of energy and other resources results in lower emissions and costs, while strengthening our role as a desirable partner for our customers.

## EXCEEDING THE CO<sub>2</sub> REDUCTION TARGET

Metsä Group continues its work to decrease fossil-based carbon dioxide emissions. Our ambitious target of reducing CO<sub>2</sub> emissions

by 30% per product tonne from the 2009 level by 2020 was exceeded for the second year in row. In recent years, the major reductions of CO<sub>2</sub> emissions as well as an increased share of bioenergy have been gained through investments in new bioenergy generation plants that have replaced fossil-fuelled units at the Kyro and Joutseno mills, for example.

A new biomass boiler in Metsä Tissue's Mariestad mill in Sweden, commissioned at the end of 2014, will reduce oil usage at the mill by 90% and CO<sub>2</sub> emissions by 6,000

tonnes per year, i.e. 30% from the present. Building the bioboiler started in 2013.

## LEADING BIOENERGY PRODUCER AND SUPPLIER

Increasing the share of bioenergy in sourcing is our way in battling climate change. Today, 86% of the fuels we use are biobased. To utilise biobased fuels with the highest possible efficiency ratio, about 80–85%, most of our plants produce both heat and electricity.

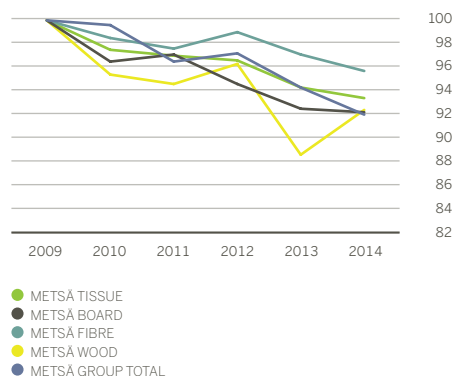
Metsä Group is one of the leaders in bioenergy generation in the industry and a significant bioenergy producer in Finland. Our pulp mills are 150% self-sufficient in electricity production. In addition to providing electricity to national grid and

other Group's mills, they deliver heat to local communities.

We also supply wood-based biomass to third party energy generators. Our total supply of 4.4 TWh (2013: 4.4) enables our customers to replace fossil fuels and reduce fossil CO<sub>2</sub> emissions by some 1,200,000 tonnes (1,200,000) per year. This is nearly 50% more than the Group's annual fossil CO<sub>2</sub> load.

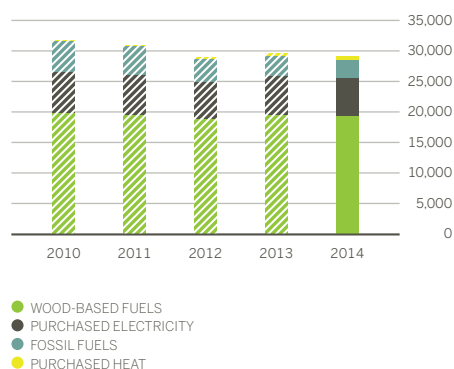
Metsä Group's target is to improve the performance company-wide by 10% from the 2009 level by 2020. This far, the improvement of 6% has been reached through careful energy analyses; building new applications for energy utilisation at the mills in cooperation with equipment suppliers and researchers; and sharing the best practices with colleagues at Group's other mills. The work is supported by the Energy Efficiency System and the ISO 50001 Energy Management Systems.

#### ENERGY EFFICIENCY IMPROVEMENT<sup>1)</sup> %, BY BUSINESS AREA

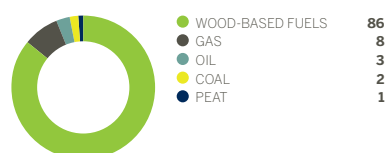


1) As specific energy consumption development

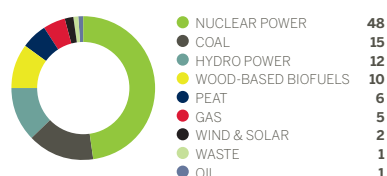
#### THE GROUP'S PRIMARY ENERGY CONSUMPTION GWh



#### THE GROUP'S FUEL CONSUMPTION IN 2014 %



#### THE GROUP'S PRIMARY ENERGY CONSUMPTION OF PURCHASED ELECTRICITY AND HEAT IN 2014 %



#### EFFICIENCY MEANS PRODUCING MORE WITH LESS ENERGY

Another way of mitigating climate change is to improve energy efficiency in production.

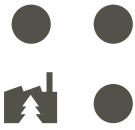


## Improved energy efficiency at Metsä Tissue

**COOPERATION AND LEARNING** from each other have played a key role in achieving excellent results in the energy efficiency improvement program at Metsä Tissue. The energy team found and has made over 500 improvements in the daily work at the mills since 2006, almost equivalent in importance to the benefits gained through technological investments, for example in heat recovery.

From the 2006 level, Metsä Tissue has improved its energy efficiency by over 10% to date. In 2014, the company was nominated to the final of the International Energy Efficiency Awards arranged by DENA, the German Energy Agency.





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# MINIMAL ENVIRONMENTAL IMPACTS

We actively seek to minimise and manage all environmental impacts related to our operations. Each of our mills has environmental permits that set the limits for discharges to water, emissions to air and noise. In addition, we are carrying out actions to prevent accidental releases and conducting regular environmental risk analyses at our production units.



Metsä Group's most significant emissions to air are carbon dioxide (CO<sub>2</sub>), sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and particles from pulp production and power plants. Our mills cause emissions of organic matter, such as chemical and biological oxygen demand (COD, BOD) and nutrients to receiving water bodies. There are also emissions of adsorbable organic halogens (AOX) from pulp mills. Suspended solids are also measured and monitored, but their levels are normally very low.

## LOWER CO<sub>2</sub> EMISSIONS DUE TO INCREASED USE OF WOOD-BASED BIOFUELS

Greenhouse gas emissions (Scope 1) decreased to 803,000 tonnes of CO<sub>2</sub> (2013: 855,000). The main part of the reduction results from replacing fossil oil and gas with wood-based biofuels as process fuel at chemical pulp mills. CO<sub>2</sub> emissions of Scope 2 were 621,000 tonnes (521,000). 50% of the total amount of Scope 1 and 2 emissions materialized in Finland.

Acidification emissions decreased to 6,543 tonnes SO<sub>2</sub> eqv. (6,698) mainly due to sulphur and NO<sub>x</sub> emission reductions at Rauma and Husum chemical pulp mills.

Eutrophication emissions were 173 tonnes P eqv. (179). All parameters affecting to eutrophication decreased but the main effect came from phosphorus and nitrogen reductions – largest drops from Husum and Kemi mills.

## LESS AND CLEANER PROCESS WATER

Metsä Group's mills have been decreasing their process water consumption per produced tonne significantly, 11% from 2010. Water intake as a whole has decreased by 5% from the previous year. Waste water treatment has been efficient and, in particular, COD emissions from the pulp mills have decreased by 8% compared to 2013.

## FEWER ENVIRONMENTAL INCIDENTS

There were only a few non-compliance incidents concerning emissions to air from pulp mills and one with waste water discharges. The incidents reduced from previous year and were due to certain operational or mechanical problems at the mills. Metsä Group's environmental obligations at the end of 2014 totalled EUR 19 million (2013: EUR 28 million). In 2014, the capital expenditure totalled EUR 143 million (214).

The Group received EUR 2.2 million (0.0) as support for investments from the Government.

Detailed information on the Group's environmental expenditures is available in Metsä Group's Financial Statements.

## EU'S BAT CONCLUSIONS TO TIGHTEN PERMIT REQUIREMENTS

The environmental permits of most of Metsä Group's mills will be updated within the next

## Reduced water use at Simpele

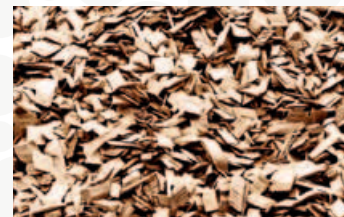
**A MAJOR INVESTMENT** at Metsä Board's Simpele mill was made in the mills process water system, including the installation of a disc filter and white water storage tank. As a key outcome, the temperature of the process water is now higher than before and easier to maintain, which reduces the need for heat energy. As the recovery of fibres is enhanced, material efficiency increases. The loading of suspended solids from the mill to the effluent treatment plant has also been reduced.



four years due to the publication of BAT (Best Available Techniques) Conclusions for the production of pulp, paper and board. The requirements, which are expected to be tighter, will be implemented via the new permits. Most Group mills comply with the new BAT requirements already now. However, investments are also expected at some mills to upgrade the effluent treatment or improve air emissions control.

The BAT Conclusions set the maximum levels for emissions to air and water. They are also mandatory maximum emission levels used in setting the emissions limit values in environmental permits. In addition, there are reference values for the use of process water, among others, as well as lists of general BAT techniques.

## Better air quality in Joutseno



**THE CHIP BIN** of Metsä Fibre's Joutseno pulp mill was renewed in summer 2014. The investment consisted of three different parts: a new chip conveyor and chip bin, the treatment of expansion steam and processing fresh steam, and more efficient collection and treatment of malodorous gases. As a result of the investment, the efficiency of the mill and the quality of the air in its locality have improved. Also the TRS (total reduced sulphur) emissions have decreased considerably.

At the same time, there was another significant investment at Joutseno, which both increased its capacity and improved the mill's environmental performance. The bottom of the recovery boiler and the air feed systems were modernized. Thanks to the more efficient mixing of fuel and air, NO<sub>x</sub> emissions have decreased by about 15%.

### ENVIRONMENTAL INCIDENTS

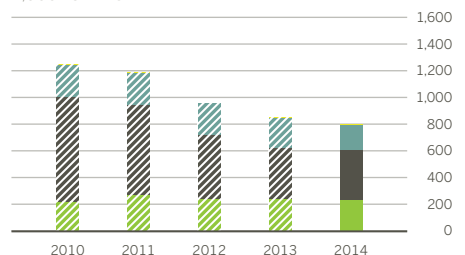
All environmental incidents that resulted in permit violations, claims, compensations or significant media coverage are detailed in the table below. Additionally, minor and short-term non-compliances with environmental permit requirements were reported at Metsä Tissue Stotzheim and Düren mills, Metsä Board Gohrsmühle and Husum mills and Metsä Fibre Rauma mill. The authorities were informed immediately and corrective actions were taken in all cases. Svir sawmill in Russia paid RUB 95,000 (about EUR 1,300) for exceeding the permit level for water discharges. The sawmill fulfils the same environmental performance requirements and is covered by the same management systems as Metsä Group's other sawmills, but the fiscal levy is paid due to the environmental permitting system in Russia.

#### ENVIRONMENTAL INCIDENTS IN 2014

Business Area	Unit	Incidents	Corrective actions
Metsä Tissue	Katrinefors mill, Sweden	The permit limit for nitrogen emissions to water was exceeded in March due to operational problems at the wastewater treatment plant.	Operation of the waste water treatment plant was stabilized and excess sludge removed.
	Paulström mill, Sweden	Particle emissions from the power plant exceeded the permit limit in April.	The flue gas channels and scrubber was cleaned and emissions have returned to normal level.
Metsä Fibre	Joutseno mill, Finland	Particle emissions to air from the lime kiln continually exceeded the permit limit due to a malfunctioning electrostatic precipitator.	Several process trials and studies were carried out and mechanical improvements were made to the electrostatic precipitator. The emissions have returned to normal level since June, but the situation remains unstable.
		Treatment rate of weak odorous gases under the monthly permit limit in June due to problems in the recovery boiler before a maintenance break.	Recovery boiler operation and treatment of odorous gases were returned to normal high level after the maintenance break.
	Kemi mill, Finland	Chlorine dioxide plant's exhaust gases exceeded the permit limit in annual measurements in June and October.	The chlorine dioxide scrubber was cleaned and process parameters adjusted. Operation instructions were updated to keep the scrubber pH at the correct level.
		Treatment rate of weak odorous gases under the monthly permit limit in December due to human error in plant operation. The weak gases were not turned back to treatment after a sudden mill shut down.	Treatment of weak odorous gases was continued after a few days and situation returned back to normal.

#### GREENHOUSE GAS EFFECT AS CO<sub>2</sub> BY BUSINESS AREA

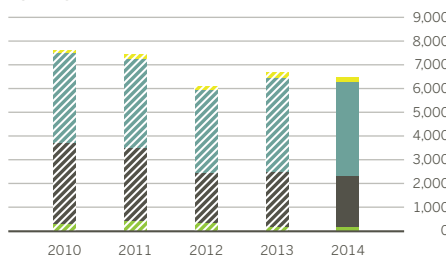
1,000 TONNES



● METSÄ TISSUE ● METSÄ BOARD ● METSÄ FIBRE ● METSÄ WOOD

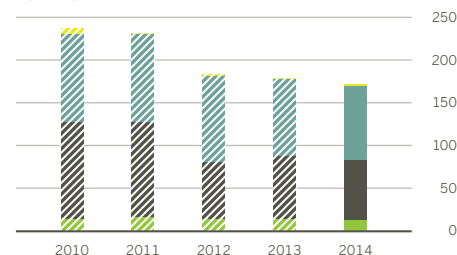
#### ACIDIFICATION AS SO<sub>2</sub> EQUIVALENT BY BUSINESS AREA

TONNES



#### EUTROPHICATION AS P EQUIVALENT BY BUSINESS AREA

TONNES





## RESPONSIBLE EMPLOYER

Metsä Group employs 10,500 employees in 30 countries. Group-wide value-based management principles unite all employees and help create a fair and satisfying working environment. Practical tools support the managers' and supervisors' daily work.



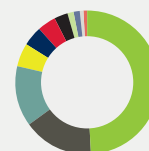
NUMBER OF  
EMPLOYEES  
31.12.2014

**10,410**



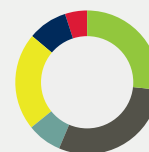
2013: **10,741**

PERSONNEL BY  
COUNTRY  
%, on 31 Dec 2014



FINLAND	49
GERMANY	16
SWEDEN	13
UNITED KINGDOM	5
RUSSIA	5
POLAND	4
SLOVAKIA	3
FRANCE	1
REST OF EUROPE	1
BALTIC COUNTRIES	1
OTHER COUNTRIES	1

THE GROUP'S  
PERSONNEL BY  
BUSINESS AREA  
%, on 31 Dec 2014



METSÄ TISSUE	27
METSÄ BOARD	30
METSÄ FIBRE	8
METSÄ WOOD	22
METSÄ FOREST	9
GROUP FUNCTIONS	5

In 2014, Metsä Group focused on management and leadership development. Renewal is one of our values and we encourage everyone to adopt the attitude of continuous improvement. Business area knowledge and negotiating skills are developed, for example, through training programmes directed at sales, marketing and customer service personnel, and other experts. We also offer employees the possibility to obtain new skills through internal job rotation and other learning opportunities. These help to retain highly skilled, talented and committed employees,

and improve the overall satisfaction of the personnel.

All Metsä Group employees are entitled to a Personal Development Appraisal (PDA), in which the employee's personal development plan is made. As the PDA processes and practices for blue-collar employees currently vary, the harmonisation of the process started in 2013 and has continued in 2014 towards Group-wide practices. In total 91% of blue-collar employees were involved in a harmonised PDA process in 2014 in units where the practice is in place. In 2014, 95% of Metsä Group's white-collar employees were

involved in PDA process. Besides the individual discussions, it is possible to have an optional group PDA. The group session helps each employee to prepare for the personal discussion and saves time in dealing with general matters.

Metsä Group follows a common principle for remuneration based on the position evaluation, employee's competence and performance, and their development. Remuneration for all positions complies with the legislation and collective agreements of the country in question. Salary reviews are performed using common criteria to ensure

a fair and competitive level of compensation. In Metsä Group's operating countries, there is a moderate distribution in both salary increases and median salaries at different organisational levels, and all employees within a position evaluation level receive equal compensation. See the table on this page for more information.

## TRAINING AND PRACTICAL TOOLS SUPPORT MANAGEMENT

Metsä Group offers wide training opportunities for its employees. In 2014, we organised 9,751 training days in Finland, attended by 2,749 Metsä Group employees. In our other operating countries 1,652 employees attended in total 356 training days which lead to some professional qualifications.

More than 270 supervisors completed the new 'Learn-Grow-Lead' Group-level training offered to all supervisors and managers. The programme, which is offered in Finnish and English, focuses on the responsibilities of managers' and value-based management practices at Metsä Group. In Finland, supervisors can pursue a Qualification in Management (JET), which 12 supervisors completed in 2014. Booster, an invitational training for key employees in business operations and Group Services, was launched in 2014. In addition, 17 members of the key management of Metsä Group participated in Challenger training.

The new Manager's Notebook is the latest of the various tools offered to Metsä Group's supervisors and managers. A practical tool to support good everyday management, it gathers all the key value-based principles and manager's responsibilities into one book which will be published in all of the Group's operating languages during 2015.

## GUIDING POLICIES AND LABOR RELATIONS

Metsä Group's Code of Conduct and Sustainability Principles guide employees in the field of social responsibility, taking into consideration human rights. We promote equal opportunities and encourage all employees to report any discrimination. All formal complaints are handled through the Code of Conduct process. The Sustainability

Principles state that our employees are free to associate with or join any union. 98% of our employees in Finland and 87% of all employees are covered by collective bargaining agreements. Metsä Group applies country-specific collective bargaining agreements and conforms to the country-specific laws and agreements in terms of the employment.

In 2014, Metsä Group employed 10,410 people, of which 94% were permanent and 6% temporary employees. 4% of our employees work part-time. We hired 200 new employees in Finland and 243 abroad. The restructuring of our business affected a total of 1,434 employees during 2014, of whom 141 were made redundant. In total 296 employees were temporarily laid off. We assist those made redundant in finding new job opportunities with individual support.

### METSÄ GROUP'S KEY PERSONNEL DATA

	2014	2013	2012	2011	2010
Number of employees <sup>1)</sup>	10,410	10,741	11,447	12,525	12,820
Share of permanent employees, % <sup>2)</sup>	94.1	94.3	94.0	94.2	94.0
Average age, years <sup>2)</sup>	44.5	44.4	44.1	43.8	43.5
Average years served, years <sup>2)</sup>	16.8	16.7	16.3	15.6	15.2
Employee turnover, % <sup>2) 3)</sup>	7.4	9.5	12.0	7.8	6.9
Ration between men/women, % <sup>2)</sup>	79/21	78/22	78/22	79/21	81/19
Share of women in management, % <sup>3)</sup>	15.0	14.3	13.3	12.9	11.1

1) Full-time equivalent (FTE) on 31 December

2) The figures covered 99% of Metsä Group employees

3) Management includes Board of Directors, Executive Management Team and business areas' management teams. Change in calculation from 2012 onwards

### REMUNERATION DATA

Compensation per production country*)	Finland	France	Germany	Slovakia	UK	Poland	Russia	Sweden
Ratio of the annual total compensation for the organisation's highest paid individuals (highest one per cent) to the median annual total compensation	5.1	5.4	3.3	5.2	4.2	9.2	11.0	3.8
Ratio of percentage increase of highest individual salaries (highest one per cent) to the average percentage increase	1.1	0.5	1.1	3.2	0.2	0.3	0.2	3.9
Ratio of basic salary and remuneration of women to men, based on comparable average job grade indexes	0.9	0.9	0.9	0.8	0.9	1.0	1.0	0.9

\*Including 95% of white-collar personnel, incl. management

## Close cooperation with schools and universities

**METSÄ GROUP HAS INVESTED IN** long-term resource planning with a focus on cooperation with schools and universities. In 2014, we once again offered 900 young people the chance to gain valuable work experience in their field of studies. A well-organised and managed period of summer employment allows us to give young people the chance to become familiar with the forestry industry and the diverse career opportunities that Metsä Group can offer.

We also work together with other industry players to promote future work possibilities in the forest industry. As part of a campaign for ninth graders, 57 Metsä Group' professionals visited 133 schools across Finland. We also offered work for 50 young people in an apprenticeship programme in Germany lasting approximately two and a half years, during which they study 1-2 days per week and work the rest of the time.







WE CREATE  
WELL-BEING

# WORK SAFETY IS OUR PRIORITY IN EVERYTHING WE DO

Safety is paramount in our daily work, management and business. We believe that an excellent safety performance creates a strong and sustainable base for our businesses. Aspiring targets and indicators press us to develop our safety performance.



Safety is a fundamental requirement for our employees as well as for our suppliers and partners. Metsä Group's target is to improve our lost-time accident frequency rate (LTA1fr) by 10% each year. With a rate of 11.2 (2013: 13.2), we were able to improve from the previous year by 15%. We strive for continuous improvement and acknowledge that we still have room to improve our safety culture. Our long-term target for lost-time accidents is zero. Business areas, together with Corporate Safety & Security and HR functions, are working closely with our personnel to reach this target. All production units monitor safety statistics on a monthly basis and plan development measures accordingly.

## STANDARDISED SAFETY PRACTICES

Preventive work is the most essential tool to secure a safe working environment. Metsä Group is standardising its safety practices across its business areas. As part of this effort, the new Health, Safety and Environment (HSE) system, first launched at several Finnish sites, will be expanded to cover all business areas. The system

supports preventive safety efforts as it ensures that safety-related observations are recorded promptly. It is also used to collect statistics on safety, which are standardised at the Group level. In doing so, they help us identify and specify areas and tasks where we still have room for improvement.

We have also created consistent Group-level safety management guidelines which, in turn, will help us to harmonise safety management throughout the company. We also started Group-level safety manager meetings as well as corporate safety coordinating meetings during the year. It is planned that these management models will be expanded to cover all Metsä Group sites.

## SATISFIED AND HEALTHY EMPLOYEES

Well-being at work is both an individual and a shared experience, created through carrying out tasks and finding success. Well-being means that we have resources for work and free time, we are enthusiastic about work and find it meaningful. As an employer, Metsä Group wants to support its employees to be

## Pilot training at Metsä Fibre focused on attitude

We are always trying to find new ways to improve safety. At Metsä Fibre we piloted a training programme that focused on the personnel's attitude towards safety. Together with an external partner, we trained all our managers and supervisors on how to intervene with unwanted behaviour and how to pass this method on to their own subordinates. The main idea was to involve our personnel, increase their safety awareness and to show that intervening is not a negative action; rather, it is caring for your own and your colleagues' safety.

## PREVENTIVE WORK IS THE MOST ESSENTIAL TOOL TO SECURE A SAFE WORKING ENVIRONMENT.

healthy, motivated and satisfied. Comparable information about the clarity and implementation of goals as well as operational development is collected through regular personnel surveys and the Organisational Functionality Survey. These surveys help us to identify the strengths of our workplace communities and further develop our operations. In 2014, organisational functionality was at a good level in all of Metsä Group's business areas, with a score of 8.1 (8.3) on a scale of 4–10.

The work capacity of Metsä Group's employees is supported in every phase of their work life and employee satisfaction is monitored regularly. Our Group-level target is to retain the sickness absenteeism rate below 3% at all times. In 2014, the rate 3.96% (4.04) was slightly better than the previous year.

A unified model includes early support, an assessment of work capacity and a personal work capacity development plan to ensure well-being. This process helps to create a caring working environment that enables the equal treatment of all employees. In addition to cooperating closely with occupational health care providers, our supervisors are given tools and training to identify any potential situations that can threaten the employee's well-being at work. An early intervention process is in place throughout the Group and additional actions to mitigate absenteeism have been taken at units with a rate of more than 5%.



## 338 days without accidents at Metsä Board's Kemi mill

Thanks to unified goals and systematic approach in developing work safety, 338 days had passed without accidents by the end of 2014. The mill's work accident frequency (LTA1) was 5.8. Increased safety has been reached through focusing on preventive work such as organised safety walks and safety observations at the work place. Induction practices have also been improved. The ultimate goal at Metsä Group is zero accidents.

### SAFETY AND WELL-BEING DATA

	2014	2013	2012	2011	2010
Sickness absenteeism, % <sup>1)</sup>	4.0	4.0	4.1	4.4	4.2
Work accident absenteeism, % <sup>1)</sup>	0.22	0.24	0.22	0.22	0.28
Accident rate <sup>2)</sup>	11.2	13.2	15.7	18.3	17.3
Registered occupational diseases, no. of cases <sup>3)</sup>	1	3	4	-	-
Work related fatalities, no. of cases	0	1	1	1	1

1) Per cent of potential working hours

2) Lost-time accident 1 frequency rate. Accidents at work per million worked hours

3) The figures cover 86% of Metsä Group employees  
- not reported

### WELL-BEING INDICATORS BY BUSINESS AREA

	Metsä Tissue		Metsä Board		Metsä Fibre		Metsä Wood		Metsä Forest		Metsä Group	
	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
Organisational functionality survey index	8.2	8.3	8.2	8.3	8.3	8.4	7.9	7.9	8.1	8.2	8.1	8.3
Organisational functionality survey response rate, % <sup>1)</sup>	77.8	72.0	88.8	70.4	76.1	79.1	74.8	65.8	89.6	87.5	81.4	73.1
Sickness absenteeism, % <sup>2)</sup>	5.0	4.8	3.9	3.9	3.9	4.1	3.8	4.4	1.8	2.1	4.0	4.0
Work accident absenteeism, % <sup>2)</sup>	0.2	0.2	0.3	0.3	0.1	0.1	0.3	0.3	0.2	0.2	0.2	0.2
Accident rate <sup>3)</sup>	9.2	7.5	12.0	12.2	4.9	8.4	18.5	26.8	5.9	6.5	11.2	13.2
Registered occupational diseases, no. of cases <sup>4)</sup>	0	0	0	2	0	0	1	1	0	0	1	3
Work related fatalities, no. of cases	0	0	0	0	0	0	0	1	0	0	0	1

1) Organisational functionality research covered 90% of Metsä Group's employees in 2013 and 100% in 2014

2) Per cent of potential working hours

3) Lost-time accident 1 frequency rate. Accidents at work resulting to at least one day sickleave per million worked hours

4) The figures cover 86% of Metsä Group employees





WE CREATE  
WELL-BEING

# CREATING VALUE FOR LOCAL COMMUNITIES

As an international company with operations in 30 countries and production units in nine, Metsä Group creates value for many different stakeholder groups. Our ownership base and business structure differentiate us from our competitors and provide a long-term perspective to our operations. After many challenging years for the forest industry, Metsä Group is now operating in the business sectors that are growing.



Through our parent company Metsäliitto Cooperative's 122,000 owner-members, Metsä Group has access to considerable reserves of premium-quality raw material, providing it with a stable, long-term foundation for the development of its operations and production plants. The impact on the Finnish forest economy is significant, as our owner-members own approximately half of all private forests in Finland.

Through solid financial performance, Metsä Group benefits all our stakeholders. We focus on products and services with promising growth prospects, and in which we have strong competence and a competitive edge. With renewal and investments, we invest in business continuity and contribute to local livelihoods.

## INTEGRATED IN THE COMMUNITIES WHERE WE OPERATE

Where Metsä Group operates locally, especially in remote areas, we create value in several ways. We generate significant employment opportunities directly by employing some 10,500 persons, and indirectly for our partners and subcontractors. The value chain that originates in the forest has knock-on effects: the forest

industry's indirect employment are much greater than those of its direct employment. Our supplier network consists of some 20,000 vendors. By creating job opportunities in rural areas, we support communities in providing services that might otherwise cease to exist.

The daily cooperation with a local community takes many forms. Our pulp mills produce some 50% more electricity than they need, which means the excess biobased electricity can be sold to the national grid. The excess heat can be consumed while manufacturing paperboard in the local mill integrate or by providing district heating to community jointly with the local energy company. The mill and the city may also cooperate in waste water treatment.

In Russia, the approximately 20 kilometres of forest road we build annually allow easy access for harvesting wood as well as for locals who want to use the forest for recreational purposes.

## FUTURE GROWTH FROM THE BIOECONOMY

The forest sector has provided the foundation for Finland's industrial development, exports

and national prosperity for many decades. In 2013, the value of Finnish forest industry exports totalled EUR 11 billion. Today, the forest industry is investing and boldly building new business operations that are based on the bioeconomy. The industry uses renewable wood raw material and its products to help curb climate change. The new bioeconomy will grow into a profitable business alongside existing operations. We are creating bioeconomy value chains across sectoral boundaries that enable a higher degree of added-value than before. Metsä Fibre's planned bioproduct mill at Äänekoski is a great practical example of this – it aims to create a unique ecosystem of companies around pulp production.

There is a growing demand for products and solutions that utilise wood or wood constituents on both existing and developing markets. The user base consists of actors like the construction and chemicals sectors, the food and packaging industries, furniture manufacturers and the design sector as well as many other industries that produce every day and recreational goods for consumers.





Over EUR  
1 million  
for the  
well-being  
of children and  
young people



## CREATING SHARED VALUE

### RAW MATERIAL AND SERVICE SUPPLIERS



**3,330** EUR MILLION  
(2013: 3,391)

### EMPLOYEES

Wages and benefits (incl. social security and pension costs)



**699**  
EUR MILLION  
(2013: 692)

### MEMBERS OF THE COOPERATIVE

Interests on members' capital



**45**  
EUR MILLION  
(2013: 45)<sup>1)</sup>

### EQUITY AND DEBT INVESTORS, ANALYSTS

Interests

**107**  
EUR MILLION  
(2013: 122)



### EXPORTS

**20%**



In 2013, the forest-based sector accounted for some 20% of overall Finnish exports with a value of EUR 11 billion.<sup>2)</sup>

### METSÄLIITTO COOPERATIVE

**CELEBRATED** its 80<sup>th</sup> anniversary in 2014. While celebrating the long history of its parent company, a EUR 1 million donation was made by Metsä Group to support the construction of the New Children's Hospital in Finland. "We want to do our part in ensuring that children and teenagers suffering from severe illnesses will get first-class care also in the future," says **Kari Jordan**, Metsä Group's President and CEO.

The goal of the New Children's Hospital 2017 project was to collect EUR 30 million in donations from companies and private individuals. Through the donations, a new leading unit focusing on specialised healthcare for children will be built in Helsinki by 2017.

Metsä Group's sponsorship and donation strategy focuses on sponsoring projects that aim to improve the well-being of children and young people. Another important sponsorship was given by Metsä Tissue's Serla brand to Tukikummit, a foundation in Finland that supports young people who are at risk of exclusion.

1) Proposal by the Board of Directors. Metsäliitto Cooperative's Representative Council decided to pay an interest rate of 5.5% be paid on the statutory capital invested by the members for 2014 (5.5 + 1.0 for 2013). Interest of 5.0% (5.0) is paid on additional members' capital A, and interest of 4.5% (4.5) is paid on additional members' capital B.

2) Source: Finnish Forest Industries statistics



# OUR BUSINESSES IN FOCUS

Metsä Group comprises five business areas that represent different parts and know-how of our unique value chain. Nevertheless sustainably managed wood is the source for everything we do, the most material sustainability topics are business-related depending about the customer needs, markets as well as product features. This section presents the sustainability priorities of our business areas.





## METSÄ FOREST

### WOOD SUPPLY AND FOREST SERVICES

**SERVICES:** forestry and wood trade services for forest owners. Deliveries of wood and wood energy to the Group's production units and other industrial customers.

**STRENGTHS:** extensive cooperation with owner-members, a pioneer in developing the management of forest assets and the profitability of forestry, as well as an efficient forest service organisation

# 1.6

SALES  
EUR BILLION

# 900

PERSONNEL

Metsä Forest is the market leader in wood trade and forest energy in Finland. We are responsible for Metsä Group's wood supply and provide the owner-members of the parent company, Metsäliitto Cooperative, with extensive services in wood trade as well as forest and nature management.

All our wood comes from sustainably managed forests and we always know its origin. The majority of the wood Metsä Group supplies comes from Finnish, mainly privately-owned forests, of which some 95% are PEFC certified.



## FOREST IN YOUR POCKET

Metsä Forest launched Finland's first forest planning mobile application in December. The app is intended for forest owners to manage their forest assets and forest-related matters in a personal manner.

The mobile app allows forest owners to view maps and aerial photographs of forest estates, browse data for individual forest plots, review proposed actions concerning the plots and mark objects that have special nature values.

The application is also handy in the field. It allows forest owners to move from one plot to another to check, for example, urgent forest

management work according to the forest plan, add personal notes and photographs for a specific plot, and store the route they walked.

Metsä Group has invested strongly in developing services for forest owners in recent years. We want to offer our owner-members the best tools for enhancing their forest assets and make using forest ownership-related services as easy as possible. In spring 2015, owner-members will be able to sell wood and purchase forest management services electronically with their online banking credentials.

### Metsä Forest's sustainability priorities:

- Sustainable forest management, certification and supply chain
- Tailored forestry services and value-adding solutions
- Optimal utilisation of material streams
- Contributing to local livelihoods and society
- Safety at work and responsible management





## METSÄ WOOD

### WOOD PRODUCTS

**PRODUCTS:** spruce and pine sawn timber, birch and spruce plywood and laminated veneer lumber (LVL) Kerto® for construction, industrial and distribution customers.

**STRENGTHS:** industrial efficiency, commitment to long-term customer relationships, reliability and high-quality wood products from renewable raw material.

# 0.9

SALES  
EUR BILLION

# 2,300

PERSONNEL

Metsä Wood provides the premium-quality wood products for our construction, industrial and distribution customers. We use 100% traceable wood from northern forests, a sustainable and renewable raw material of the finest quality.

Sustainably managed wood is strong, light and consistent in appearance. In addition, it has superb acoustic properties and minimal thermal expansion. Our products are manufactured efficiently regarding raw material, energy and waste.



## SIGNIFICANT IMPROVEMENT IN SAFETY AT METSÄ WOOD

Metsä Wood started a systematic work to improve its safety performance at the end of 2012. The long-term zero accident target for the safety work was also set. The safety performance is reviewed in every management team meeting. Safety is the number one priority with no compromises. Now, after two years, significant improvement in safety performance can be seen. The lost-time accident frequency rate (LTA1) has decreased by 31% from the 2013 level and by 43% from the 2012 level. We continuously aim to prevent accidents through our thorough safety management system. All incidents are inspected and the learnings are distributed to everyone to prevent the future incident from becoming accidents.

Additionally, a new Health, Safety and Environment (HSE) system as well as safety walks and safety talk routines were introduced. During 2014, more than 3,000 preventive safety observations were reported in the system. Safety observations are essential to us. They involve the whole personnel to carry the responsibility of and to contribute to the safety of our working environment and the working methods we use. The work with safety issues continues during 2015 with the ambitious final target of zero accidents.

### Metsä Wood's sustainability priorities:

- Product and process innovation
- Material and energy efficiency
- Safety at work
- Sustainably managed wood
- Products as a carbon storage

# 100%

utilisation of wood

# 43%

less accidents (as LTA1) from the 2012 level



## METSÄ FIBRE

### PULP

**PRODUCTS:** bleached softwood and birch pulp for the production of high-quality printing and soft tissue papers, paperboard and specialty papers. Other bio-based products include tall oil and turpentine, which are used as raw materials in the paint and glue industry.

**STRENGTHS:** a responsible player, high-quality products, technical expertise, cost efficiency and smooth logistics.

# 1.3

SALES  
EUR BILLION

# 850

PERSONNEL

Metsä Fibre is a world-leading producer of softwood pulp for high-quality paper, board and tissue producers in Europe and the Far East. The pulps are made from a completely renewable and recyclable raw material. Metsä Fibre is also a significant bioenergy producer with some 10% of Finland's bioenergy produced at its pulp mills.

## AT THE HEART OF THE BIOECONOMY WITH A PLANNED BIOPRODUCT MILL

Metsä Fibre is planning to build a bioproduct mill in the existing site's area in Äänekoski, Finland. When materialised, the approximately EUR 1.1 billion investment will be the largest in the forest industry in Finland ever. The mill, with an annual pulp production capacity of 1.3 million tonnes, is planned to be operational in 2017.

The mill will be the world's first next-generation bioproduct mill that can convert wood raw material into a diverse range of products. In addition to high-quality pulp, it will produce biomaterials, bioenergy, biochemicals and fertilisers sustainably and with great resource efficiency. New bioproducts will be created in collaboration with research bodies and external companies joining the network. A unique bioeconomy ecosystem of companies will be built around the pulp production, creating opportunities, especially for small and medium-sized enterprises, to produce innovative bioproducts with high added value.

### SIGNIFICANT INCREASE IN THE USE OF WOOD SUSTAINABLY

The mill will use 6.5 million m<sup>3</sup> of wood annually. The use of pulp wood will be increased nation-wide by approximately 4 million m<sup>3</sup> (i.e. 10%). According to estimates by the Finnish Forest Research Institute, the sustainable increase for softwood fibre can be 7 million m<sup>3</sup> and for hardwood fibre

4 million m<sup>3</sup>. The wood supply will be secured by Metsäliitto Cooperative's extensive, solid owner-member base in Finland.

### MAXIMAL RESOURCE EFFICIENCY

Raw materials and side streams will be utilised 100% both as products and bioenergy. Only biofuels will be used at the Äänekoski mill, not fossil fuels. Energy efficiency and cleantech will be emphasised when choosing equipment and machinery. The mill's emission levels will be lower than the current environmental permit allows. The new bioproduct mill supports Finland's bioeconomy strategy, the targets set for resource efficiency as well as the energy and climate strategy. In addition,

# 150%

self-sufficient  
in electricity  
production

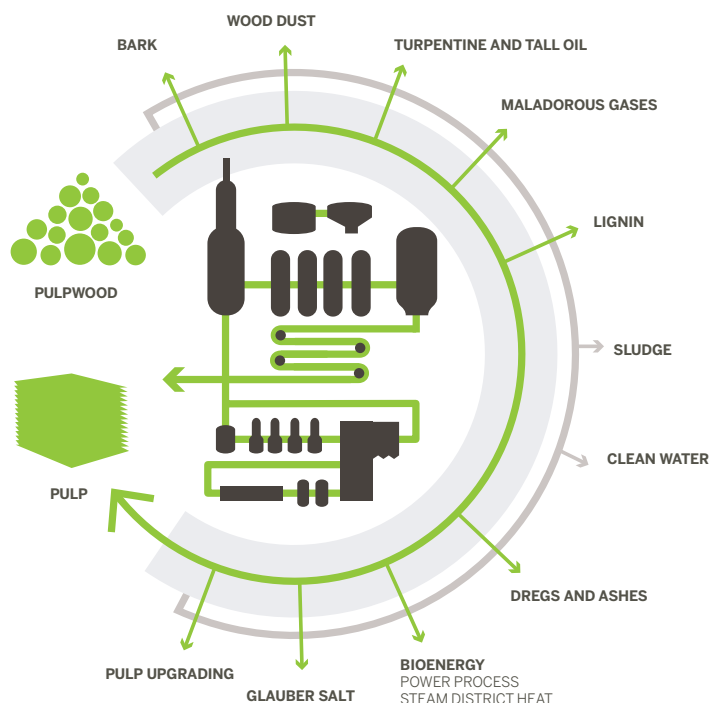
the mill will increase the share of renewable energy in Finland by approximately two percentage units.

### Metsä Fibre's sustainability priorities:

- Product safety
- Bioenergy
- Safety at work
- Sustainable forest management
- Material and energy efficiency
- Environmental efficiency

# 10%

of sales from  
bioenergy and  
biochemicals





## METSÄ BOARD

### PAPERBOARD

**PRODUCTS:** fresh forest fibre paperboards for consumer and retail packaging.

**STRENGTHS:** fresh forest fibre used as raw material, high quality, ecological, lightweight and product safety.

# 2.0

SALES  
EUR BILLION

# 3,100

PERSONNEL

Metsä Board produces lightweight paperboards which require less raw material, have lower transport weights and thereby produce less waste and emissions. This means decreasing environmental impacts and costs at all stages of the product's life cycle. Made of high-quality fresh forest fibre, our products are also safe for food contact. Operating hand-in-hand with major international brands, Metsä Board's reduced material use brings benefits to its customers by contributing to their sustainability targets.



## METSÄ BOARD RECOGNISED BY CDP AS A LEADER IN CLIMATE CHANGE TRANSPARENCY

Metsä Board was recognised in the CDP's Nordic Climate Disclosure Leadership Index (CDLI). The company achieved an excellent score of 98 out of 100 for the depth and quality of climate change data it discloses to investors and the global marketplace.

High scores indicate that a company provides robust climate data and conveys a strong understanding of corporate climate-related issues. Only companies with a score in

the top 10% are listed in the CDLI, showing they have provided a high level of transparency in their disclosure of climate-related information.

CDP is an international, non-profit organisation providing the only global system for companies and cities to measure, disclose, manage and share vital environmental information. CDP has published a global climate report since 2000 and a Nordic report since 2007. Metsä Board's information has been included in the Nordic report from the start.

### Metsä Board's sustainability priorities:

- Product safety
- Well-being and safety at work
- Product and process innovation
- Sustainable forest management and supply chain
- Resource efficiency

# 30%

lighter  
paperboards

# 37%

less CO<sub>2</sub> emissions  
since 2009





## METSÄ TISSUE

### TISSUE AND COOKING PAPERS

**PRODUCTS:** Lambi, Serla, Mola and Tinto tissue paper products for consumers, Katrin products and hygiene solutions for public premises, and SAGA baking and cooking papers for home and professional use.

**STRENGTHS:** understanding of customer needs and consumer trends, solid product expertise, efficient sales and distribution channels and energy efficient production.

# 1.0

SALES  
EUR BILLION

# 2,800

PERSONNEL

Metsä Tissue offers high-quality tissue and cooking papers for consumers and professional customers. The functional tissue products contribute to personal hygiene and well-being in many ways. The use of baking and cooking paper brings ease to the kitchen while significantly reducing both food waste and costs. Manufacturing the tissue products close to our customers enables us to minimize the environmental impacts of transportation. Our main raw material is 100% traceable fresh fibre and we also use recycled fibre.



## SAFE PRODUCTS FOR STAYING HEALTHY

Did you know that we are more likely to spread viruses through shaking hands than kissing? Actually, four out of five cases of flu are transmitted via hands.

Several studies prove that a disposable paper towel is the best and the most efficient way to dry hands after a careful wash with soap and water. In addition to being safe and hygienic, a paper towel is made of renewable fibre with desired features. Metsä Tissue's Katrin brand promotes and educates proper hand washing in public premises such as in

hospitals, kindergartens, schools and restaurants. Katrin solutions include tissue hygiene products, professional wiping and cleaning towels, napkins as well as compatible dispensers and supplementary accessories. Our brands and other eco-labelled products are always a trusted choice for our customers and end users.

### Metsä Tissue's sustainability priorities:

- Safe products for consumer and professional customers
- Product and process innovation
- Safety at work and responsible leadership
- Product labelling and consumer communication
- Life-cycle management

# 100%

biodegradable  
products

# 10%

energy efficiency  
improvement  
since 2006

# SUSTAINABILITY DATA BY UNIT IN 2014

## METSÄ TISSUE

Mill	Country	Personnel				Production (1,000 t)		Management systems					Chain of Custody		
		Number of employees <sup>1)</sup>	Accident rate <sup>2)</sup>	Sickness absenteeism % <sup>3)</sup>	Organisational functionality index <sup>4)</sup>	Tissue and cooking papers		ISO 9001	ISO 14001	ISO 50001	OHSAS 18001	ISO 22000/ BRC	PEFC	FSC®	CO <sub>2</sub> bio
Mänttä <sup>6)</sup>	Finland	377	20.8	5.5	7.8	113		x	x	x		x	x	x	0
Düren	Germany	103	0.0	5.8	7.7	23		x	x	x	x	x	x	x	0
Kreuzau	Germany	406	6.2	8.6	8.4	147		x	x	x	x	x	x	x	8,727
Raubach	Germany	275	2.2	5.3	8.8	50		x	x	x	x	x	x	x	0
Stotzheim	Germany	286	13.2	7.5	8.2	23		x	x	x	x	x	x	x	0
Krapkowie	Poland	308	12.3	3.9	7.8	73		x	x <sup>5)</sup>		x		x	x	0
Žilina	Slovakia	316	1.9	2.0	8.0	80		x	x <sup>5)</sup>		x	x	x	x	0
Katrinefors	Sweden	355	14.0	4.5	7.7	74		x	x	x			x	x	0
Nyboholm	Sweden	179	6.3	3.6	7.8	26		x	x	x			x	x	6,148
Pauliström <sup>7)</sup>	Sweden					23		x	x	x			x	x	10,139
Others <sup>8)</sup>		200													
<b>Total</b>		<b>2,805</b>	<b>9.2</b>	<b>5.0</b>	<b>8.2</b>	<b>633</b>									<b>25,015</b>

- 1) Full-time equivalent on 31 December 2014 2) Lost-time accident 1 frequency rate. Accidents at work per million worked hours. 3) % of potential working hours  
4) Organisational functionality indexes of Metsä Tissue mills are calculated based on responses of production personnel. 5) ISO 14001 standard includes the Energy Efficiency System (EES).  
6) Includes Tissue and Baking and Cooking businesses. 7) Pauliström mill's personnel figures are included in Nyboholm mill's figures. 8) Includes personnel of Vorsino and others than mill locations.  
Personnel figures of Others are included in Metsä Tissue's total figures.

## METSÄ BOARD

Mill	Country	Personnel				Production (1,000 t)		Management systems					Chain of Custody		
		Number of employees <sup>1)</sup>	Accident rate <sup>2)</sup>	Sickness absenteeism % <sup>3)</sup>	Organisational functionality index <sup>4)</sup>	Chemical pulp and CTMP	Board and paper	ISO 9001	ISO 14001	ISO 50001	OHSAS 18001	ISO 22000	PEFC	FSC®	CO <sub>2</sub> bio
Joutseno BCTMP	Finland	52	32.8	2.5	8.8	303		x	x	x	x	x	x	x	0
Kaskinen BCTMP	Finland	78	7.2	0.9	7.8	305		x	x		x	x	x	x	145,300
Kemi	Finland	100	5.8	5.1	8.2		369	x	x	x	x	x	x	x	0
Kyri	Finland	241	19.2	6.2	7.8		239	x	x	x	x	x	x	x	0
Simpele	Finland	306	5.7	2.7	8.3		260	x	x	x	x	x	x	x	113,132
Tako	Finland	205	20.4	4.5	8.4		194	x	x	x	x	x	x	x	0
Äänekoski Board	Finland	188	9.5	3.1	8.3		222	x	x	x	x	x	x	x	115,988
Gohrsmühle	Germany	478	17.6	5.8	8.3		46	x	x	x	x	x	x	x	0
Husum	Sweden	859	7.6	3.5	8.2	685	668	x	x	x		x	x	x	1,531,847
Others <sup>5)</sup>		604	-	-											3,507
<b>Total</b>		<b>3,111</b>	<b>12.0</b>	<b>3.9</b>	<b>8.2</b>	<b>1,294</b>	<b>1,999</b>								<b>1,909,774</b>

- 1) Full-time equivalent on 31 December 2014 2) Lost-time accident 1 frequency rate. Accidents at work per million worked hours. 3) % of potential working hours  
4) Organisational functionality indexes of Metsä Board mills are calculated based on responses of production personnel.  
5) Includes personnel from sales and logistics operations, management and subsidiaries. Emissions and waste originate from Äänevoima's production of energy sold for external use.  
Personnel figures of Others are included in Metsä Board's total figures. 6) BOD not measured

## METSÄ FIBRE

Mill	Country	Personnel				Production		Management systems					Chain of Custody		
		Number of employees <sup>1)</sup>	Accident rate <sup>2)</sup>	Sickness absenteeism % <sup>3)</sup>	Organisational functionality index <sup>4)</sup>	Chemical pulp (1,000 t)	Sawn timber (1,000 m <sup>3</sup> )	ISO 9001	ISO 14001	ISO 50001	OHSAS 18001	ISO 22000	PEFC	FSC®	CO <sub>2</sub> bio
Joutseno	Finland	131	0.0	5.0	7.9	594		x	x	x	x	x	x	x	1,236,558
Kemi	Finland	165	7.0	5.4	8.3	552		x	x	x	x	x	x	x	1,304,838
Rauma	Finland	123	9.8	3.1	8.2	607		x	x	x	x	x	x	x	1,314,019
Äänekoski	Finland	168	10.6	4.4	8.1	504		x	x	x	x	x	x	x	948,021
Svir	Russia	120	0.0	2.4	8.2		233	x	x <sup>5)</sup>		x		x	x	18,968
Others <sup>6)</sup>		135	-	-											
<b>Total</b>		<b>842</b>	<b>4.9</b>	<b>3.9</b>	<b>8.3</b>	<b>2,257</b>	<b>233</b>								<b>4,822,404</b>

- 1) Full-time equivalent on 31 December 2014 2) Lost-time accident 1 frequency rate. Accidents at work per million worked hours. 3) % of potential working hours  
4) Organisational functionality indexes of Metsä Fibre mills are calculated based on responses of production personnel. 5) Svir Timber's ISO 14001 standard includes the Energy Efficiency System (EES). 6) Includes personnel from sales operations, a subsidiary and management. Personnel figures of Others are included in Metsä Fibre's total figures.

FSC Licence Code FSC-C014476

Emissions to air (t)				Discharges to water (t)					Water use (1,000 m³)		Waste (t)			Mill
CO <sub>2</sub> fossil	Sulphur as SO <sub>2</sub>	Nitrogen oxides as NO <sub>2</sub>	Particles	COD	BOD	Total phosphorus	Total nitrogen	Total suspended solids	Water sourcing	Waste water flow	Recycling	Landfill	Hazardous	
13,769	0	0	0	288	30	0.76	19	38	3,386	5,367	34,769	573	19	Mänttä <sup>6)</sup>
30,659	0	17	0	49	4.8	0.24	0	4.8	772	481	5,781	0	2.2	Düren
80,813	9	76	0.31	433	20	0.98	0	20	2,837	1,961	105,141	6,934	5.0	Kreuzau
22,784	0	12	0	175	4.6	0.23	0	4.6	465	459	104,990	0	0	Raubach
10,103	0	6.4	0	14	2.1	0.11	0	2.1	230	214	1,788	0	199	Stotzheim
26,785	0.802	2.5	0.33	32	4.3	0.33	4.7	4.1	819	661	44,849	2,806	0	Krapkowitz
14,069	0.059	9.9	0	181	10	0.52	0	10	1,111	1,034	47,222	2,698	55	Žilina
12,085	0	5.1	0	221	34	0.52	17	11	2,133	3,856	4,278	22,000	9.6	Katrinefors
10,007	2.4	18	0.42	16	3.0	0.080	0.95	3.3	454	463	2,047	0	0.29	Nyboholm
5,778	0.36	21	0.66	55	24	0.068	0.53	5.4	311	327	1,389	0	7.7	Paulström <sup>7)</sup>
														Others <sup>8)</sup>
<b>226,852</b>	<b>13</b>	<b>167</b>	<b>1.7</b>	<b>1,464</b>	<b>137</b>	<b>3.8</b>	<b>42</b>	<b>103</b>	<b>12,518</b>	<b>14,823</b>	<b>352,256</b>	<b>35,012</b>	<b>298</b>	<b>Total</b>

Emissions to air (t)				Discharges to water (t)					Water use (1,000 m³)		Waste (t)			Mill
CO <sub>2</sub> fossil	Sulphur as SO <sub>2</sub>	Nitrogen oxides as NO <sub>2</sub>	Particles	COD	BOD	Total phosphorus	Total nitrogen	Total suspended solids	Water sourcing	Waste water flow	Recycling	Landfill	Hazardous	
22,557	0	11	0.013	611	5.5	0.36	3.9	11	5,203	649	5,742	0	16	Joutseno BCTMP
5,599	79	230	6.6	1,801	82	2.4	18	322	11,893	5,119	18,160	39	23	Kaskinen BCTMP
6,410	0	2.7	0	250	41	1.7	39	55	9,379	7,173	71,552	158	45	Kemi
6,247	0	3.4	0	207	14	0.29	10	54	6,252	4,353	30,376	35	22	Kyro
88,010	141	154	1.1	293	18	1.3	12	28	22,543	4,306	25,155	97	24	Simpele
72,092	0	76	0	164	66	1.1	0.74	33	2,771	2,555	5,295	58	102	Tako
70	0.17	84	0.010	820	274	0.79	12	375	3,392	4,491	2,947	23	40	Äänekoski Board
122,085	247	173	4.3	90	25	1.05	6.1	0.78	3,340	3,324	30,013	13	25	Gohrsmühle
48,993	375	1,114	129	7,762	- <sup>6)</sup>	16	137	1,714	41,949	41,733	92,258	224	1,000	Husum
8,285	18	23	0.23								2,570	25	3.2	Others <sup>5)</sup>
<b>380,348</b>	<b>861</b>	<b>1,870</b>	<b>142</b>	<b>11,997</b>	<b>525</b>	<b>25</b>	<b>239</b>	<b>2,906</b>	<b>106,723</b>	<b>73,703</b>	<b>284,068</b>	<b>672</b>	<b>1,300</b>	<b>Total</b>

Emissions to air (t)				Discharges to water (t)					Water use (1,000 m³)		Waste (t)			Mill
CO <sub>2</sub> fossil	Sulphur as SO <sub>2</sub>	Nitrogen oxides as NO <sub>2</sub>	Particles	COD	BOD	Total phosphorus	Total nitrogen	Total suspended solids	Water sourcing	Waste water flow	Recycling	Landfill	Hazardous	
43,427	477	976	134	5,640	137	4.1	97	263	67,913	16,258	15,579	9,597	42	Joutseno
61,945	152	1,250	170	6,960	127	5.0	103	369	40,771	15,590	71,552	158	45	Kemi
25,237	176	913	211	8,467	87	6.3	55	253	19,998	14,855	8,120	12,915	38	Rauma
59,494	358	921	408	5,085	123	5.4	71	472	37,042	11,768	38,064	10,204	45	Äänekoski
253	0.076	19	19	12	1.1	0.050	0.76	12	207	249	14,260	88	0.16	Svir
														Others <sup>6)</sup>
<b>190,356</b>	<b>1,164</b>	<b>4,079</b>	<b>942</b>	<b>26,164</b>	<b>474</b>	<b>21</b>	<b>327</b>	<b>1,054</b>	<b>165,932</b>	<b>58,721</b>	<b>147,575</b>	<b>32,962</b>	<b>169</b>	<b>Total</b>



**METSÄ WOOD**

Mill	Country	Personnel				Production (1,000 m³)		Management systems			Chain of Custody		CO <sub>2</sub> bio	CO <sub>2</sub> fossil
		Number of employees <sup>1)</sup>	Accident rate <sup>2)</sup>	Sickness absenteeism % <sup>3)</sup>	Organisational functionality index <sup>4)</sup>	Wood products		ISO 9001	ISO 14001 <sup>5)</sup>	OHSAS 18001	PEFC	FSC®		
Eskola	Finland	12	0.0	0.7	8.2	sawn timber	60	x	x	x	x	x	0	0
Hartola	Finland	11	13.7	1.0	7.5	glulam production	19	x	x		x		158	0
Kaskinen <sup>7)</sup>	Finland	17	0.0	0.9	8.1	further processing	24	x	x	x	x	x	11,248	0
Kyrö	Finland	68	55.5	4.6	7.9	sawn timber	219	x	x	x	x	x	23,006	457
Lappeenranta	Finland	73	15.4	1.9	8.1	sawn timber	226	x	x	x	x	x	23,571	0
Lohja	Finland	151	31.2	5.0	7.8	Kerto®	93	x	x		x	x	0	0
Merikarvia	Finland	80	0.0	5.7	7.9	sawn timber	205	x	x	x	x	x	24,517	672
Punkaharju	Finland	474	19.5	5.8	7.7	plywood and Kerto®	174	x	x	x <sup>6)</sup>	x	x	0	0
Renko	Finland	74	7.4	2.7	8.1	sawn timber	301	x	x	x	x	x	29,088	512
Suolahti	Finland	452	16.8	4.4	7.9	plywood	208	x	x	x	x	x	60,212	251
Vilppula	Finland	114	18.7	3.5	7.8	sawn timber	418	x	x	x	x	x	74,018	2,738
Boulleville and Honfleur	France	110	28.2	2.2	7.7	further processing	117				x		0	0
Boston	Great Britain	268	26.4	3.3	7.4	further processing	207	x	x	x	x	x	0	38
Grangemouth	Great Britain	38	0.0	2.5	7.6	further processing	16	x	x	x	x	x	0	94
King's Lynn	Great Britain	29	12.4	0.9	7.8	further processing	134	x	x	x	x	x	0	121
Newport	Great Britain	29	0.0	1.2	8.3	further processing	35	x					0	634
Widnes	Great Britain	82	17.1	2.2	8.0	further processing	46	x	x	x	x	x	0	0
Others <sup>8)</sup>		167											32,422	135
<b>Total</b>		<b>2,249</b>	<b>18.5</b>	<b>3.8</b>	<b>7.9</b>		<b>2,501</b>						<b>278,241</b>	<b>5,654</b>

1) Full-time equivalent on 31 December 2014. 2) Lost-time accident 1 frequency rate. Accidents at work per million worked hours. 3) % of potential working hours. 4) Organisational functionality indexes of Metsä Wood mills are calculated based on responses of production personnel. 5) ISO 14001 standard includes the Energy Efficiency System (EES). 6) OHSAS concerns only plywood production. 7) At the end of 2014 only Thermowood production. 8) Includes personnel from sales operations and management. Personnel figures of Others are included in Metsä Wood's total figures. Emissions and water use originate from Kumpuniemen Voima's production sold for the external use.

Metsä Wood's discharges to water occur only in plywood production processes. St. Petersburg planing plant in Russia is not included in the figures above.

**METSÄ FOREST**

Country	Personnel				Wood procurement 1,000 m³	Management systems		Chain of Custody	
	Number of employees <sup>1)</sup>	Accident rate <sup>2)</sup>	Sickness absenteeism % <sup>3)</sup>	Organisational functionality index		ISO 9001	ISO 14001	PEFC	FSC®
Estonia	29	0.0	0.3	8.7	1,519	x	x	x	x
Finland	565	8.6	1.7	8.0	22,531	x	x	x	x
Latvia	45	0.0	0.7	8.5	1,291	x	x	x	x
Russia, St. Petersburg	19	0.0	1.8	8.7		x <sup>4)</sup>	x <sup>5)</sup>	x	x
Russia, Podporozhye	227	2.5	2.4	8.2	2,469 <sup>6)</sup>	x <sup>4)</sup>	x	x	x
Sweden	2	-	-	-	2,203	x	x	x	x
Others					70 <sup>7)</sup>				
<b>Total</b>	<b>887</b>	<b>5.9</b>	<b>1.8</b>	<b>8.1</b>	<b>30,083</b>				

- Not reported

1) Full-time equivalent on 31 December 2014. 2) Lost-time accident 1 frequency rate. Accidents at work per million worked hours. 3) % of potential working hours.

4) Included in Metsäliitto Cooperative's quality systems (ISO 9001). 5) Included in Metsäliitto Cooperative's environmental systems (ISO 14001).

6) Includes all wood procurement from Russia. 7) Includes wood from Lithuania.

FSC Licence Code FSC-C014476

Emissions to air (t)			Discharges to water (t)					Water use (1,000 m³)		Waste (t)			Mill
Sulphur as SO <sub>2</sub>	Nitrogen oxides as NO <sub>2</sub>	Particles	COD	BOD	Total phosphorus	Total nitrogen	Total suspended solids	Water sourcing	Waste water flow	Recycling	Landfill	Hazardous	
0	0	0	0	0	0	0	0	0.38	0	0.70	1.3	1.1	Eskola
0	0.16	0.16	0	0	0	0	0	1.2	0.20	19	8.2	5.0	Hartola
0	11	11	0	0	0	0	0	16	1.9	27	256	0	Kaskinen <sup>7)</sup>
0.033	23	23	0	0	0	0	0	8.4	7.3	49	11	15	Kyrö
0	23	23	0	0	0	0	0	158	0.068	68	16	2.9	Lappeenranta
0	0	2.4	1.5	0.21	0.040	0.400	0.28	83	72	101	17	92	Lohja
0.041	25	24	0	0	0	0	0	10	6.2	2,270	73	3.4	Merikarvia
0	0	0	41	18	0.020	0.080	1.0	47	47	1,077	159	159	Punkaharju
0.037	29	29	0	0	0	0	0	114	5.6	90	17	1.3	Renko
0.073	76	13	33	51	0.63	0.92	24	464	83	266	73	91	Suolahti
8.8	77	75	0	0	0	0	0	0.47	0	3,908	55	6.8	Vilppula
0	0	0	0	0	0	0	0	0	0	0	261	59	Boulleville and Honfleur
0	0.068	0	0	0	0	0	0	0	0	631	119	0	Boston
0	0.17	0	0	0	0	0	0	2.1	0	268	52	1.0	Grangemouth
0.0089	0.16	0.016	0	0	0	0	0	4.4	0	30	46	0	King's Lynn
0.046	0.86	0.086	0	0	0	0	0	0	4.8	3.4	99	0	Newport
0	0	0	0	0	0	0	0	0	0	292	34	0	Widnes
0.039	41	6.8						756	0				Others <sup>8)</sup>
<b>9.1</b>	<b>308</b>	<b>208</b>	<b>75</b>	<b>69</b>	<b>0.69</b>	<b>1.4</b>	<b>25</b>	<b>1,665</b>	<b>228</b>	<b>9,102</b>	<b>1,299</b>	<b>437</b>	<b>Total</b>

The Sustainability Report 2014 has been prepared according to the Global Reporting Initiative (GRI) G4 guidelines. Material indicators have been selected based on a materiality analysis, conducted in 2014. The table specifies where you can find more information on the GRI disclosures. Mitopro Oy has externally assured all indicators presented in the report. They have confirmed the report to comply with the GRI G4 “in accordance – Comprehensive” criteria.

AR Metsä Group Annual Review 2014  
FS Metsä Group Financial Statements 2014  
SR Metsä Group Sustainability Report 2014

● Fully reported  
○ Partially reported  
– Not reported

Indicator	More information	Level	UN Global Compact
<b>GENERAL STANDARD DISCLOSURES</b>			
<b>STRATEGY AND ANALYSIS</b>			
G4-1	Statement from the CEO	AR p. 2–3, SR p. 6–7	●
G4-2	Description of key impacts, risks and opportunities	SR p. 12–13, 16–17	●
<b>ORGANISATIONAL PROFILE</b>			
G4-3	Name of the organisation	SR and AR coverpages	●
G4-4	Primary brands, products, and services	SR p. 4–5, 22–23, 47–51	●
G4-5	Location of the headquarters	Metsä Group's headquarters is located in Espoo, Finland	●
G4-6	Countries where the organisation operates	SR p. 2–3	●
G4-7	Nature of ownership and legal form	SR p. 2–3	●
G4-8	Markets served	SR p. 2–3	●
G4-9	Scale of the reporting organisation	SR p. 2–3	●
G4-10	Breakdown of workforce	SR p. 40–41	●
G4-11	Collective bargaining agreements	SR p. 41	●
G4-12	Description of supply chain	SR p. 26–31	●
G4-13	Significant changes during the reporting period	No significant changes	●
G4-14	Addressing a precautionary approach	SR p. 8–9	●
G4-15	Externally developed sustainability charters, principles, or other initiatives	SR p. 8–11	●
G4-16	Memberships in associations	SR p. 11, 15, <a href="http://www.metsagroup.com/sustainability">www.metsagroup.com/sustainability</a>	●
<b>IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES</b>			
G4-17	Entities included in the organization's consolidated financial statements or equivalent documents	FS p. 40–43, Note 14 Group structure	●
G4-18	Process for defining the report content and the Aspect Boundaries	SR p. 12–13, 60	●
G4-19	Material aspects identified	SR p. 60. In total 39 indicators were identified as material in our materiality analysis. All indicators for identified material aspects are reported.	●
G4-20	Aspect Boundary within the organization	SR p. 60	●
G4-21	Aspect Boundary outside the organization	SR p. 60	●
G4-22	Explanation of the effect of any re-statements of information	SR p. 60. Restated figures in 2013 waste data	●
G4-23	Significant changes from previous reporting periods in the scope and aspect boundaries	SR p. 12–15	●
<b>STAKEHOLDER ENGAGEMENT</b>			
G4-24	List of stakeholder groups engaged by the organization	SR p. 12–15	●
G4-25	Basis for identification and selection of stakeholders	SR p. 12–15	●
G4-26	Approaches to stakeholder engagement	SR p. 12–15	●
G4-27	Responding to key topics and concerns resulting from stakeholder engagements	SR p. 10–15	●
<b>REPORT PROFILE</b>			
G4-28	Reporting period	1 Jan–31 Dec 2014	●
G4-29	Date of the previous report	March 2014	●
G4-30	Reporting cycle	Annual	●
G4-31	Contact point for questions	<a href="mailto:sustainability@metsagroup.com">sustainability@metsagroup.com</a> Twitter: @MetsaGroup	●
G4-33	External assurance for the report	SR p. 61	●
<b>GOVERNANCE</b>			
G4-34	Governance structure	FS p. 88–92 Corporate Governance Statement	●
G4-35	The process for delegating authority for sustainability topics	SR p. 10–11	●
G4-36	Executive-level position or positions with responsibility for sustainability topics	SR p. 10	●
G4-37	Report processes for consultation between stakeholders and the highest governance body	Stakeholder consultation is incorporated in the governance structure. There are also four personnel representatives in the Metsäliitto Cooperative's Supervisory Board	●
G4-38	Composition of the highest governance body and its committees	FS p. 88–92 Corporate Governance Statement	●
G4-39	Position of the Chair of the highest governance body	FS p. 88–92 Corporate Governance Statement	●
G4-40	Nomination and selection processes for the highest governance body and its committees	FS p. 88–92 Corporate Governance Statement	●
G4-41	Avoiding conflicts of interest	FS p. 88–92 Corporate Governance Statement	●
G4-42	Role of the the highest governance body and senior executives in setting the purpose, values and strategy	SR p. 10–11	●



Indicator	More information	Level	UN Global Compact
<b>G4-43</b>	Measures taken to develop and enhance the highest governance body's knowledge of sustainability topics	SR p.10. Sustainability is at the Board agenda annually	●
<b>G4-44</b>	Evaluating the highest governance body's performance with respects to sustainability topics	The Board of Directors prepare a self-assessment annually	●
<b>G4-45</b>	Role of the highest governance body in the identification and management of economic, environmental and social impacts, risks, and opportunities	FS p. 88–92 Corporate Governance Statement	●
<b>G4-46</b>	The highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics	FS p. 88–92 Corporate Governance Statement	●
<b>G4-47</b>	Frequency of the highest governance body's review of sustainability topics	FS p. 88–92 Corporate Governance Statement	●
<b>G4-48</b>	Highest committee or position to formally approve this report and coverage of all material aspects	SR p. 10	●
<b>G4-49</b>	Process for communicating critical concerns to the highest governance body	FS p. 88–92 Corporate Governance Statement	●
<b>G4-50</b>	Nature and total number of critical concerns that were communicated to the highest governance body	SR p. 8, 10	●
<b>G4-51</b>	Remuneration policies for the highest governance body and senior executives	FS p. 88–92 Corporate Governance Statement	●
<b>G4-52</b>	The process for determining remuneration	FS p. 88–92 Corporate Governance Statement	●
<b>G4-53</b>	Inclusiveness of stakeholders' views regarding remuneration	FS p. 88–92 Corporate Governance Statement. Stakeholder views are taken into account as part of the governance structure	●
<b>G4-54</b>	Ratio of the annual total compensation for the organization's highest-paid individual to the median annual total compensation for all employees	SR p. 41	●
<b>G4-55</b>	Ratio of percentage increase in annual total compensation for the organization's highest-paid individual to the median percentage increase in total compensation for all employees	SR p. 41	●
<b>ETHICS AND INTEGRITY</b>			
<b>G4-56</b>	Values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	SR p. 8–11	●
<b>G4-57</b>	Internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity	SR p. 8–11	●
<b>G4-58</b>	Internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity	SR p. 8–11	●
<b>SPECIFIC STANDARD DISCLOSURES</b>			
<b>G4-DMA</b>	General disclosures of management approach	SR p. 8–17	
<b>ECONOMIC</b>			
<b>G4-EC1</b>	Direct economic value generated and distributed	SR p. 45. Figures not presented in GRI table format	○
<b>G4-EC2</b>	Financial implications and other risks and opportunities for the organization's activities due to climate change	FS p. 70 Note 33. Environmental affairs	●
<b>G4-EC3</b>	Coverage of the organization's defined benefit plan obligations	FS p. 49–52 Note 22 Retirement benefit obligations, SR p. 36–37	●
<b>G4-EC4</b>	Financial assistance received from government	SR p. 38	●
<b>INDIRECT ECONOMIC IMPACTS</b>			
<b>G4-EC7</b>	Development and impact of infrastructure investments and services supported	SR p. 45. Due to developed infrastructure in our operating countries, no major in-kind or pro bono investments have been made in 2014	○
<b>G4-EC8</b>	Significant indirect economic impacts, including the extent of impacts	SR p. 44–45	●
<b>PROCUREMENT PRACTICES</b>			
<b>G4-EC9</b>	Proportion of spending on local suppliers at significant locations of operation	SR p. 29	●
<b>ENVIRONMENTAL</b>			<b>UNGC P7-9</b>
<b>MATERIALS</b>			
<b>G4-EN1</b>	Materials used by weight or volume	SR p. 33	●
<b>G4-EN2</b>	Percentage of materials used that are recycled input materials	SR p. 33	●
<b>ENERGY</b>			
<b>G4-EN3</b>	Energy consumption within the organization	SR p. 36–37	●
<b>G4-EN4</b>	Energy consumption outside of the organization	No figures available. Most important sources: raw material and product transport, purchased pigment and chemical production	–
<b>G4-EN5</b>	Energy intensity	SR p. 36–37	●
<b>G4-EN6</b>	Reduction of energy consumption	SR p. 36–37	●
<b>G4-EN7</b>	Reductions in energy requirements of products and services	SR p. 36–37	●
<b>WATER</b>			
<b>G4-EN8</b>	Total water withdrawal by source	SR p. 33	●
<b>G4-EN9</b>	Water sources significantly affected by withdrawal of water	SR p. 33	●
<b>G4-EN10</b>	Percentage and total volume of water recycled and reused	No figures available. Water is continuously recycled in the process and used several times. At some mills cooling water is used as process water and water from board/paper mill process is used in pulp production	–
<b>BIODIVERSITY</b>			
<b>G4-EN11</b>	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	www.metsagroup.com/sustainability	●
<b>G4-EN12</b>	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	SR p. 24–27, www.metsagroup.com/sustainability	●
<b>G4-EN13</b>	Habitats protected or restored	SR p. 24–27, www.metsagroup.com/sustainability	●
<b>G4-EN14</b>	IUCN red list species and national conservation list species with habitats in areas affected by operations	Not material to Metsä Group	–
<b>EMISSIONS</b>			
<b>G4-EN15</b>	Direct greenhouse gas (GHG) emissions (Scope 1)	SR p. 36–38	●
<b>G4-EN16</b>	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	SR p. 36–38	●

Indicator	More information	Level	UN Global Compact
<b>G4-EN17</b> Other indirect greenhouse gas (GHG) emissions (Scope 3)	No figures available. Most important sources: raw material and product transport, purchased pigment and chemical production	–	
<b>G4-EN18</b> Greenhouse gas (GHG) emissions intensity	SR p. 36–37	●	
<b>G4-EN19</b> Reduction of greenhouse gas (GHG) emissions	SR p. 4, 36–38	●	
<b>G4-EN20</b> Emissions of ozone-depleting substances (ODS)	Not material to Metsä Group	–	
<b>G4-EN21</b> NOx, SOx, and other significant air emissions	SR p. 33, 36–38	●	
<b>EFFLUENTS AND WASTE</b>			
<b>G4-EN22</b> Total water discharge by quality and destination	SR p. 33	●	
<b>G4-EN23</b> Total weight of waste by type and disposal method	SR p. 35. Restated figures in 2013 data.	●	
<b>G4-EN24</b> Total number and volume of significant spills	38–39	●	
<b>G4-EN25</b> Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel convention <sup>2</sup> Annex I, II, III, VIII,	Not material to Metsä Group	–	
<b>G4-EN26</b> Water bodies and related habitats significantly affected by the organization's discharges of water and runoff	SR p. 38	●	
<b>PRODUCTS AND SERVICES</b>			
<b>G4-EN27</b> Mitigation of environmental impacts of products and services	SR p. 18–21	●	
<b>G4-EN28</b> Percentage of products sold and their packaging materials that are reclaimed by category	SR p. 18–21. All the Group's products are recyclable and biodegradable. Board and paper recycling is organised by the local municipalities and there is no exact data available	–	
<b>COMPLIANCE</b>			
<b>G4-EN29</b> Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	SR p. 39	●	
<b>TRANSPORT</b>			
<b>G4-EN30</b> Significant environmental impacts of transporting products and other goods and materials for the organization's operations	SR p. 30–31	●	
<b>OVERALL</b>			
<b>G4-EN31</b> Total environmental protection expenditures and investments by type	SR 36-36, FS p. 70 Note 33 Environmental affairs	●	
<b>SUPPLIER ENVIRONMENTAL ASSESSMENT</b>			
<b>G4-EN32</b> Percentage of new suppliers screened using environmental criteria	All new suppliers must approve our Supplier Code of Conduct, which includes environmental criteria. Screening tool under development	●	
<b>G4-EN33</b> Significant actual and potential negative environmental impacts in the supply chain and actions taken	No significant negative impacts have been identified	●	
<b>ENVIRONMENTAL GRIEVANCE MECHANISMS</b>			
<b>G4-EN34</b> Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	SR p. 8–11, 38–39	●	
<b>SOCIAL</b>			
SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK			UNGC P6
<b>EMPLOYMENT</b>			
<b>G4-LA1</b> Total number and rates of new employee hires and employee turnover by age group, gender and region	SR p. 40–41. Regional breakdown by gender is not considered material	●	
<b>G4-LA2</b> Benefits provided to full-time employees that are not provided to temporary or part time employees, by significant locations of operation	Not material as 94% of all employees are on permanent contracts	–	
<b>G4-LA3</b> Return to work and retention rates after parental leave by gender	Not material as the work contracts continue unchanged after the parental leave	–	
<b>LABOR/MANAGEMENT RELATIONS</b>			
<b>G4-LA4</b> Minimum notice periods regarding operational changes	We comply with local agreements and legislation in redundancy situations	●	
<b>OCCUPATIONAL HEALTH AND SAFETY</b>			
<b>G4-LA5</b> Workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs	Local occupational health and safety committees cover 100% of our employees in all main operating countries	●	
<b>G4-LA6</b> Type and rates of injury, occupational diseases, lost days, and absenteeism and total number of work-related fatalities, by region and by gender	SR p. 42–43. Business area breakdown provided. Geographical breakdown not considered as material	●	
<b>G4-LA7</b> Workers with high incidence or high risk of diseases related to their occupation	Not material in Metsä Group's operations	–	
<b>G4-LA8</b> Health and safety topics covered in formal agreements with trade unions	SR p. 40–43	●	
<b>TRAINING AND EDUCATION</b>			
<b>G4-LA9</b> Average hours of training per year per employee by gender, and by employee category	SR p. 41. The training is reported in days per year	○	
<b>G4-LA10</b> Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	SR p. 41	●	
<b>G4-LA11</b> Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	SR p. 40. Breakdown and gender not considered material as all employees are entitled to a Personal Development Appraisal (PDA)	●	
<b>DIVERSITY AND EQUAL OPPORTUNITY</b>			
<b>G4-LA12</b> Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership	SR p. 41	●	
<b>EQUAL REMUNERATION FOR WOMEN AND MEN</b>			
<b>G4-LA13</b> Ratio of basic salary and remuneration of women to men by employee category, and significant locations of operation	SR p. 41	●	
<b>SUPPLIER ASSESSMENT FOR LABOR PRACTICES</b>			
<b>G4-LA14</b> Percentage of new suppliers that were screened using labor practices criteria	All new suppliers must approve our Supplier Code of Conduct, which includes criteria on labour practices. Screening tool under development	●	
<b>G4-LA15</b> Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	No significant negative impacts have been identified	●	

Indicator	More information	Level	UN Global Compact
<b>LABOR PRACTICES GRIEVANCE MECHANISMS</b>			
<b>G4-LA16</b>	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	No reported grievances	●
SUB-CATEGORY: HUMAN RIGHTS			UNGC P1, P2
<b>INVESTMENT</b>			
<b>G4-HR1</b>	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	SR p. 28–29. There were no such investments in 2014 which required a human rights impacts assessment	●
<b>G4-HR2</b>	Employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	SR p. 8–9. Coverage of the Code of Conduct training reported	○
<b>NON-DISCRIMINATION</b>			UNGC P6
<b>G4-HR3</b>	Total number of incidents of discrimination and corrective actions taken	There were no reported cases of discrimination in 2014	●
<b>SUPPLIER HUMAN RIGHTS ASSESSMENT</b>			
<b>G4-HR10</b>	Percentage of new suppliers that were screened using human rights criteria	All new suppliers must approve our Supplier Code of Conduct, which includes criteria on human rights. Screening tool under development	●
<b>G4-HR11</b>	Significant actual and potential negative human rights impacts in the supply chain and actions taken	No negative impacts have been identified	●
<b>HUMAN RIGHTS GRIEVANCE MECHANISMS</b>			
<b>G4-HR12</b>	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	No reported grievances	●
SUB-CATEGORY: SOCIETY			
<b>LOCAL COMMUNITIES</b>			UNGC P1
<b>G4-SO1</b>	Percentage of operations with implemented local community engagement, impact assessments, and development programs	SR p. 44–45. No Group-wide community engagement or impact assessment programmes available	●
<b>G4-SO2</b>	Operations with significant actual and potential negative impacts on local communities	SR p. 40–45	●
<b>ANTI-CORRUPTION</b>			UNGC P10
<b>G4-SO3</b>	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	SR p. 8–9, FS p. 90–92. Corporate Governance Statement. Anti-corruption is included in the Internal Audit's risk assessment procedures	○
<b>G4-SO4</b>	Communication and training on anti-corruption policies and procedures	SR p. 8–9	●
<b>G4-SO5</b>	Confirmed incidents of corruption and actions taken	No confirmed incidents in 2014	●
<b>PUBLIC POLICY</b>			UNGC P10
<b>G4-SO6</b>	Total value of political contributions by country and recipient/beneficiary	SR p. 15	●
<b>ANTI-COMPETITIVE BEHAVIOR</b>			
<b>G4-SO7</b>	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	SR p. 11	●
<b>COMPLIANCE</b>			
<b>G4-SO8</b>	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	SR p. 11	●
<b>ASPECT: SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY</b>			
<b>G4-SO9</b>	Percentage of new suppliers that were screened using criteria for impacts on society	All new suppliers must approve our Supplier Code of Conduct, which includes criteria on impacts on society. Screening tool under development	●
<b>G4-SO10</b>	Significant actual and potential negative impacts on society in the supply chain and actions taken	No significant negative impacts have been identified	●
<b>GRIEVANCE MECHANISMS FOR IMPACTS ON SOCIETY</b>			
<b>G4-SO11</b>	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	No reported grievances	●
SUB-CATEGORY: PRODUCT RESPONSIBILITY			
<b>CUSTOMER HEALTH AND SAFETY</b>			
<b>G4-PR1</b>	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	SR p. 20–21	●
<b>G4-PR2</b>	Incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	No incidents reported in 2014	●
<b>PRODUCT AND SERVICE LABELING</b>			
<b>G4-PR3</b>	Product information	SR p. 19–23, 47–51	●
<b>G4-PR4</b>	Non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	No incidents reported in 2014	●
<b>G4-PR5</b>	Results of surveys measuring customer satisfaction	SR p. 27	●
<b>MARKETING COMMUNICATIONS</b>			
<b>G4-PR6</b>	Sale of banned or disputed products	Metsä Group does not sell banned or disputed products	●
<b>G4-PR7</b>	Non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	No incidents reported in 2014	●
<b>CUSTOMER PRIVACY</b>			
<b>G4-PR8</b>	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Not material to Metsä Group	–
<b>ASPECT: COMPLIANCE</b>			
<b>G4-PR9</b>	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	No incidents reported in 2014	●



# SCOPE OF THE REPORT

Metsä Group comprises Metsä Tissue, Metsä Board, Metsä Wood, Metsä Fibre and Metsä Forest. This report covers the whole Group, including the production, warehousing and sales units of the business areas. Sustainability reporting follows the same principles of consolidation as our Financial Statements.

Metsä Group reports its sustainability performance at the Group, business area and product levels. The Sustainability Report 2014 has been prepared according to the Global Reporting Initiative (GRI) G4 guidelines. We have selected the indicators the most relevant to our operations, products and stakeholders based on a materiality analysis, an assessment of the most significant sustainability issues for the company and its stakeholders. The report also covers major permit violations, claims, compensations and topics related to the Group that have gained public attention or may have caused a reputation risk in environmental or human resource management, or ethical business practices.

The Sustainability Report 2014 presents Metsä Group's approach to sustainability management and detailed performance indicators. It does not include consolidated performance data collected outside the Metsä Group companies. The Annual Review 2014 includes a summary of the Group's sustainability work. Furthermore, the subsidiaries Metsä Board and Metsä Fibre publish own annual reports in which Metsä Group's and the business areas' sustainability work is presented in brief. The sustainability performance data in this report and claims based on the data have been externally assured by an independent third party, Mitopro Oy. Read the assurance report on page 61.

## DATA MEASUREMENT TECHNIQUES

The calculation coverage of the environmental parameters follows that of the financial accounting with the following amendments:

- Only material flows to and from industrial sites are included.
- Discharges to water through external waste water treatment plants (typically municipal) are taken into account assuming an 85% reduction for COD. Emissions of BOD, phosphorus and suspended solids are calculated according to the flow with the following residual concentrations: BOD 10 mg/l; total phosphorus 0.5 mg/l; and total suspended solids 10 mg/l. The total nitrogen emission is regarded as zero because there is surplus nitrogen in

municipal waste waters and the reduction of our BOD binds nitrogen to biomass thus reducing the plant's total nitrogen emission.

- The emissions of external waste waters treated at our waste water treatment plants are not included. The allocation of emissions between internal and external inflows is carried out assuming theoretical COD reductions for each inflow, which are then corrected according to the real COD reduction for the whole plant. Other emissions are allocated according to the flow.
- Total energy consumption is expressed as primary fuel consumption and calculated assuming 40% energy efficiency for purchased electricity production and 85% energy efficiency for purchased heat production.
- Environmental impacts, acidification and eutrophication are calculated by multiplying impact-causing emissions by coefficients. Acidification is expressed as sulphur dioxide equivalents. The coefficient for sulphur is 1 and for NO<sub>x</sub> 0.7. Eutrophication is expressed as phosphorus equivalents. The coefficient for total phosphorus is 1; for BOD 0.0088; for total nitrogen 0.14; and for NO<sub>x</sub> 0.0041. The greenhouse effect only consists of carbon dioxide emissions and has a coefficient of 1. The following CO<sub>2</sub> emission coefficients have been used for fossil fuels: heavy fuel oil 279 kg CO<sub>2</sub>/MWh; light fuel oil 267 kg CO<sub>2</sub>/MWh; natural gas 202 kg CO<sub>2</sub>/MWh; liquefied petroleum gas 227 kg CO<sub>2</sub>/MWh; coal 341 kg CO<sub>2</sub>/MWh; peat 381 kg CO<sub>2</sub>/MWh; and waste fuel according to its specific content at each site.
- In unit-specific data, discharges from waste water plants serving several mills are allocated to mills using the methodology explained above. Emissions from power plants separate from production units are also allocated to mills using the energy. In this allocation, the use of 1 MWh of electricity is double the value compared to the use of 1 MWh of heat.
- The figures for BOD emissions do not include those from Husum mill. The measurement is not required by the authorities and is thus not taken anymore.

Waste volumes are reported including the moisture. The use of temporary waste storage before final disposal at some mills gives some variations to the waste figures depending on how much waste is channelled to temporary

storage and how much is taken from there on each year. Waste figures include volumes to final disposal (incl. material and energy recovery, landfill, and hazardous waste disposal). A part of this volume comes straight from the mill process and a part is from the temporary storage. Waste volumes from mill process to temporary storage are not included.

## TECHNIQUES IN MEASURING HR DATA

The data gathering and calculation coverage follows that of the financial accounting with the following amendments:

- Coverage of the employee data was 99% of employees. Employee data excludes statistics from Hangö Stevedoring.
- The number of employees, sickness absenteeism, work accident absenteeism and lost-time accident frequency rate (LTA1fr) cover 100% of the employees. The number of employees is reported as full-time equivalent (FTE). The sickness absenteeism % and work accident absenteeism % are calculated per potential working hours. The lost-time accident frequency rate (LTA1fr) includes all accidents at work that have resulted in at least one disability day. The LTA1 fr is calculated as accidents at work per million worked hours. Only accidents involving Metsä Group's personnel are included in the LTA1 fr indicator.
- The organisational functionality survey index is based on the results of the organisation functionality studies. The studies reflect the 26 defined Group-level topics that affect the functionality of the organisation (Metsä Tissue has its own four additional topics), from which the overall level of organisational functionality is calculated for each company on a scale of four to ten. The organisational functionality survey is conducted for 100% (2013: 90%) of the employees.
- The registered occupational disease data covers 86% of employees. The figures cover all other countries' employees except Sweden and The Netherlands.
- The share of women in management includes women in the Board of Directors, the Executive Management Team and the business areas' management teams at the end of the year. Change in calculation in 2012–2014.
- New entries only include new permanent employees. Leavers only include permanent employees who left Metsä Group. Employee turnover includes all permanent leavers and redundancies as a result of the restructuring of the businesses, and is calculated against the average permanent head count.

# INDEPENDENT ASSURANCE STATEMENT

## TO THE MANAGEMENT AND STAKEHOLDERS OF METSÄ GROUP

### SCOPE AND OBJECTIVES

The Management of Metsä Group commissioned us to perform a limited assurance engagement on the Metsä Group Sustainability Report 2014 ("the Report"). The assurance engagement was conducted in accordance with the AA1000 Assurance Standard (2008) and as a type 2 engagement.

We have duly performed an independent external assurance, the objective of which was to evaluate:

- Metsä Group's adherence to the AA1000 Accountability Principles of inclusivity, materiality and responsiveness;
- the reliability of performance information presented in the Report according to the Quality of Information Principles defined the Global Reporting Initiative Guidelines (G4); and
- the compliance with the Global Reporting Initiative G4 in accordance criteria at the Comprehensive level

### RESPONSIBILITIES

Metsä Group's Management is responsible for the preparation of the Report and the performance data and statements presented therein, which the Board of Directors of Metsäliitto Cooperative has approved. Our responsibility as assurance providers is to express a conclusion based on our work performed. The criteria used for our assessment include the Global Reporting Initiative Guidelines 4.0 and Metsä Group's own internal reporting guidelines.

### ASSURANCE PROVIDER'S INDEPENDENCE AND COMPETENCE

We have conducted our assessment as independent and impartial from the reporting organisation. We were not committed to any assignments for Metsä Group that would conflict with our independence, nor were we involved in the preparation of the Report. Our team consists of competent and experienced sustainability reporting experts, who have the necessary skills to perform an assurance process.

### BASIS OF OUR OPINION

Assurance providers are obliged to plan and perform the assurance process so as to ensure that they collect adequate evidence for the

necessary conclusions to be drawn. The procedures selected depend on the assurance provider's judgement, including their assessment of the risk of material misstatement adhering to the reporting criteria.

Our opinion is based on the following procedures performed:

- Interviews with ten senior management representatives from Metsä Group and Business Areas to gain an understanding of the major impacts, risks and opportunities related to Metsä Group's sustainability agenda.
- Assessment of the procedures Metsä Group has in place to ensure the inclusivity of stakeholder engagement processes, the identification of material stakeholder expectations and the responsiveness to stakeholder concerns.
- Interviews with Metsä Group specialists responsible for sustainability performance data collection at Group-level and in selected sites.
- Review of Group-level systems and procedures to generate, collect and report sustainability performance data for the Report.
- Review of data sources, data generation and reporting procedures at Metsä Board Husum mill in Sweden, Metsä Forest Podporozhye and Metsä Fibre Svir in Russia.

### CONCLUSIONS

#### ADHERENCE TO AA1000 ACCOUNTABILITY PRINCIPLES

Metsä Group has made a commitment to active stakeholder dialogue. Metsä Group has stakeholder engagement processes in place in order to understand stakeholder expectations and to respond to stakeholder concerns. The material topics presented in the Report correspond to stakeholder interests and major economic, environmental and social impacts in Metsä Group's value chain. It is our opinion that the Report gives a fair and balanced view on the material topics and stakeholder interests; and that Metsä Group adheres in its sustainability practices to the AA1000 Accountability Principles of inclusivity, materiality and responsiveness.

### SUSTAINABILITY PERFORMANCE DATA

We have reviewed the basis of the sustainability information provided in the Report. It is our opinion that the Report provides adequate information of Metsä Group's sustainability performance and the information is presented in accordance with the reporting criteria.

### GRI IN ACCORDANCE CRITERIA

The Report complies with the GRI G4 "in accordance – Comprehensive" criteria.

### OBSERVATIONS AND RECOMMENDATIONS

Based on our review, we present the following observations and recommendations, which do not affect the conclusions presented above.

- In Metsä Group, there is a solid foundation for sustainability with competent people and integration to management. Operational sustainability through tangible actions and targets is a strength of Metsä Group. Metsä Group is well positioned to enhance sustainability in the whole value chain. We encourage Metsä Group to continue utilising this opportunity the business development and investments on sustainable technologies and new products.
- Metsä Group has updated the sustainability agenda based on materiality assessment in 2014. As a result some new and emerging topics have been taken into more detailed consideration. We recommend Metsä Group to further intensify full implementation of the sustainability agenda in all operations and in cooperation with key stakeholders.
- Metsä Group has made progress towards the Group-level sustainability targets. Positive development continued in reductions of fossil carbon emissions, increasing energy efficiency, coverage of certified wood in operations and lost-time accidents frequency. As noted last year, we encourage Metsä Group to develop more challenging sustainability targets especially for resource efficiency and new topics identified in the updated materiality assessment.

Helsinki, Finland, 16<sup>th</sup> February 2015

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# Make the most of Metsä



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