

# Swedish forestry

Forest land covers 70 percent of Sweden

## Forest and forest land

Sweden is the third largest country by area in Europe, and 70% of it is forest. The total area of forest land is 28 million hectares. 25% of this forest land is protected from forestry according to different initiatives, as voluntary set-aside forest land, forest land formally protected from forestry by the Forest Act and Natural parks and reserves.

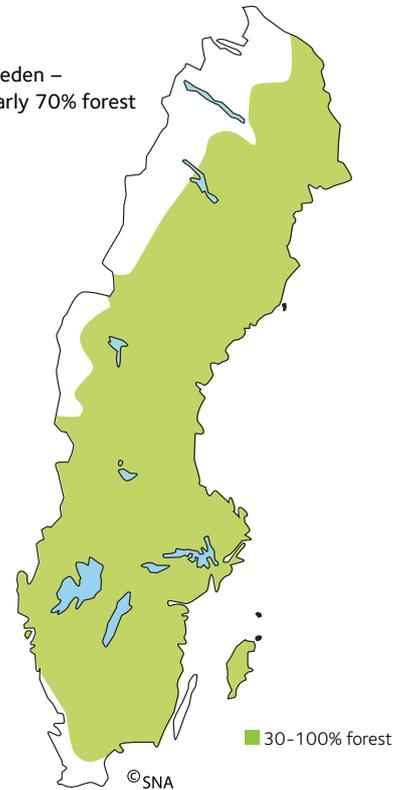
Naturally renewable, the forest is one of Sweden's most important resources, playing a central role in a sustainable society. The forest resource must be used in a way that maintains productivity and biodiversity – renewal and growth without damaging other ecosystems. Swedish forests are primarily boreal. The total standing volume

is about 3 000 million m<sup>3</sup>, of which 41% is spruce/whitewood (*Picea abies*), also called Norwegian spruce, and 40% pine/redwood (*Pinus sylvestris*), also called Scots pine. 18% is birch and 6% consists of other deciduous trees.

In the southern, hemi-boreal parts of Sweden, a wide belt of mixed forests with coniferous and deciduous trees is found. The very southernmost parts are nemoral and thus originally covered with deciduous forests.

The coniferous forests in Sweden are sometimes referred to as the western taiga. The rotation period of the forest varies from 65–110 years depending on the geographical location.

Sweden – nearly 70% forest



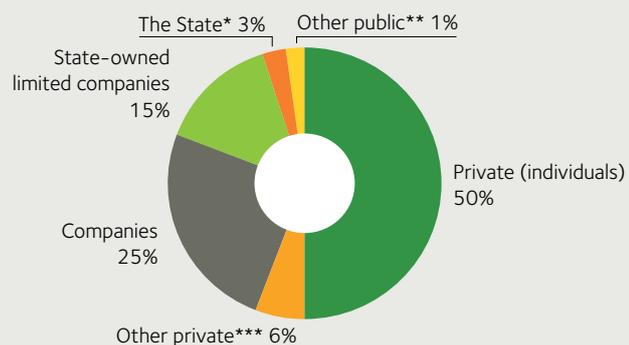
Forest land in Sweden

## Ownership structure

50% of Sweden's forests are owned by private individuals, 25% by large forest companies and 25% by the state and other public organizations. A major part of the mountain forest is state-owned.

The average size of a privately owned forest is roughly 50 hectares. In total, there are about 350 000 private forest-owners in Sweden, of whom 70% live on their properties.

### OWNERSHIP OF FOREST LAND



\*State funds, foundations, etc.

\*\*Municipalities, county councils, foundations, funds, etc.

\*\*\*Common lands, forest commons, the Church of Sweden.

Source: Swedish Forest Agency

## The forests are growing

Since the 1920's the total standing volume of Swedish forests has increased by over 68% to around 3 000 million m<sup>3</sup> today. The fact that the forests today are growing faster than at the beginning of the 20th century can largely be explained by changes in land use and

improved forest management. Annual growth is about 120 million m<sup>3</sup> and annual felling is around 80 million m<sup>3</sup>. Each year the volume of standing timber increases by around 40 million m<sup>3</sup> (net annual increment).



## Managing the forests for sustainability

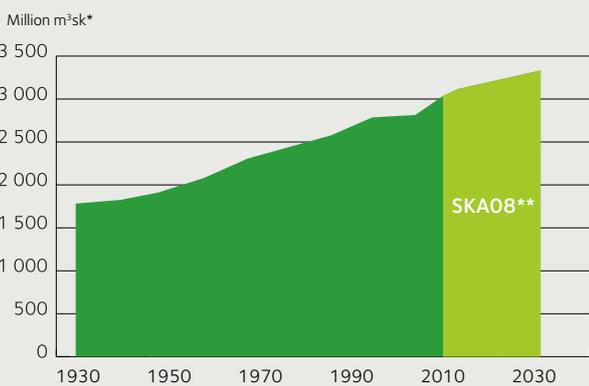
**Sustainable forest management** is not just about preserving the quantity of forests for future generations, it is also about respecting the biological diversity of the forests, the ecology of the species living within it, and the communities affected by the forests. Sustainable forest management will, in other words, maintain the balance between economic

wood production and respecting wildlife and vegetation, outdoor recreation, employment and local interests.

About 100 years ago Sweden introduced forestry legislation that limited the amount of timber that could be harvested, and imposed an obligation on woodlot owners to carry out regeneration after felling, contributing

to sustainable management. Sustainable forestry ensures an increase in the stock of growing wood – for each tree that is cut down at least two new ones are planted. Since then forest resources have doubled. Forest policy places equal emphasis on environment and wood production.

### TREND FOR STANDING VOLUME



\*m<sup>3</sup>sk = Forest cubic metres  
\*\*SKA08 = Forest impact analyses

Source: Swedish Forest Agency

### GROWING STOCK, INCREMENT AND FELLINGS



\*m<sup>3</sup>sk = Forest cubic metres

Source: National Forest Survey

## Modern sustainable forest management

**Swedish forest management** is moving towards methods that enhance natural processes and produce authentic forest structures which are environmentally appropriate, socially beneficial and economically valuable.

Site-specific forestry takes into consideration the varying conditions of the individual site. This ensures greater variety and minimizes negative effects on animal and plant life. Major resources are being committed to conservation, education and development. The forest worker of today is a skilled and environmentally conscious professional. Protected zones are left untouched

on the banks of waterways, old trees are saved and dead wood is left in the forest. One consequence of this awareness is that large scale clear-cutting is almost entirely abandoned today. It is estimated that the large industrial forest enterprises now leave some 10% of the potential harvest standing for ecological reasons.

**Sweden enjoys a** high level of forest protection. About 4 million hectares of productive forest land are formally protected as national parks, nature reserve habitat protection areas and nature conservation agreements.

## Reforestation – tough protection

**The Swedish forest** industry knows that its future is linked to the protection and expansion of its forests. This, in combination with strong, effective laws, ensures more trees are planted than harvested. Ever since 1903, the mandatory requirement for regeneration after felling has had a central role in

Swedish legislation. Annually 170 000 hectares are planted with some 370 million seedlings.

Natural regeneration occurs in about 50 000 hectares. The Swedish Forest Agency continuously monitors the results of the forest regeneration.



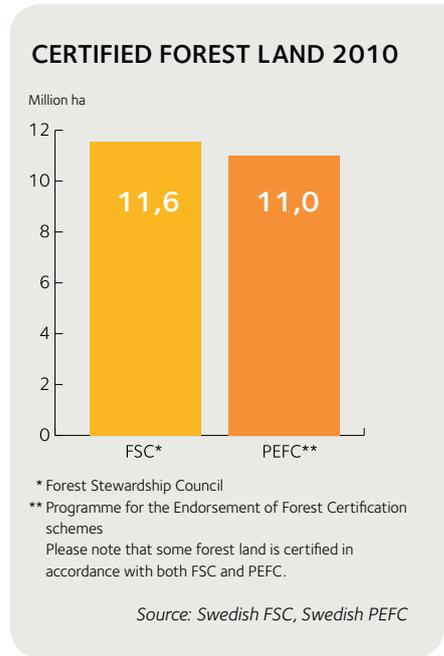
*For every tree harvested at least two new ones are planted.*

# Certification – confirmation of sustainable forest management

The demand for eco-friendly production of forest products from customers and consumers has led to new strategies from the forestry sector. The forestry sector is well aware that caring for the environment has very much become an economic issue. Nowadays, suppliers of forest products will have problems selling their products if they cannot demonstrate that the wood is coming from sustainable forestry. By using forest certification, the suppliers can demonstrate a commitment to the environment that end-users can have full confidence in. Certification is usually verification from an independent third

party that a product is in accordance with the description. Forest certification is voluntary and in addition to national forest policies.

There are two main schemes in Sweden – FSC (Forest Stewardship Council) and PEFC (Programme for the Endorsement of Forest Certification). In 2011 the FSC had 11,6 million hectares of certified forest land and the PEFC programme had 11,0 million hectares of certified forest land. As a customer you can have a high confidence in certified wood products from Sweden.



# The forest and the climate

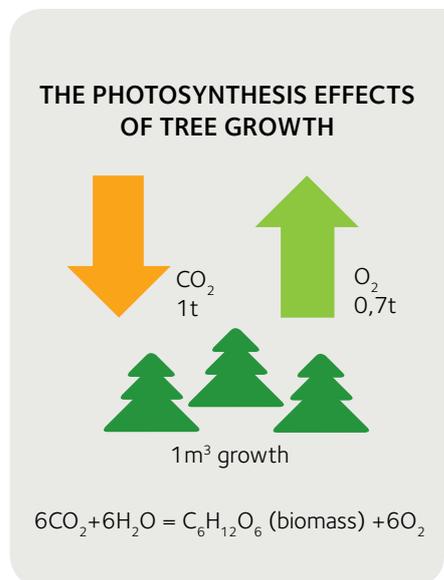
When the forest is sustainably managed, it becomes an infinite resource. The growing trees absorb CO<sub>2</sub> from the atmosphere. Throughout their life, wood products then continue to store the carbon sequestered by the harvested trees. In a typical year (2007), the combination of Sweden's forest uptake and net storage of CO<sub>2</sub> exceeded its fossil fuel CO<sub>2</sub> emissions from transport.

Through a combination of active forest management, use of logging residues for energy production, and manufacturing of wood-based products – Swedish emis-

sions of CO<sub>2</sub> can be reduced significantly. There is huge growth potential in the forests. Swedish experience of sustainable forest management stimulating net growth while protecting biodiversity can be an important model for reducing climate impact all around the world.

Source: Swedish Statistical Yearbook of Forestry 2010

Sources: Swedish Forest Agency (2011), Forestry Statistics 2009/2010, Official Statistics of Sweden, Swedish University of Agricultural Sciences (2009/2010), Swedish FSC (2011), Swedish PEFC (2011).



## SWEDISH WOOD

part of the Swedish Forest Industries Federation

Swedish Wood spreads knowledge, provides inspiration and encourages development relating to wood, wood products and wood construction. The goal is to increase the use of wood in Sweden and in selected international markets through information and inspiration.

Swedish Wood is a department within the trade and employer organisation the Swedish Forest Industries Federation. Swedish Wood is supported by the Swedish sawmill sector.

Box 55525  
 SE-102 04 Stockholm, Sweden  
 Tel: +46 8 762 72 60

info@swedishwood.com  
 www.swedishwood.com

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