

PUUNJALOSTUSINSINÖÖRIT RY - YHTEISTYÖTÄ METSÄTEOLLISUUDEN HYVÄKSI

FiberTech 2026 - Metsäteollisuuspäivät

Antti Lindqvist, PI



**PUUNJALOSTUS-
INSINÖÖRIT**
Finnish Forest Products
Engineers' Association

FINNISH FOREST PRODUCTS ENGINEERS' ASSOCIATION IN A NUTSHELL

2700 + 50
PROFESSIONALS +
COMPANIES



110 
YEARS
AS A PIONEER IN THE
FOREST INDUSTRY

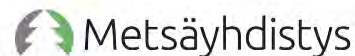
- **NETWORKS & EVENTS**
- **KNOWLEDGE**
- **EXHIBITIONS**
- **LEARNING MATERIALS**

200 000 €
SCHOLARSHIPS
annually

3500+
PARTICIPANTS
IN >20 EVENTS
annually

7000 + 55
REGISTERED
USERS +
ORGANISATIONS





BOARD OF DIRECTORS 2026-2027

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Ida Heimo, young member, Aalto University

Antti Lindqvist, PI



PI TEAM TODAY



Antti Lindqvist
CEO



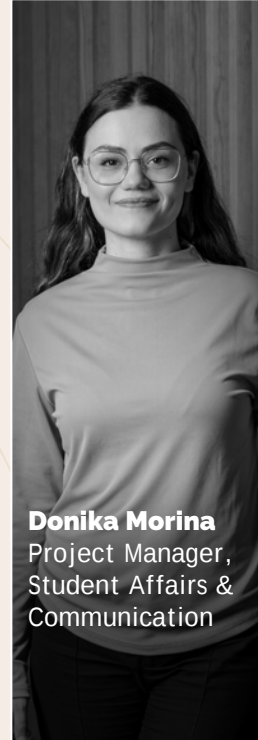
Vera Hallikainen
Development
Manager,
Deputy CEO,
ForestBioFacts,
Marketing &
Communications



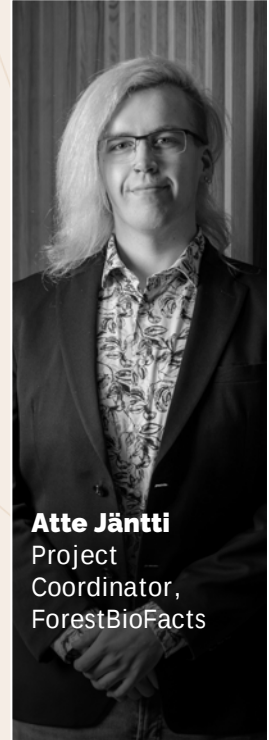
Natalia Musina
Project Manager,
Member Services
and Events



Elisa Heiskanen
Marketing and
Office
Coordinator



Donika Morina
Project Manager,
Student Affairs &
Communication



Atte Jäntti
Project
Coordinator,
ForestBioFacts

CHANGES IN FINNISH & GLOBAL PULP AND PAPER INDUSTRY



PUUNJALOSTUS-
INSINÖÖRIT
Finnish Forest Products
Engineers' Association



GLOBAL MEGATRENDS – THE NEW ERA OF TURBULENCE

TECHNOLOGICAL DISRUPTION

- AI, automation and quantum computing redefining industries
 - Moore's Law acceleration – exponential data growth & processing power
- **Implication: Businesses must adapt in real time**

CLIMATE & SUSTAINABILITY REVOLUTION

- Net-zero targets, carbon markets and ESG policies
- Transition to renewable energy outpacing predictions
- → **Implication: Sustainability is no longer optional – regulations and consumer demand drive rapid shifts**

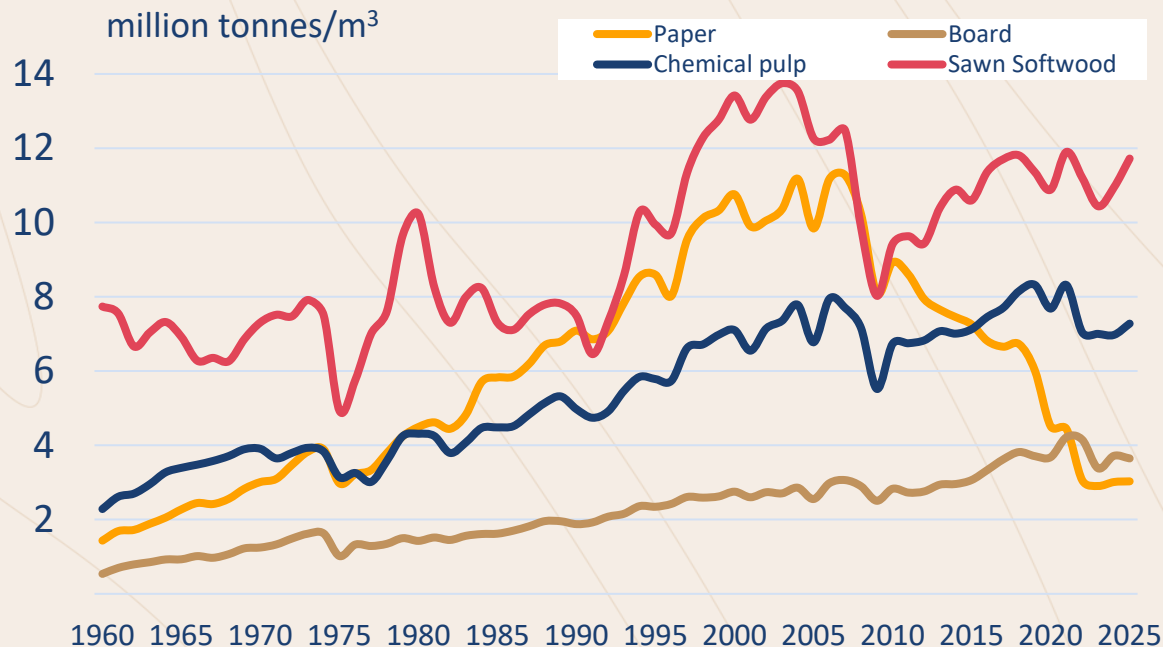
DEMOGRAPHIC & URBAN SHIFTS

- Aging populations in developed nations vs. youth booms in emerging markets
 - Smart cities and urbanisation connectivity and infrastructure demand
- **Implication: Workforce and market dynamics shifting at an unprecedented rate**

GEOPOLITICAL & ECONOMIC REALIGNMENTS

- The rise of multipolar world economies (China, India and regional trade blocks)
 - Supply chain reconfigurations post-pandemic
- **Implication: Businesses must navigate fast-changing trade policies and risks**

FINNISH FOREST INDUSTRY PRODUCTION 1960-2025



Production		2025
Paper		3 029
Paperboard	1000 t	3 647
Chemical Pulp	1000 t	7 277
Sawn softwood*	1000 m ³	11 722
Change from prev. year		
Paper		0,6 %
Paperboard		-1,9 %
Chemical Pulp		4,4 %
Sawn Softwood		7,1 %

*Production of replenishment companies
estimated

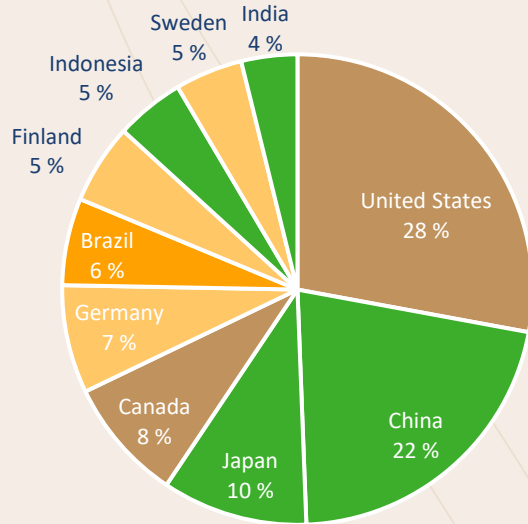
Content Source: Finnish Forest Industries Federation, 2026

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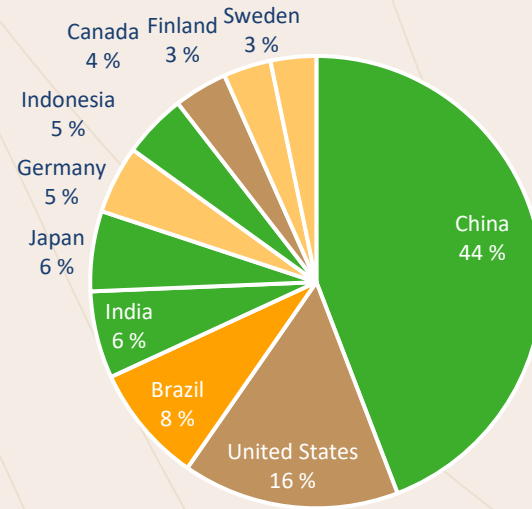
CHINA HAS BECOME THE GLOBAL LEADER IN PULP AND PAPER INDUSTRY CAPACITY

THE TOP TEN COUNTRIES IN 2008



339 MM mt

THE TOP TEN COUNTRIES YTD 2025



489 MM mt



APAC



Europe



LATAM



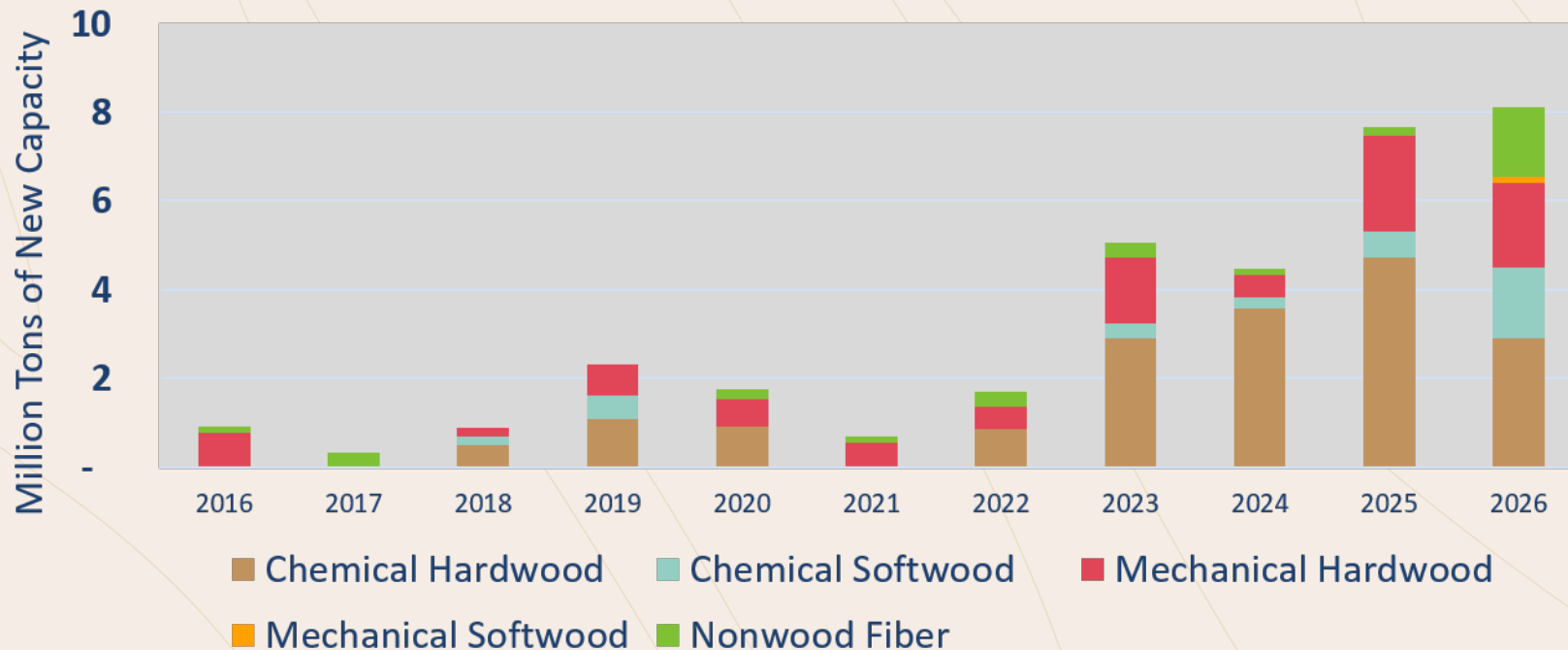
North America

Content Source: FisherSolve®

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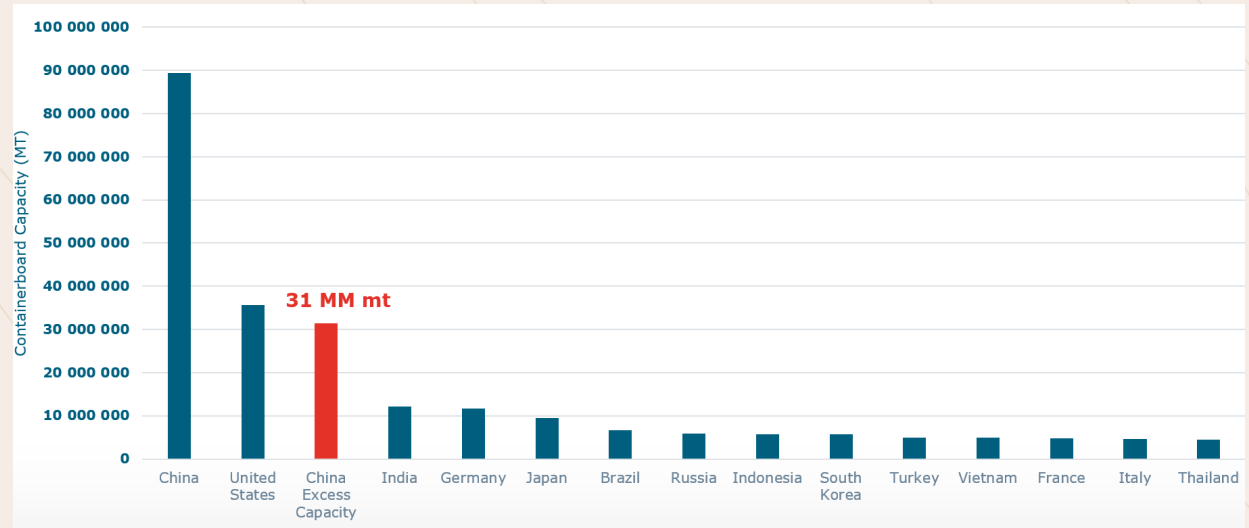


CHINA'S VIRGIN PULP CAPACITY HAS RISEN UP TO 40 MILLION TONS AND IS GROWING RAPIDLY



CHINA'S CONTAINERBOARD OVERCAPACITY IS SHAKING THE PACKAGING MARKET

- China's overcapacity in containerboard is larger than any European country's TOTAL capacity
- ...and soon larger than US total capacity



GROWING GLOBAL DEMAND

– KEY QUESTION: WHAT WILL BE THE ROLE OF EUROPEAN AND ASIAN FOREST INDUSTRIES?

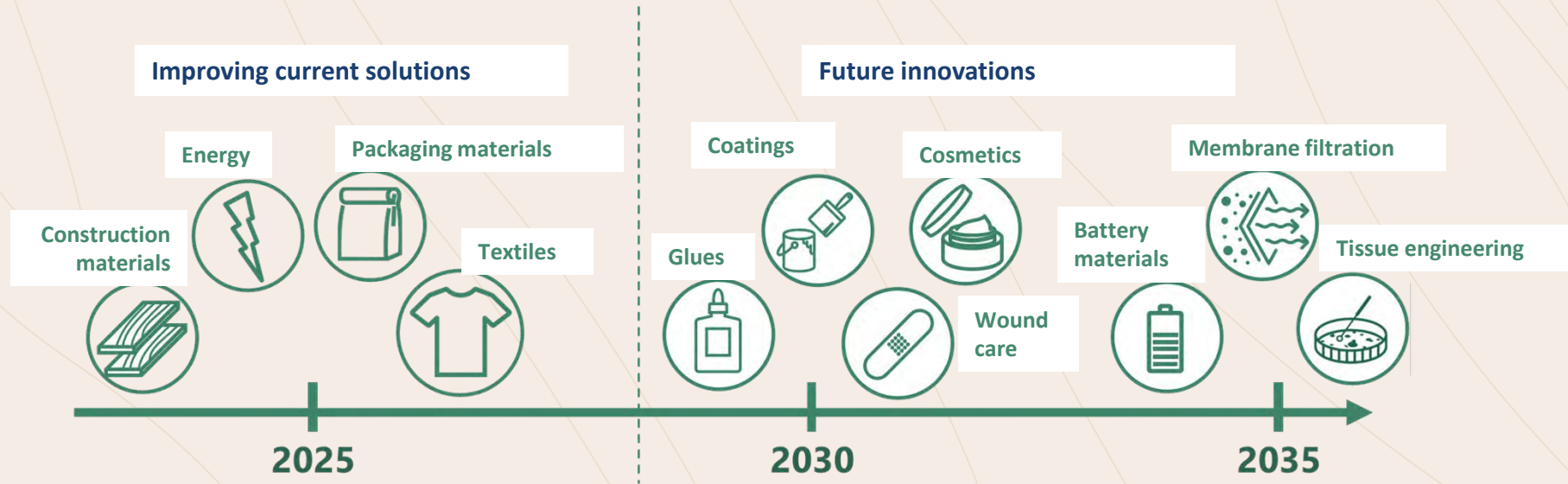


Content Source: Finnish Forest Industries Federation

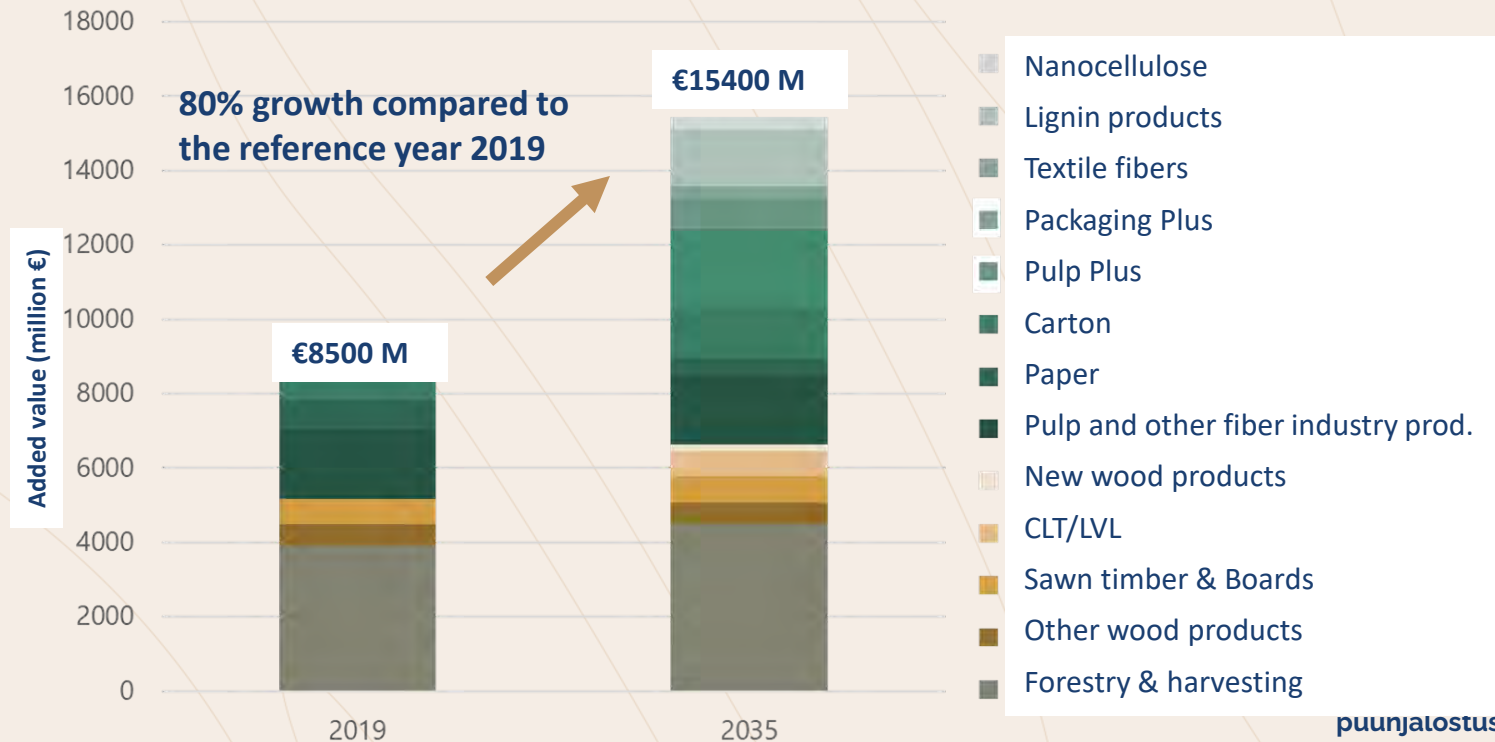
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THE ECONOMIC GROWTH OF FOREST SECTOR REQUIRES A TRANSFORMATION OF THE VALUE CHAINS



IT IS POSSIBLE TO INCREASE THE VALUE ADDED OF FINNISH FOREST INDUSTRY PRODUCTS WITHOUT ADDITIONAL FELLING



Content source: Finnish Forest Bioeconomy Science Panel, 2024

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COLLABORATION & ACTIVITIES



PUUNJALOSTUS-
INSINÖÖRIT
Finnish Forest Products
Engineers' Association



Vision

Together, we will create a wood-based future.

Values

Cooperation
Reliability
Pioneering

Purpose

We are a responsible and innovative network of forest industry professionals and companies. We develop of our members' expertise. We contribute to making the field more attractive, and we are a valued partner in Finland and abroad.

PI 2025-2030 STRATEGY

Active and
diverse
members

Skilled and
committed
personnel

Strong and
stable economy

Responsible
operations

Business
intelligence

Development of professional skills

Promoting a sense of community and networking

Advancing the renewal and improving the attractiveness of the field

Supporting young and new professionals

PI STRATEGY 2025-2030

- MAIN FOCUS AREAS

Pioneering sustainability

- PI always acts responsibly, promotes the responsibility of the entire industry and sets an example for operators in the industry and other associations.

Smart business intelligence

- PI's operations are transparent, responsible and the measures are based on the best available information. The impact of operations is made visible with measured data and the use of artificial intelligence.

Up-to-date student membership

- Changes in degree programmes and working life, as well as a more inclusive student membership that takes better account of young people's own wishes

Showcasing the power of the corporate member network

- To engage corporate members more closely in the activities of PI and to activate the employees of the member companies also as individual members.

Development of services for international experts and county members

- With responsible choices and the use of artificial intelligence, taking into account the needs of international experts in all of PI's activities. The aim is to develop the services of members outside the Helsinki metropolitan area by improving digital services and by providing members with high-quality Puunvuoro media in the future as well.

Development of fundraising

- Development of PI's fundraising, e.g. by developing investment activities and enabling donations, with the aim of gradually reducing individual membership fees during the strategy period

Examples of activities

- *New responsibility metrics*
- *Diversity and responsibility in all operations*

- *New all-encompassing dashboard, the "Master Dashboard"*

- *Free student membership, removal of the 2-year study requirement*
- *Increased campus visibility and invited membership for higher education institutions*

- *More visibility and impact for member companies*
- *Roadshow in member companies*

- *Major events to be bilingual*
- *Smart digital services add value to PI's services*

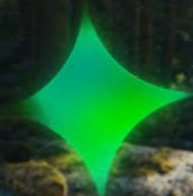
- *Enabling donations and developing fundraising*

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A lush forest scene with a stream flowing over mossy rocks. Sunlight filters through the dense canopy of tall evergreen trees.

ForestBioFacts

A bright green, four-pointed star icon with a slight gradient and a soft glow.

AI Assistant

What is ForestBioFacts?

A **digital learning environment and a database** covering everything you need to know about forest-based products and technologies.

Planned, created, and developed in close **collaboration with industry and universities.**

Created for **industry professionals** e.g. in operations, R&D, project management, sales & marketing, business development and university-level **educators, students and researchers.**

Content available in:



55
organisations
worldwide

7 500 +
registered
users

1 600+
articles

300+
videos

21
books

30
webinars and
podcasts

New

Virtual mill
tour

Glossary of
300
terms

6-language
dictionary of
6 000
terms

New

Asses your
learnings and
follow
progress

New

AI
Chatbot
to improve
experience

Soon!

Digital book
and
magazine
archive



New AI Assistant in ForestBioFacts

Ask anything about forest-based bioeconomy from ForestBioFacts. Get trustworthy, high-quality answers.

Welcome to ForestBioFacts
The digital learning environment for forest-based bioeconomy

16 themes
Everything you need to know about forest-based products and technologies, the learning environment, careers of a forest-based bioeconomy and 15 additional themes. Tailored for your needs by top professionals in academia and industry.

Learning assessment
Develop your expertise and track your progress efficiently with ForestBioFacts. Challenge, strengthen, and test your knowledge through short, focused questions. Complete all questions or a theme to earn a certificate that highlights your experience.

New AI Assistant
Ask anything from ForestBioFacts to get new insights and answers. The AI Assistant searches information only from ForestBioFacts. You can ask in any language, but you'll usually get the best results in English.

AI Assistant for forest-based products, processes, and technologies
Ask a question and get an answer with links to learning materials when available. The AI Assistant searches information only from ForestBioFacts. You can ask in any language, but you'll usually get the best results in English.

What are the best options in electrifying kraft pulping process?

Your answer is being prepared.

AI Assistant for forest-based products, processes, and technologies
Ask a question and get an answer with links to learning materials when available. The AI Assistant searches information only from ForestBioFacts. You can ask in any language, but you'll usually get the best results in English.

induction heating. These technologies allow mills to decouple process heat generation and utilize renewable electricity, increasing operational flexibility and reducing carbon footprint. Key electrification strategies for kraft pulping are:

- Electric boilers and high-temperature heat pumps can substitute for biomass or steam systems, providing process steam with renewable electricity.
- Resistance and induction heating can be applied to high-temperature units like dryers, which are traditionally challenging to decarbonize.
- Electrified units can be operated flexibly, ramping up when electricity prices are low and reducing output when prices are high, supporting grid stability and cost optimization.
- Substituting fossil fuels in the lime kiln with renewable alternatives (e.g., bark gasification, tail oil pitch) is already practiced, but full electrification offers further decarbonization potential.

Modern kraft mills are typically self-sufficient in energy, except for the lime kiln, which remains the main source of fossil CO₂ emissions. Electrification of the lime kiln and other heat-intensive processes is therefore a primary focus for achieving nearly fossil-free operation in kraft pulp mills.

Sources

- [Energy consumption trends in forest industry](#)
- [Intermittent renewable energy sources impacting pulp and paper industry](#)

Ask a follow-up or new question...

AI-generated answers may be incorrect. Please verify important information and check [Terms and conditions](#).

Answers are based on verified information: ForestBioFacts articles and Papermaking Science and Technology books.

Links to sources always included to ensure you can trust and verify the answer.

Ask anything, in any language. (English gives best results.)

forest bio facts

Content review and development plan for 2024-2028

We welcome experts to join the review project for the all four themes currently being reviewed.

We are also looking for experts to edit and finalise the content for publication.

MAY

Review work kick-off with a team of around 12 experts from academia, companies and research institutes.

Pulping and biorefining

Process control and automation

Biomass chemistry and physiology

Supply chain

JUNE - SEPTEMBER

Review work carried out during summer and autumn independently by the reviewers.

Mid-project follow-up meeting on 27 August 2026.

The call for reviewers is still ongoing.

SEPTEMBER - FEBRUARY 2027

Review project ends and final project meeting on 14 October 2026.

Recruitment for one partner (e.g. Masters student, recent graduate, researcher, etc.) per theme to edit content based on the revisions.

Finalising the content for publication

MARCH 2027

Updating forestbiofacts.com with revised content.

Publish updated content by end of March 2027.

2024

Natural fibre products

Introduction to forest-based bioeconomy

Man-made bio-based fibre products

Environmental control and management of biofuels

Forests and other biomass resources

Bio-based nanomaterials

Asset management

2025

Pulping and biorefining

Process control and automation

Biomass chemistry and physiology

Supply chain

2026

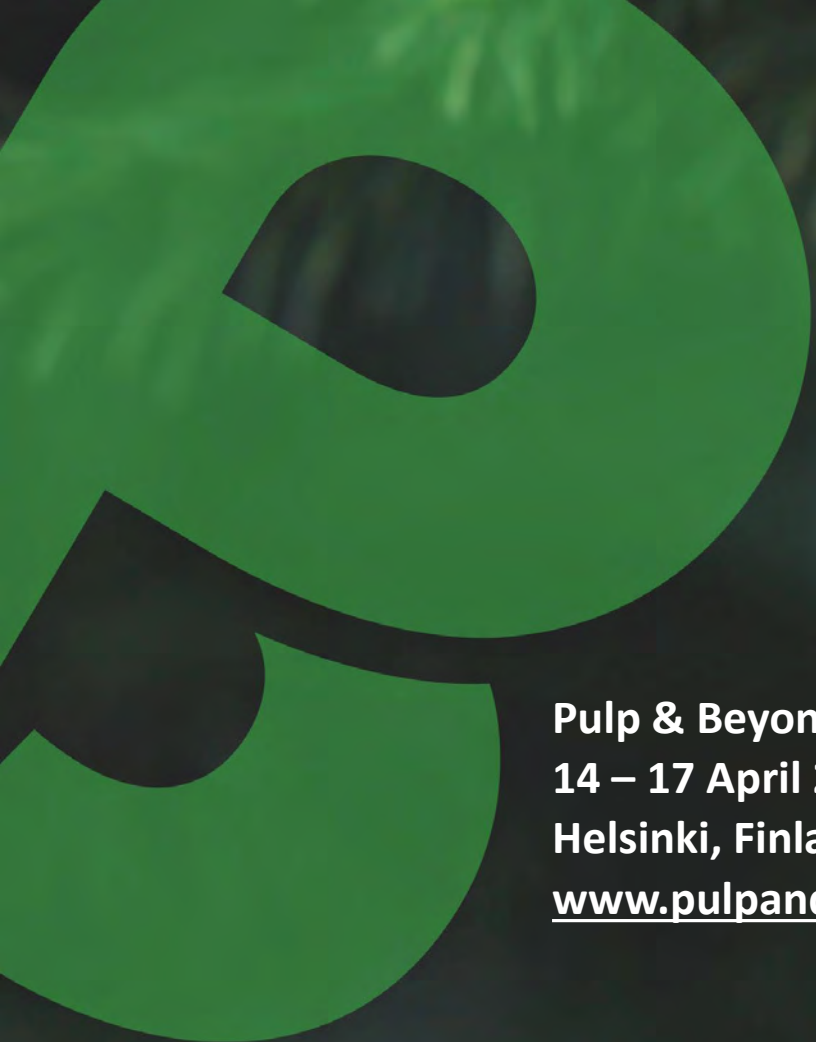
Wood products

Recycled fibre

Material testing and product properties

Business and investment planning

2027



Pulp & Beyond 2026

Pulp & Beyond Exhibition and Conference

14 – 17 April 2026

Helsinki, Finland

www.pulpandbeyond.com





Pulp & Beyond 2026:

- 160+ companies
- 8400 event visitors during the week
- 380 conference delegates
- 2+1 excursions for 150 visitors & students
- International delegations from India, Japan and Taiwan

Programme highlights:

- International Conference
- Main Stage & Speaker's Corner
- 80+ speakers
- Start-up competition



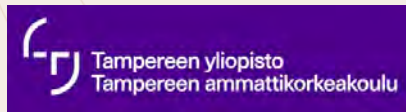




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PI:N YHTEISTYÖTÄ & TAPAHTUMIA KOTIMAASSA SYKSYLLÄ 2026



Syyskuu 2026:

- PI & metsäteollisuus esillä korkeakoulujen orientaatioviikoilla ympäri Suomen
- Afterwork –tilaisuus Kemiran kanssa Espoossa
- Johan Gullichsen –kollokvio & stipendigaala Helsingissä

Lokakuu 2026:

- PI Roadshow-tilaisuudet yritysten kanssa Espoossa, Turussa, Lappeenrannassa ja Tampereella
- Aamiaistilaisuus Valmetin kanssa Vantaalla
- Lukiolaisten hackathon Kauniaisissa

Marraskuu 2026:

- PI:n syysseminaari Pörssitalolla
- Metsä 360-palkintotilaisuus Lahdessa

Joulukuu 2026:

- Jouluglöggit ja historiatilaisuus PI:n toimistolla Espoossa



PI INTERNATIONAL ACTIVITIES IN AUTUMN 2026



September 2026:

- Webinar in collaboration with German sister association Zellcheming

October 2026:

- Finnish business delegation to Brazil in collaboration with ABTCP and business developer [Niina Fu Oy](#)
- Training and supporting young researchers from Finland to MWP event in Sweden

November 2026:

- Webinar with international research programme Emission Free Pulping
- Finnish business delegation to India in collaboration with IPPTA

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INTERNATIONAL CONGRESS & EXHIBITION
PULP AND PAPER
CONGRESSO E EXPOSIÇÃO INTERNACIONAL DE CELULOSE E PAPEL

ABTCP 2026

October 06 - 08
06 a 08 de outubro
Transamerica Expo Center
São Paulo | SP | Brasil



THE MARCUS
WALLENBERG
PRIZE



Emission
Free
Pulping



IPPTA



Paperex
SOUTH INDIA



WE CAN REDUCE EMISSIONS AND IMPROVE PROFITS BY INCREASING THE YIELD OF WOOD-BASED PRODUCTS

DRIVERS

There has been a tremendous change in market environment



WHAT IS HOT

Renewable fuels
Biochemicals
Bio-based graphite
Lignin derivatives
Textile fibres
Biogenic CO₂



STATUS IN 2026

In 2026, commercialization of most bioproducts still requires major investments in application and market development



INNOVATE TO SUCCEED

Innovate boldly
Integrate technological transformation
Create competitive advantages

Content Source: AFRY, VTT



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