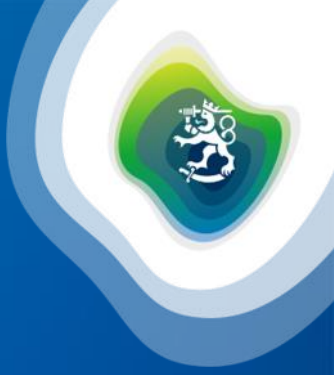




# Examples of forest policy tools & strategies and governance in Finland

Kaisa Pirkola  
Ministry of Agriculture and Forestry



# I. Forest policy tools and governance



# Forest policy tools in Finland (1/2)



## The Ministry directs and develops forest policy and legislation

Metsähallitus, the Natural Resources Institute and the Finnish Forest Centre operate under the guidance of the Ministry (-> Leena Leskinen presentation)

## Legislation e.g. Forest Act

- the first **Forest Act** 1886; Statutory forest regeneration

## Strategies & programmes

- National Forest Strategy
- Bioeconomy strategy
- Climate Plan for the Land Use Sector
- Climate and energy strategies
- National climate change adaption plan
- Voluntary forest protection programme METSO

# Forest policy tools in Finland (2/2)

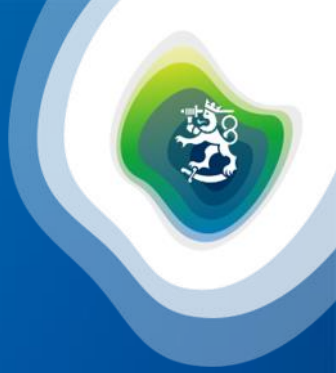


## Financial incentives (90-year experience)

- Forest improvement
- Biodiversity conservation, protection of small ecologically valuable habitats
- Incentives activate private forest owners for forest management

## Information and advice

- National forest inventories (monitoring every 10 years since 1920's)
- Publicly funded forest resource database
- Forest management plans
- Communication and education



## II. Finland's National Forest Strategy 2035

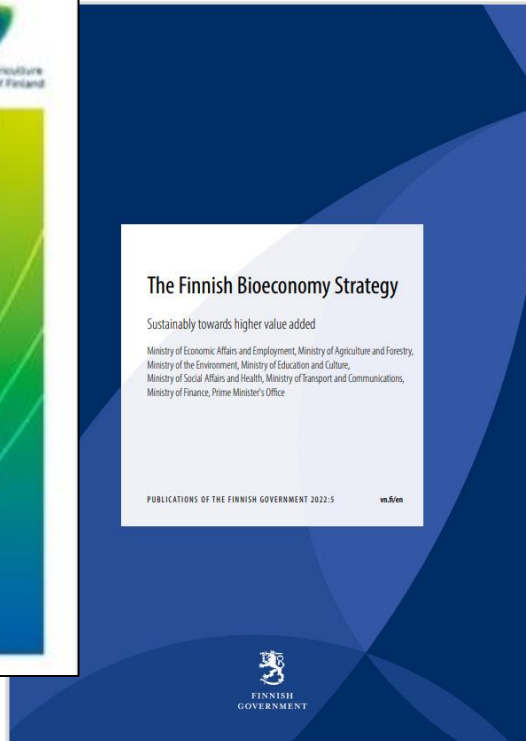
<https://mmm.fi/en/nfs2035>

# Main strategies related to forestry, forest industries and bioeconomy



Published in 2022

<https://mmm.fi/en/nfs2035>



Published in 2022

- [The Finnish Bioeconomy Strategy](#)
- [Fact Sheet](#)

## Climate Plan for the Land Use Sector

- “promotes the reduction of emissions strengthens carbon sinks from/in land use sector (LULUCF) +adaptation to climate change”
- [Climate Plan for the Land Use Sector](#)
- Published in 2023

## Climate and energy strategies

- Latest published in 2022
- The preparation of the new energy and climate strategy has started by updating the scenario calculations and listing the new policy measures to be taken into the scenario calculation. The new Energy and Climate Strategy is expected to be completed in the spring of 2025.
- Responsible ministry: Ministry of Economic Affairs and Employment



## National climate change adaption plan

## Voluntary forest protection programme METSO

[Frontpage | Metsonpolku](#)



# National Forest Strategy 2035

- Provides outlines to Finland's forest policy
- Prepared during 2022 and The National Forest Council adopted the strategy in December 2022
- Reform driven by changes in national and international environment
- Drawn up in cooperation between experts and as an interactive process
- Aim to coordinate the needs of humans, economy and environment



# MEGATRENDS

Pressures for change of the welfare state, fair and just transition

Climate change mitigation and adaptation

Redefinition of security

Global political and economic tensions

Transformation of the use of natural resources, coordination a challenge

Transformation of energy production and use

Loss of biodiversity



## NATIONAL FOREST STRATEGY 2035

New ways of revenue generation from natural resources

More from less

Transformation of working culture

Coherent policies

Platform economy, mass data, artificial intelligence, automation

New materials, commodities and production practices in a circular economy

Consumer behaviour, values and attitudes

# ENABLERS





# NATIONAL FOREST STRATEGY 2035

## Vision and strategic objectives

Finland is a competitive operating environment for a responsible forest sector that is capable of renewing itself.

Forests are in active, sustainable and diverse use.

## GROWING WELLBEING FROM FORESTS AND FOR FORESTS

We strengthen the vitality, diversity and adaptability of forests

We strengthen knowledge-based management and competence in the forest sector.



- **III. Some examples**

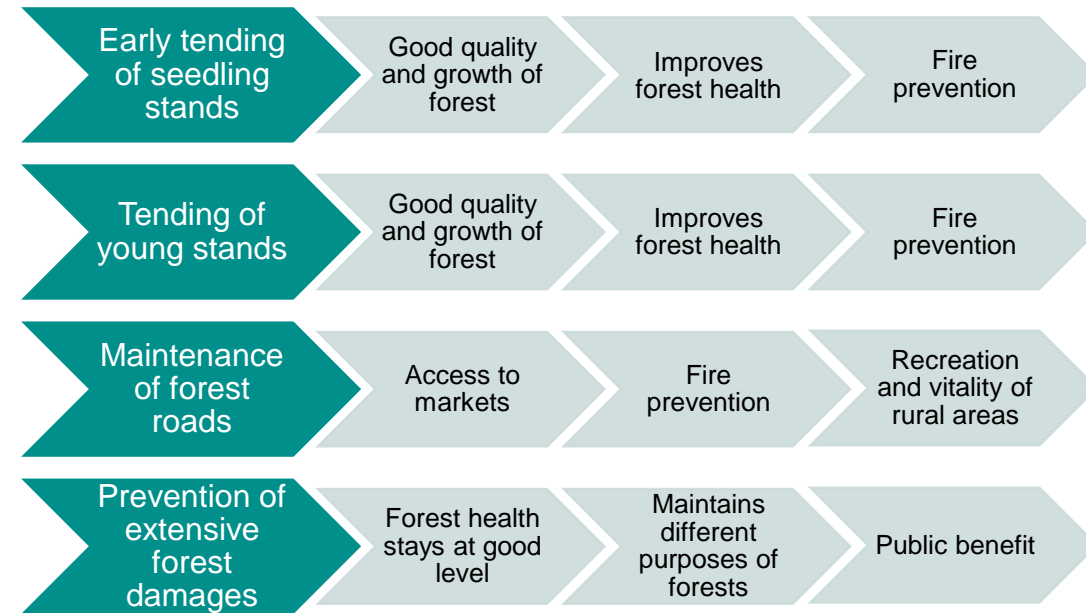


# Support schemes for private forest owners



## The aim is sustainable forest management and healthy and well-growing forests

- Aid for forestry -METKA support scheme
- Aid for private forest owners
- Aid can be applied for the management of seedling stands and young stands, health fertilisation, construction and renovation of forest roads, and peatland forest management.
- Aid is applied from the Forest Centre
- Aid can be applied also for environmental support for the temporary protection of forests and support for nature management work and prescribed burning.





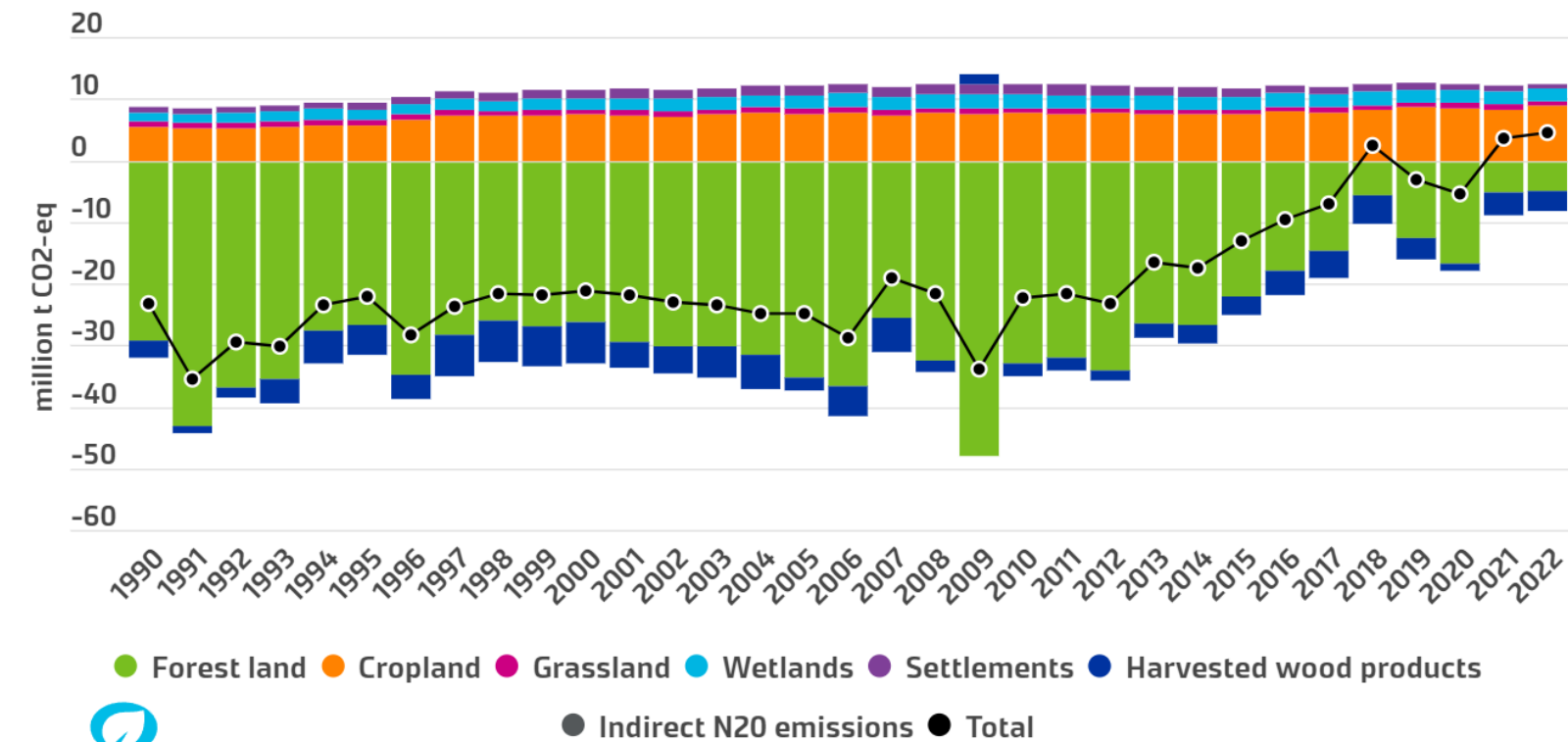
Forests play an important role in Finland's climate policy:

# Aim is to increase forest growth and carbon sinks

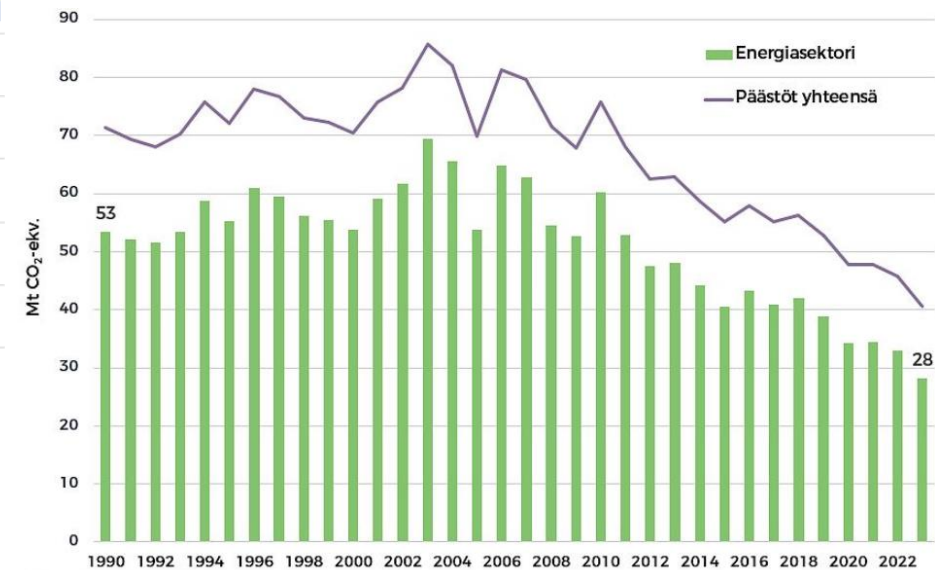
The aim is to increase sinks to make Finland carbon neutral by 2035

Emissions and removals in the LULUCF sector by land use category (million t CO<sub>2</sub>-eq)

Positive number indicates emissions, and a negative number indicates removals (sink).



The majority of Finland's greenhouse gas emissions are generated from energy production and consumption, that is, mainly from the use of fossil fuels. The high emissions in the energy sector are mainly due to Finland's cold climate, long distances and energy-intensive industries. Since 2010, emissions from the energy sector have declined from around 60 million tonnes to around 28 million tonnes, i.e. well below the 1990 emission level



Read more: [Greenhouse gas inventory 2022: Natural Resources Institute](#)

Greenhouse gas emissions 1990 – 2023\*



# Forest management methods are reformed



- Forest management methods change as information increases and the objectives of citizens and forest owners change
- Forest management methods are also reformed to respond to climate change
- Main issues and risks that must be taken into account in forest management include, in particular:
  - Storms
  - Insect damages and root rot
  - Drought and other exceptional weather conditions
  - Forest fires, even they are fairly rare in Finland
- Finland has drawn up a climate change adaptation action plan that also covers forestry.



# Best practices for forest management

- Finland has had forest management recommendations – called Best practices for sustainable forest management - since 1989
- The Best Practices offer forest owners well-founded alternatives and options for benefiting from forests
- The Best Practices are continuously updated
- Multi-stakeholder process is coordinated by Tapio Ltd.
- Different elements of sustainability are taken into consideration: economy, diversity of nature, recreational use of forests and climate change mitigation with the help of forests

Read more: [Best Practices for Sustainable Forest Management \(metsanhoitonsuosituks.fi\)](https://www.metsanhoitonsuosituks.fi)

# Best Practices for Sustainable Forest Management



- Best Practices for Sustainable Forest Management offer alternatives for forest management and information on their effects.
- Different elements of sustainability are taken into consideration: **economy, nature, recreational use** of forests and **climate change mitigation and adaptation**.
- The Best Practices reflect **long-term research** and societal values among the key stakeholders as well as the main targets set by the Finnish national forest policy.
- The Best Practices are **provided by the Ministry of Agriculture and Forestry** as a service for Finnish forestry.

# 'Best Practices' as part of the finnish forest policy package

Company practices, codes of conduct etc.

complement the selection of targets for the measures and the practical implementation of forestry with their own guidelines.

Best Practices for Sustainable Forest Management

guide forest owners towards their goals in practice, put the **latest research data into practice** and go **further** on nature, water and climate issues.

Forest  
legislation and certification

set **limits** for the use of managed forests.



# Nature management conserves the biodiversity of commercial forests

Nature management is part of everyday forestry. The end result is always the sum of forest management and nature management objectives and measures.

## Nature management of forests:

- Conserves valuable habitats
- Leaves retention tree groups and game cover
- Leaves buffer zones at the edges of river basins
- Conserves decaying wood and creates high stumps
- Protects trees hosting birds of prey
- Carries out controlled burning of forests and burning of retention tree group

Thanks to the development of forestry practices and operating models, around 30 previously threatened species were removed from the threatened species list in 2019.





# Forest Biodiversity Programme for Southern Finland (METSO)



- Voluntary forest protection by landowners is particularly important in Southern Finland where the network of national parks and other nature reserves is not as developed as in other parts of Finland. Voluntary forest protection is promoted by the State through the Forest Biodiversity Programme for Southern Finland 2014–2025, called METSO.
- The METSO Programme 2008–2025 aims to halt the ongoing decline in the biodiversity of forest habitats and species, and to establish at least stable or preferably favourable trends in Southern Finland’s forest ecosystems. The Programme is a collaborative effort between the Ministry of the Environment, the Ministry of Agriculture and Forestry and different stakeholders.
- The METSO Programme has been designed to enhance biodiversity by supplementing and improving Finland’s network of protected areas and by maintaining and developing nature management practices for commercially managed forests. Conservation schemes will largely be based on voluntary participation of landowners willing to safeguard biodiversity in their own forests. The Programme also promotes the establishment of conservation networks between private forest owners and organisations. Restoration activities are also being carried out on existing protected areas on State owned land.
- The METSO Programme offers various tools for the forest owners: they can offer their forests either for permanent protection or make temporary protection agreements. In addition, active nature management supported by the Programme is one way to increase biodiversity in managed stands. Forest owners and other stakeholders are also encouraged establish co-operative networks.
- There are ten forested habitats, which are being preserved under the METSO Programme. The sites are selected according to their ecological structure and their value for biodiversity. Regional forest and environmental authorities decide if the site is suitable for the Programme. Compensation will be paid to landowners according to legislation in the Nature Conservation Act or the Act on the Financing of Sustainable Forestry
- [Frontpage | Metsonpolku](#)



# Prevention of forest damages is an established practice



- The health status of forests in Finland is still good. Occasional local forest damages are caused e.g. by storms, snow, elk, annosus root rot, bark beetles and vole
- Climate change increases the risk of different damages and pest outbreaks in forests
- So far, forest fires have not caused significant damage in Finland
- The goal is to prevent damages in advance by active forest management and monitoring
  - The Ministry of Agriculture and Forestry is responsible for plant health policy and legislation. As a part of national legislation, the Forest Damages Prevention Act and the Plant Health Act aim to maintain good forest health in Finland, and to prevent further forest damages.
  - In case of large expanding damage (e.g. pest outbreak) Ministry of Agriculture and Forestry can order the forest authority (Metsäkeskus) to take preventive measures against extensive forest damages. Further, according to the law on Forest damages prevention, the forest owners may not refuse the preventive measures. In these cases, the State covers the costs of prevention.



# Objective is to increase the forest area and reduce deforestation in Finland



Efforts will be made to **reduce the deforestation** by developing planning and advisory services and developing the processing and utilisation of manure.

The emissions from deforestation are relatively high in Finland: a total of approximately 3 million tonnes of carbon dioxide per year. This amounts to about five per cent of Finland's total annual emissions.

Although forests already account for a large proportion of Finland's land area, there are also areas in Finland that can be **afforested**, which means that Finland's forest area can be increased.

Such areas include fields excluded from cultivation and former peat production areas. An aid scheme implemented in 2021-2023.

Both objectives are included in **the Climate Plan for the Land Use Sector** (June 2022).



# Breeding for climate change

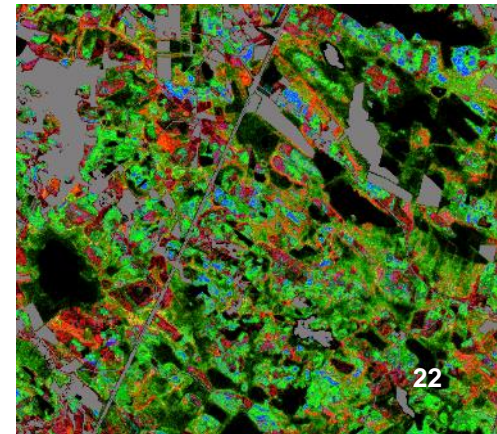


- Scientific evidence indicates that in many places natural regeneration alone may not allow forest ecosystems to adapt to climate change.
- The adaptation of our forests to the climate change can be improved by using **improved forest reproductive material in forest regeneration**.
  - Tree breeding aims at simultaneous improvements in several traits like **wood production, timber quality and adaptation capacity**.
- Natural Resources Institute is responsible for the Forest Tree Breeding Program.
- The results of breeding are put into practice via forest tree seed orchard program, financed by the state.

# Forest inventories provide data for decision making

## Forest inventory results are widely used:

- as a basis for national and international forest policy making
- as a basic knowledge of regional and national forest planning
- to support investment decisions in the forest industry
- for forestry sustainability assessment and forest certification
- in evaluating carbon sinks and greenhouse gas emissions
- as a research data





# Two inventory systems in Finland

## National forest inventory (NFI)

- For regional and national statistics & policy planning
- The Natural Resources Institute Finland (Luke) is responsible for the national forest inventory
- Statistical sampling & satellite images'

## Forest management inventory

- For operational forestry: silvicultural decisions at stand level
- Implemented by Finnish Forest Centre + companies
- Airborne LiDAR, aerial photography & ground trothing
- -> Metsään.fi-service

The Metsään.fi is The Finnish Forest Centre's free transaction service for forest owners and forest service providers. Forest owners get basic information about their own forests by logging in to the Metsään.fi service. The basic forest information behind the login is only available to forest owners, but they can share it with the service providers of their choice. Logging in to the service is free of charge. Read more. [The Metsään.fi service | Finnish Forest Centre](#)



# Wood products are carbon storages – and therefore an integral part of climate policy



- Finland aims to increase the use of wood in long-lived wood products
- The most significant way is to increase the use of wood in construction
- In recent years, the volume of wood construction has increased significantly, especially in the construction of blocks of flats and in public construction, such as schools and day-care centres.
- The use of wood can also be increased in infrastructure, such as bridges
- Wood has traditionally been a main material in single-family houses, and its use continues to be strong.
- Read more about [Wood building programme](#) (2016-2023)





## Wood-based energy is derived from side products of wood processing

Wood-based energy is derived from side products and waste of wood processing, such as bark, sawdust, and waste liquor from pulp production. Additionally, treetops, branches, small-diameter trees, and stumps collected during logging and forest management can be chipped and used as energy sources, known as forest chips.

The main use of wood fuels in Finland is for the production of heat and electricity.

In recent years, wood fuels have accounted for over a quarter of Finland's total energy consumption.

Read more about [wood in energy generation in 2023](#)

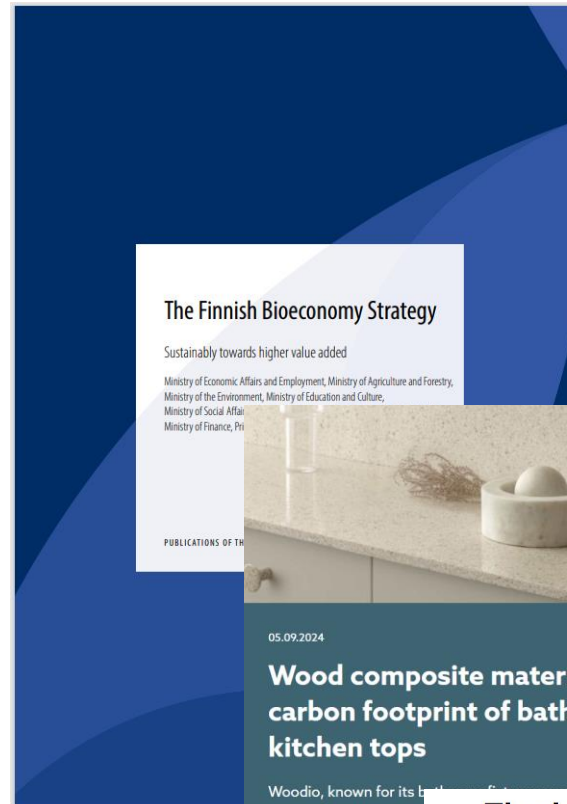


# Bioeconomy

## Research and innovation

Read more about innovations in Forest.fi: [forest.fi/innovation/](https://forest.fi/innovation/). The Innovation articles highlight the versatility of wood. The articles are written in cooperation with the New Wood project, which promotes wood-based innovations and provides information about them.

[The Finnish Bioeconomy Strategy. Sustainably towards higher value added - Valto](#)



**Textile fibres from wood**

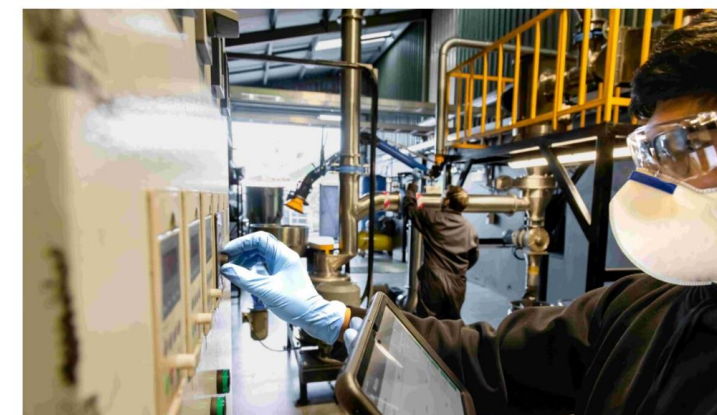
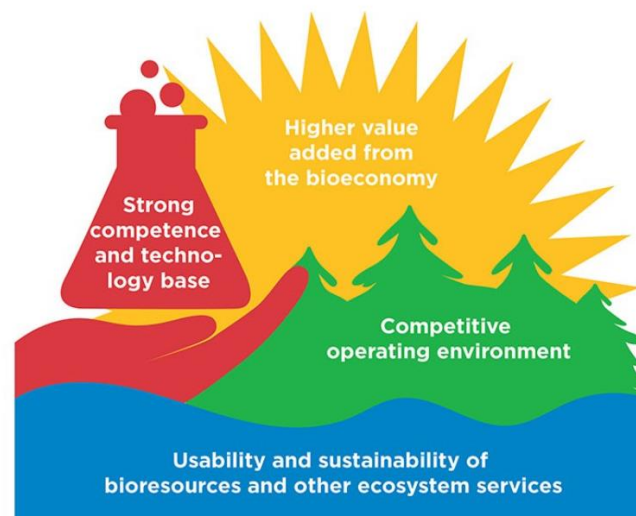


05.09.2024  
**Wood composite material halves carbon footprint of bathroom and kitchen tops**  
Woodio, known for its high-quality wood composite material, is offering a sustainable alternative that offers an alternative

05.09.2024  
**Material based on wood fibres protects products with sensitive surfaces**



**Finnish wood processed for use in electric vehicle batteries – biographite replaces graphite imported from China**



# National Forest Bioeconomy Science Panel supports decision-making on scientific basis



- Finland appointed an independent and interdisciplinary national Forest Bioeconomy Science Panel last year.
- It includes top scientists from universities and research organisations and it is chaired by the Natural Resources Institute of Finland.
- The Panel publishes reports and statements on issues related to forests and gives policy recommendations to the Finnish Government.
- The first publications focus on increasing the added value of wood-based products, future scenarios for forests in Finland and the EU, and underlying values related to forests.
- The Panel provides a good example and a tool for science-based policymaking around a polarised topic (forest management and use).



# Sámi people in Finland

- There are approximately 8,700 Sámi people in Finland.
- More than 60 per cent of them already live outside their homeland, which places new demands on teaching, services and communication in Sámi.
- The total number of Sámi people in different countries is estimated to be over 75,000. Norway has the highest number of Sámi people.
- The status of the Sámi as an indigenous people has been confirmed in the Constitution of Finland





Ministry of Agriculture and Forestry of Finland



# Organisations in the administrative branch of the Ministry of Agriculture and Forestry



Together with other ministries, we are responsible for the performance guidance of many agencies and institutes



# Forest administration in Finland



## Ministry of Agriculture and Forestry

- Manages state-owned lands and waters
- Public administration tasks
  - Management of nature conservation areas (national parks, others), wilderness and recreational areas
  - Game and fisheries services, control of hunting and fishing rights
- Market-driven business
  - Forestry was incorporated in April 2016
  - Real Estate (Laatumaa)
  - Subsidiary for seed production
- State enterprise



- Promotes forest-based livelihoods
- Implementation of forest policy
- Enforcement of forest legislation
- Distribution of financial incentives (65 M€/year)
- Training, promotion & information on sustainable forest management
- Data collection for forest resource database (1.5 million hectares/year)
- Head quarter in Lahti, 5 service areas
- Personnel 560



- Luke emerged from January 1, 2015:
  - MTT Agrifood Research Finland
  - Finnish Forest Research Institute
  - Finnish Game and Fisheries Research Institute
  - The statistical services of the Information Centre of the Ministry of Agriculture and Forestry
- 10 offices, 8 experimental stations, 5 aquaculture infrastructure areas
- Personnel 1300
- Turnover 122 M€/year (institute turnover together)

