



FOREST BIODIVERSITY

METSO



Use of public incentives for voluntary forest protection – example of the Finnish METSO Programme

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METSO Programme 2008-2025

- METSO is an example of a payment scheme for ecosystem services (EU Forest Strategy for 2030): “The Finnish METSO Programme pays private forest owners to set aside their land for biodiversity. The amounts provided depend on the value of the land and for how long the forest will be set aside.”
- Main goal is to halt the ongoing decline in forest species and habitats and establish favourable trends in forest biodiversity
- The focus is on private forests, but municipal and state-owned lands are also involved
- Landowners can voluntarily offer sites for protection
- The ecological site selection criteria define which habitats are accepted for conservation
- Coordinated by the Ministry of the Environment and the Ministry of Agriculture and Forestry



METSO Programme 2008-2025 – aims to:

- improve conservation area network, especially in the southern part of the country
- enhance biodiversity in commercially managed forests
- promote collaboration between forest- and environmental sectors, landowners and other stakeholders
- improve the knowledge base on forest biodiversity, increase communication and education

Most concrete actions

- Goal: To increase the network of protected areas with 96 000 ha (Min.Env.) → **97 %** achieved 2008-2023, €425M
- Goal: To safeguard biodiversity on 82 000 hectares of forest habitats in commercially managed forests (Min.Agr.For.) → **79 %** achieved 2008-2023, €117M



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METSO Programme Elements

1. Ecological site selection criteria; significant wooded habitats, particularly significant structural features
2. Regional implementation and cooperation
3. Development of Finland's network of protected areas
4. Safeguarding biodiversity in privately owned forests; environmental subsidy agreements; nature management projects
5. Advise to forest owners and training of forest professionals; forest planning
6. Cooperation network
7. Restoration and nature management of habitats in protected areas
8. Inventories of habitats and species in protected areas
9. Nature management measures in commercially managed State forests
10. Ensuring biodiversity in forests owned by municipalities
11. Communications
12. Improving the knowledge base
13. Developing monitoring, information systems and statistics
14. Monitoring and evaluation of the programme

METSO Programme 2008-2025

- Implemented by regional environmental and forest authorities
 - Permanent protection
 - Temporary protection (10-20 years)
 - Nature management in forest habitats

METSO options: Permanent protection

- Private nature reserve (ownership remains)
 - Compensation based on timber value
- Purchase by the state
 - Price based on the value of timber and value of the land
- Land exchange (with state-owned land)



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METSO Programme 2008-2025

METSO options: Temporary conservation

- Environmental forestry subsidy agreement, 10 years
 - Compensation mostly based on timber value
- Temporary nature reserve, 20 years
 - Compensation based on financial losses incurred

METSO options: Nature management projects

- Includes measures to maintain, enhance or restore valuable natural features in forest habitats
- Project often involves several forest owners and forest holdings
- Forest owner benefit by having ecologically valuable features on their land managed by experts



The shopping list: ten forest habitat types with high biodiversity value

- Herb-rich forests
- **Heath forests with high biodiversity (old-growth, abundant dead wood)**
- **Wooded mires and open mires with forest margins**
- Forests by watercourses
- Flooded forests and forest swamps
- Esker forests
- Wooded meadows and forest pastures
- Wooded cliffs, bluffs and boulder fields
- Calcareous and ultramafic rocky habitats
- Forests at uplifting coastline (of Baltic Sea)



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Shopping list – site selection criteria of METSO

- Each habitat type has its own set of criteria
- Habitat types contain I-III quality classes – mainly based on structural characteristics (e.g. age, amount of dead wood, tree species composition)
- Known occurrences of threatened species
- Size and connectivity to existing conservation areas
- Restoration (hydrology) and nature management potential
- Social criteria (ecotourism, recreational importance, etc.) can be used to some extent

- Large sites with multiple high-quality habitats are most desirable



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Simplified example: Heath forests with high biodiversity in METSO

Spruce forests

Class I

- Dead wood over 10 m³/ha (different decay stages)
- Age over 120 years (no demand for deadwood – usually present)

Class II

- Mature forest, dead wood 5-10 m³ (different decay stages)

Pine forests

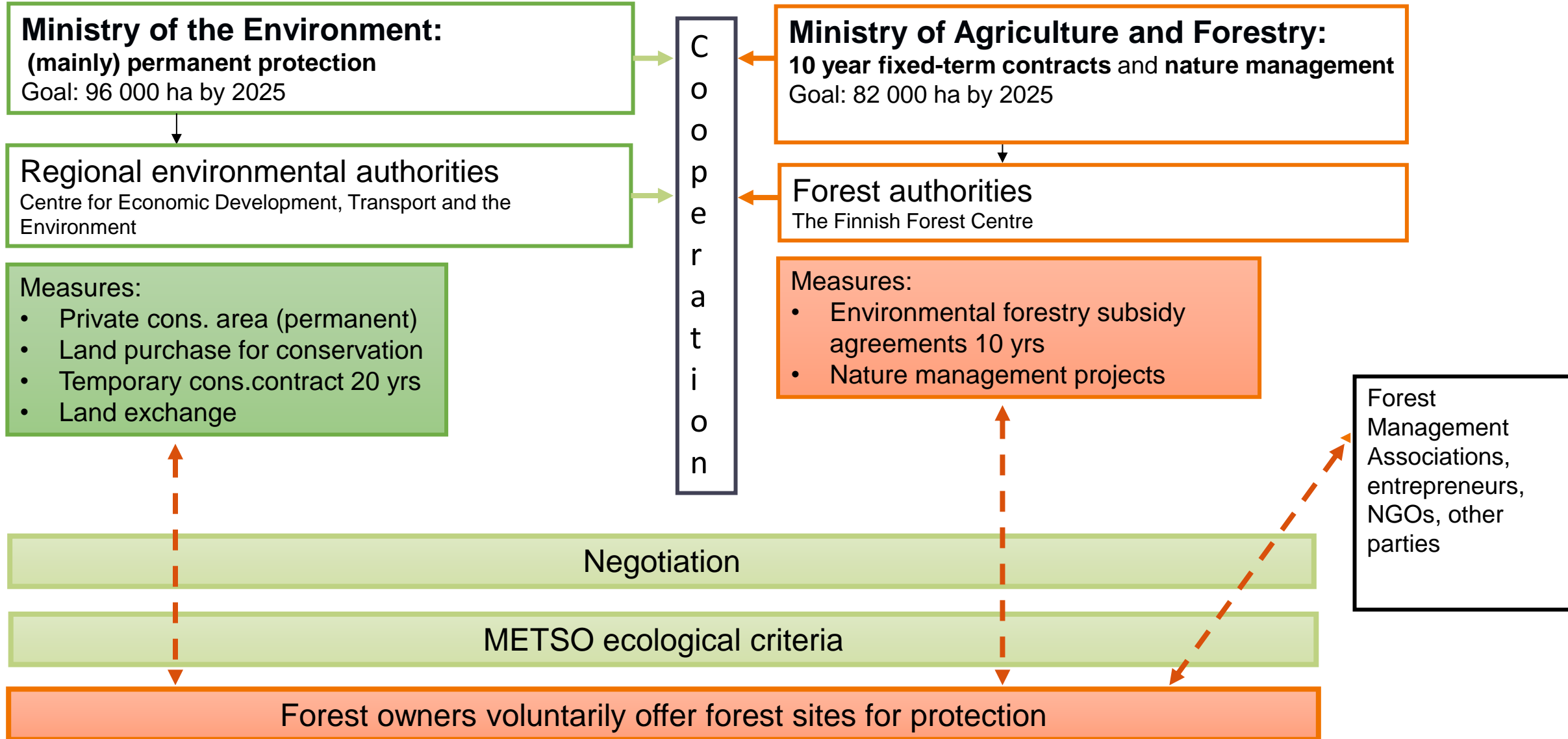
Class I

- Dead wood over 10 m³/ha
- Age over 140 years (no demand for deadwood)

Class II

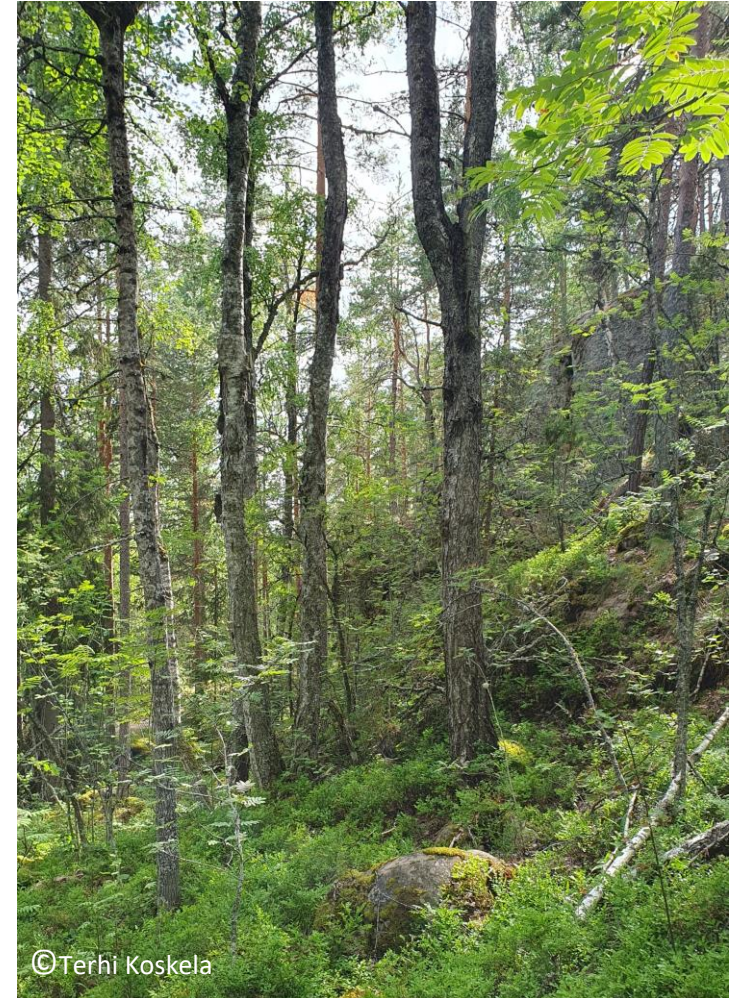
- Mature forest, dead wood 5-10m³ (different decay stages)

METSO process



Major success stories of METSO

- **METSO has received strong support from landowners, NGOs, forest companies, and authorities – also politicians**
- **Voluntariness is a key factor in ensuring acceptability**
- **Protected METSO sites have generally high biodiversity value**
- **METSO has significantly improved the cooperation and communication between the forest authorities, the environmental authorities, forest owners and other stakeholders**
- **A variety of measures to protect the biodiversity of forests**
- **Increased knowledge of biodiversity through research and development projects**
- **Decision support for marketing and site selection (GIS-based conservation planning tool Zonation)**



Future considerations

- Ensuring the adequate resources for voluntary conservation and implementation throughout the country
- Increased dialogue, education, communication, cooperation and monitoring require resources and time
- Conservation planning: size of the protected areas and connectivity of the protected area network
- The selection criteria are currently mainly tailored to the needs of forest protection in the southern half of Finland
- Most old-growth forests are located in the north, where METSO's implementation has been limited
- Especially in Northern Finland, the rights of the indigenous Sámi people should be taken carefully into account in land-use planning
- The new METSO program period (2026-) is being prepared together with targets of Restoration Law



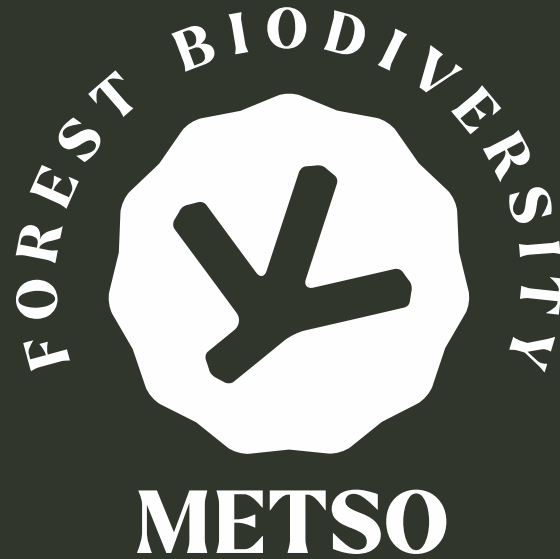


METSO has become a widely accepted positive “brand” in Finland with a good reputation among forest owners and stakeholders

[More info in English:](#)
[METSOwebsite](#)



Thank you very much!



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