Finland approach to the EU Biodiversity Strategy for 2030

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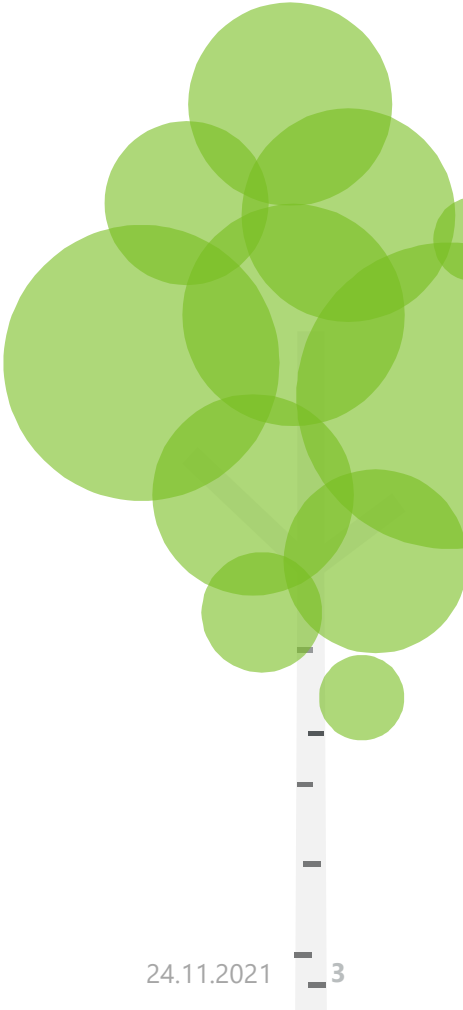
Essential elements in EU the BD strategy concerning forests

Protect 30% of EU land area (EU level) of which 1/3 is strictly protected area

Protect all primary and old growth forests
Legally binding restoration targets proposed in 2021
No deterioration of any protected areas or species by 2030
Planting 3 billion trees using ecological principles

Other relevant targets

- Organic farming >25%
- Reduction of the use of pesticides
- Reduction of the use of fertilizers
- Reverse the decline of pollinators
- Remediate contaminated soils
- Restore rivers
- Urban greening
- Reduction of invasive species
- Reduce bycatch in fisheries

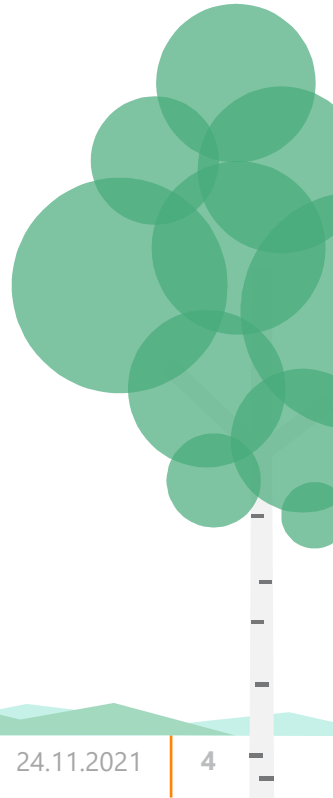


Transformative change is needed

Governance → regulation

Finance, business → guarantee of funding

Knowledge, education → attitudes



Finland: assessment of the impacts

- Ministry of Agriculture and Forestry + Ministry of the Environment
- Researchers from Luke and SYKE
- Report ready in 11th October 2021
- 361 pages
- In Finnish, available at: https://jukuri.luke.fi/handle/10024/547941

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Content of assessment

Targets to increase protection

- Present protection levels
- Carbon-rich ecosystems (peat soils)
- Impacts on forestry, agriculture
- **In this presentation: Forests**

Targets for restoration

- Restoration, pollinators, pesticides, agroforestry, afforestation, remediation of soils, rivers, red-listed species, fertilizers, urban greening, mining, by-cath

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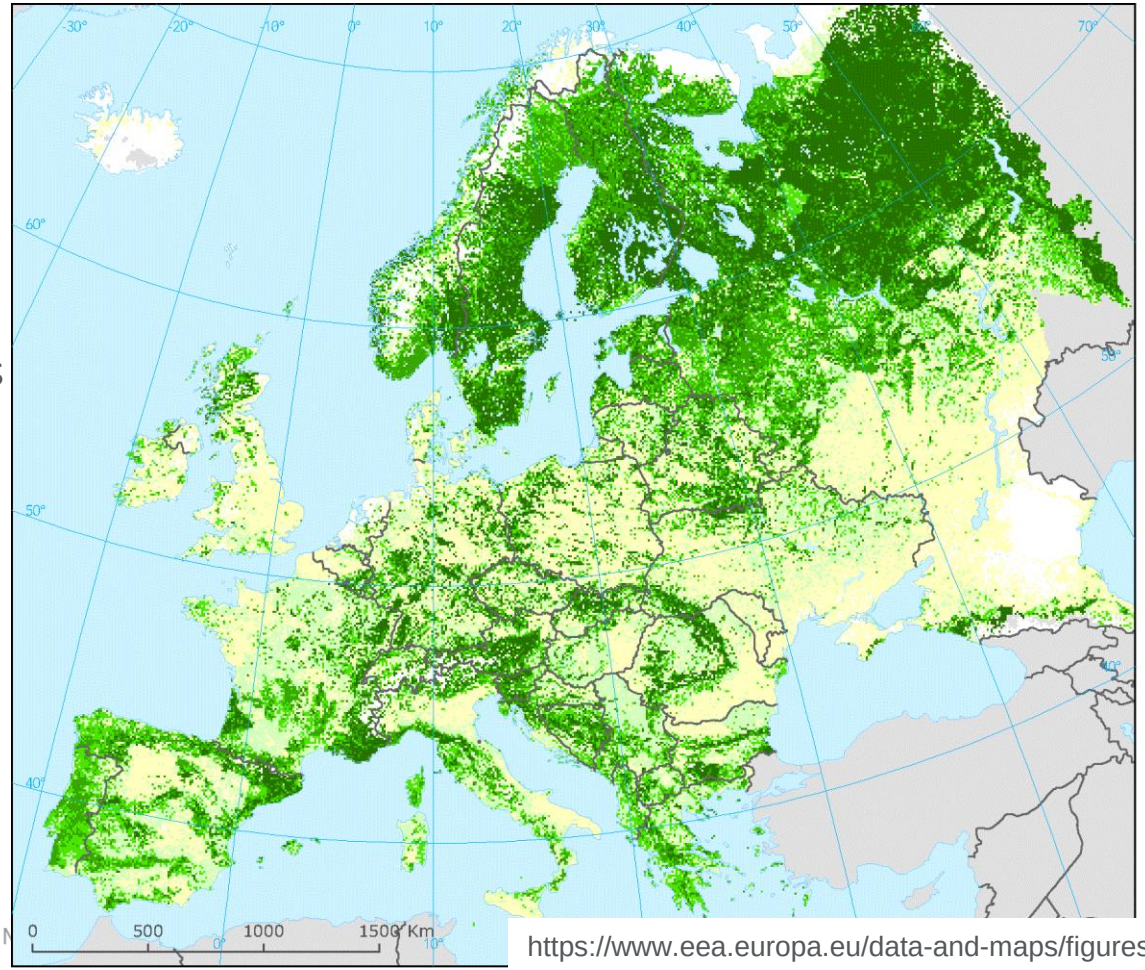
Forests in Finland

- 75% of land area covered by forests
- 10% of forest area in Europe



https://www.eea.europa.eu/data-and-maps/figures/forest-map-of-europe-1

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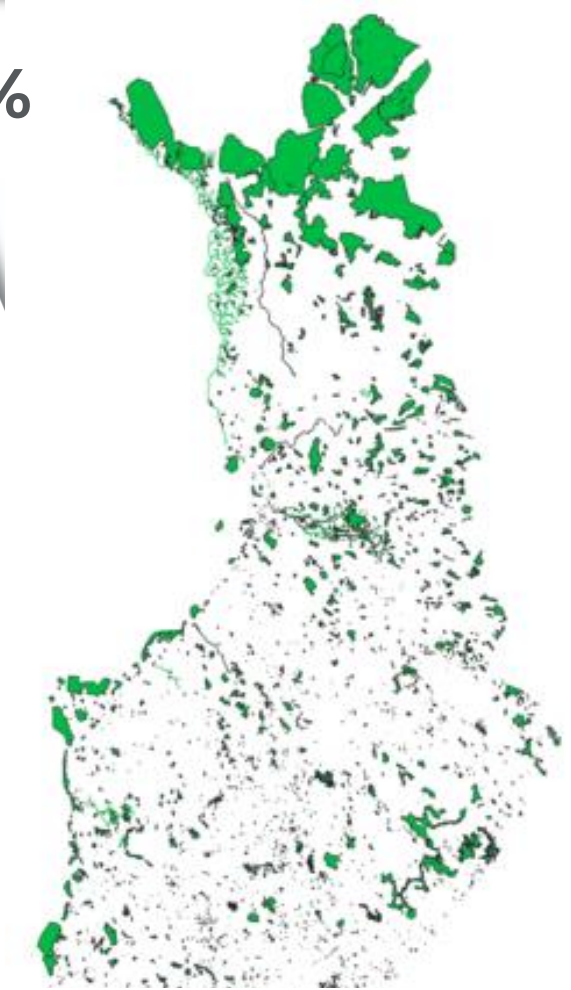
EU Goal: 30% protection including 10% strict protection

- Surface area in total 33,846 mill ha (includes lakes and rivers)

- Forest land and scrub land: approx. **14% protected**
    - Natura 2000, Nature Conservation Act, conservation programmes, wilderness areas etc.
    - Does not include nature management of commercial forests
    - Of forest land: 10% under strict protection

- Lakes and rivers: approx. **5% protected**

19% protected → additional protection 11% to fulfill 30%
    - Of which 5% in forests



https://fi.wikipedia.org/wiki/Luettelo_Suomen_Natura_2000_-alueista

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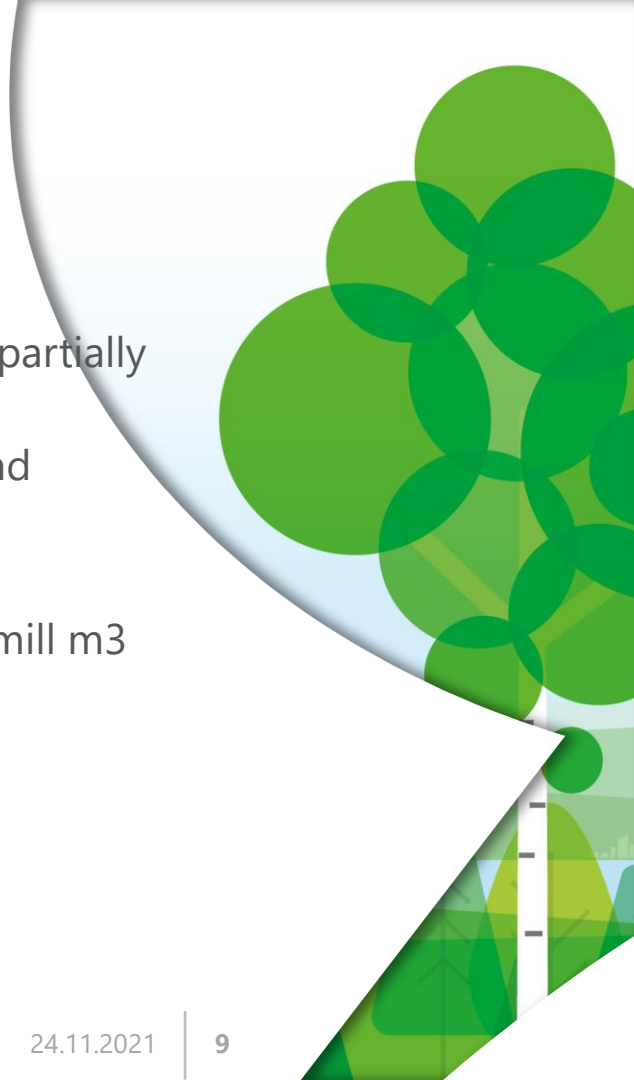
Three scenarios

1. BAU: present protection and management levels
2. MUU: all old-growth forests strictly protected, other forests partially protected
3. 50/50 additional protection divided evenly between strict and partial protection

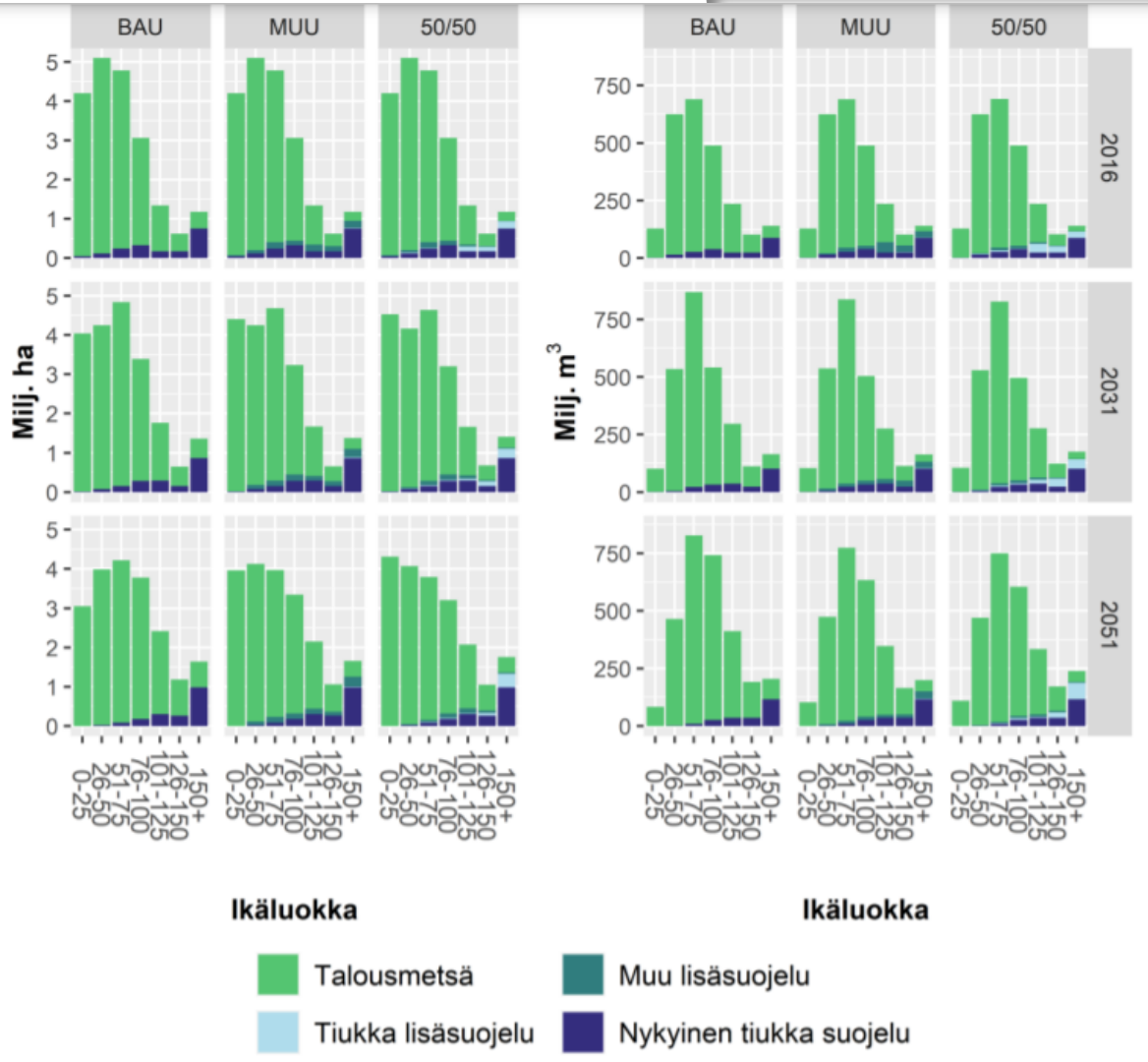
Target: 5% increase in protection, cutting level constant at 72.4 mill m3

Simulations: European Forestry Dynamics Model (EFDM)
FinFEP (includes forest and energy sectors)



Results

- Forest land area (left)
- All scenarios: proportion of old age classes increases
- Area of young age classes (0-25y) increase relative to BAU (in commercial forests)
- Protection targeted to old forests



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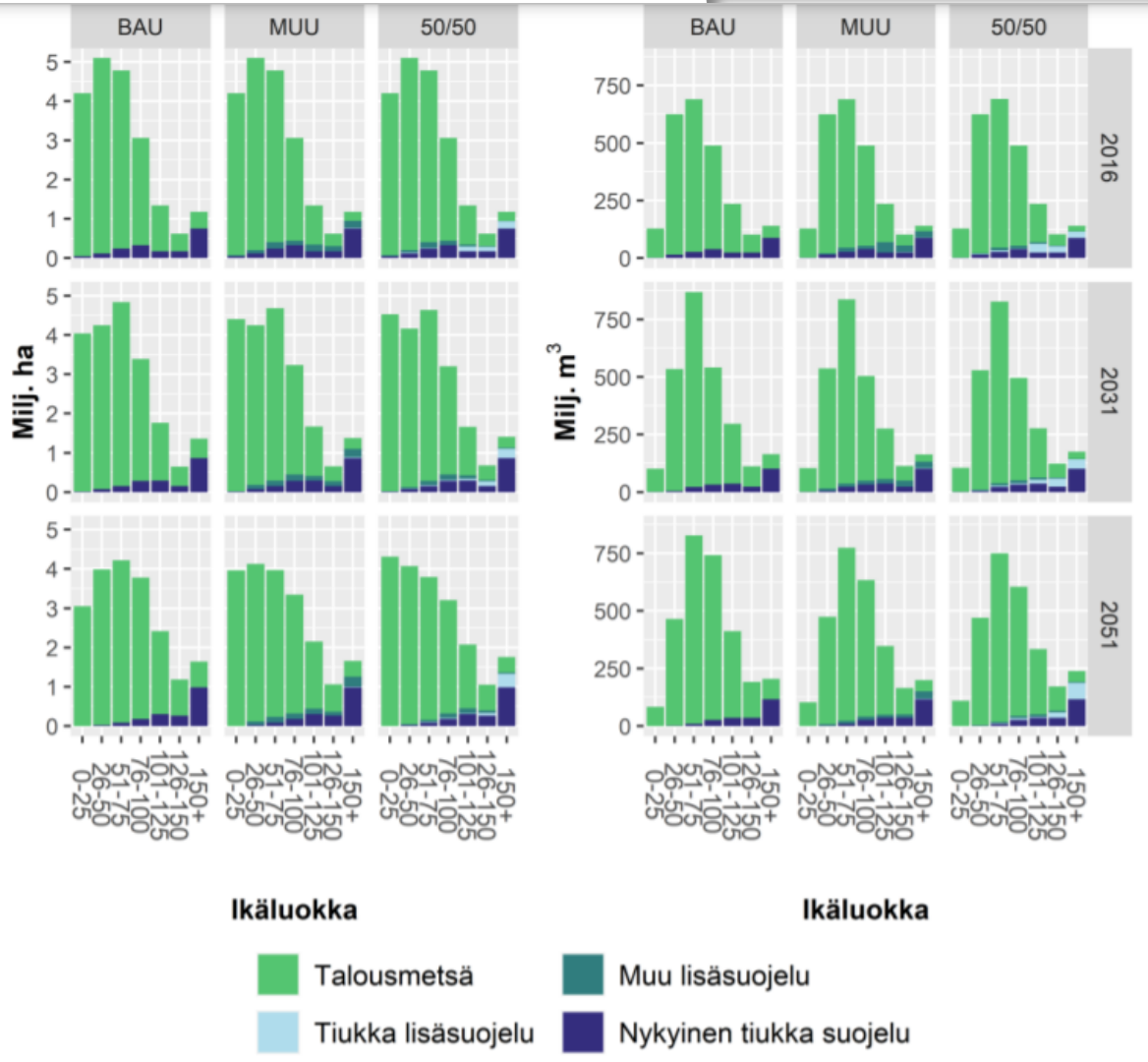
Results

- Stock volume (right)
- Stock volume increases with time
- BAU volume increases more



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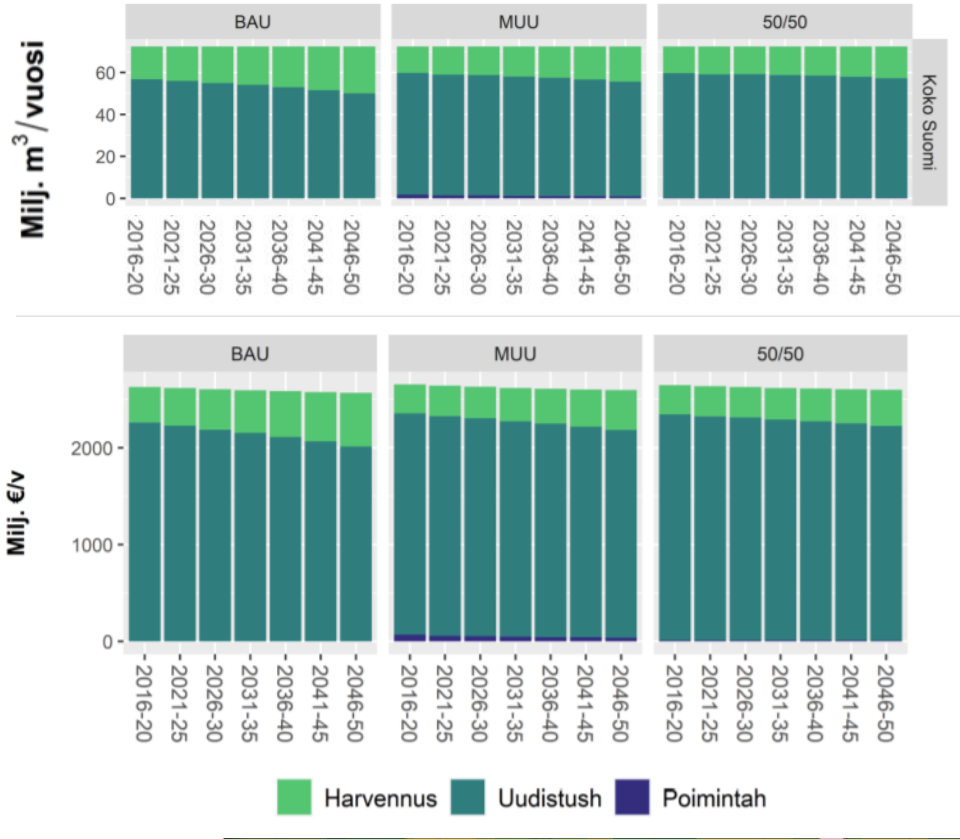
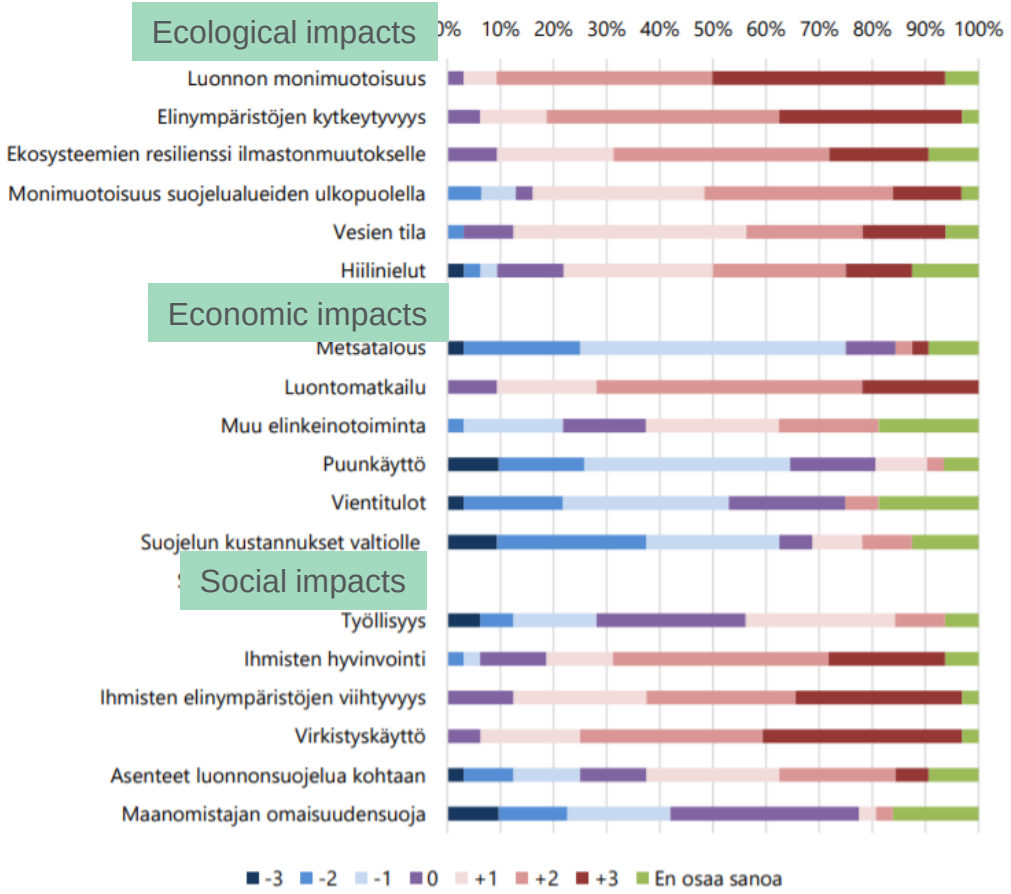
Cuttings

- Proportion of regeneration cuttings increase relative to BAU
- BUT: in all scenarios: proportion of thinnings increase with time
- Net present values decrease slightly relative to BAU (bill eur 2016-2051)

Skenaario	3 %	4 %	5 %
BAU	52,2	45,6	40,2
MUU	51,9	45,3	40,0
50/50	51,5	45,0	39,7



Opinions on the impacts of 30 % protection



Expected impacts on biodiversity

- Generally improves

+ Increase of growth forests in protected areas

- More younger age classes in commercial forests

+ Low-productive peatlands: no trade-off

- Setting low productive Agricultural peat soils aside from production?
    - Where to find monetary incentives to support set aside of agriculture?

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Conclusions

- Keeping cumulative cuttings at present level is possible with 5% increase in protection
- Surface area of young forests would increase

- Not possible to evaluate how protection influences wood supply and the consequent cutting
- If forests with large tree volume are protected it may not be possible to increase cutting levels to 80 mill m3 → remarkable costs to the state from increased protection
    - Trade-off!

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Conclusions of the whole assessment

- **“Finland has some readiness for implementation of EU biodiversity strategy”**

- Evaluation of impacts is preliminary
- Quality of data varies → influences predictions
- Comprehensive economic assessment is needed
- More info on synergies & tradeoffs needed
- Development of research, monitoring and statistics needed to measure whether targets can be reached
- Some targets can be interpreted in various ways (e.g. old-growth forests)

Thank you!

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