



Metsä Fibre

Strong fibre expertise

Key figures 2013, continuous operations

 Sales	1,313 million euros
 Result before tax	197 million euros
 Personnel, year end	Around 900
 Pulp capacity	2,460 million tonnes per annum
 Wood consumption	12.5 million m3
 Energy self sufficiency, electricity	144 %

Our pulp mills are located in Finland



Joutseno

Capacity: 690,000 tonnes
Wood consumption: 3.4 million m³
ECF-bleached softwood pulp
Personnel: 133



Rauma

Capacity: 650,000 tonnes
Wood consumption: 3.4 million m³
ECF-bleached softwood pulp
Personnel: 120



Kemi

Capacity: 590,000 tonnes
Wood consumption: 2.9 million m³
ECF-bleached softwood and hardwood pulp
Personnel: 169



Äänekoski

Capacity: 530,000 tonnes
Wood consumption: 2.4 million m³
ECF-bleached softwood and hardwood pulp
Personnel: 171

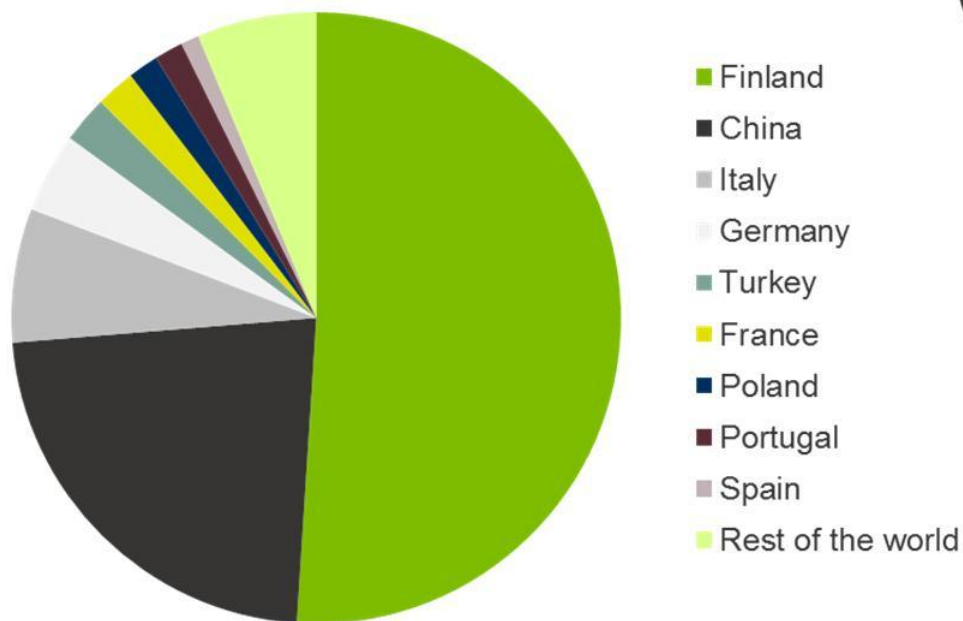


Metsä Svir sawmill

Capacity: 250 000 m³
Wood consumption :500,000 m³
Raw material: Spruce
Personnel: 142

We operate in the international market

Pulp deliveries 2013

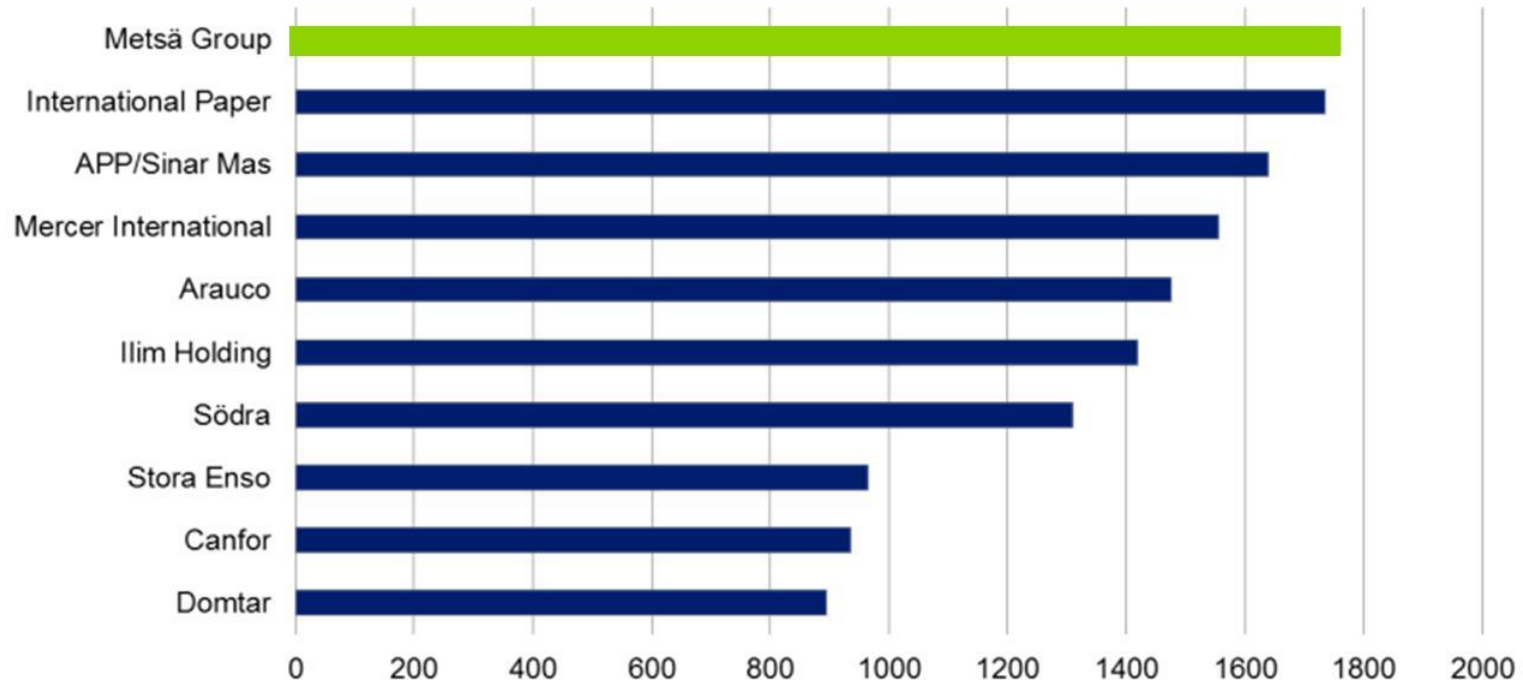


We are a Finnish forest industry company and we operate in the international market.

Our main market area is Europe. One quarter of Metsä Fibre's pulp is sold to Asia.

Leading Bleach Softwood Kraft Market Pulp Producers in the World 2013/Q4 (excl. fluff, excl. dissolving pulp)

1 000 tonnes



Source: Pöyry Management Consulting

Metsä Fibre's end products



Printing paper

Botnia Nordic Strong

Reinforcement pulp produced from northern softwood gives magazine paper desirable strength characteristics.



Tissue paper

Botnia Nordic Pine

Made from northern softwood, this softwood kraft pulp is a versatile material for high-quality tissue and soft papers.



Board

Botnia Nordic Birch

Made from northern hardwood, this short-fibre birch pulp is a special product suited for the manufacture of high bulk paperboard goods.



Speciality products

Botnia Nordic Pine & Birch

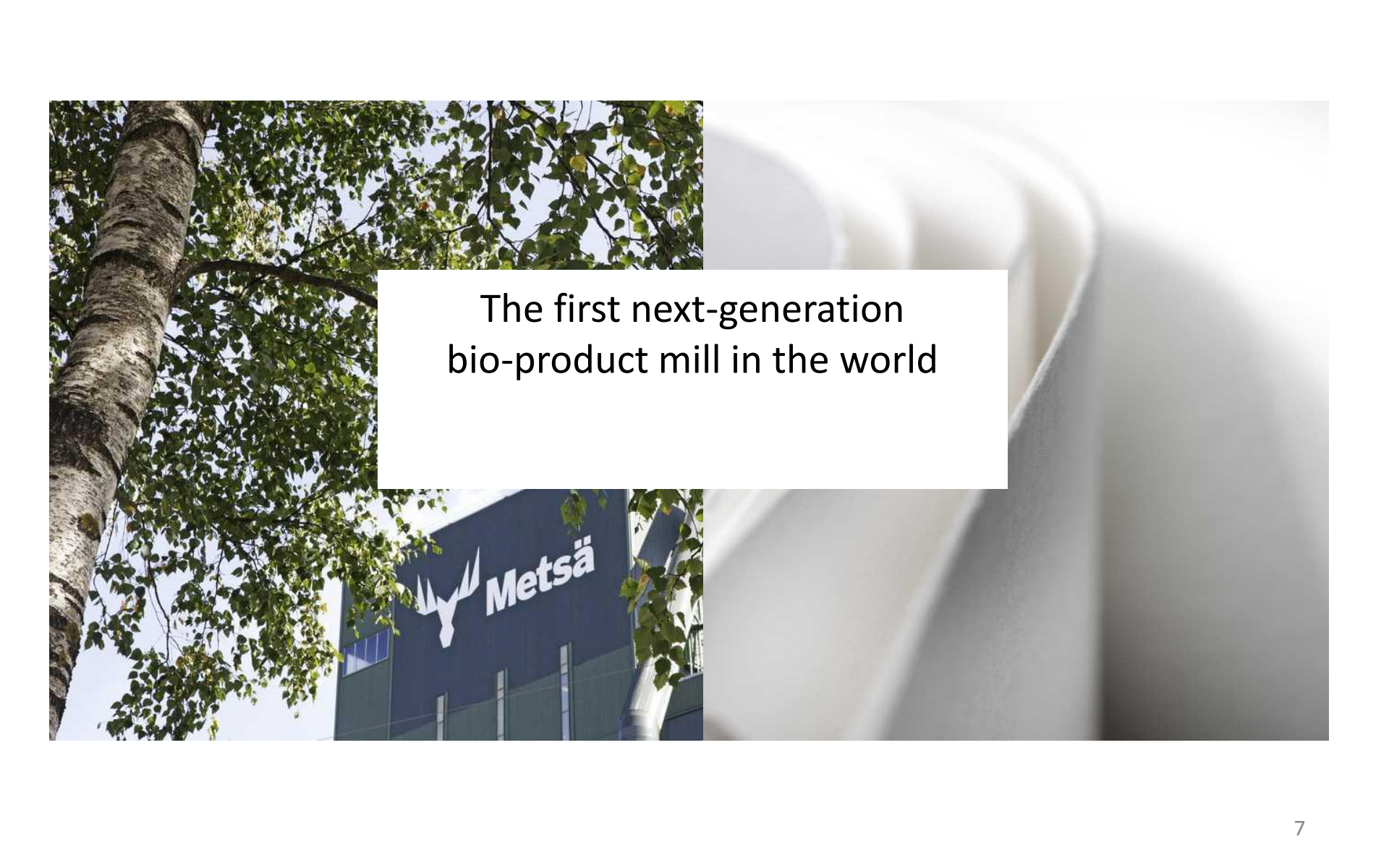
Special pulp grades are suited for the manufacture of various specialty products, such as baking, release and thermal papers, and other special applications like CMC.

We manage the entire value chain

Fibre expertise

Logistics and warehousing

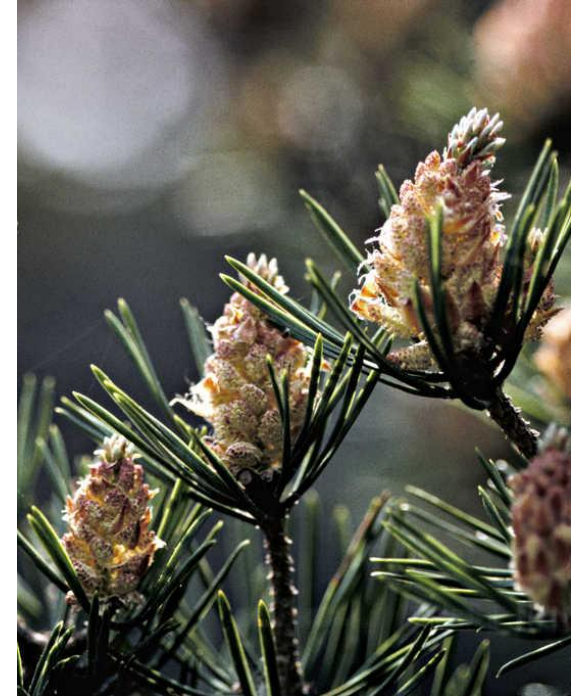
Partnership with key customers



The first next-generation
bio-product mill in the world

The first next-generation bio-product mill in the world

- The biggest investment in the forest industry in Finland
 - EUR 1.1 billion
 - Annual pulp production 1.3 million tonnes (currently 0.5)
 - Use of wood 6.5 million m³ annually (currently 2.4)
 - Over 2,500 jobs in the whole value chain in Finland
 - Internal financing approximately 40 per cent
- Advantages
 - Efficient production of high-quality pulp
 - Integrated production of new bio-products
 - Resource-efficient way of using all production side streams
- Helps Finland to reach its targets for the use of renewable energy
 - Electricity generation 1 400 GWh/a
 - District heating and steam 7 000 GWh/a
 - Wood energy 1 200 GWh/a

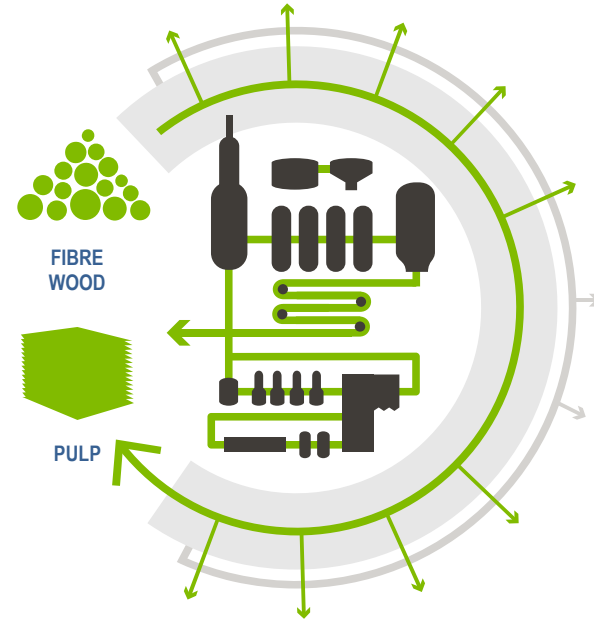


Demand for market pulp by region and end-product

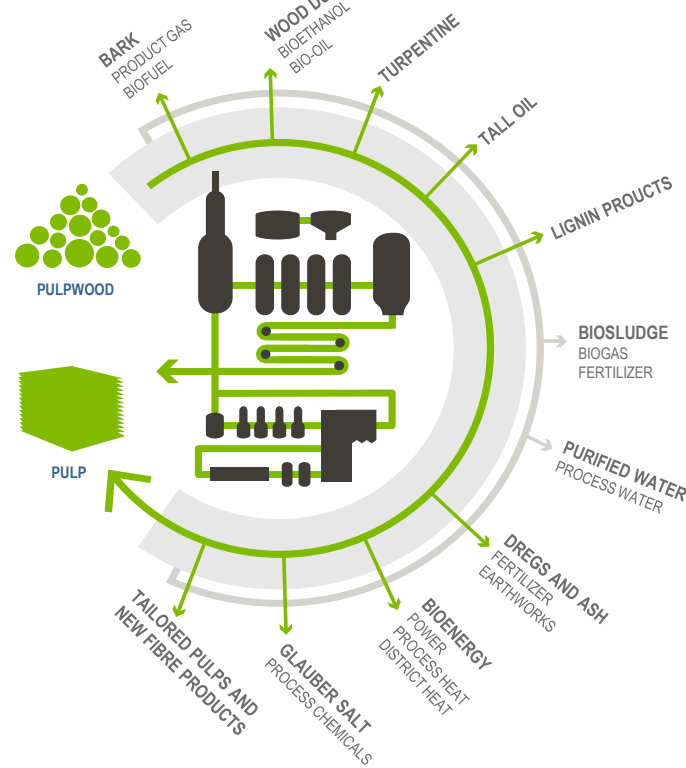
Demand	Printing and office papers	Tissue	Paperboard	Speciality products
Whole world	40%	30%	10%	20%
Europe				
China				
Rest of Asia				
North America				

Bio-product mill – more than a traditional pulp mill

- Wood is refined into bio-materials, bio-energy, bio-chemicals and fertilizers sustainably and with great resource efficiency
- Raw materials and side streams will be utilized 100 per cent as products and bioenergy
- The mill will not use fossil fuels
- Energy efficiency will be emphasized when choosing equipment and machinery
- The operating model will be based on an efficient partner network
 - New products will be created in collaboration with various experts joining the network
 - Creates opportunities especially for small and medium-sized enterprises to produce innovative bio-products with high added value



Modern, energy-efficient pulp mill as the core



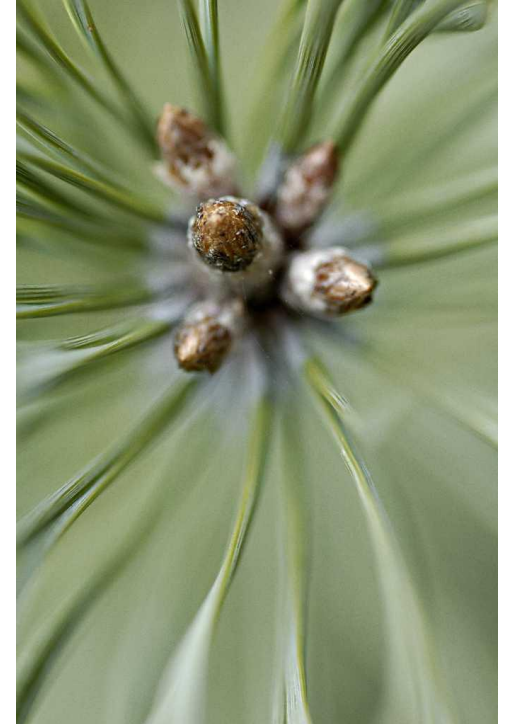
Bio-product mill's product portfolio

Current products as the core:

- Bio-materials: high-quality pulp
- Bio-chemicals: tall oil and turpentine
- Bio-energy: bio-electricity, process steam, district heating, wood-based fuels

Potential new products:

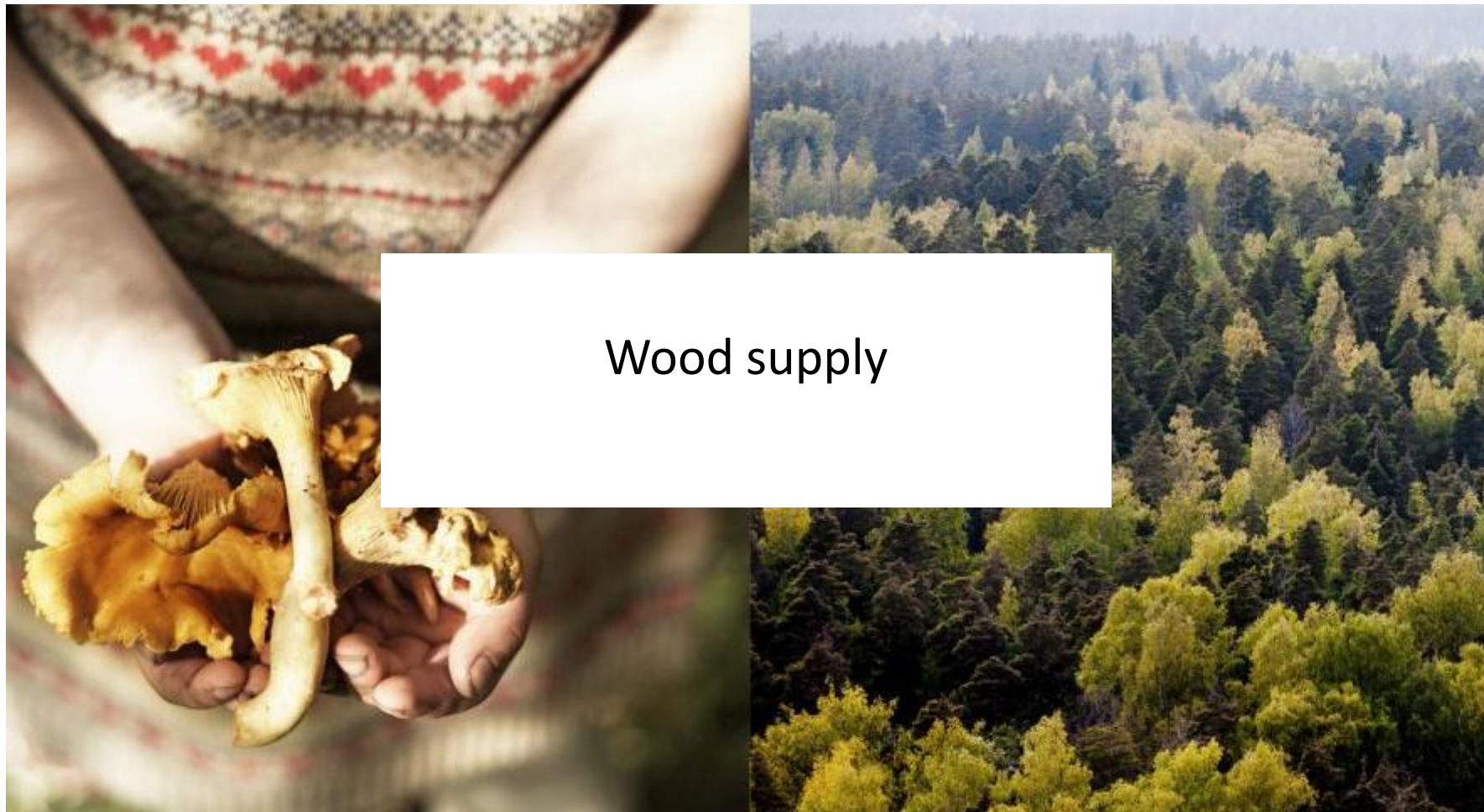
- Bio-materials: custom-made pulp, lignin upgrades, new fibre products
- Bio-chemicals: raw materials for bio-plastics, fertilizers and process chemicals
- Bio-energy: bio-oil, methanol, bio-gas, product gas, ethanol



Maximal energy and resource-efficiency

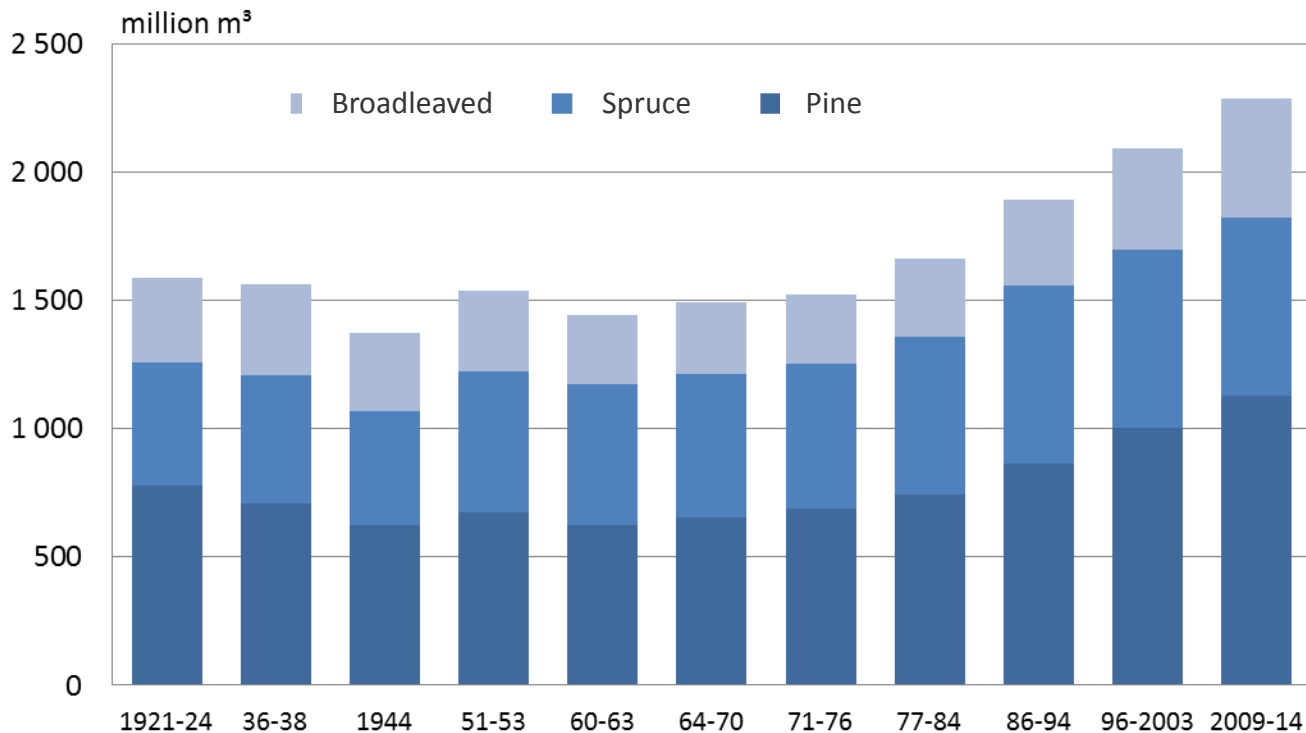
- The bio-product mill will increase the share of renewable energy in Finland by approx. 2 percentage points
- Energy efficiency and clean technology (cleantech) will be emphasized when choosing equipment and machinery
 - The mill's emission levels will be lower than allowed by Äänekoski mill's current environmental permit
 - All production side streams and waste will be utilized as efficiently as possible
 - Material efficiency will be top in class



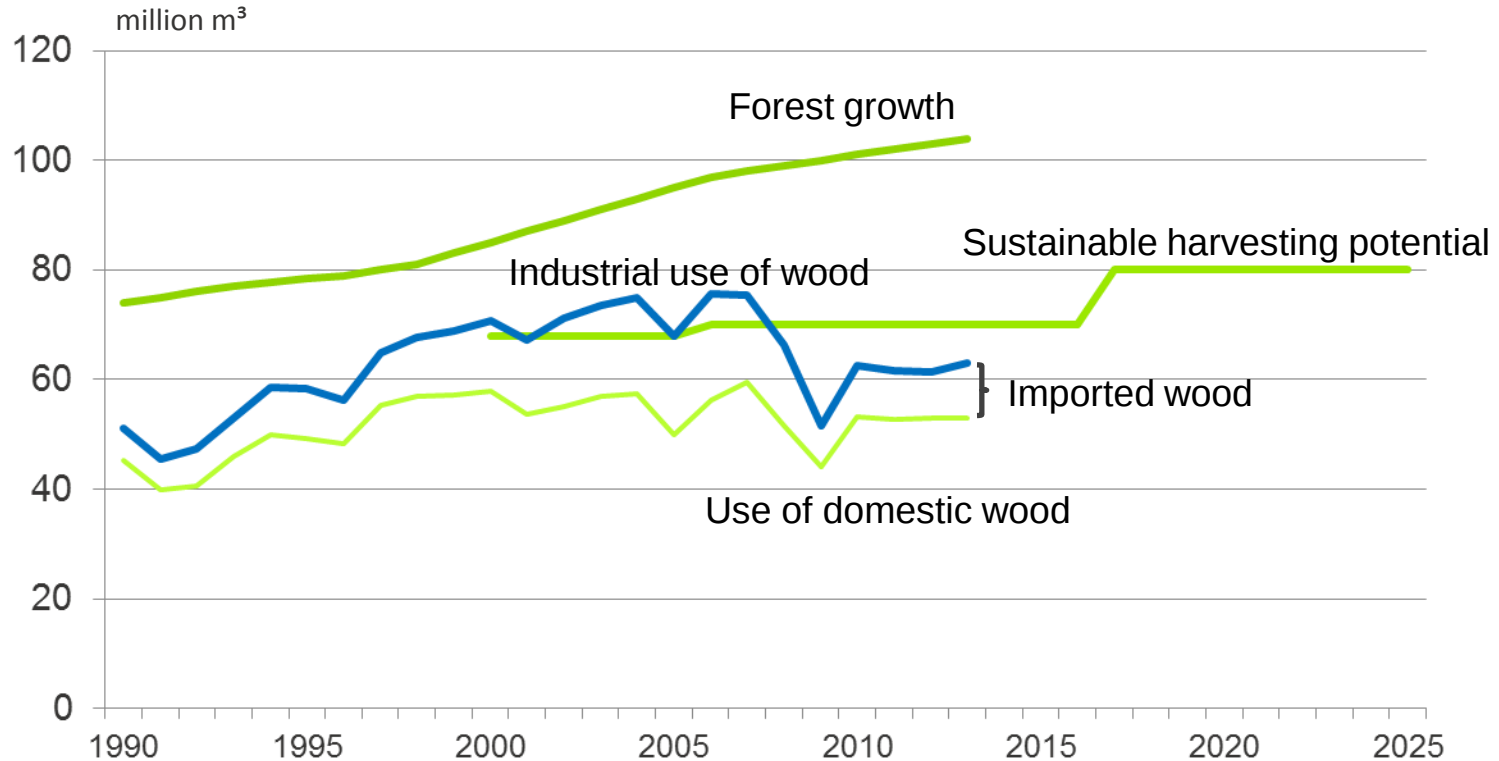


Wood supply

The amount of wood in the Finnish forests increases continuously

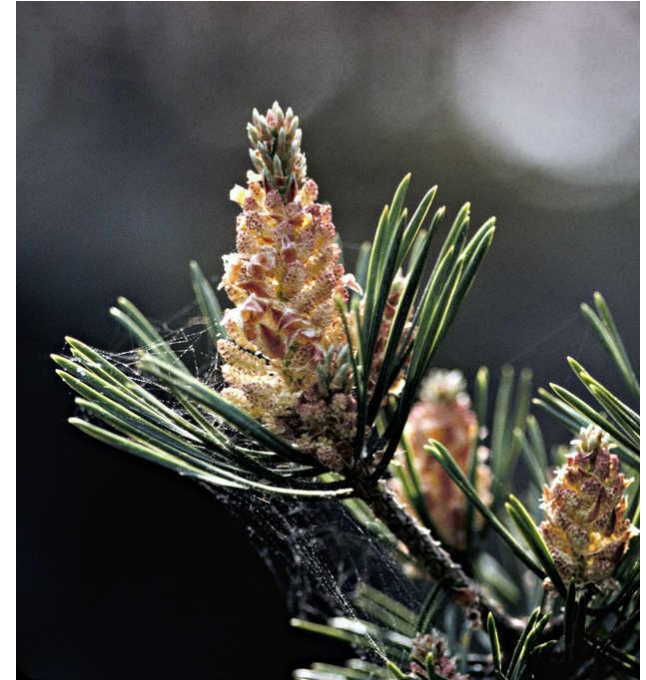


The use of domestic wood can be increased sustainably



Aiming for operation in 2017

- Environmental Impact Assessment (EIA) and environmental permit process will be initiated immediately with the aim of completing them during the first quarter 2015
- The final investment decision will be made during spring 2015, so that the new mill could be operational in 2017

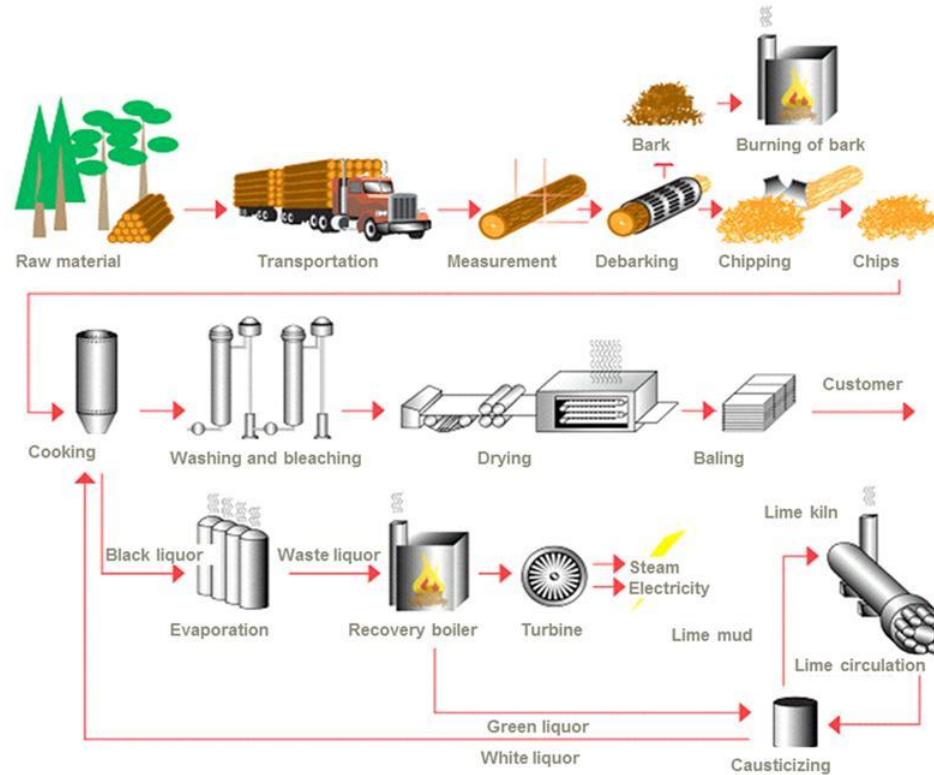




Joutseno Mill



Production process



Production

- Production capacity 690 000 tonnes ECF bleached softwood pulp
- Pulp grades:
 - Botnia Nordic Pine+ JNO
 - Botnia Nordic Strong+ JNO
- Exports 90%
- Market pulp 90 %
- Wood consumption 3,5 million m3 / year



Bio-Products

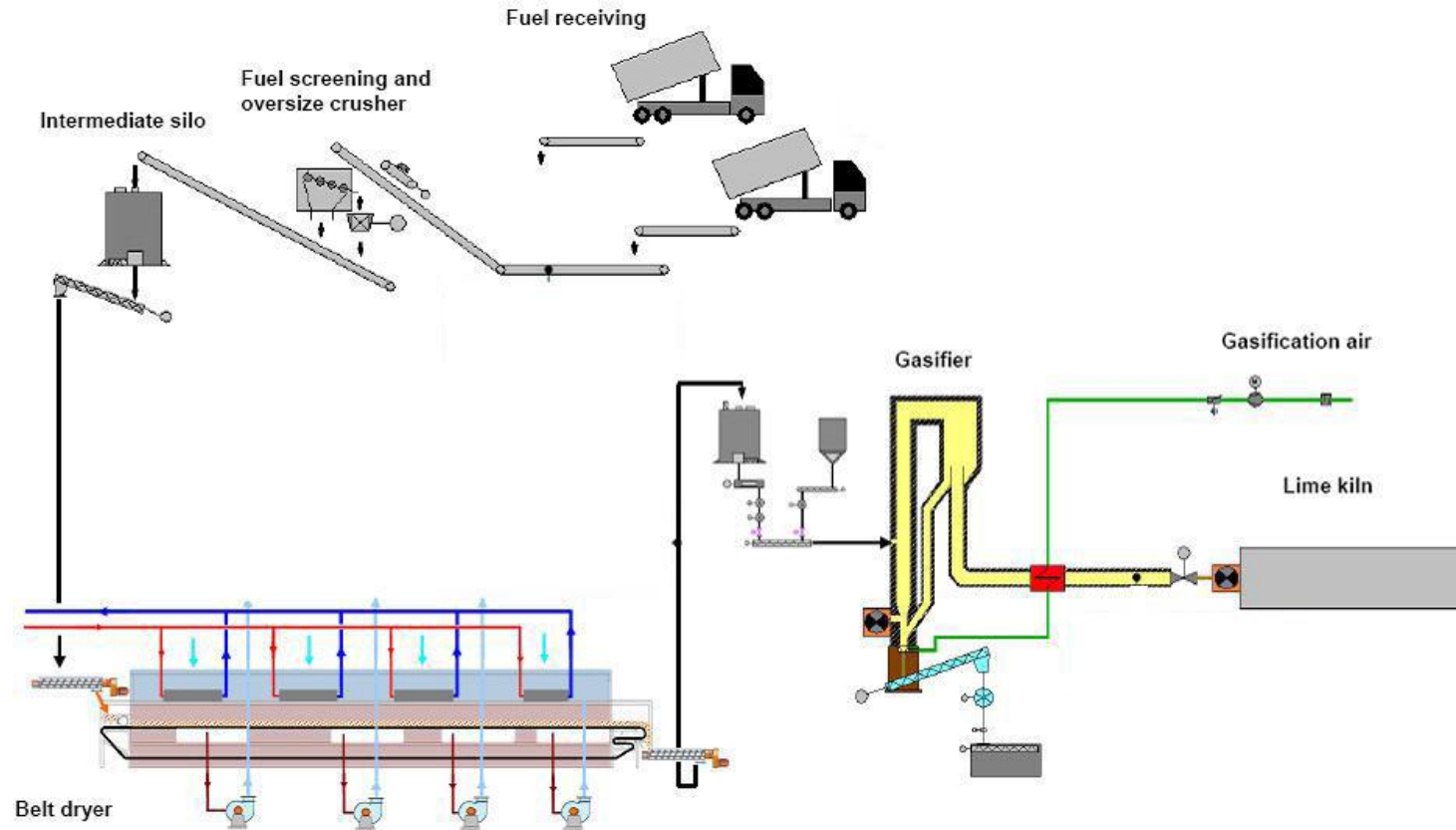
- Tall oil 19 000 t/a
- Turpentine 1 200 t/a
- Electricity sales 290 GWh
(In 2012 households and agriculture in Lappeenranta used 252 GWh)
- Bark sales 150 GWh
(in addition to the bark used in gasifying process)

48 MWh gasification plant

- Started in 2012.
- The gasification plant improves the efficiency of renewable energy usage by replacing the natural gas used with bio fuel made from bark.
- Joutseno Mill is the first carbon dioxide-neutral facility in Finland during normal operations.
- The technology in the gasification plant is a new application in the Finnish pulp industry. In bark drying, this innovative and comprehensive solution uses surplus heat from the mill.
- The plant considerably improves the mill's energy-efficiency and further improves the mill's environmental performance.



48MWh gasification plant





Thank you!