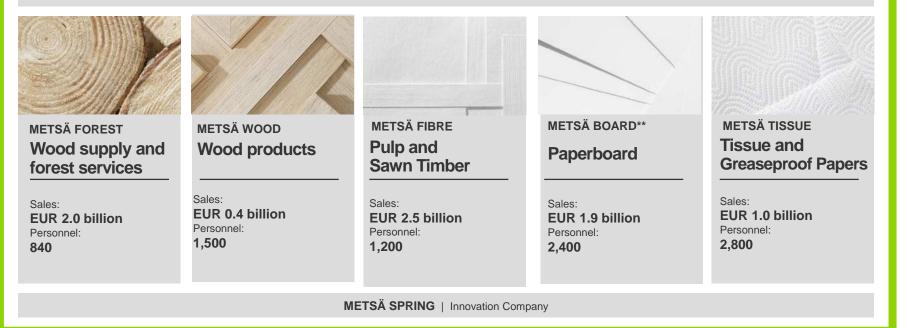


A sustainable and circular bioeconomy business model of the forest based industries – climate change mitigation potential

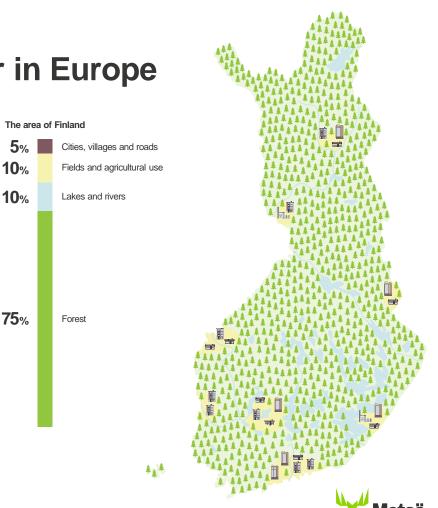
Tytti Peltonen VP, Corporate Affairs Metsä Group

METSÄ GROUP | Sales* EUR 5.7 billion | Personnel 9,300 | Renewable energy 28,4 TWh

METSÄLIITTO COOPERATIVE | Group's parent company | Owned by 103,000 Finnish forest owners







Finland – the largest forest cover in Europe

100+ MILLION M3

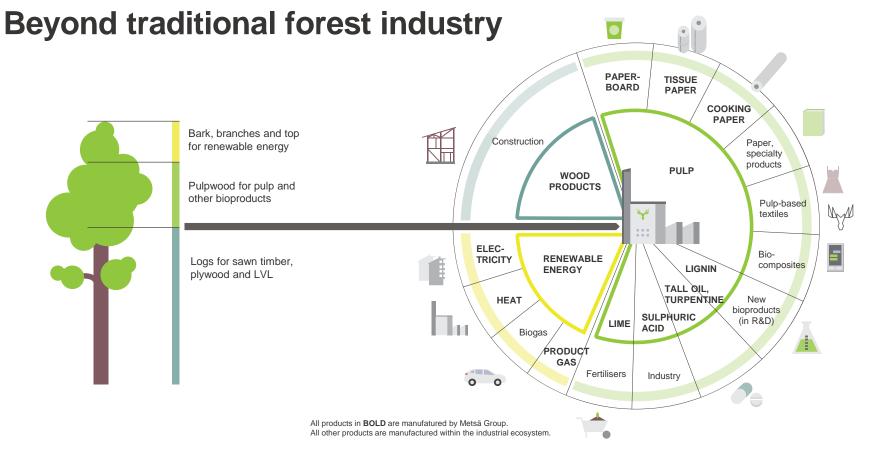
- Finland is the most forested country in Europe. Our forests grow more than they are used
- More than 50% of Finland's forests are owned by private forest owners



 Metsäliitto Cooperative members own nearly half of the private forest area in Finland

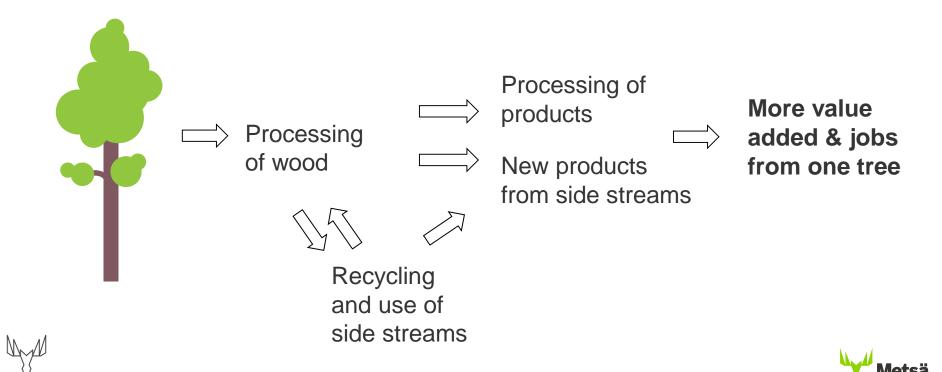


 Sustainable forest management safeguards biodiversity and enables versatile use of forests



Metsä

New bioproducts improve existing value chains and create jobs



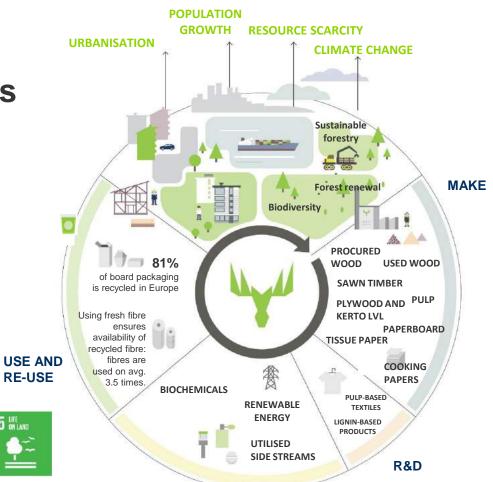
Climate change mitigation – potential of the forest-based industries

Mitigation actions

- Sustainable forest management
- Production: energy & resource efficiency and breakthrough technologies
- Recyclable and long-term use products
- Renewable energy from side streams _



RE-USE

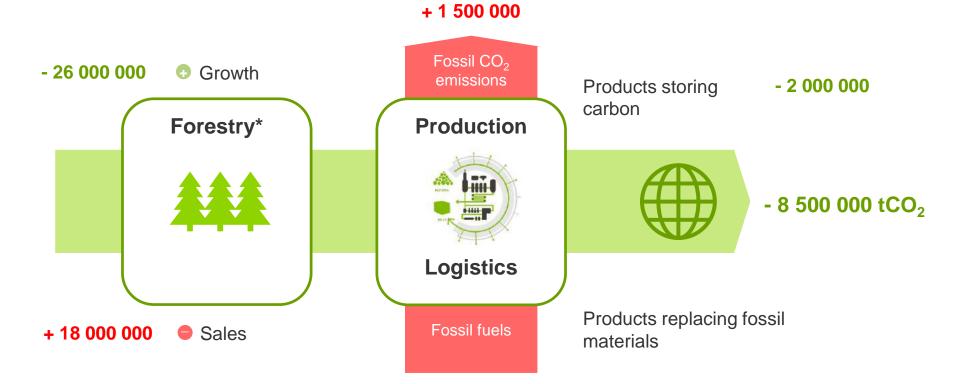


Metsä Group's 2030 sustainability objectives

Supporting UN Sustainable Development Goals (SDG's)



Metsä Group is a significant carbon sink



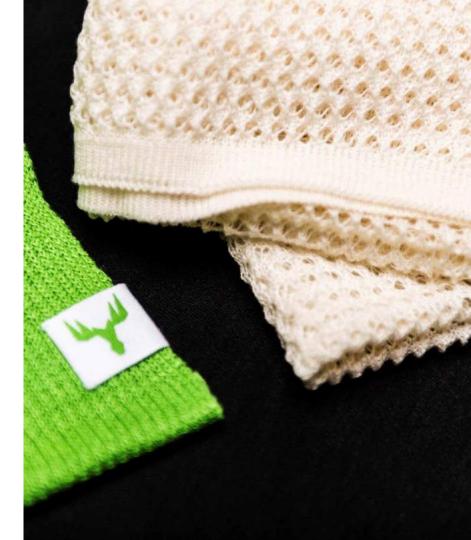
Investments to support low-carbon circular bioeconomy

- In 2015-2018 Metsä Group invested 2 billion EUR in the European bioeconomy
 - New bioproduct mill in Äänekoski, Finland (1.2 billion EUR)
- In 2018 Metsä Group established a new innovation company Metsä Spring Ltd
 - Identifies and develops new business opportunities in sustainable forestbased bioeconomy and circular economy
 - Textile fibre demo plant investment
- Metsä Group is planning three new investments worth 2 billion EUR
 - New bioproduct mill in Kemi, Finland
 - New pine sawmill in Rauma, Finland
 - First phase in renewing the Husum pulp mill, Sweden
 - Implementation in 2019 2023



Successful market-based and resource-wise bioeconomy

- Competitive forest industry means upgrading each part of the wood to its highest value
- Our products succeed in international market and have great growth potential without regulatory subsidies
- Healthy established businesses enable
 investing into new innovations
- Public co-funding of R&D&I accelerates the development of new high-risk technologies



Make the most of Metsä

