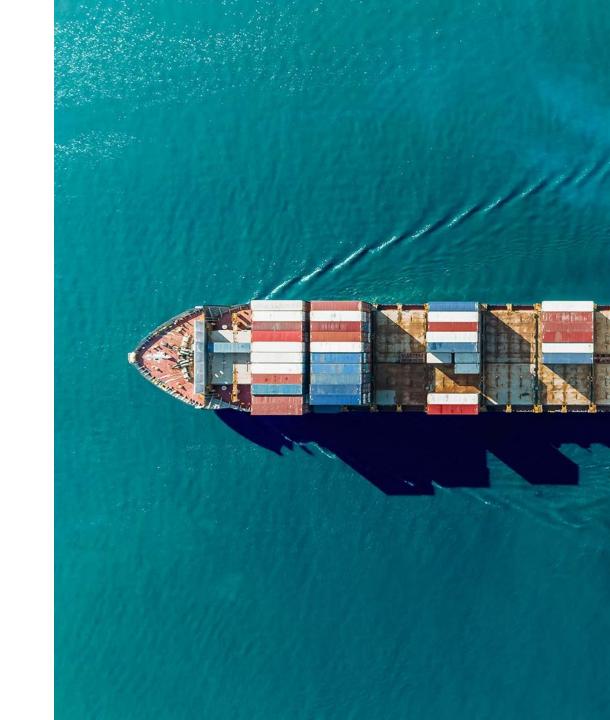
On the road to green shipping

Alina Koskela Logistics affairs

Nordic Roadmap Conference for Future Fuels

3.5.2023





The Finnish Forest Industries Federation represents some 60 member companies operating in the forest industry

Paper production and further processing

Pulp production

Paperboard production

Sawmill industry

Board industry

Joinery industry and other wood products industry

Lobbying organisation for companies that operate in the forest industry and related activities in Finland





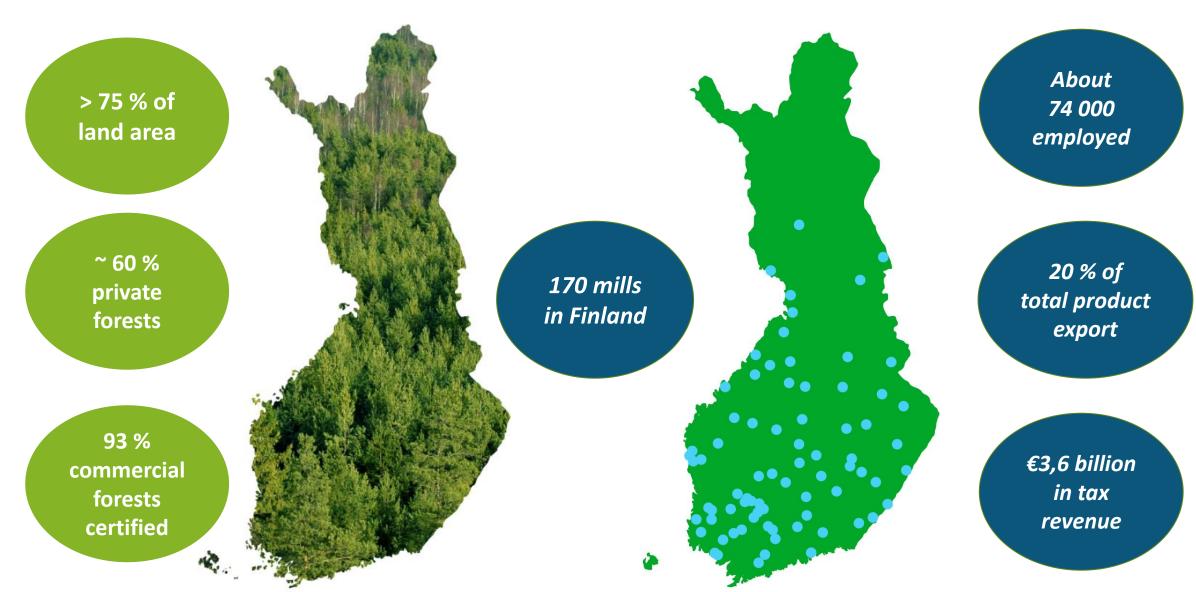






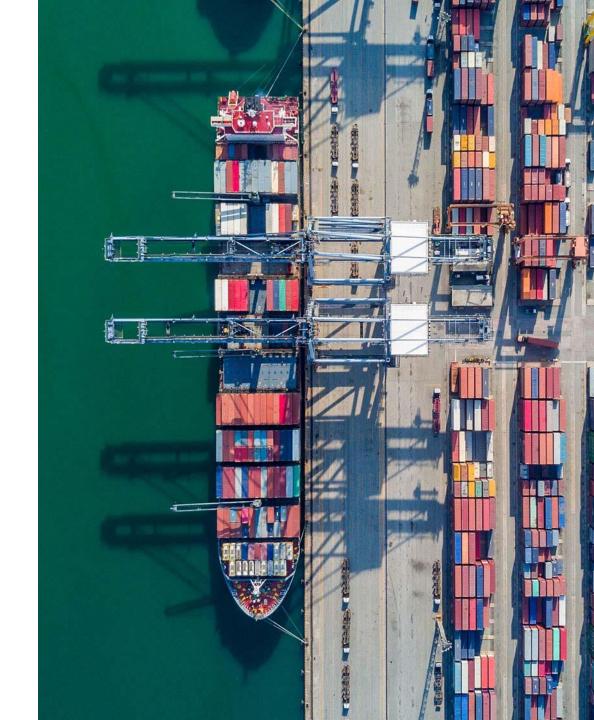


Finland – the country of forests and forest-based bioeconomy



Operative environment is changing

- Wind of change in logistics:
 - Reliability of delivery
 - Cost-efficiency
 - Cutting emissions
- What implications Russia's war on Ukraine will have on Finnish connectivity to global markets?
- New emphasis on Nordic connections and wellfunctioning infrastructure



On the road to green shipping

- Freight transport is greening how to maintain the level playing field?
 - EU regulation, IMO targets
- Investments&costs
 - Vessels
 - Alternative fuels
 - Infrastructure
 - Digitalisation and automation
- Winter conditions&ice-classed vessels





Metsä Group and Royal Wagenborg agree on a common goal to reduce carbon dioxide emissions

Metsä Group and the Dutch shipping company Royal Wagenborg have agreed to cooperate in reducing the climate impact of maritime transport. The goal is to reduce carbon dioxide emissions in sea transport of Metsä Group products by 30 percent per ton/mile by 2030 when compared to 2021.

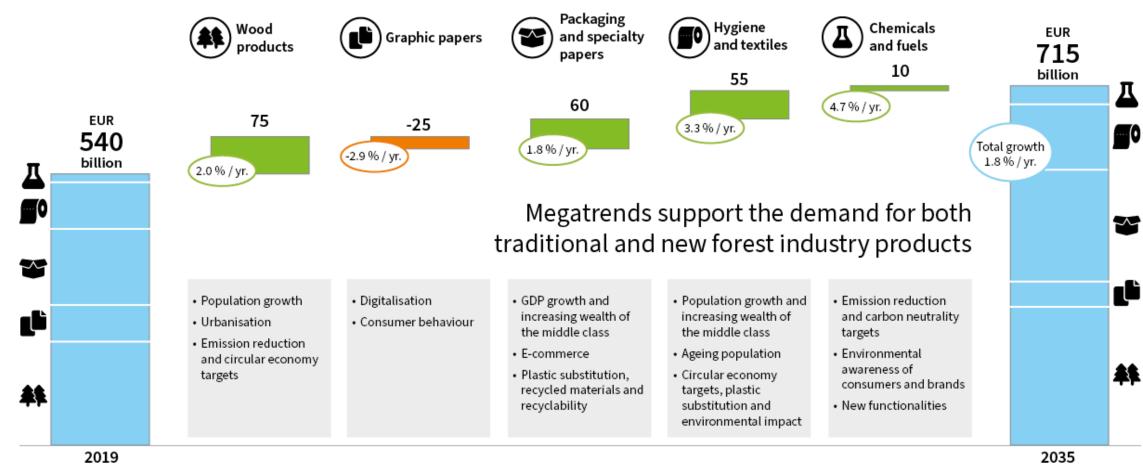
Press releases | 24.04.2023 14:00 EET | Metsä Group

"One of Metsä Group's strategic sustainable development targets for 2030 is to reduce fossil emissions and use of fossil materials in our own operations. As far as the mills are concerned, we are already quite far in realizing the target and we want to achieve similar development steps in our supply chain as well. The majority of our products are delivered to our customers by sea, and Royal Wagenborg is an important partner for us. Shipping as a whole represents about three percent of the world's greenhouse gas emissions, and it is important to achieve emission reductions in that regard," says **Jari Voutilainen**, SVP, Sourcing and Logistics at Metsä Group.

Megatrends support green growth

FOREST INDUSTRY PRODUCTS TOTAL MARKET

The total market for forest industry products is estimated to grow globally by 1.8% per year, which corresponds to a difference of 175 billion in 2019-2035.







Forest industry's climate solutions





2020: 3 MtCO₂ 2035: 0,3 MtCO₂

How?

- Electrification and energy efficiency measures
- Replacing peat
- Replacing natural gas
- Replacing fossil oil





Volume of growing stock

