

# Facts about Nordic forests

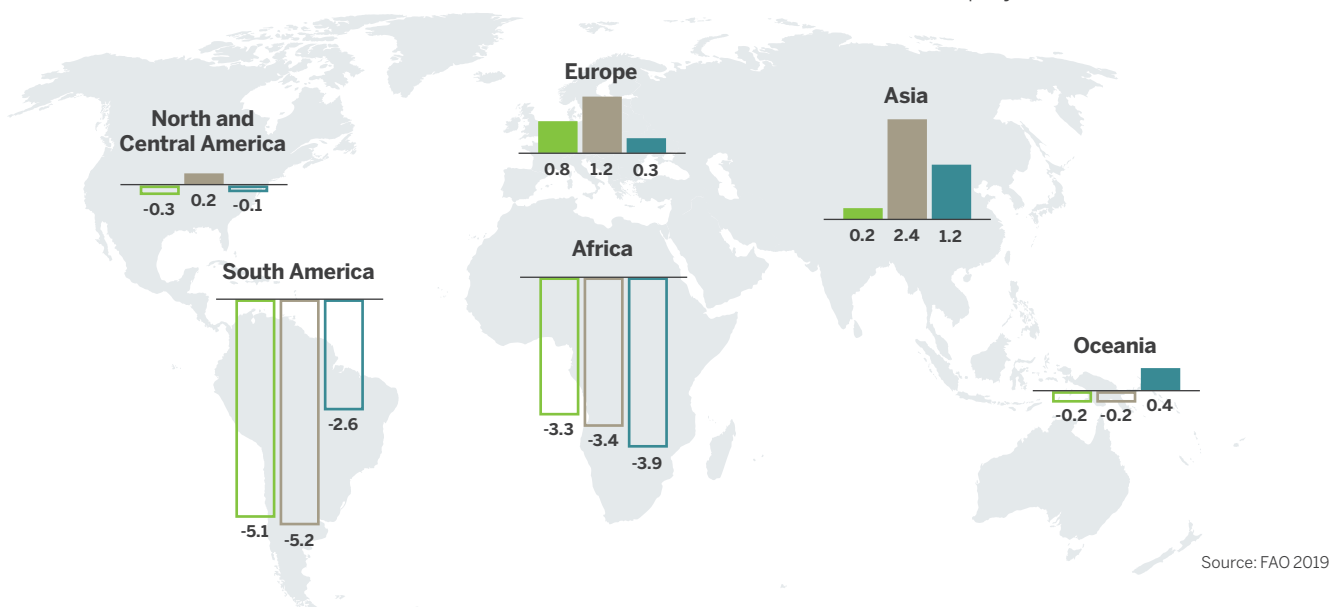
## – what you should know about Nordic forests and forestry

The ability of trees to absorb CO<sub>2</sub> makes forests an important carbon sink; they are also valuable ecosystems, providing a home for many species, both flora and fauna. Forests also offer great recreational value. The majority of forests in Finland and Sweden have been owned by families for generations.

Forests differ depending on where they are located; most Finnish and Swedish forests are situated in the boreal zone and experience long winters and short summers. There is plenty of water available and the forests – which cover 75% and 69% of the land area of Finland and Sweden respectively (Source: State of Europe's Forests 2020 report) – grow without the need for irrigation.

### ANNUAL FOREST AREA NET CHANGE

■ 1990–2000 ■ 2000–2010 ■ 2010–2020  
Million hectares per year



Source: FAO 2019

### HOW SERIOUS A PROBLEM IS DEFORESTATION?

Deforestation is a regional problem. South American and African forests are diminishing due to agricultural expansion, livestock grazing, mining, and drilling. However, between 2005 and 2020 the forest area in Europe grew by 58,390 km<sup>2</sup> – that's equivalent to the area of 1,500 football pitches of net forest growth every day.

According to the Natural Resources Institute Finland (Luke) the growing stock in Finnish forests has increased

by more than 40% over the past 40 years. The amount of protected forest in Finland is the highest in Europe, with 10% of forests receiving strict protection (Source: Ministry of Agriculture and Forestry of Finland).

“Every day between 2005 and 2020 the forest area in Europe grew by the equivalent of 1,500 football pitches.”

## BUT DOESN'T CUTTING DOWN TREES DECREASE THE CARBON SINK?

Good forest management practices play a key role in ensuring that forests grow more than they are harvested and that forests remain a carbon sink. Trees bind carbon and help mitigate climate change. It is important to get forests growing again as quickly as possible after harvesting. Legislation in Finland and Sweden requires that harvested forests are replanted – in both countries, three to four new seedlings are planted for each fully grown tree that is harvested. It is also important to bear in mind that forest-based materials can offer an alternative to fossil-based products.



### REGENERATION FELLING

Big logs go to saw and plywood mills, and thinner parts to pulp production.

Branches and treetops are used for renewable energy.

### FOREST REGENERATION

In Finland and Sweden three to four new seedlings are planted for every harvested tree.



### THINNING

Giving space for best trees to grow into log-sized trees.

The trees cut during thinning are used as pulpwood and then converted into boards and papers.

### TENDING AND MANAGEMENT OF YOUNG STANDS

Securing the growth of the healthy trees and the health of forests.

### PRE-COMMERCIAL THINNING

Giving space for best trees to grow into log-sized trees.

## HOW IS THE BIODIVERSITY TAKEN CARE OF IN NORDIC FORESTS?

Plants, fungi, animals, and microorganisms all have vital roles to play in a forest ecosystem, and it's important to operate in a way that does not affect the balance between them. In Nordic forests, industry and forest owners pay special attention to preserving biodiversity, for instance by leaving retention trees, biodiversity stumps and buffer zones, and preserving standing and fallen decayed trees. As they gradually decay, biodiversity stumps and retention trees provide homes for many different species, including fungi, insects and birds. The most valuable forest sites are left as they are for conservation.

In Finland only native tree species are planted as these are important to the local ecosystems and biodiversity. Mixed forests – coniferous and broad-leaved species growing in the same area – are becoming more common as they have been shown to be an effective way to maintain biodiversity. They are also considered to be more resistant to damage caused by climate change and other factors.

The biodiversity of a forest will be compromised for good if it is cut down for uses such as agriculture or livestock grazing, as is happening in vast areas of rainforest.

## CERTIFICATION HELPS IDENTIFY AND SUPPORT GOOD FOREST MANAGEMENT

Forest certifications are voluntary accreditations that support the wellbeing of forests and confirm the legality of wood's origin. The most common forest certification schemes are PEFC and FSC®, both of which help conserve biodiversity and preserve the valuable habitats and biotopes that are typical of natural forests. Forest certification ensures good conditions for the people working in forests and allows the forests to continue to be used for recreational purposes. It also safeguards the rights of indigenous people in northern parts of Finland and Sweden. Only some 10% percent of the world's forests are certified, whereas this figure is around 90% in Finland and more than 60% in Sweden.

"Digital maps and data are used in Finland and Sweden to trace wood all the way back to the forest where it was grown."

### Sustainable forestry ensures that:

- wood has been sourced legally
- wood is traceable and its supply chain is transparent
- forests grow more than they are used
- biodiversity is protected
- human rights are respected