

Snapshot of the

SWEDISH FOREST INDUSTRY



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A greener, safer world

The bio-based products manufactured by the forest industry – such as building materials, packaging, hygiene products and biofuels – are essential to people's daily lives and are instrumental in the transition to a more circular, fossil-free future.

The Swedish forest industry is one of the world's largest exporters of pulp, paper and sawnwood.

The forest industry plays a key role in Europe's preparedness and resilience. In addition to provide secure capital inflows through exports, local raw materials and our own production facilities are important assets in times of geopolitical turmoil.

70 %

of Sweden's land area is forested

30,000

species of flora and fauna are found in Swedish forests

€17 billion

Value of Swedish forest industry exports each year

90 %

of Swedish pulp, paper and board production is exported

≈80 %

of sawnwood from Sweden went to other countries in 2024

100 %

The total volume of trees in Swedish forests is twice as large as it was one hundred years ago

400,000,000

seedlings are planted in Swedish forests every year



We build our houses and furniture with wood, and our food is protected and kept fresh by board packaging. We wear clothes made from wood fibres, write on recyclable paper, and rely on by-products from harvesting and production of forest products to keep us warm in cold weather.



Forest industry products

When a tree is harvested, all of its parts are put to good use. Sawnwood and pulp – processed into paper, board and textiles – are the main products.

About 85 per cent of the Swedish forest industry's production is sold outside Sweden – mainly on the EU's internal market. Asia, North America and North Africa are other important markets.

The Swedish forest industry creates jobs and is the foundation for climate-neutral construction and greater circularity across the globe.

Swedish exports account for 13 per cent of global trade in sawnwood

13%

Everything from high-rise buildings to juice cartons

Sawnwood, paper, textiles and chemicals – the list of things that can be made from a tree is long. These are things that we need in our everyday lives. Renewable wood replaces fossil-intensive materials, and can also be recycled. This is good for the climate.

Building materials like walls, beams and mouldings, flooring and doors are examples of what can be done with joinery and construction wood.

Nappies and other hygiene products like toilet tissue, paper towels and sterile materials used in healthcare are made from paper pulp – as are **writing paper and newsprint**. The corrugated boxes that protect products during shipment, and the **juice cartons** on your breakfast table, are also made from pulp.

Viscose, modal and lyocell are examples of textiles made from pure cellulose. They can be used to make everything from clothing and accessories to home textiles.

Pallets, pallet collars and cable drums are examples of wooden packaging that streamlines handling and protects products transported around the world.

Lignin, a residue of pulp production, can be used to manufacture bioplastics, chemicals and carbon fibres.

Bioenergy – renewable, fossil-free energy produced from branches, tree tops and other forestry residues – is used for heating, electricity generation and as fuel in Swedish industry and transports.

Homes and schools in Sweden are often **heated** by surplus heat from the forest industry.





Clothes made from wood

Lyocell, viscose and modal are examples of textiles made from renewable forest resources. They can replace fossil, oil-based textiles.

The entire tree is used

Wood is a versatile material, and every part of the tree is used as resource-efficiently as possible.

The lower, thicker parts of the trunk are used as raw material for sawmills, where they are sawn and planed into boards and planks to be used to build houses and furniture.

The upper, narrower parts of the tree – as well as small thinned trees – become pulp to manufacture primarily paper, board and textiles.

Some tree tops and branches, as well as sawdust from sawmills, become bioenergy, biofuel or raw material in the chemical industry.

Stumps, roots and some branches are left behind at the harvesting site to decompose and become nutrients in the soil.

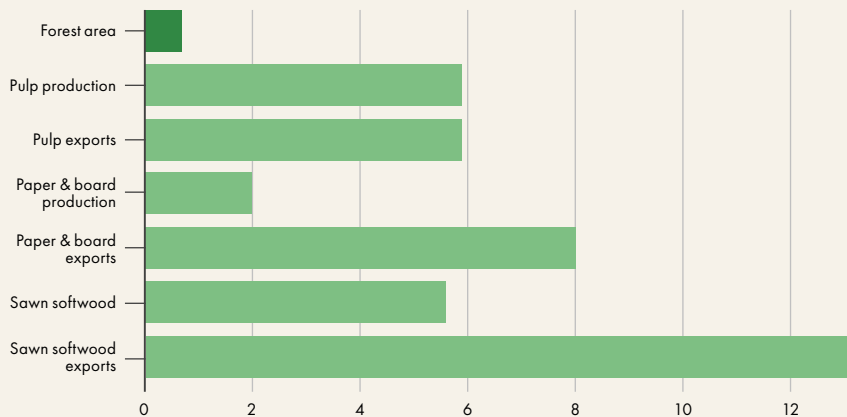


From Sweden to the world

Sweden is home to less than one per cent of the world's forests. Even so, the Swedish forest industry is one of the world's largest exporters of pulp, paper and sawnwood.

Swedish exports of sawnwood account for 13 per cent of global trade. Swedish pulp accounts for 6 per cent, and Swedish paper 8 per cent, of global trade (2023).

Sweden's share of global... 2023, per cent

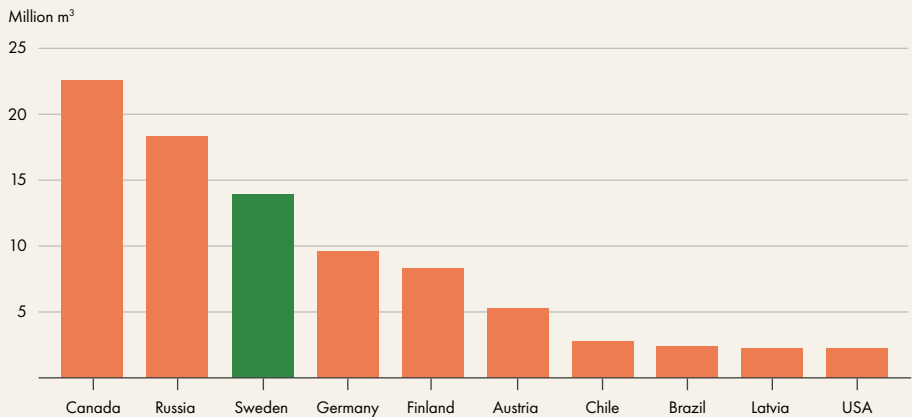


World’s largest sawnwood exporters

Sweden plays a key role in supplying the world with sawnwood, and Europe is its largest market.

Russia’s exports are primarily directed to Asia, while Canada’s largest market is the US. Russia’s exports have been impacted by sanctions imposed following its war of aggression against Ukraine. The country’s exports of sawnwood fell an estimated 25 per cent between 2020 and 2023.

Global exports 2023



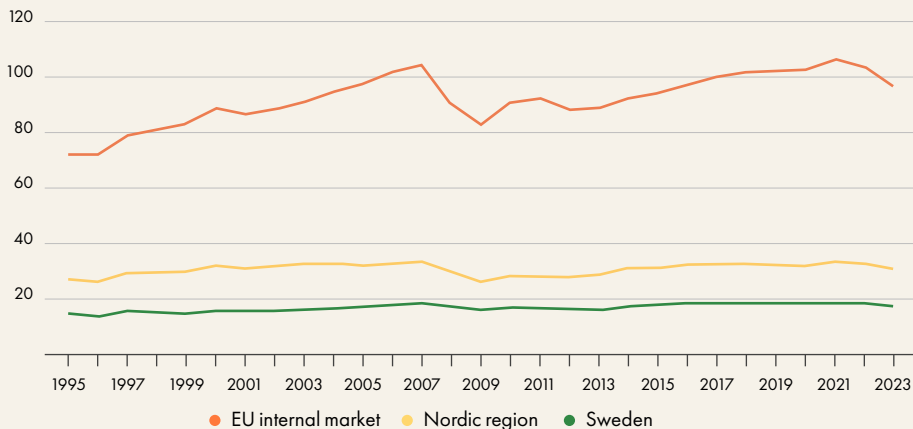
The Nordic regions importance for wood products supply in Europe

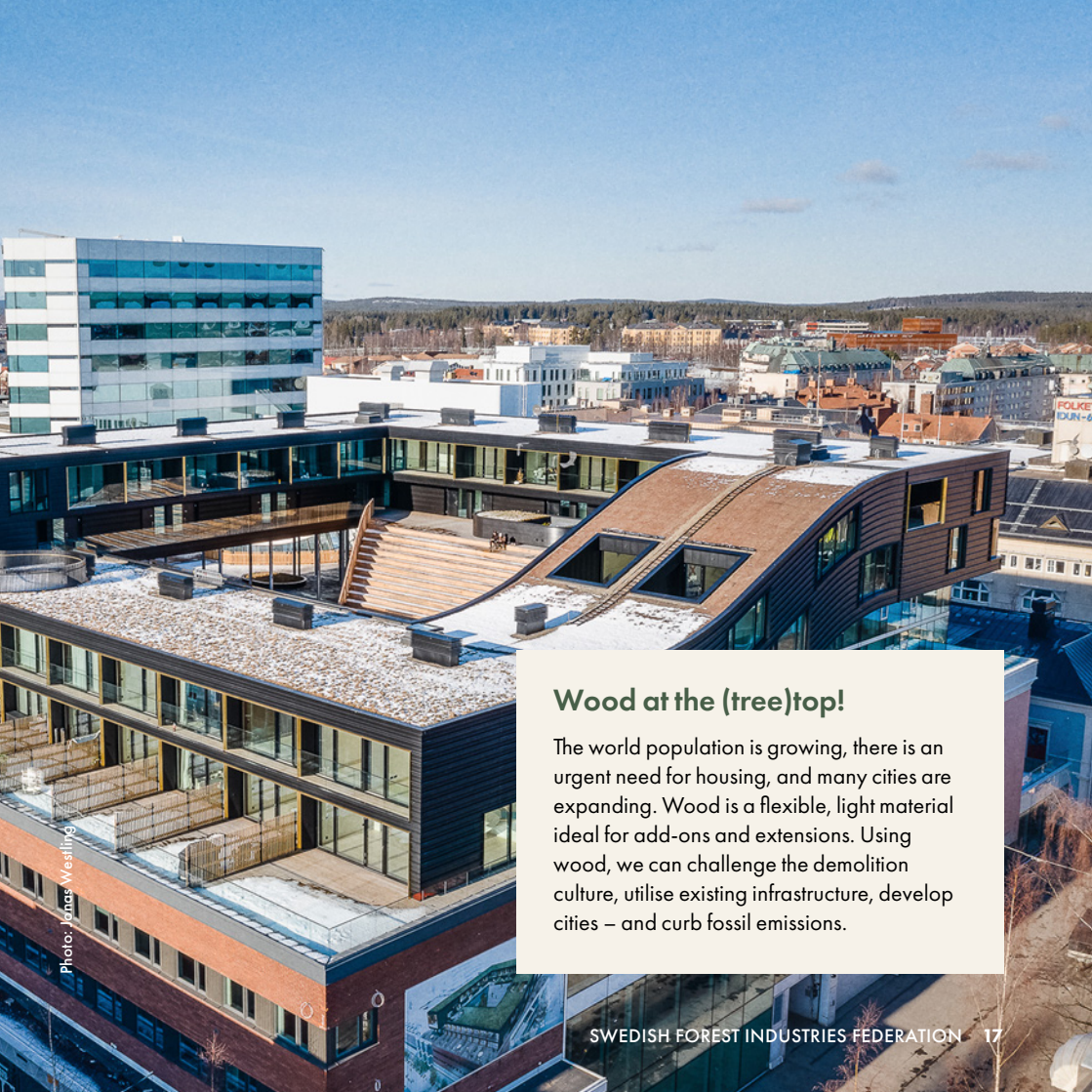
Europe's* total production of sawnwood products in 2023 was approximately 100 million m³. The Nordic region (Sweden, Finland and parts of Norway) accounted for nearly one-third of this production. Sweden alone accounted for approximately 18 per cent of Europe's production.

*Includes EU member states as well as Norway and Switzerland.

Sawnwood production EU27

Million m³



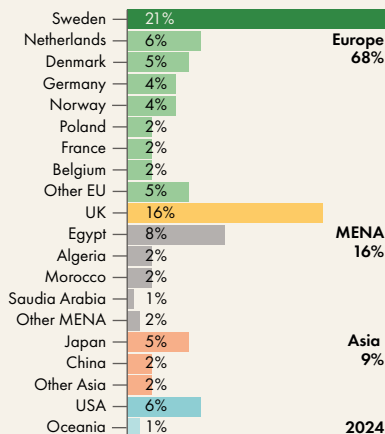


Wood at the (tree)top!

The world population is growing, there is an urgent need for housing, and many cities are expanding. Wood is a flexible, light material ideal for add-ons and extensions. Using wood, we can challenge the demolition culture, utilise existing infrastructure, develop cities – and curb fossil emissions.

Markets

Around half of the timber harvested in Sweden goes to sawmills, with the rest going to pulp and paper mills. Spruce and pine are the most common types of tree species, and Swedish timber and sawnwood are known for their high quality.



Largest markets for Swedish sawnwood

In 2024, Sweden produced 17.8 million m³ of sawnwood. The EU's internal market is the largest recipient of Swedish sawnwood, and the UK is the single largest trading partner.

In 2024, deliveries to the US accounted for 6 per cent of Sweden's total exports of sawnwood.

Did you know that...

... nearly 80 per cent of sawnwood from Sweden was sold to customers in other countries in 2024? Over the long term, exports are normally 75 per cent.



What is the wood used for?

In Northern Europe, wood is often used in buildings – as it is in the US, Canada, Japan, Australia and parts of Southeast Asia. In Japan, for example, Swedish wood is valued for its quality and strength in the construction of houses able to withstand earthquakes. This photo is of a Japanese office building constructed in part with wood from Sweden.

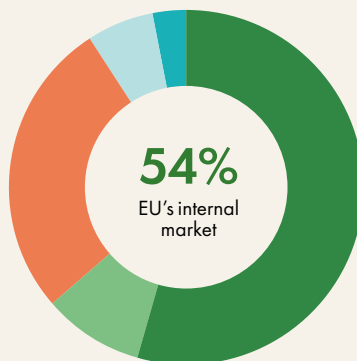
When Swedish furniture company IKEA lists the countries from which it sources wood for furniture production, Sweden is among the countries that deliver the most (along with Poland and Lithuania). In Egypt, wood from Swedish forests is used to manufacture furniture, doors and window frames.

Export regions for Swedish market pulp

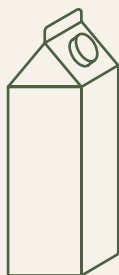
In 2024, Sweden produced 11 million tonnes of pulp. Sixty per cent of this production goes to integrated mills in Sweden, which cover the entire production chain from wood to finished materials – paper, board and textiles.

The remaining pulp production (4.4 million tonnes) is mainly exported.

Asia is an important market for Swedish pulp producers. Even so, more than half – 54 per cent – of Swedish market pulp is exported to EU's internal market, of which 24 per cent remains in Sweden. Nine per cent goes to European countries outside the internal market, mainly the UK, Turkey and Norway, while 6 per cent is exported to the US. (2024)



- EU's internal market 54%, of which 24% stays in Sweden
- Other Europe 9%
- Asia 7%
- USA 6%
- Other 3%



30%

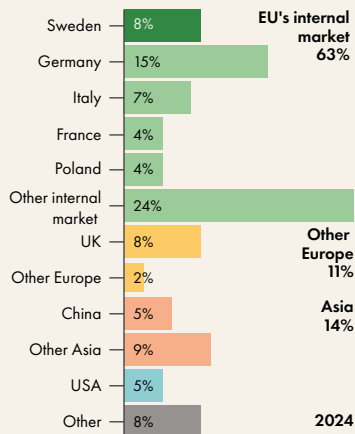
Thirty per cent of the world's beverage carton board is manufactured in Sweden

Source: AFRY

Largest markets for Swedish paper and board

In 2024, 8 million tonnes of paper and board were produced in Sweden. Most of Sweden's paper and board production – 63 per cent – goes to the EU's internal market. The UK is also an important market.

In 2024, deliveries to the US accounted for 5 per cent and deliveries to China for 5 per cent, of Sweden's total paper and board exports.

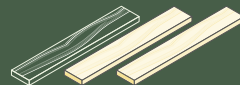


Did you know that...

... 90 per cent of Swedish pulp and paper production is exported? (2024)

2 out of 3

Swedish sawnwood products are delivered within Europe.

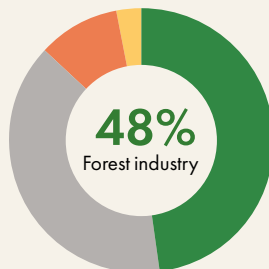


Forests are important for Sweden

Exports account for a full 54 per cent of Sweden's gross domestic product (GDP). Swedish core industries are a key component of Sweden's economy, accounting for a significant share of the country's exports of goods.

In 2024, the forest, mining, steel and metal, and non-metal mineral product industries exported goods worth €35 billion. The forest industry accounted for €17 billion of this amount – 48 per cent.

Source: Swedish Association of Industrial Employers (2025)



- Forest industry 48%
- Steel and metal industry 39%
- Mining industry 10%
- Other non-metallic mineral products 3%

3%

The forestry sector contributes three per cent to Sweden's GNP (2022)

140,000

Number of people employed in the forestry sector in Sweden

Source: Swedish Association of Industrial Employers (2025)



Photo: iStock

The forest warms us

Compared with many other countries, Sweden's energy system uses a low proportion of fossil energy. One reason for this is the availability of forest biofuels.

In 2022 bioenergy accounted for 54% of Europe's renewable energy mix, avoiding 300 million tonnes of CO₂ emissions annually. The sector directly contributes to Europe's energy security, reducing dependence on external energy imports while fostering rural economies and local employment.

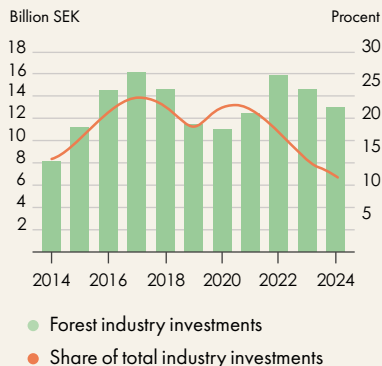
Source: Bioenergy Europe

Part of the green transition

The Swedish forest industry invested more than €6 billion in new technology and facilities between 2020 and 2024.

These investments were often designed to increase production capacity, improve product quality, or as part of the green transition – e.g., increased electrification of machinery and transports to reduce the need for fossil fuels.

Swedish forest industry investments and share of total industry investments



130

The 130 members of the Swedish Forest Industries Federation operate 260 facilities – including saw-, pulp, paper and board mills – throughout Sweden



Importance of the bioeconomy in times of uncertainty

A bioeconomy is an economy based on the use of renewable biological resources from forests, land and the sea to produce food, materials, energy and services.

A well-functioning bioeconomy, based on a continuous supply of domestic, easily accessible raw materials, is crucial not only for Europe's competitiveness, but also for its security. The forest industry can supply, for instance, materials for building

houses and bridges, for food packaging, healthcare products and various energy services, as well as transport infrastructure and logistics. A strong industry also creates significant job opportunities.

The forest-based bioeconomy has enormous untapped potential and is a key component in the transition to more sustainable and resilient development.



Climate benefits

AND HOW THE FOREST CAN CONTRIBUTE EVEN MORE

Increasing carbon storage and reducing emissions are key tools for combatting global warming. Growing forests and products made from forest raw materials are essential for mitigating climate change.

Forests and wood-based products play a vital role by capturing carbon through photosynthesis and storing it in trees and wood products, reducing greenhouse gases in the atmosphere.

The UN Climate Panel has determined that global greenhouse gas emissions need to be halved by 2030 if the 1.5°C degree target is to be achieved. So there is no time to waste.

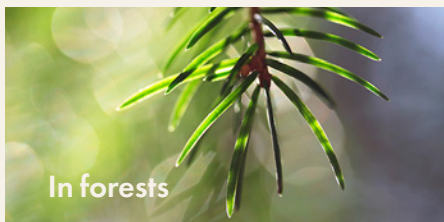


In 2024, the Swedish forestry sector's total climate benefit amounted to 97 million tonnes of carbon dioxide equivalents (CO₂e)

97

Swedish forestry sector's climate work

CARBON STORAGE



In forests

32 million tonnes
CO₂e

Swedish forests sequestered net 32 million tonnes of CO₂e in 2024.

Growing forests bind and store carbon dioxide in trees and soil. Maximising forest growth requires thinning and clearing, choosing the right planting material, fertilising, and preventing damage to the forest such as grazing damage.



In wood-based
products

6 million tonnes
CO₂e

In 2024, the Swedish forest industry's production of wood-based products increased society's carbon stock by the equivalent of 6 million tonnes CO₂e.

Wood-based products store carbon.

Because carbon remains in tree fibres, long-lived and recycled products are beneficial for maximising carbon stocks.

ISO standard for calculating climate benefits

International standard ISO 13391 can be used to effectively calculate the climate impact of forestry activity and wood-based products. It covers not only carbon storage but also substi-

tution – the use of wood-based alternatives in place of fossil-intensive materials. The standard can be applied at the national level as well as for individual companies and organisations.

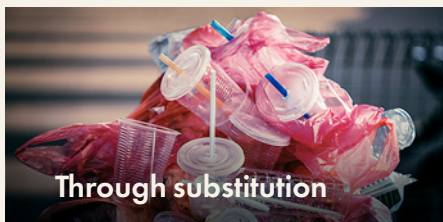
REDUCED EMISSIONS



-4 million tonnes
CO₂e

In 2024, the Swedish forest industry generated emissions corresponding to 4 million tonnes CO₂e.

The Swedish forest industry's production is essentially 100% fossil free. Emissions generated by the industry come mainly from machinery and transports. The industry is actively working to reduce these emissions.



63 million tonnes
CO₂e

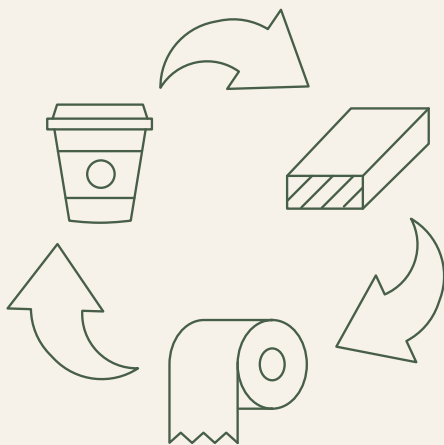
In 2024, products from the Swedish forest industry prevented the emission of approximately 63 million tonnes CO₂e from other materials and energy sources.

When renewable forest products replace fossil-intensive alternatives, fossil fuels and materials can remain where they are, underground.

Nature's double dividend

Sweden's 2024 territorial greenhouse gas emissions amounted to 47.5 million tonnes CO₂e. The same year, the Swedish forestry sector's total climate benefit amounted to 97 million tonnes CO₂e.

The Swedish forestry sector therefore provides climate benefits equivalent to nearly twice the country's total emissions.



Same climate benefit – different methods

Boards and planks are examples of long-lived products. They can be used to construct buildings or furniture that have a long lifespan.

Disposable paper cups are an example of a circular product. When recycled, the fibres continue to store carbon – just like fibres in a plank.



The importance of avoiding fossil-based products

When wood-based products and fuels replace those produced from oil, carbon or natural gas, this is called 'substitution'.

Examples of this include the replacement of concrete and steel with wood, of plastic packaging with paper packaging, of fossil diesel with biofuels, and of oil or coal heating with wood chips.

Growing forests play a key role as carbon sinks. But sustainable development also requires the avoidance and replacement of fossil materials.



Circularity

SWEDISH FOREST INDUSTRY'S RECYCLING POWER

Wood fibres can be reused and recycled into new products, often many times.

Wood-based products are part of a natural, circular cycle that begins and ends with photosynthesis – an essential process for a functioning circular economy.

Fresh and recycled fibres complement each other in Europe's fibre supply. Fresh fibres dominate in forest-rich countries like Sweden, while recycled fibres are more common in densely populated areas—but fresh input is always needed to sustain the cycle.

Source: CEPI

In 2024, 75 per cent of all
paper and board consumed
in Europe was recycled

75%

A photograph of a stack of wooden pallets in a warehouse. The pallets are made of light-colored wood and have 'EPAL' and 'EUR' markings. They are stacked in a way that shows the top and side of several pallets. The background is dark, and there are blue vertical pipes or columns visible. The lighting is warm and focused on the pallets.

A circular success

Wood-based packaging is reusable, inexpensive to manufacture, and has a high strength-to-weight ratio.

Sweden developed a standardised pallet back in 1947, and the EUR pallet has been the standard in many countries since the 1960s. It facilitates various types of transports, and can often be up to 50 times or more. Source: Retursystem Byggpall

The world needs Swedish fresh fibres

The Nordics and the rest of Europe have a well-developed circular system for paper fibres. Paper and board from Sweden and Finland are largely recycled by the paper industry in continental Europe.

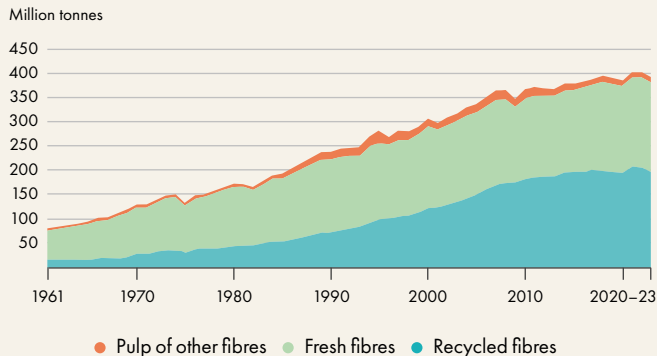
Since the mid-1990s, the proportion of recycled fibre has increased and now accounts for around 50 per cent of the raw material used in global paper production. Swedish fresh fibre is a prerequisite for this.

53

m tonnes

In Europe, the paper industry collected and recycled 53 million tonnes of paper and board in 2024

Source: CEPI



On a global level, recycled fibres are increasingly being used in paper production. For some food packaging and hygiene products, fresh fibres are more suitable than recycled fibres.

Raw material use in paper and board production

In Sweden, which has immediate access to raw materials, paper and board production uses primarily fresh fibres from the forests. Eight million tonnes of paper and board were produced in Sweden in 2024.

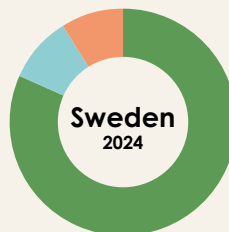
Because a sizeable portion of this production is delivered to the EU's internal market and to countries outside of Europe, the world benefits from Swedish fresh fibres. As recycled fibres, it then becomes a key component in other countries' paper and board production.

A total of 79 million tonnes of paper and board was produced in Europe in 2024 – and 51 per cent of the raw material used were recycled fibres.

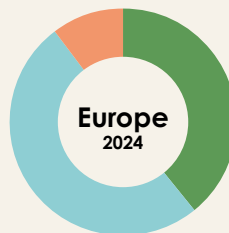
Did you know that ...

in a circular economy, things are used for as long as possible? When they break, they're repaired, repurposed or recycled.

Raw material consumption in paper and board production 2024



- Pulp (fresh fibres) 81.5%
- Recycled fibres 9.5%
- Filler, coating etc 9%



Europe 2024

- Pulp (fresh fibres): 39%
- Recycled fibres: 50.7%
- Filler, coating etc. 10.3%

Source: CEPI 2024



A hero on the shelf

Good packaging protects its contents all the way to the customer, and is easy to reuse or recycle.

Packaging can extend the shelf life of food and enable its transport over long distances. This is important in a world where one in ten people go hungry, while nearly one-fifth of the world's food production goes to waste.

Forest industry's circularity

How the forestry sector's circularity works:

Photosynthesis

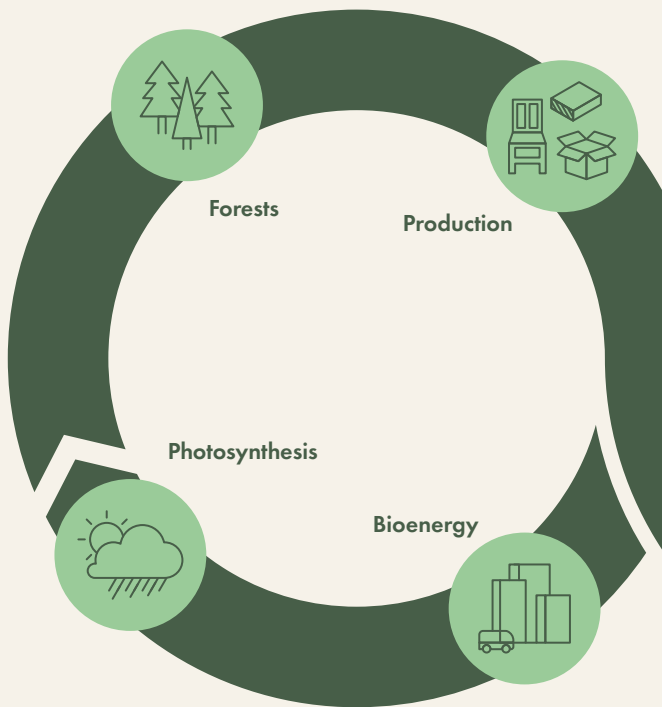
Growing trees convert sunlight, carbon dioxide in the air, and water in the soil into wood. Through photosynthesis, carbon dioxide is sequestered as carbon in growing plants.

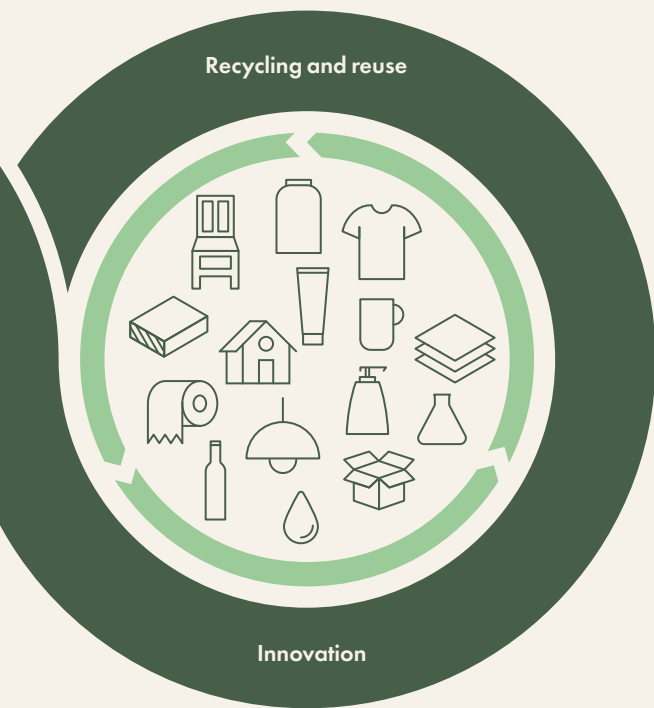
Forests

Trees are harvested when they are fully grown. After felling, new seedlings are planted.

Production

Harvested trees are made into products – such as sawnwood for houses and furniture, or board, paper or textiles. These products continue to store the carbon sequestered by the trees as they were growing.





Innovation

Products and processes to increase resource efficiency and degree of processing are being continuously developed.

Recycling and reuse

Fibres can be reused many times. Fibre-based packaging has a high recycling rate, and there is growing interest in reusing more wood-based building materials.

Bioenergy

When wood fibres have reached the end of their useful life, they can be utilised along with other forest industry residues to produce bioenergy for heating, electricity and fuel. This process releases biogenic carbon dioxide, which is absorbed by growing trees through photosynthesis. The circle is now complete.



Forest industry environmental work

The Swedish forest industry has been working systematically with environmental issues since the 1970s. This work – distinguished by a holistic approach to raw materials, energy, waste and transports – has produced results.



98 per cent of all pulp is produced by environmentally certified mills. The corresponding figure for paper is 97 per cent

98%

Producing more – but emitting less

Since the 1970s, the forest industry's emissions of organic material to water have decreased by more than 90 per cent, and emissions of sulphur compounds by over 95 per cent.

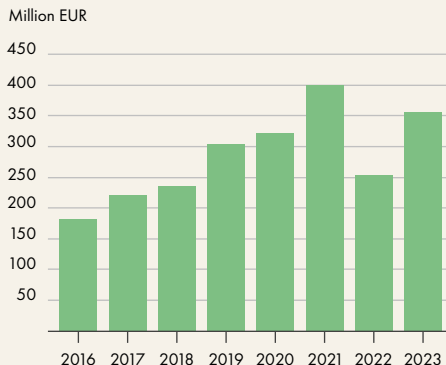
At the same time, production has increased 50 per cent.

Environmental impact is prioritised

For many years, the Swedish forest industry has been investing significant resources in reducing its environmental impact. Environmental protection expenditures totalled nearly €368 billion in 2023. A large portion of this amount was dedicated to water treatment.

Source: Statistics Sweden (SCB)

Expenditures on environmental protection Pulp, paper and wood products industry



The importance of water

The pulp and paper industry relies on water for its processes and for cooling. Around 95 per cent of the water used by Swedish mills is returned to waterways. The water is reused and purified in several stages.

Most of the remaining 5 per cent is converted to steam.



Energy and transports

The availability of energy and efficient transports are crucial requirements for a well-functioning forest industry. The forest industry is one of Sweden's most energy-intensive sectors, and is Sweden's largest transport purchaser.

At the same time, the Swedish forest industry produces about half of the electricity it consumes. And transports in Sweden are often more energy efficient than in other countries, due to the use of rail freight transport and extra-large lorries.



Photo: Södra

Thanks to the use of self-generated
bioenergy, the Swedish forest industry's
processes are 96 per cent fossil free

96%

Energy

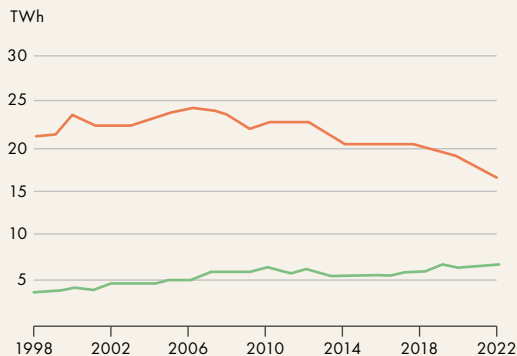
Industry is reducing its electricity requirements

Sweden consumed a total of 135 TWh of electricity in 2023, of which the forest industry consumed 18 TWh.

A shift from mechanical to chemical paper and pulp production has reduced electricity consumption. In parallel with this, the pulp and paper industry is increasing its internal electricity generation.



Electricity consumption, 1998-2022 TWh



◀ Forestry is an energy-intensive industry. But even though it uses a lot of energy and heat, the Swedish forest industry is essentially self-sufficient.

- The pulp and paper industry's total electricity consumption
- The pulp and paper industry's internal electricity generation



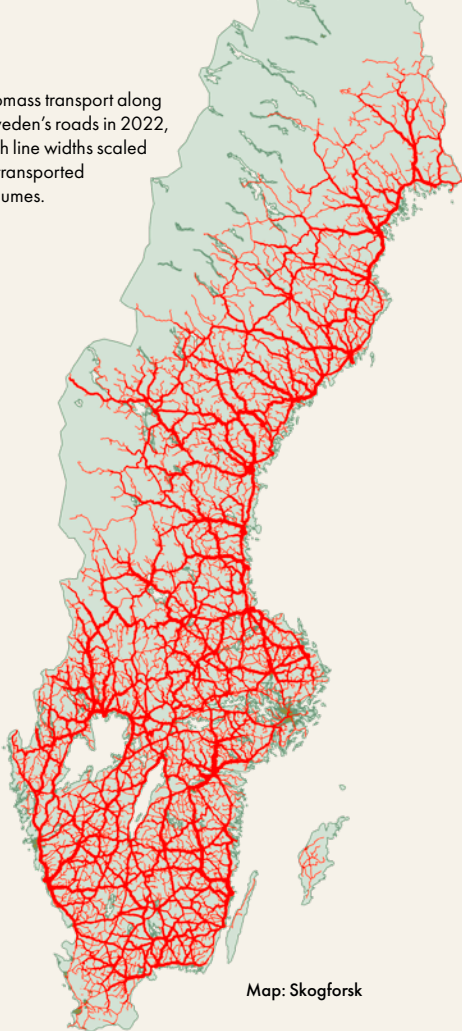
Powering the forest industry

The forest industry accounts for around 15 per cent of Sweden's total electricity consumption. Half of this electricity is produced by the industry itself.

Forest industry's total consumption is comprised of

- 9 TWh purchased electricity
- 6 TWh self-generated energy (through own processes)
- 3 TWh of electricity from wind and hydropower plants owned by forest industry companies

Biomass transport along Sweden's roads in 2022, with line widths scaled to transported volumes.



Map: Skogforsk

Transports

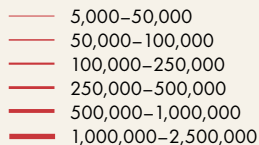
Forest industry's circulatory system

The forest industry is Sweden's largest transport purchaser. Lorries and rail transport are the primary means of transport used within Sweden, while shipping is predominantly used for exports.

Every year, timber lorries collect over 70 million tonnes of forest raw materials from 280,000 individually harvested stacks of timber in Swedish forests. Many roads in Sweden are used, as shown on the map.

Forest industry road transports are often quite short due to exchange of forest raw material between companies as well as train terminals. A Swedish timber lorry transports its load an average of 90 kilometres. The industry aims to achieve fossil-free road transports within Sweden by 2040.

Total flow (tonnes)



Infrastructure in the forest

The forestry sector has built and maintains a road network covering 200,000 kilometres throughout Sweden.

These roads are essential for transporting timber, and are also important for everyone who wants to spend time in the

forest and countryside for recreation and berry picking.

The extensive road network also facilitates firefighting efforts – and may become even more important as Sweden's preparedness increases.



The Swedish forests

Sweden is a country with extensive forests, and active, sustainable forestry is essential for a viable forest industry.

A long-term focus on forest management methods that promote forest growth is one reason why the total volume of trees in Swedish forests is twice as large as it was 100 years ago – even though harvesting has increased.

Conditions for greater biodiversity also continue to improve.

Foto: Johan Gunseus Vikdahl

Sweden's land area
that is forested

70%

Forest coverage in Europe

Forests cover 39 per cent of the EU's land area. In contrast to many areas of the world where deforestation remains a serious problem, forest cover in the EU is increasing. According to Eurostat statistics, around eight million hectares of forest were added between 2000 and 2022 – **an increase of 5.5 per cent.**

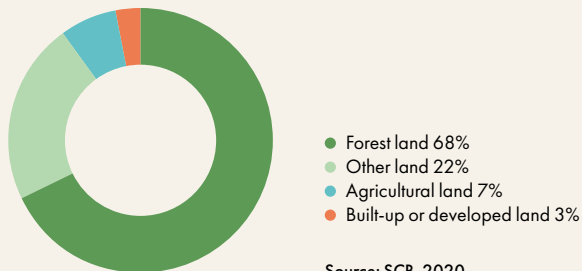
Nearly 70 per cent of Sweden's land area is forested. Three per cent is comprised of built-up areas, and the remainder of marshland, agricultural land and other land.

Source: Statistics Sweden (SCB)



Land use distribution

Sweden



Source: SCB, 2020

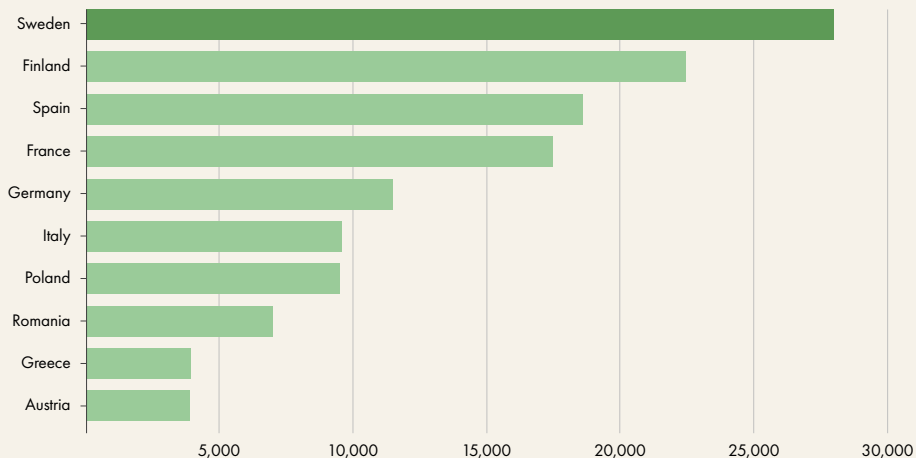
European forests

The five EU-states with the largest forest areas are Sweden, Finland, Spain, France and Germany.

The many different types of forests in the EU reflect the Union's geographical and climatic diversity (boreal forests, alpine coniferous forests, etc.).

Forest areas in the EU

By country, 1,000 hectares

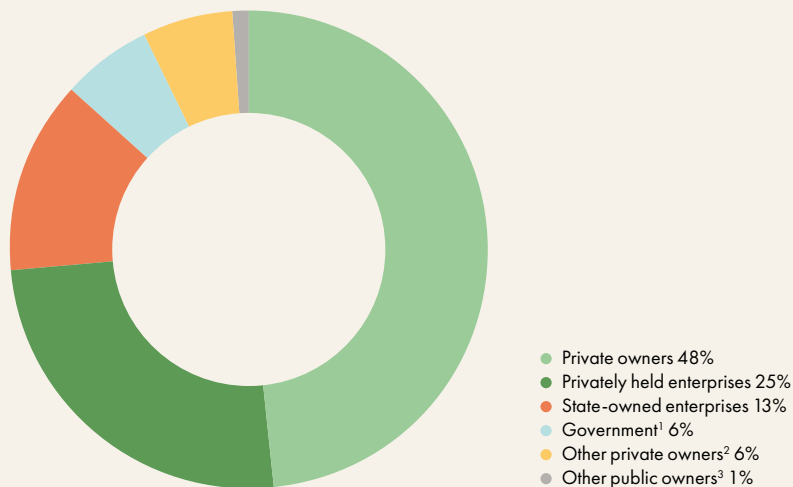


Source: Eurostat

Who owns the Swedish forests?

Approximately one quarter of Swedish forests are owned by private forest companies. One quarter are owned by the state, municipalities and the Church of Sweden. Almost half of Swedish forests are owned by 308,000 private individuals – which means that 3 per cent of Swedes are forest owners. In Sweden, forests are often passed down from generation to generation.

Source: Swedish Forest Agency, 2024



¹ Government authorities, foundations, etc.

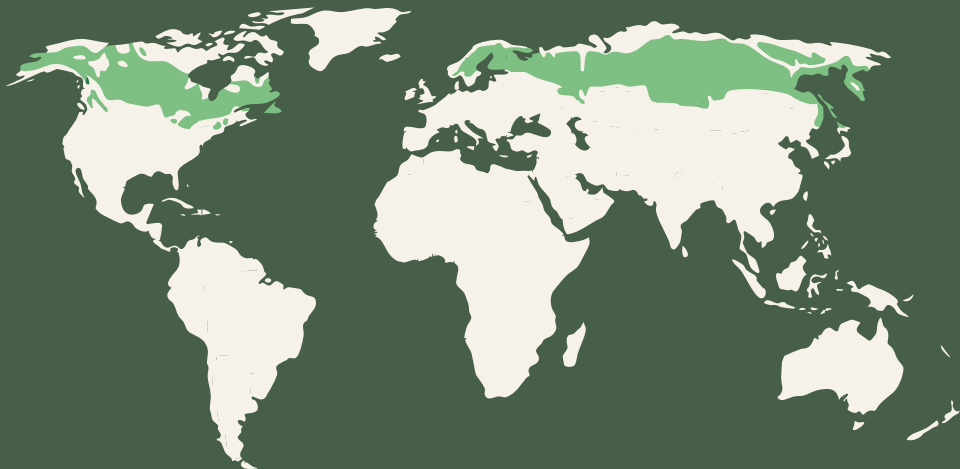
² Common land, common forest, Church of Sweden

³ Municipalities, county councils, foundations, funds, etc.

Functioning of the boreal forest

The boreal forest is a forest ecosystem extending from Siberia in the east through northern Scotland to North America. Although these areas differ greatly in terms of climate, type of soil, etc., essentially the same type of forests are found across the entire region. Coniferous trees dominate, and these

forests have less species diversity than tropical forests. Forest fires are a natural part of the boreal forest's dynamics and have shaped its landscape over a long period of time. This is one reason why clear-cutting works so well in Swedish forests – it creates the same type of 'disturbance' as fires used to cause.

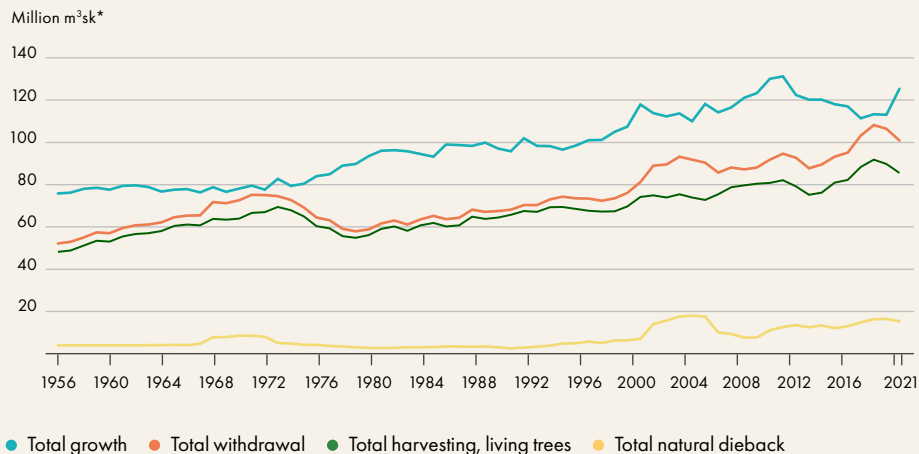


Forest growth exceeds harvesting

The total volume of trees in Swedish forests is now twice as large as it was 100 years ago. This is due to a long-term focus on replanting and on management methods that promote forest growth. Trees are denser, grow faster, and the plant material is of better quality.

The diagram below shows how much the

forest grows each year. 'Total withdrawal' shows the amount harvested through forestry operations, along with trees that have fallen due to natural competition or to snow or storm damage, etc. The effects of the two major storms of 2005 and 2007 can be clearly seen in the diagram.



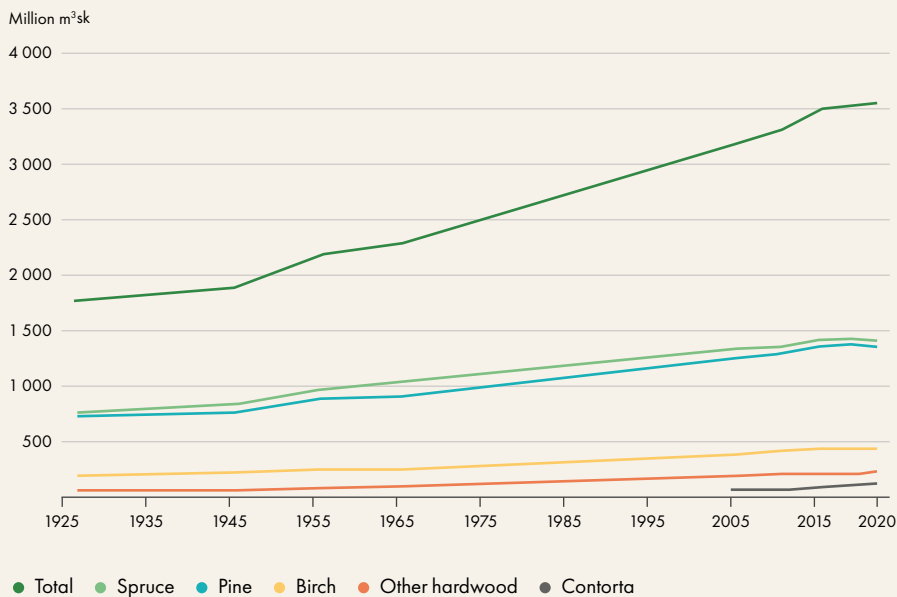
*All land-use classes apart from built-up land. Including mountain land as from 2017. Outside formally protected areas pursuant to 2022 boundaries.

Five-year average, stated as middle year; e.g., 2018-2022 = 2020 Source: Swedish University of Agricultural Sciences

Timber volume development since the 1920s

The volume of trees in Swedish forests has been steadily increasing since the 1920s. Timber volume is a measurement of the total amount of usable wood in a forest. The diagram shows how Swedish forests are

slowly becoming more diverse. While conifers such as pine and spruce are the most prevalent tree species, the proportion of birch and other broad-leaf trees is increasing.



Five-year average, stated as middle year; e.g., 2018-2022 = 2020 Source: Swedish University of Agricultural Sciences

The Swedish forestry model

Seventy-five per cent of Swedish forests are managed.

Clear-cutting is the predominant forest management system in Sweden. It is combined with various environmental protection measures, ranging from the preservation of entire forest areas to specific actions that promote biodiversity in each management activity (for example, leaving broad-leaved trees and dead-wood in place).

The average size of a Swedish clear-cut area is 4.5 hectares, and the median size is 2.5 hectares. The farther south you go, the smaller the clear-cut areas.

Historically, clear-cutting became the standard method in Sweden for both productivity and environmental reasons. In the 1950s, there was criticism of the forest degradation caused by selective dimension cutting. The new scientific method of clear-cutting resolved many environmental problems that forestry faced then, and still faces in other parts of the world.

With the clear-cutting method, forest management follows a cyclical process with various phases, just like in agriculture.

Forest seedling planting

The forest owner takes measures to prevent damage from pests, storms, snowstorms or fires.

Active forest management

The trees are regularly cleared and thinned over the next few years to create room for growth.



Reforestation

After felling, new trees are planted. The soil is prepared to support the young plants and create the best possible conditions for them.

Harvesting

It takes around 60–120 years for trees in Sweden to mature. When it's time to harvest, most trees in the stand are felled.

Continuous cover forestry

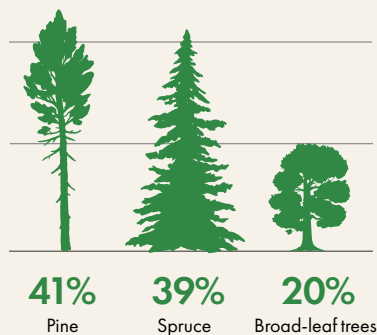
Continuous cover methods are used as a complement to clear-cutting. This is particularly suitable in locations close to urban areas and those with high nature conservation values. Other reasons for applying continuous cover methods include preserving hanging lichen, a crucial consideration for reindeer husbandry.

Stable for 40 years

Regeneration felling is done on around 200,000 hectares (approx. one per cent) of Sweden's forest area each year, at around 60,000 locations. This has been a stable annual harvest for the past 40 years. Harvested wood volumes have increased around 50% during the same period, the result of long-term investments in forest management that have increased the timber volume that is harvested.

Source: Swedish Forest Agency

Swedish forests by tree species





400 million forest seedlings are planted every year

Pine has been the most common species of seedling delivered over the past several years, while interest in spruce has decreased somewhat. One reason more pine is being planted is that it is less sensitive to storms and drought.



Swedish Forestry Act

The Swedish Forestry Act of 1993 mandates that environmental and production objectives must be given equal weight, that trees must be sufficiently mature before harvesting, and that forest owners are obliged to reforest after felling.

Responsible harvesting is a distinguishing characteristic of Swedish forestry, which incorporates a rigorous process of regeneration that ensures harvested trees are replenished. This sustainable approach is evidenced by the planting of approximately 400 million trees annually and a harvesting cycle of 60 to 120 years. The Forestry Act prohibits the harvesting of forests that are less than 100 years old in parts of Sweden.

Photo: Johan Gunseus Vikdahl

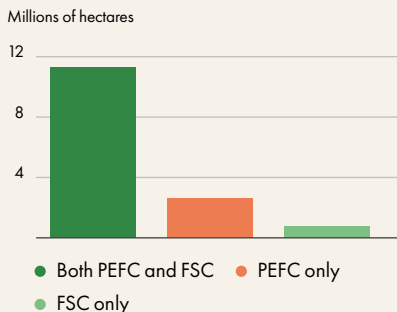
Nature conservation

67% of Swedish forests are certified

There are two established, international certifications in Sweden for responsible forestry: PEFC and FSC. In 2024, close to 14.7 million hectares of productive forest land was certified – 67 per cent of all productive forest land that is not formally protected.

Source: Swedish National Forest Inventory 2024

Certified productive forest area by certification type



Changes being felt

Biodiversity is crucial for healthy, viable forests that are well equipped to manage climate change and extreme weather conditions.

In Sweden, forest owners are free to choose how to manage their forests, within the framework prescribed by legislation.

The effects of forestry policy reform and the Forestry Act that came into force in the mid-1990s are now starting to be felt. Government regulations and subsidies, along with increased knowledge and altered views on sustainability, have had a major impact on the Swedish forests of today.

There are many reasons why forests are not managed. It may be that the land is unproductive, such as in forested wetland or rocky areas, or that the area has high nature conservation values.

Percentage of forests under management:
Approximately

75%

Percentage of forests that are not managed:
Approximately

25%

Distribution of unmanaged forests:

Source: Statistics Sweden

9%

of Swedish forest land is formally protected – e.g. as nature reserves.

5%

of total productive forest land is voluntarily set aside.

11%

is unproductive forest land – e.g. forested wetland or rocky outcrops

Voluntary set-asides

1.4 million hectares have been voluntarily set aside. These are areas of productive forest land where the forest owner takes responsibility for preserving valuable habitats, cultural heritage sites or social values.

Source: Swedish Forest Agency, 2024

Unproductive forest land

Forested wetlands or rocky outcrops where trees do not produce an average of one cubic metre of timber per hectare per year are called wasteland or unproductive forest land.



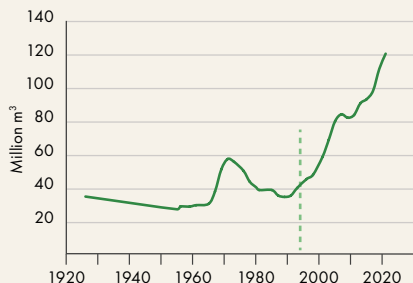
Foto: iStock

How to encourage diversity

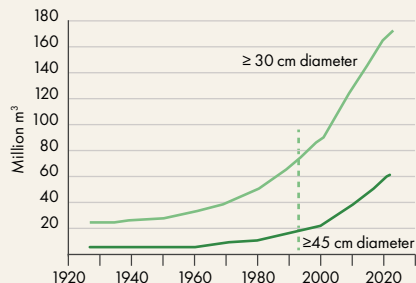
Conditions for biodiversity are created by saving an area during harvesting, leaving groups of trees in place, saving deadwood or clearing an overgrown cottage foundation. This is called basic retention, and 8–11 per cent of Swedish forests are left untouched during harvesting in this way.

Positive trend since the 1990s

Three times as much hard, deadwood



2.5 times as many thick broad-leaf trees



Swedish forests becoming more diverse

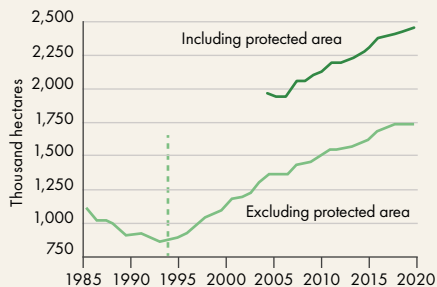
One way to measure biodiversity is to examine the conditions that allow various species to thrive. Dead trees – often referred to as deadwood – are essential for many species, which is why they are both created and left to lie in the forest after harvesting. The number of old trees and old forests has increased and forests are more diverse, which promotes biodiversity.

The diagrams above show how several trajectories change direction in the 1990s with

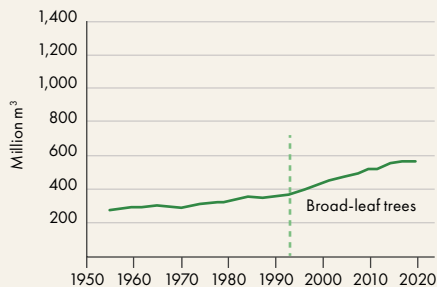
the introduction of a new forest policy, with equal weight given to production and the environment. Sweden also introduced a new Forestry Act in 1994. Forest owners were given more guidance and more freedom in their forestry operations, along with more responsibility to manage their forests in a sustainable manner. Detailed regulation was abolished, various types of subsidies were eliminated and views of sustainability changed.

Source: Swedish University of Agricultural Science

Nearly twice as much old forest



50% more broad-leaf trees in forests



Vertical dotted line marks when the Forestry Act came into force.



Deadwood creates life

Old trees and stumps that are left in the forest play an important role. Many species rely on this type of deadwood for nourishment, places to grow, habitats or protection.

Did you know that ...

....trees absorb the most carbon dioxide when they're growing the most? Growth slows when trees grow old, and so does their ability to absorb carbon dioxide.

Fires are less frequent

Historically, Swedish forests burned more frequently and extensively – around one per cent of forests are estimated to have burned every year. With modern methods, we are now often able to limit the spread of fire. Today, an average of 0.016 per cent of Swedish forests burn each year.

Old trees provide new habitats

Outside the formally protected areas in Swedish forests, there are now more trees that are over 180 years old. Although old trees do not necessarily provide valuable habitats per se, hollow trees and other spaces are often beneficial for many forest species.

Source: Swedish University of Agricultural Science



61%

of formally protected forest land is located in Sweden's mountainous region

Source: Swedish Environmental Protection Agency

30,000

Number of forest-dwelling species in Sweden

More diverse forests

Broad-leaf trees are seldom planted in Sweden, since they are well able to regenerate naturally. Since 1953, the number of broad-leaf trees has increased 53 per cent. This is attributable to several factors, including certifications that promote species diversity and the practice of sparing broad-leaf trees during clearing.



Research and innovation

Swedish forestry and the forest industry are undergoing an expansive phase, and are world leaders in a range of research areas. The Swedish forestry sector therefore has excellent opportunities to take an active role in promoting development that is socially, economically and environmentally sustainable.

Research provides the foundation for the industry to invest in and develop solutions with long-term profitability and global competitiveness that promote more sustainable consumption and climate benefits worldwide.

Increased forest growth, more wood used in construction, more bio-based materials, and improved production processes are four areas where the forest sector wants to focus research

4

In the Swedish Forest-based Sector's **Research Agenda**, researchers and the forest sector present needs an inventory of immediate research and innovation, with four prioritised areas:

1. Increased growth of forest raw material in a forestry system that is digitalised and sustainable, that ensures functioning ecosystems and biodiversity, and that minimises the risks of damage and fires.
2. Increased use of wood in construction as a significant and cost-effective climate measure, and as a natural part of society's sustainable development.
3. More bio-based materials and products to replace fossil alternatives, and to pave the way for more bio-based solutions in new markets.
4. Further developed production processes as the basis for continued global competitiveness, and to ensure efficient use of forest raw materials and energy.

Download and
read the Swedish
Forest-based
Sector's Research
Agenda:



Key areas for research

The Forest-based Sector Technology Platform (FTP) is the meeting place for industry, forest owners and public authorities to discuss and build up a critical mass of knowledge on common research and innovation needs for the sector, and to decide on the best ways to co-operate.

FTP's core document, Vision 2040 of the European forest-based sector, looks

ahead at maximising the potential of research and innovation in the forest-based sector to bring about resilient ecosystems, smart products and social growth within the circular bioeconomy.

Download and
read Vision 2040



Photo: Unsplash



Sources, unless otherwise specified: Swedish Forest Industries Federation
Currency conversion rate rate of 1 EUR = 10.88 SEK has been applied (May 2025).
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www.forestindustries.se

