



From inventions to investments - creating value for forest-based bioeconomy

Antti Asikainen, EVP, Chair of Finnish Forest Bioeconomy Science Panel

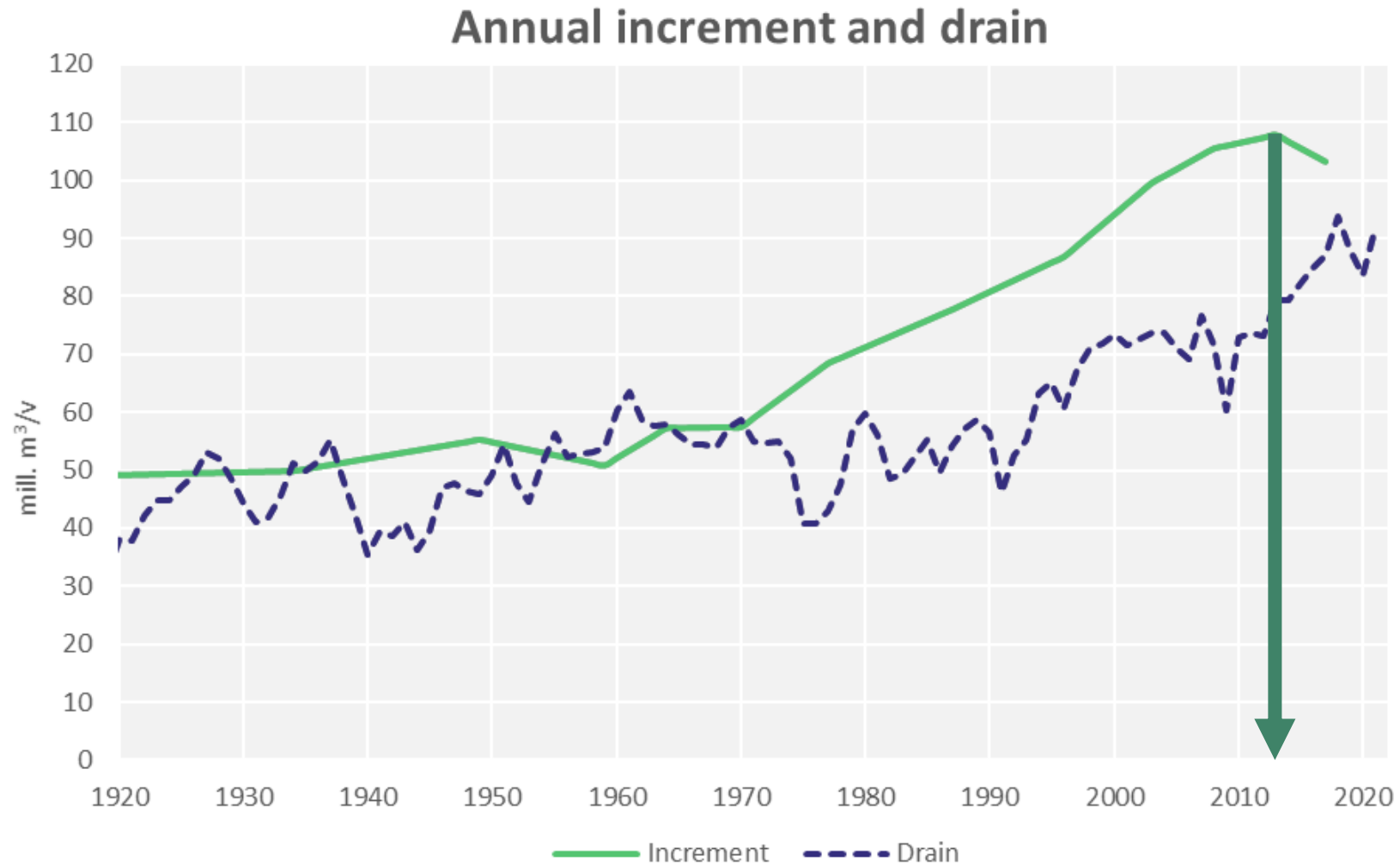
How to speed up the value added in innovative bioeconomy – steps to strategy implementation

6th June .2023, Scandic Park, Helsinki

Forest growth is saturating



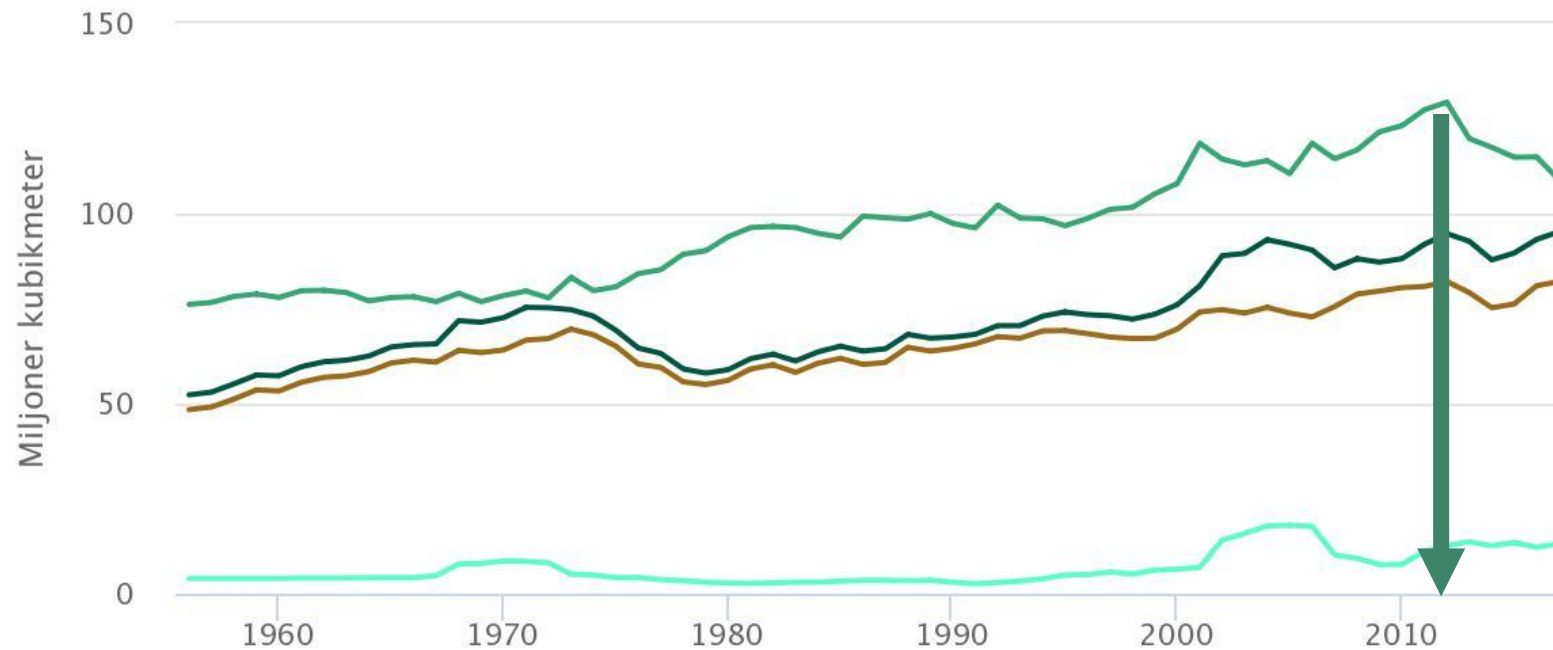
Forest growth in Finland...



Lähde: Luke



...Sweden



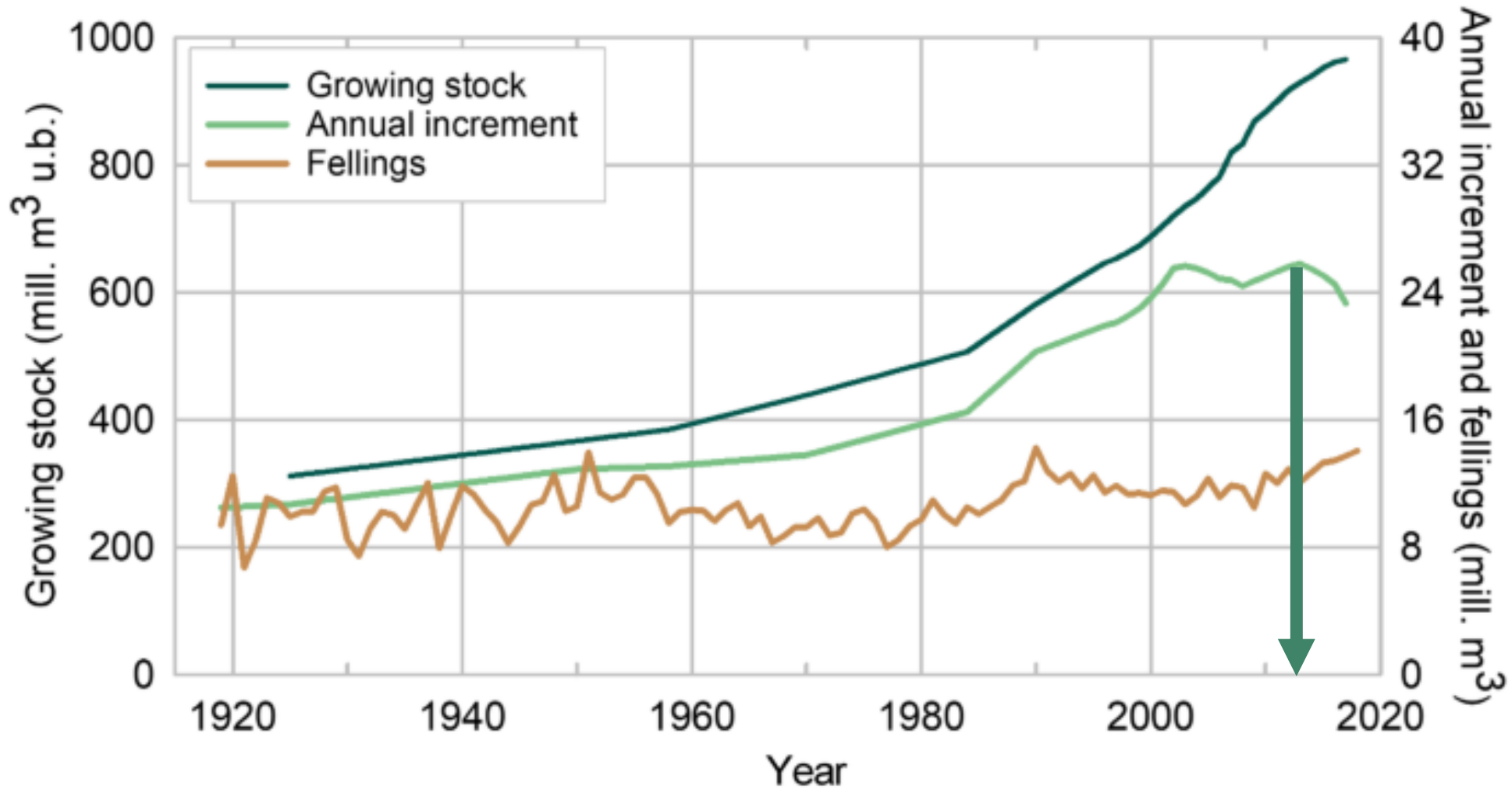
Tillväxt och avverkningar i skogen 1956-2017

- Total tillväxt
- Total avgång (avverkning och naturlig avgång)
- Avverkning av levande träd
- Naturlig avgång

Lähde: <https://www.slu.se/nfi>



...and Norway



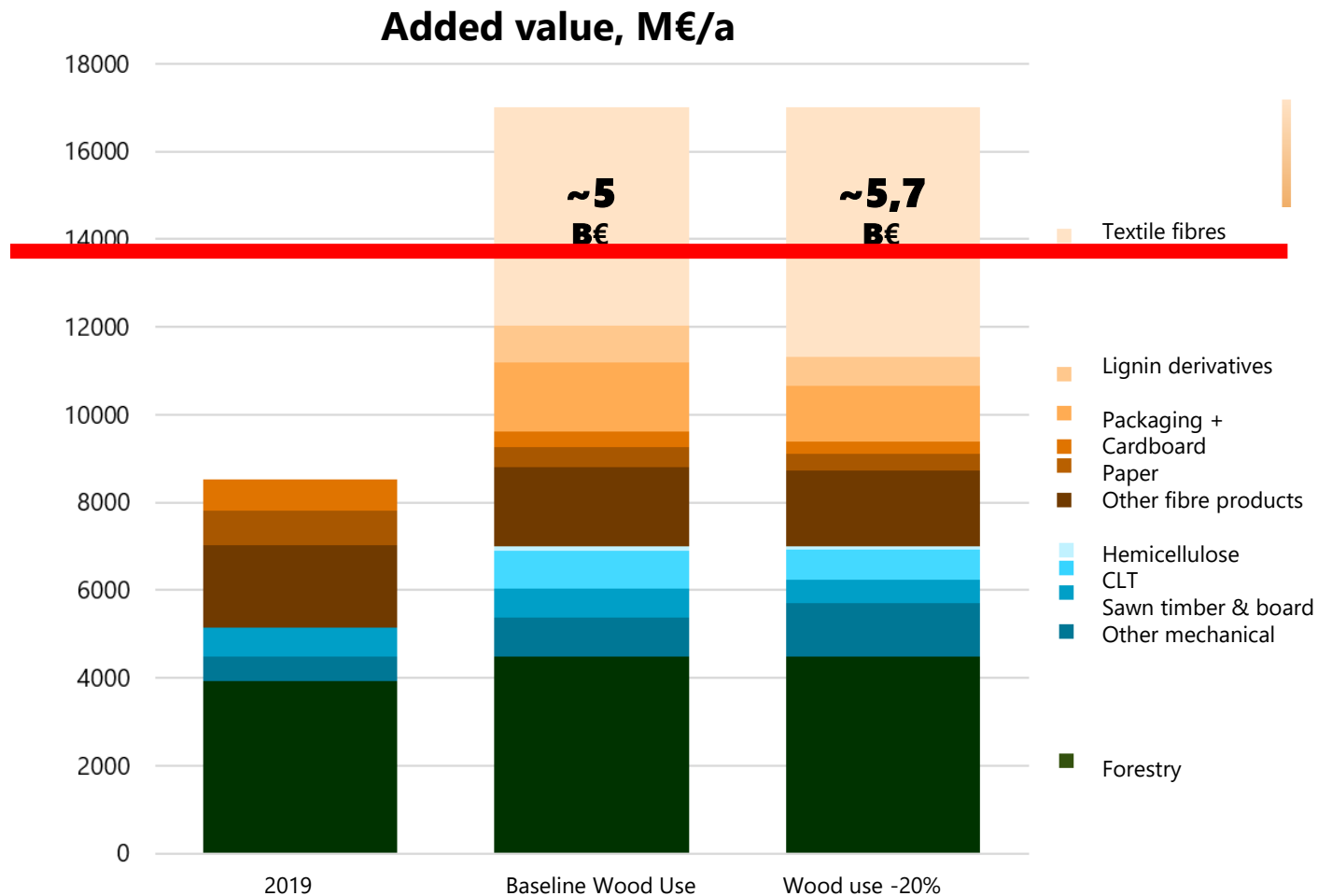
Lähde: <https://www.ssb.no/en/statbank/table/06289/>



Value Added



Added value +100% - Mission next to impossible?

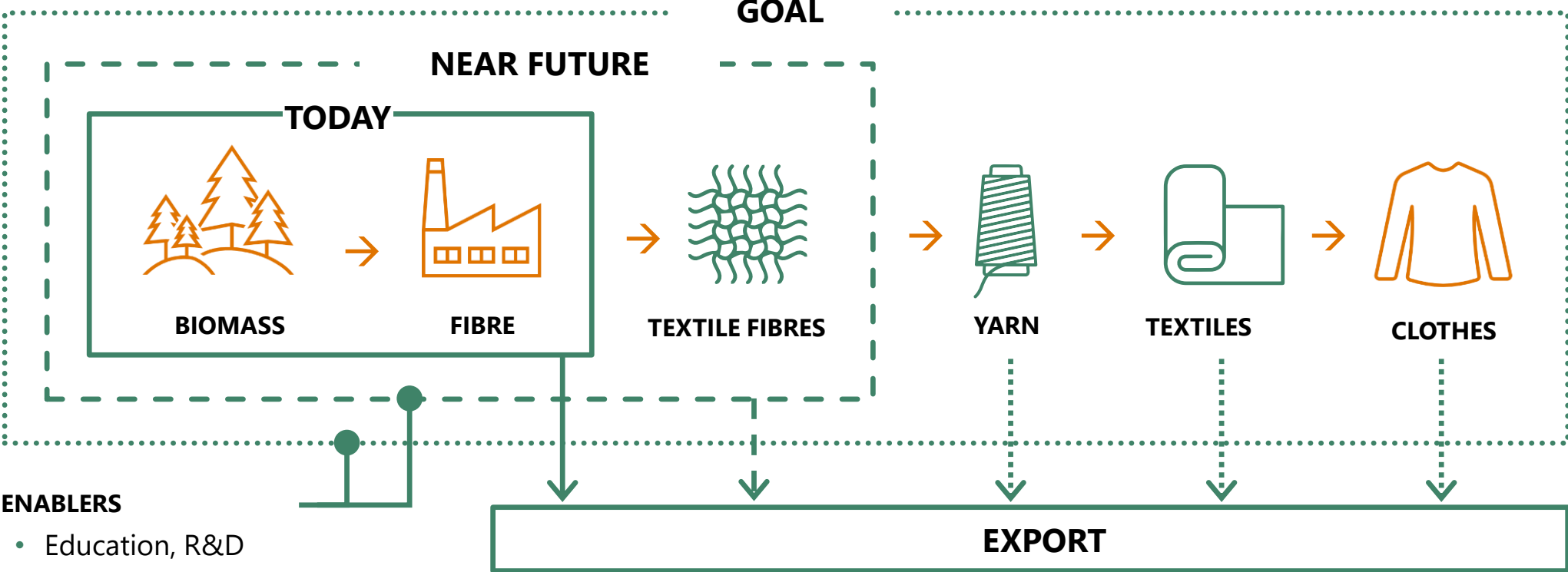


Assumptions:

- Wood sourcing declines 20% (71 → 57 Mm³)
- All exported pulp for textiles (output 3,5 Mt)
- Added value increases in all pulp and mechanical wood products



Case – textile value chain



- Education, R&D
- Supporting technologies
- Steady raw material sourcing
- Logistics and digital solutions
- Affordable clean energy



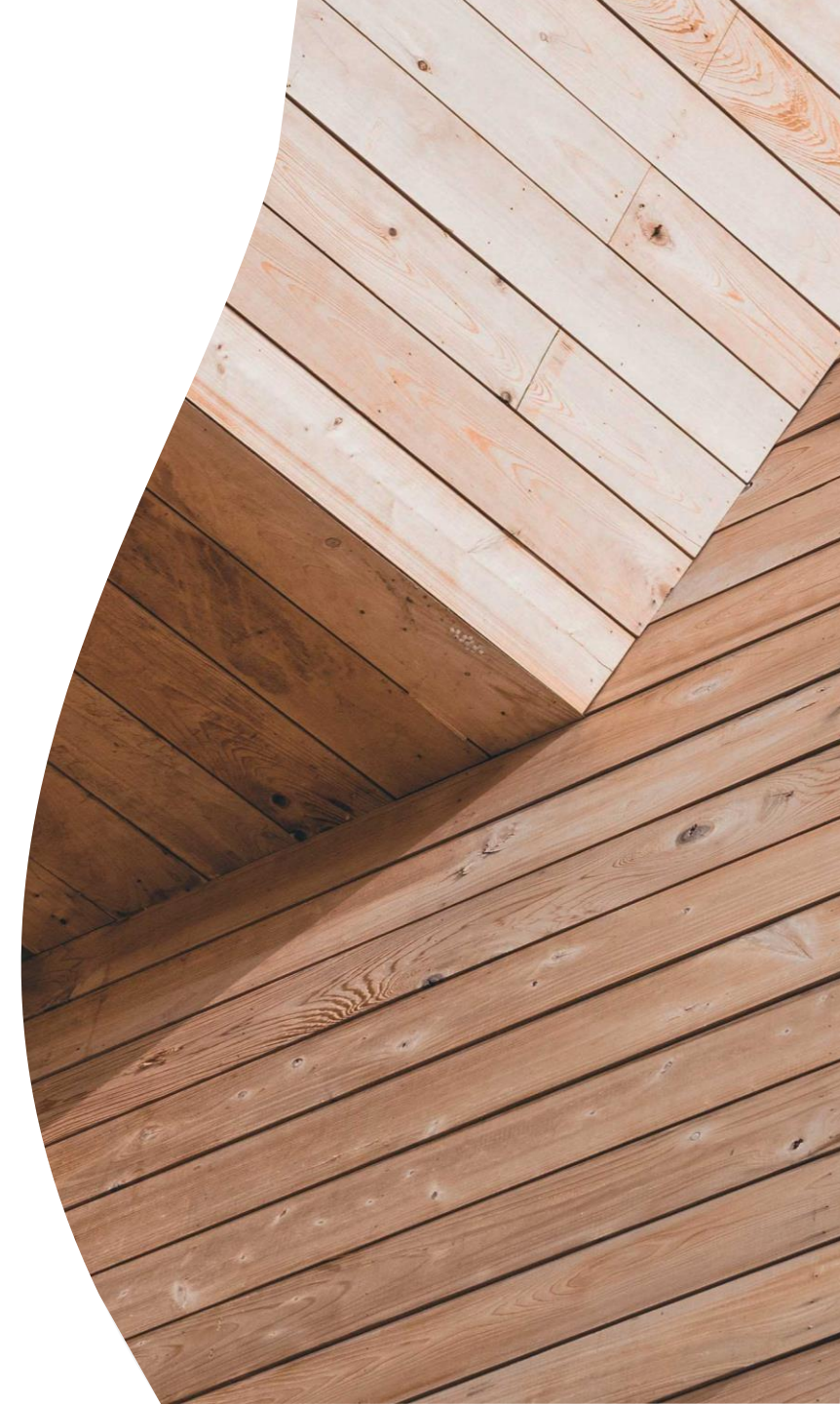
Added value fro wood costruction and immaterial services

- **Wood-based construction can double its domestic added value by increasing volumes** without having increasing impact on wood harvest
- Added value of forest based chain needs to consider non wood value chains such as recreation and tourism, where growth possibilites are considerable



Factors of growth

- High added value calls for investments
- **Pulp and lignin further refining** play the key role in the equation
- **Bio-based CO₂** is a wild card – needs to be pushed to demo level
- **10 TWh bioenergy efficiency leap** – 10% more energy from current biomass streams
- Long term commitment on R&D&I funding and **(4%)** and experimental environments for upscaling
- We need innovative industrial policy to promote investments and reindustrialization of EU





The Finnish Forest Bioeconomy Science Panel – metsatiedepaneeli.fi/en/

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