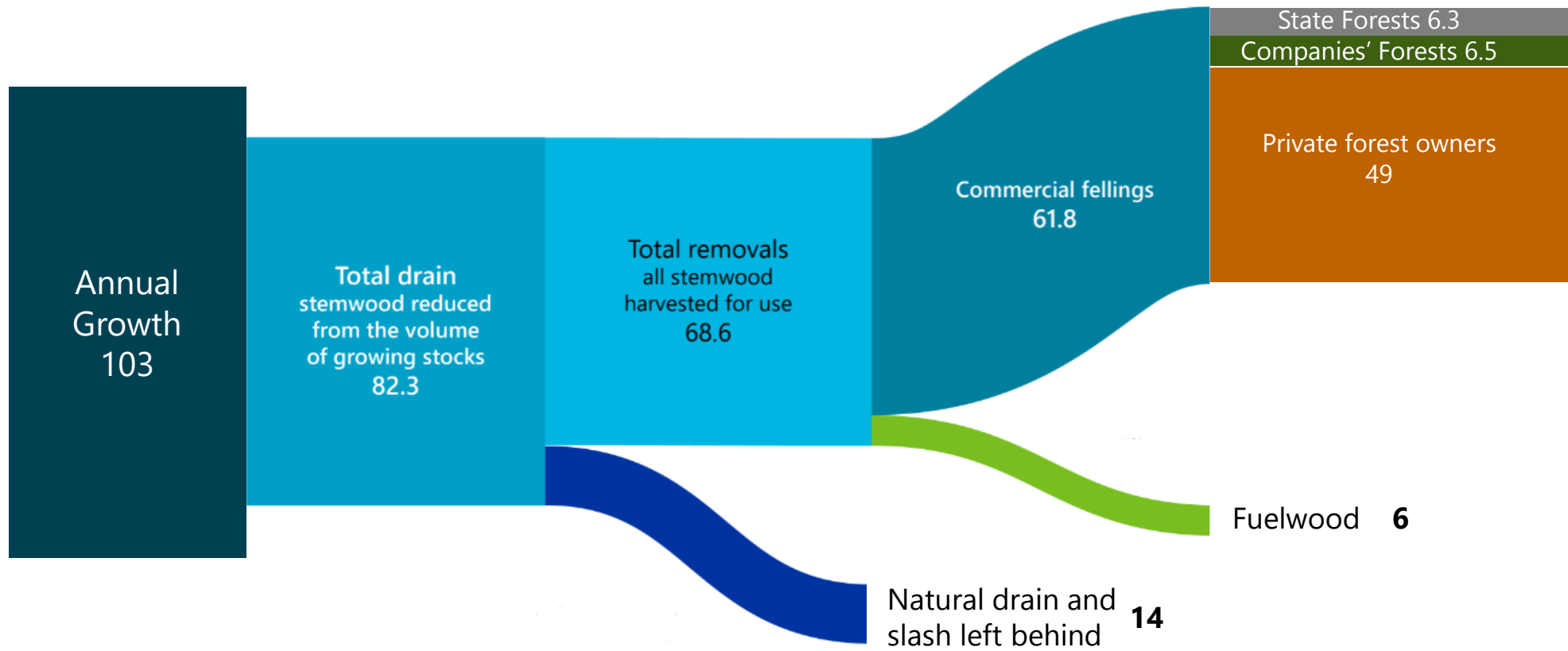


# Value Chains of Forest Bioeconomy

Dr. Lauri Sikanen  
Principal Scientist  
Natural Resources Institute Finland

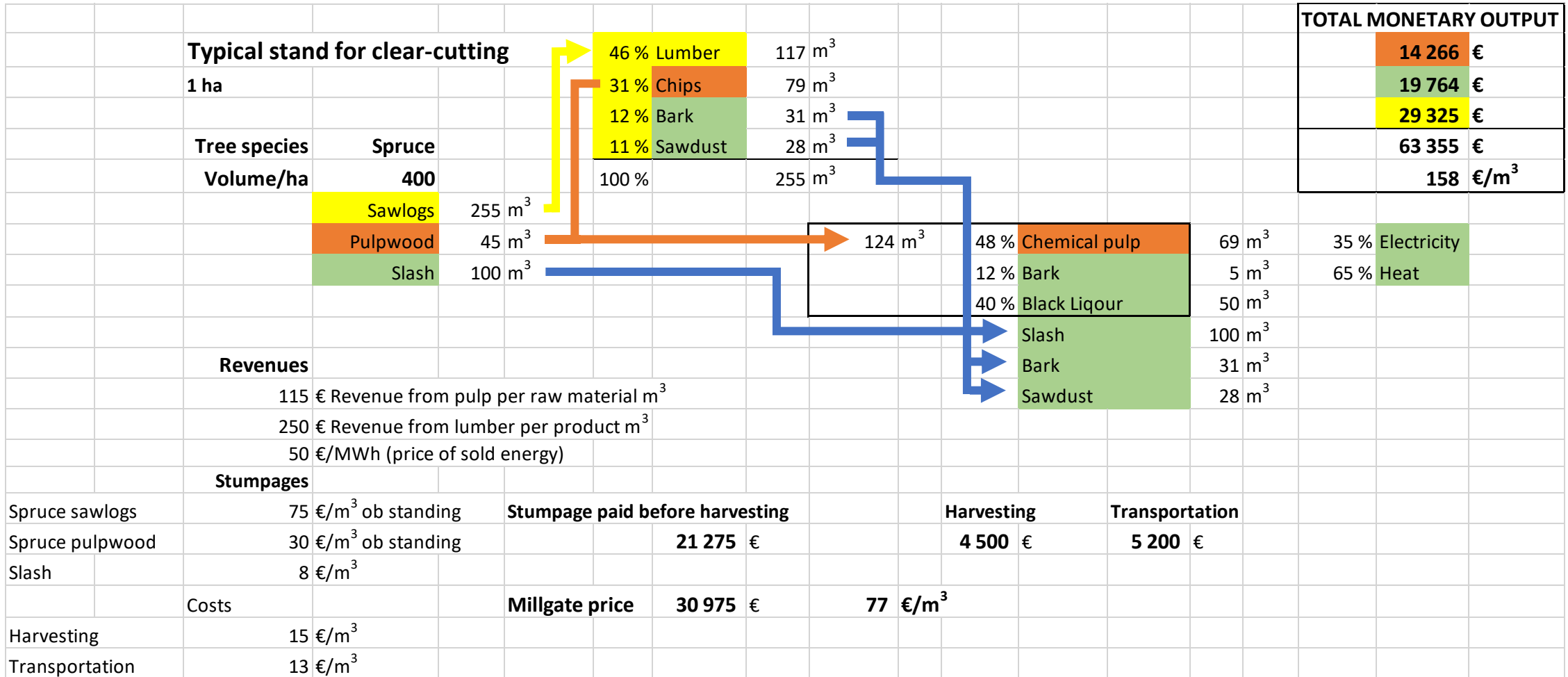




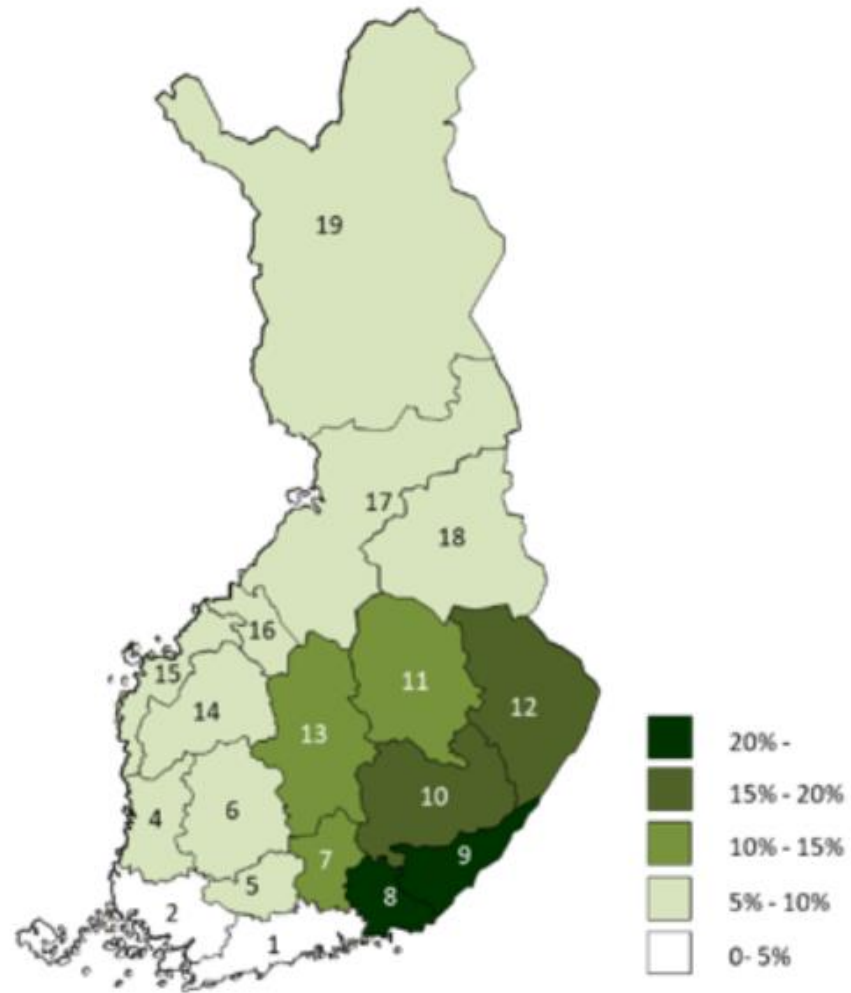
Average forest owner in Finland owns about **30 hectares** of forests. Annual profit before taxes is, on average, **170€/ha**. This means that average forest owner gets **annually 5 100€** income from his/her forest. In 2023 the gross salary of **average Finnish wage earner was 3 315€/month**.

Through 300 000 forest owners (owning more than 2ha) this **annual 2.5 billion euros income from stumpages** distributes to the society pretty nicely.

# Value created by one hectare of spruce clearcut



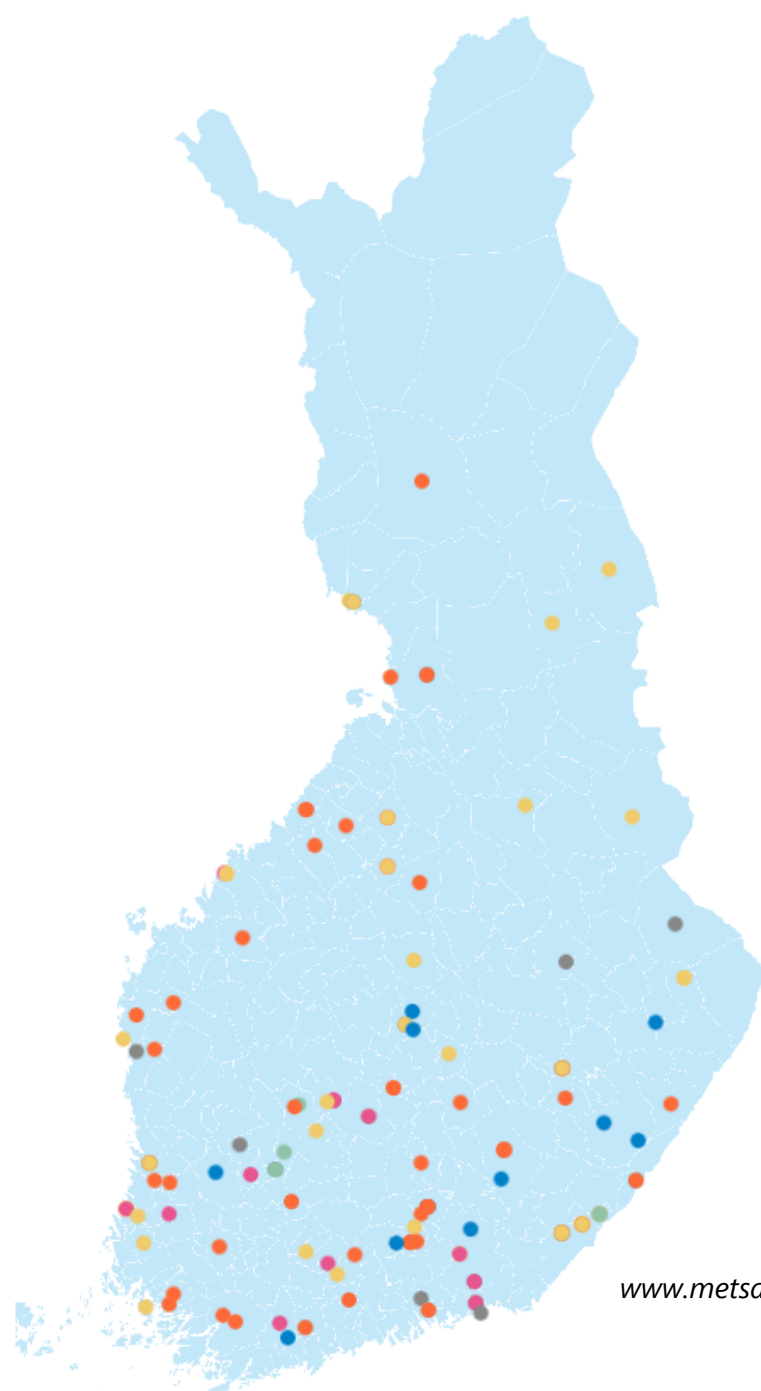
# Forest bioeconomy in the output of regional economy 2021



Source: Tapio, Statistics Finland 2024

## Production Units of Forest Industries in Finland

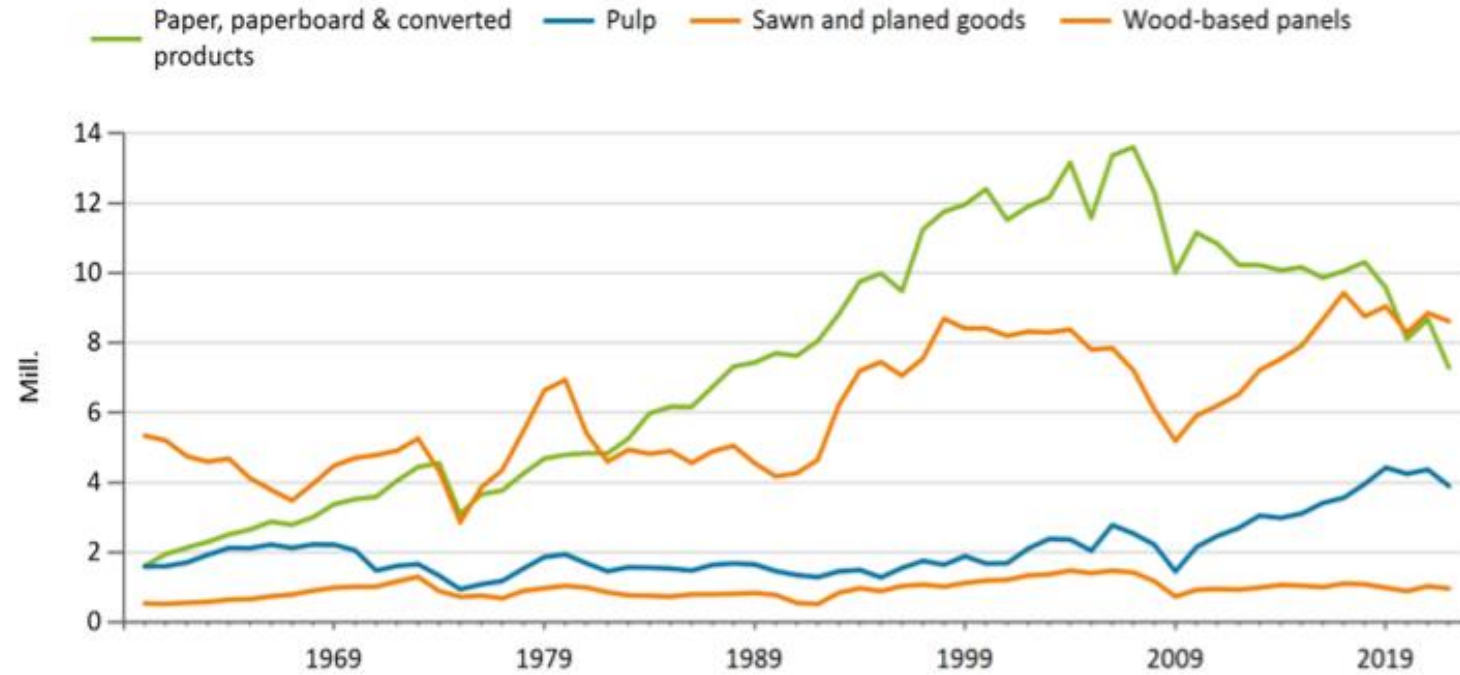
- Paper board
- Fibre board and plywood
- Pulp mills
- Other biorefineries
- Paper product mills
- Paper mills
- Wood construction mills
- Sawmills



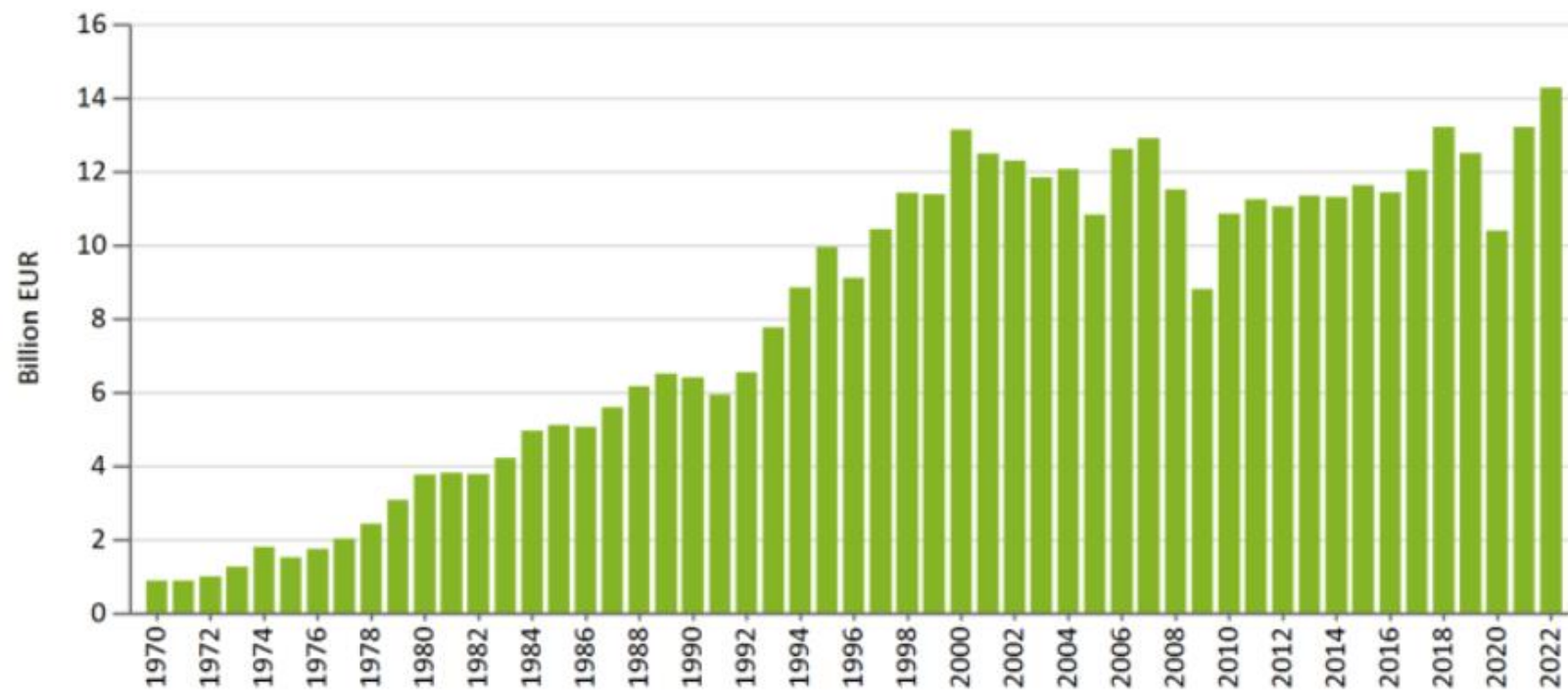
[www.metsateollisuus.fi](http://www.metsateollisuus.fi)



# Forest industry exports from Finland since 1960

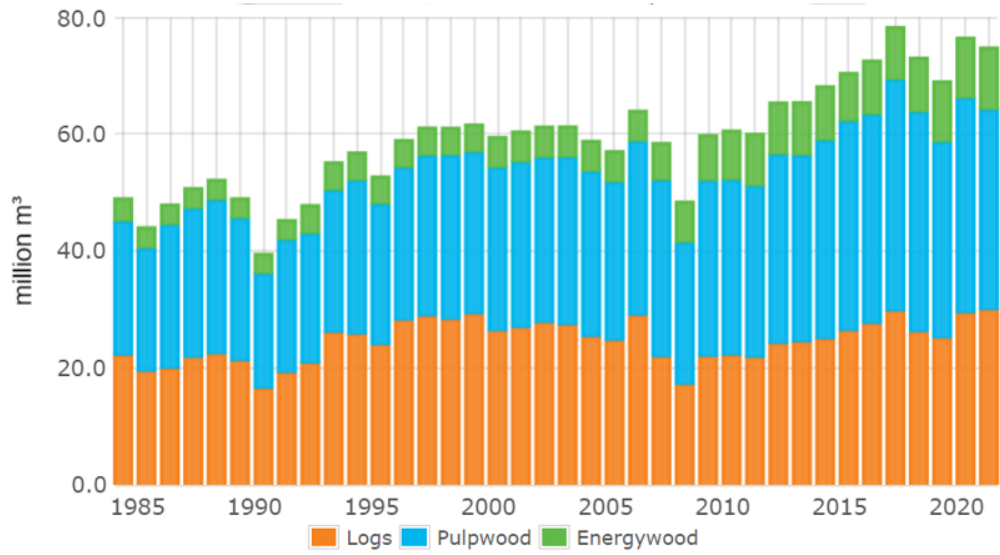


## Value of forest industry exports

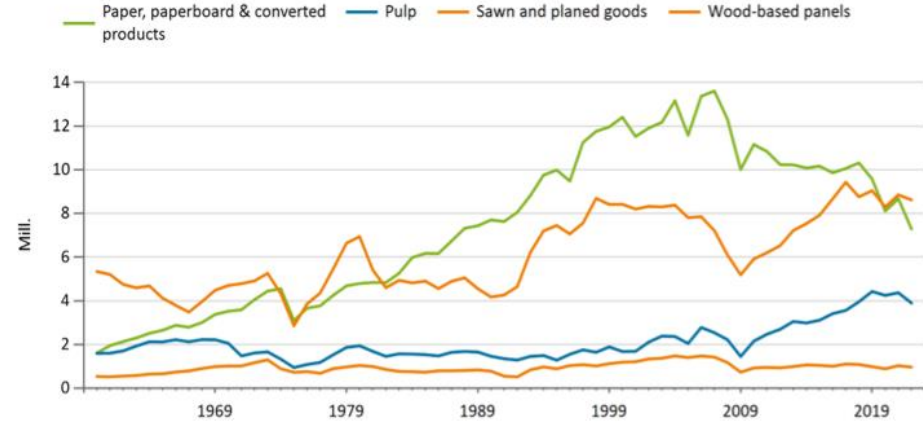




### Harvesting volumes have been increasing in Finland



### Forest industry exports from Finland since 1960

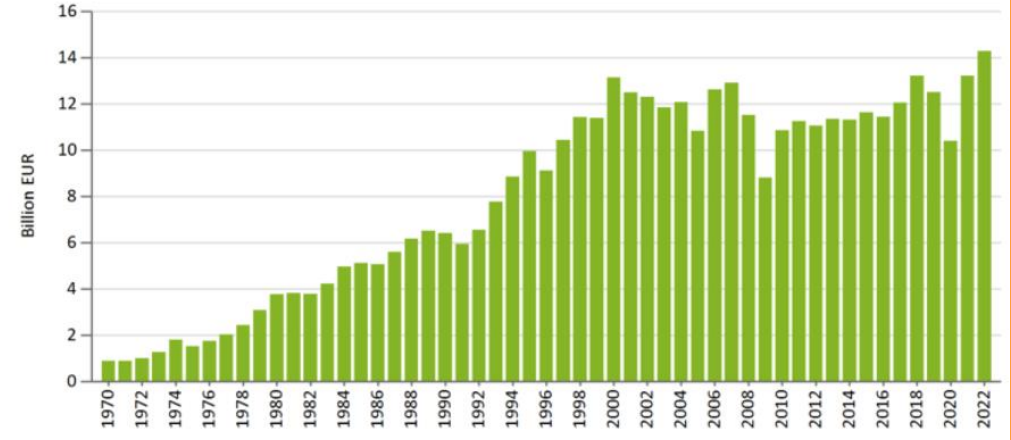


Finnish Forest Industries

SOURCE: Finnish Forest Industries Federation

2.3.2023

### Value of forest industry exports



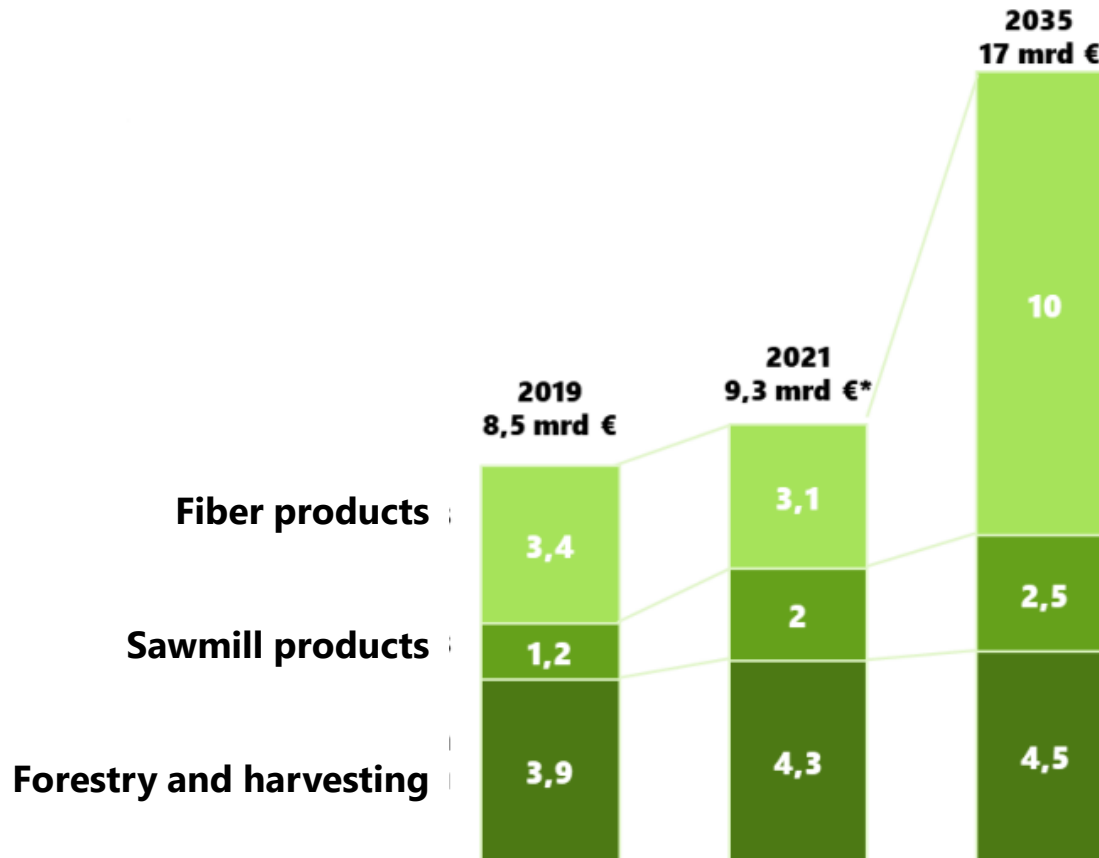
Finnish Forest Industries

SOURCE: Finnish Customs

2.3.2023



# Added value of forest sector in Finland



Source: Luke: Finland will live from forest in 2035 - Discussion opening of the forest sector to double the value added (in Finnish). [luke-luobio\\_14\\_2023\\_\(1\).pdf](#)

# How to get added value from 10b to 17b?

## Top three in order

1. Textile fibers
2. Advanced fiber based packaging
3. CLT

**For example, these two beauties are ready to rock with novel products but currently keeping cash flowing with pulp**



*Photo: www.metsagroup.com*

**Metsä Group Äänekoski**



*Photo: www.metsagroup.com*

**Metsä Group Kemi**

# Ioncell® in a nutshell

- The Ioncell® process uses a novel solvent called ionic liquid. It's an environmentally friendly solvent that can be recycled and isn't flammable like many others.
- Ioncell® fibers feel soft and are strong even when wet. They're tenacious and work well in both clothing and technical applications.
- The Ioncell® process could revolutionize the recycling of textile waste. It enables waste textiles to get a new life as high-quality fibers.

