Integrated forest management – our competitive advantage

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It all starts in the forest

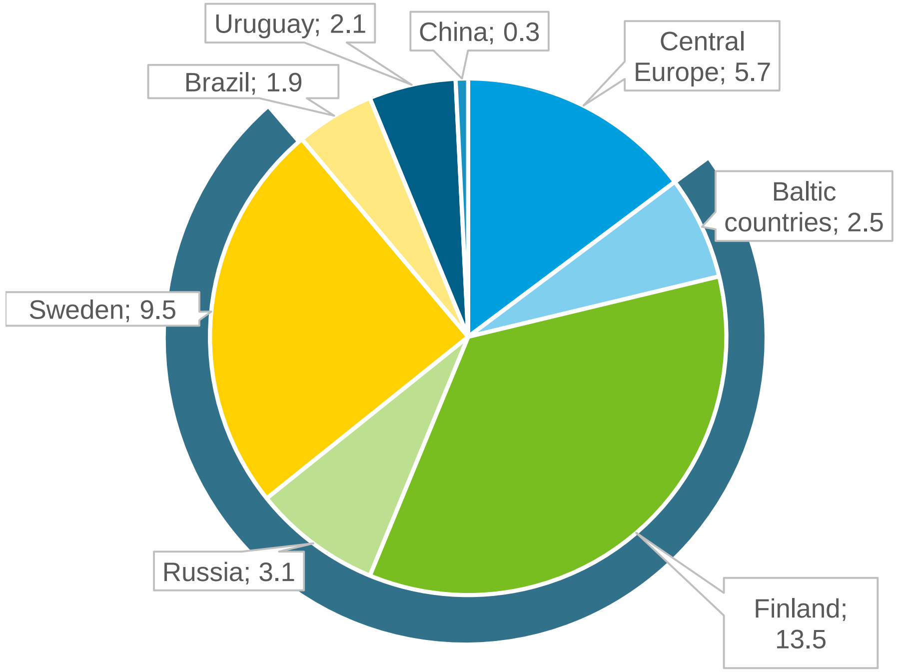
Creating additional value through supply, innovation and sustainable forest management…

Competitive wood supply | **Innovation** | **Sustainable forest management**

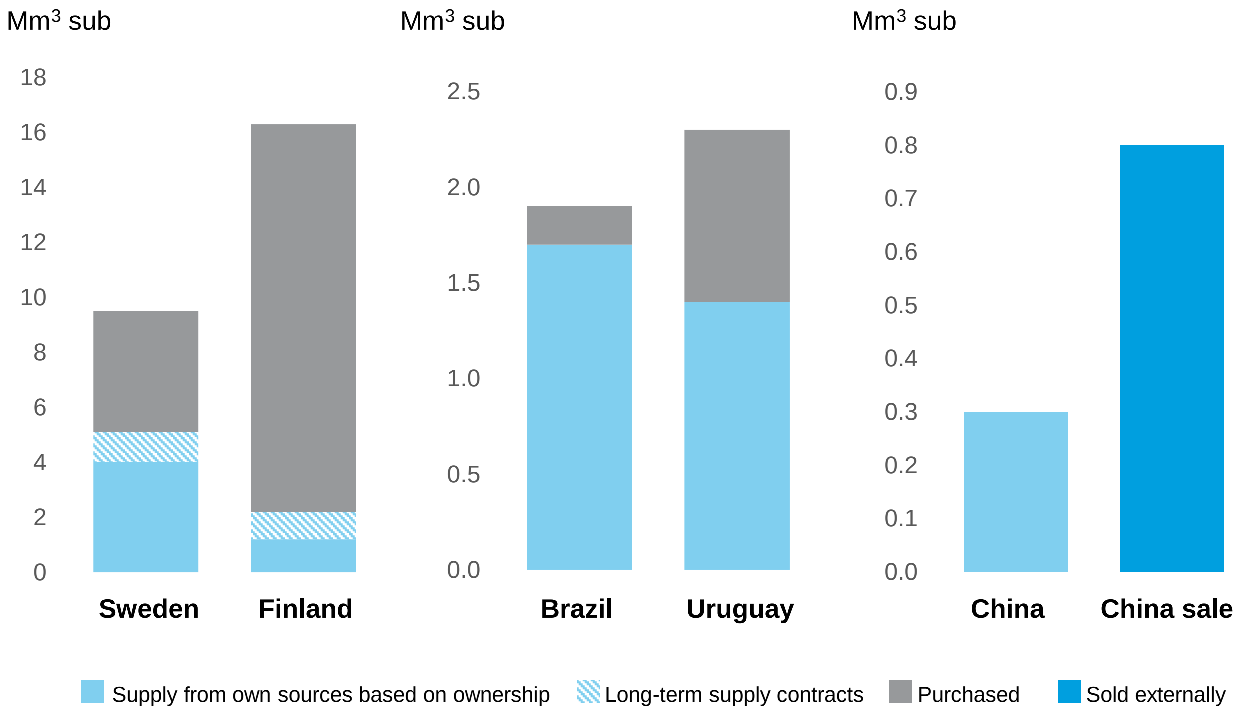
…controlling 30% of wood supply and a #1 Nordic position are competitive advantages…

#1 Nordic position

Wood procurement by region
(million m³ sub)



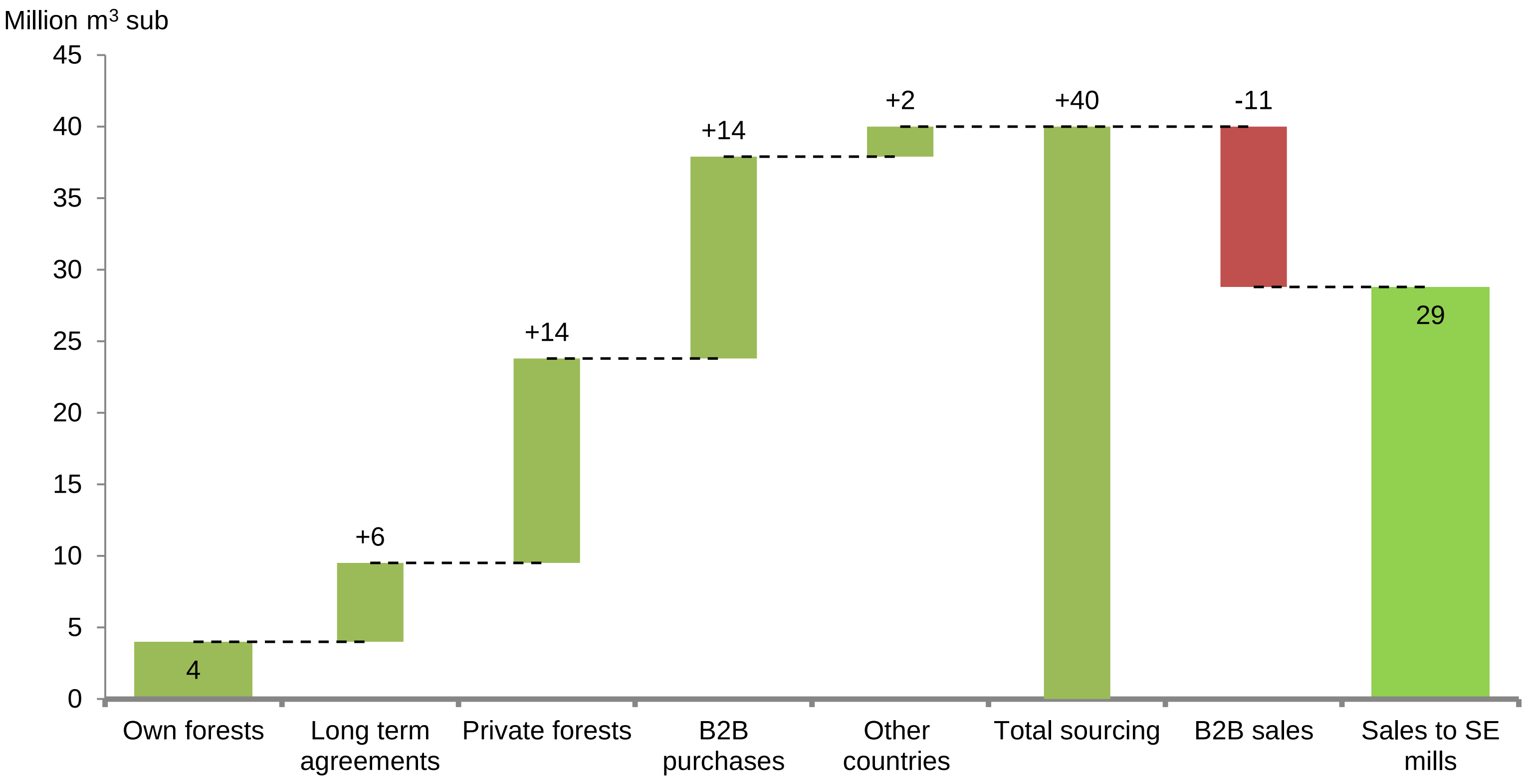
We control ~30% of our wood raw material consumption
(million m³ sub)



Central Europe, China, Uruguay and Brazil are integrated to business divisions.

…with our scale, we are the most efficient wood supplier in Northern Europe

Broadest supplier base gives us price, flexibility and security



Strong relationships with private forest owners are another competitive advantage

50% of our supply

920 000 forest owners in Finland and Sweden

24 000 wood purchasing agreements with private forest owners

Advanced CRM and sales force management

Professional services to forest owners

- Harvesting and wood trade
- Silviculture and forest management
- Forestry planning
- Digital toolboxes for self management
- Advisory and consulting

We are building and globalising innovations to increase efficiency…

- Scale benefits in investing in digitalisation and new technologies
- In the digital world, marginal cost is zero
- Global approach in development and knowledge sharing

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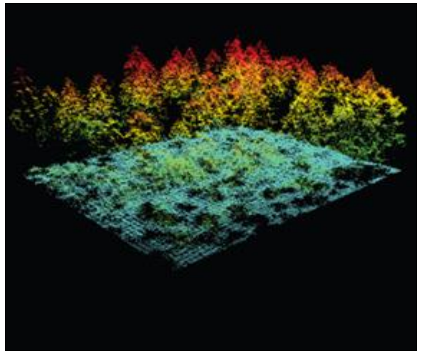
…and here are examples of innovation and digitalisation

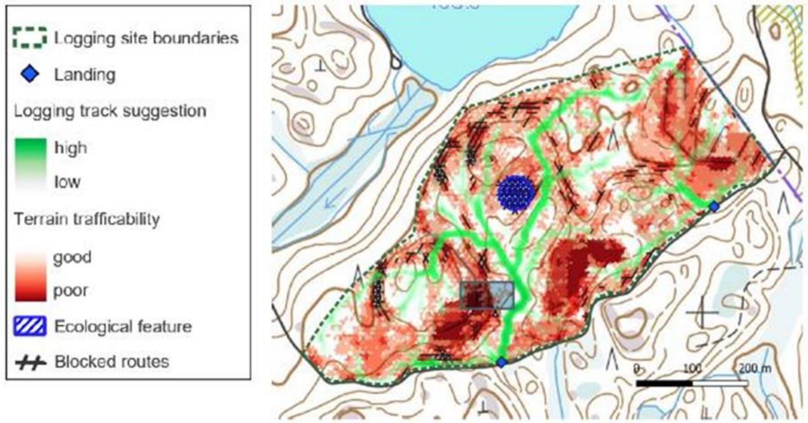
“Big Forest Data” and Precision Forestry

Digitalising Forest Owner Service Channel

Optimised Supply Chain

Maximising raw material value

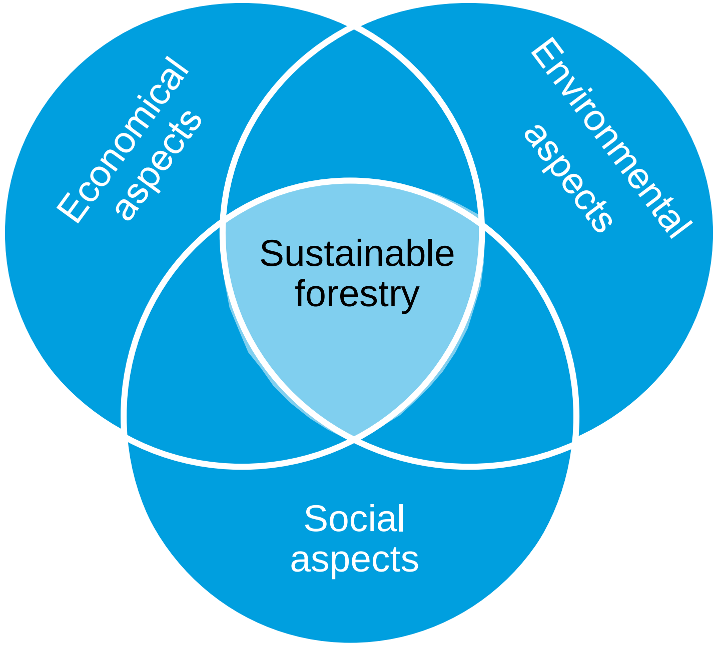




Creating additional value from our own forests

Today's consumers demand sustainable forestry
Optimally managed sustainability is a competitive advantage

Forest growth
Productivity



Growing forests good for the climate
Protecting biodiversity
Limit impact on soil and water

100% of our wood from sustainable sources

96% of lands owned and managed by Stora Enso are covered by certification.

FSC
PEFC
PEFC/05-1-1

Jobs in rural areas
Dialogue with indigenous people
Recreation considerations

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We are increasing sustainable yield without compromising biodiversity

Increased harvesting by 10–15% in our Swedish forests

Future
x million m^3/a

With R&D and accurate & timely forest management practices

2020
4.0 million m^3/a
With increasing standing stock

Bergvik historically
3.5 million m^3/a

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Additional yield initiatives with +10% potential

Tree breeding and biotechnology
- Increased yield, disease resistance, and improved wood properties

Forestry practices – "Precision Forestry"
- Best practices world wide
- Accurate and timely operations
- Efficient use of digital opportunities

Sustainability and biodiversity
- Developed forestry practices
- Development of biodiversity KPI's

Life cycle analysis
- Substitution effects
- Carbon balances

Innovation does not happen in isolation


It all starts in the forest

Disclaimer

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Appendix

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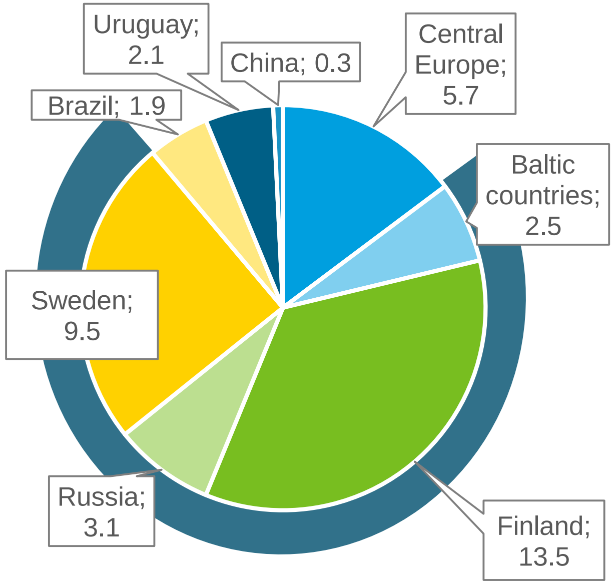
Forest division in short

1.4 million hectares in Sweden

41% of Tornator

Nordic wood supply operations

Wood procurement per region,
total 38.7 million m^3



100% Wood from Sustainable sources

FSC/PEFC certified or FSC controlled

24 000

Wood Purchasing agreements
with private forest owners

4.0 million m^3
annual harvesting from own forests in Sweden

Sales 2 285 MEUR
in 2018

Growing Forests
have stored in average every year 2008–2018

3 Mt CO2

Trees grow back
60–100 years rotation period in the Nordics
Constantly new products

Glossary – Area and volumes

- Productive forest areas, ha:
  - forest areas that from wood growth potential point of view qualify for active harvesting planning
  - includes productive areas that are set aside from the current harvesting plan
- Cubic metres, solid under bark (m^3 sub):
  - commercial wood stem volume, excluding bark and low diameter tree tops
- Forest cubic metres (m^3fo):
  - containing the whole tree stem volume with bark and top, but excluding branches

Statistics - Sweden

Forests in Sweden	
Total land area	40.8 million ha
Total forest area	28 million ha
Share of land area	69%
Productive forest land	23.6 million ha
Certified forests (PEFC & FSC)	About 14-15 million ha (FSC 11,9 million ha productive forest land, PEFC 15,9 million ha forest land - many are double certified, about 60% certified productive forest land)
Family forests	48% of productive forests
State-owned	20% of productive forests
Industry-owned (e.g. private companies)	24% of productive forests
Other	6% of productive forests
Standing timber stock	3488 million m^3 (3180 million m^3 productive forest land)
Forest growth per year	124 million m^3 (119 million m^3 productive forest land)
Loggings per year	93 million m^3
Harvested forest area	2% (including thinning)

Source: Skogsindustrierna, 2019

Statistics - Finland

Forests in Finland	
Total area	33.8 million ha
Total forest area	26.2 million ha
Share of land area	86%
Productive forest land	20.3 million ha
Certified forests (PEFC & FSC)	19.1 million ha
Private forests	60%
State-owned	26%
Companies	9%
Others	5%
Standing timber stock	2 356 million m^3
Forest growth per year	105.5 million m^3
Loggings per year	70 million m^3
Harvested forest area	3.0% (including thinning)

Sources: Forest.fi and Finnish Forest industries
https://smy.fi/wp-content/uploads/2017/08/ff_graph_2017_Finland_and_Her_Forests_in_a_Nutshell.pdf
https://www.forestindustries.fi/statistics/forest-resources-and-wood-raw-material/