## Facts and Key Figures

Swedish forest-based industry



### Climate contribution

The forest and forest-based industry products are part of a perpetual ecocycle that begins and ends with photosynthesis, with sun, water and carbon dioxide giving nutrition to growing forest. Carbon atoms serve to build up the trees and are stored in the biomass as the trees grow.

In average the forest and forest-based products reduced the global climate impact by in average 94 million tonnes of carbon dioxide (MtCO<sub>2</sub>). This compensate for Sweden's total climate



#### CARBON SINK

impact, twice.

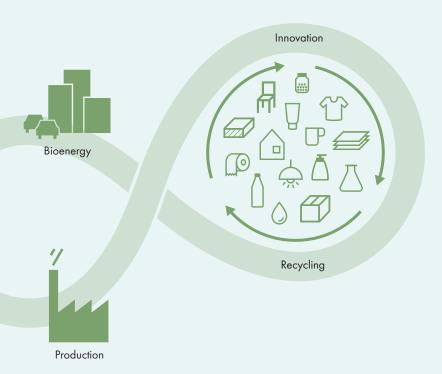
Growing forests with an increasing timber volume sink

MtCO<sub>a</sub>e/yr net

#### **FOSSIL** REDUCTION

Products from the forest replace fossil based ones

MtCO<sub>a</sub>e/yr



#### FOSSIL EMISSIONS

Fossil emissions from industrial processes, transportation and input materials

- 4

MtCO<sub>2</sub>e/yr

### OVERALL EFFECT ON CLIMATE CHANGE EFFORTS

Sweden's forest sector is climate positive with an overall climate effect of

94

MtCO<sub>2</sub>e/yr

### **Production and Trade**

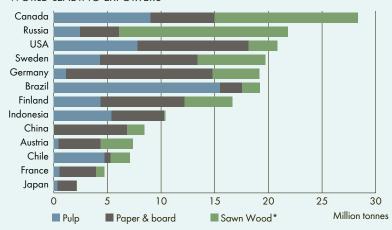


More than half of the harvest from Swedish forests is processed into different kinds of timber and refined products, such as glulam. The rest is turned into pulp, for production of paper, board, textiles and energy.

SWEDEN AND EU SHARE OF WORLD FORESTS, AND PRODUCTION OF SAWN WOOD, PULP AND PAPER



#### WORLD LEADING EXPORTERS



<sup>\*</sup>Conversion: factor 2m3 = 1 ton has been used

Source: Swedish Forest Industries Federation, CEPI, FAO

### Production in Sweden

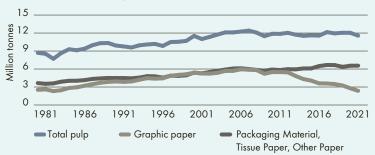
#### PRODUCTION OF SAWN WOOD



Source: Swedish Forest Industries Federation

Production of sawn wood products in the EU: 112.4 million m<sup>3</sup>

#### PRODUCTION OF PULP, PAPER AND BOARD



Source: Swedish Forest Industries Federation

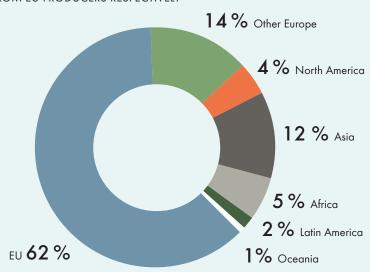
Production of pulp in the EU: 35.5 million tonnes Production of graphic paper in the EU: 22.5 million tonnes Production of packaging materials, tissue paper and other paper in the EU: 62.2 million tonnes

### Markets



The Swedish forest-based industry is a major contributor to Sweden's economy. The industry is strongly export oriented. In the forest-based industry in EU, totally 1,6 million people are employed.

### MARKETS FOR FOREST-BASED PRODUCTS FROM EU PRODUCERS RESPECTIVELY



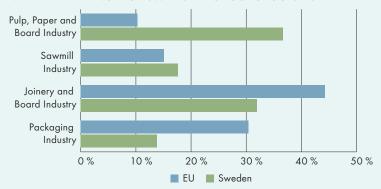
### **Export**



Forest-based products account for 10 % of Sweden's total goods exports and 3 % of total goods imports.

This entails a major contribution to Sweden's trade balance.

#### NET TRADE BALANCE FOR SWEDISH PRODUCT GROUPS 2021



Source: Statistics Sweden

Total Exports: 161 billion EUR Total Imports: 158 billion EUR

80%

of production is exported, at a gross value of

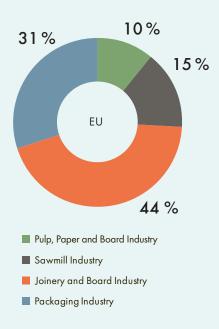
16.5

billion euro

### **Employees**



In Sweden, the forest-based sector generate a total of 70,000 direct jobs. If all subcontractors are included, there are 115,000 people employed in the sector. In the forest-based sector in EU, totally 1,6 million people are employed.

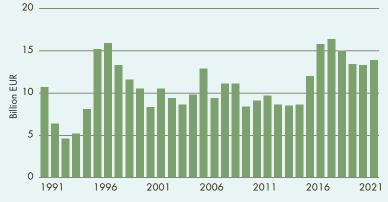


### Our member companies

Of total employment, exports, turnover and value added in Swedish industry, the forest-based industry accounts for 9–12 %.

130	50		
sawmills with an output	Pulp, paper		
of over 10,000 m³/yr	and board mills		
25.7 billion euro total turnover (2018)	6.2 billion euro value added (2020)		

#### SWEDISH FOREST-BASED INDUSTRY INVESTMENTS



Source: Statistics Sweden

### Swedish Forests



Thanks to sustainable forest management, Sweden today has twice as much forest as it did 100 years ago. For every tree harvested, at least two new ones are planted. Every year, 380 million trees are planted.

70%

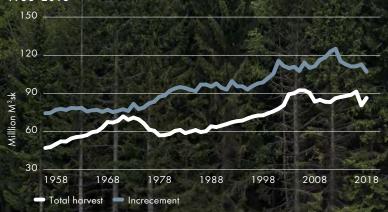
of Sweden's area is forest - 28 million hectares million cubic metres

42%

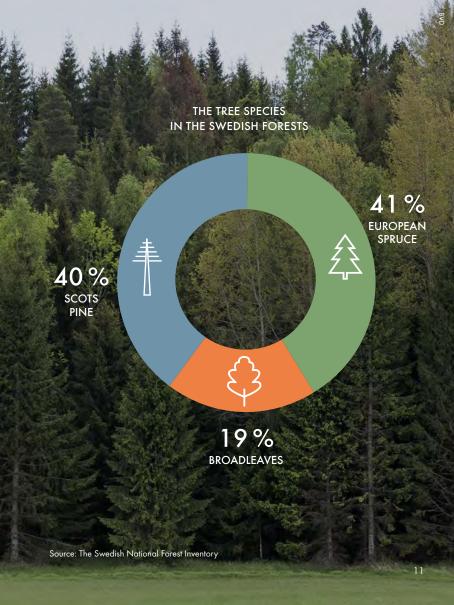
of the EU's area is covered by forest 1%

of the forest

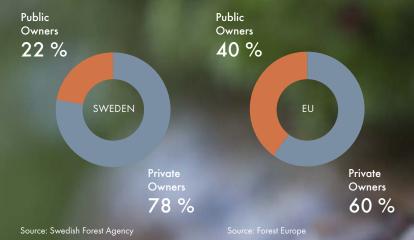
### TOTAL ANNUAL VOLUME INCREMENT AND ANNUAL HARVEST 1958–2018



Source: Swedish University of Agricultural Sciences, The Swedish National Forest Inventory



#### OWNERSHIP OF FOREST LAND



### SHARE OF FOREST NOT HARVESTED OF SWEDEN'S 28 MILLION HECTARES

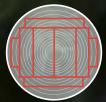
9 % Formally protected woodland	2 % Conservation areas when harvesting
4 %	12 %
Voluntary set-aside	Unproductive woodland

Source: Statistics Sweden

#### THE WHOLE TREE IS USED



The parts of the logs that are not made into sawn timber products are used for pulp, paper and bioenergy.



#### CERTIFICATION IN SWEDEN

There are two established international certifications for responsible forest management: PEFC and FSC.

66%

of forests in Sweden is certified.

A majority of forests holds
both certifications.



Source: Swedish Forest Industries Federation, FSC PEFC

FSC = Forest Stewardship Council
PEFC = Programme for the Endorsement
of Forest Certification Schemes

Source: Swedish Forest Agency

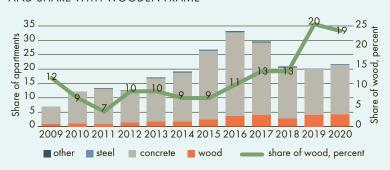


# Wooden construction of multi-family housing

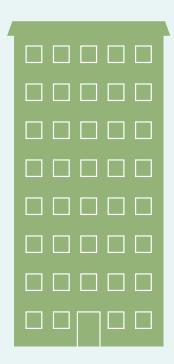


About 20 percent of all multi-family buildings in Sweden are made from wood – a market share that continues to increase. If 50 percent of Sweden's multi-family housing by year 2025 are constructed using wood instead of other materials, the climate impact in the construction phase would be reduced by about 40 percent each year. Together with increased wood construction on public and private premises, this corresponds to approximately 1 million tonnes of carbon dioxide per year.

### CONSTRUCTION OF MULTI-FAMILY HOUSING BY FRAMING MATERIAL AND SHARE WITH WOODEN FRAME



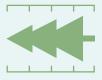
Source: SCB





To build the house, we need 2000 cubic meters of sawn wood.

### Nothing is wasted in Swedish forest industries



When Swedish foresters harvest trees for timber no biomaterial is left to chance. Branches, tops, smaller diameters and biomass from thinnings are taken care of. In fact, we use the whole tree. Nothing is discarded! Let us exemplify with the construction of an eight-storey wooden house.



THE RAW MATERIAL GROWN AND HARVESTED FOR THE HOUSE ALSO PROVIDES 128 PEOPLE, IE ALL THE TENANTS IN THE HOUSE, WITH:



Electricity supply for

6

years



District heating for

9

years



Paper consumption for

25

years



years of consumtion of textiles from the forest such as lyocell and viscose



2300

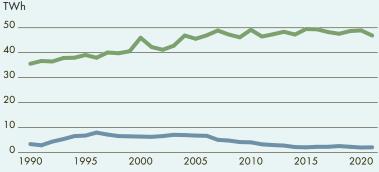
kilometers transport with biofuels for each house hold

### Energy



The Swedish forest-based industry is energy-intensive with processes requiring large amounts of heat and electricity. The industry is more or less self-dependent on heat and a growing producer of renewable electricity. The industry is Sweden's largest producer of bioenergy.

#### 



Source: Swedish Energy Agency

96% fossil free processes

40 %

of used electricity is produced in the sector



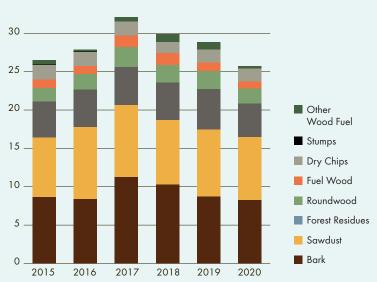
Swedish forest-based industry uses 21 TWh of electricity per year – 15 % of total power use in Sweden.

### Bioenergy from the forest

DELIVERY OF WOOD FUEL FROM SWEDISH FOREST-BASED INDUSTRY







Source: Swedish Forest Industries Federation



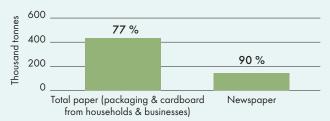
Bark, sawdust and forest residues – tops and branches – comprise the majority of raw material for Swedish bioenergy.

### Recycling and Environmental work



There is a high level of paper recycling in the forest-based industry. The trade has a well-functioning, circular flow. The forest-based industry has been systematic in its environmental work since the 1970s. It is characterised by a holistic view of raw materials, energy, waste and transport.

#### RECYCLING OF PAPER PRODUCTS



Collection target for packages is reported according to EU:s new definition of measure points: only materials that is recycled into new materials are accounted for.

Source: FTI, 2020

#### ENVIRONMENTAL ISSUES LINKED TO PRODUCTION

● REDUCED EMISSIONS TO WATER 1990-2020						
Nitrogen -53%	Phosphorus		Organic compounds -70 % (COD)		Chlorine -94%	
• REDUCED EMISSIONS TO AIR 1990–2019						
·				arbon dioxide		

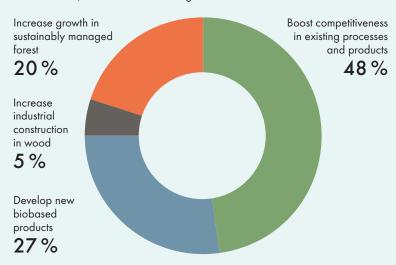
Source: Swedish Forest Agency

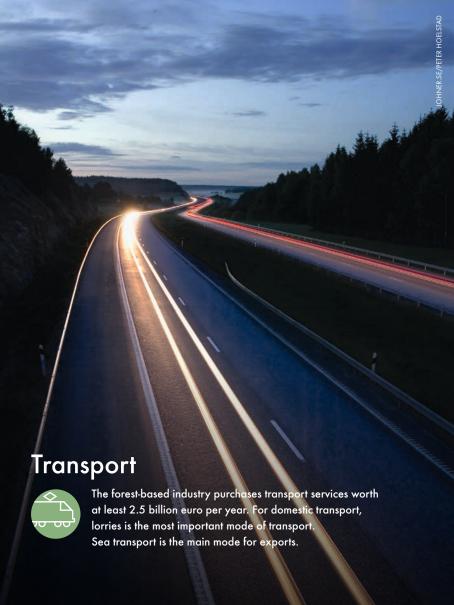
### Research and Innovation



Every year, approximately 390 millon euro is invested in Swedish research with a link to forest and forest-based industry. In 2018 the EU invested 175 million euro in the same areas, according to FTP, Forest-based sector Technology Platform.

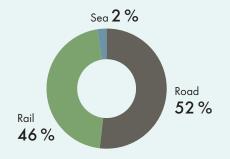
### FOREST AND FOREST-BASED INDUSTRY RESEARCH IN SWEDEN Private sector, universities and colleges





#### SWEDISH FOREST-BASED INDUSTRY DOMESTIC TRANSPORT

#### Million tonne kilometres

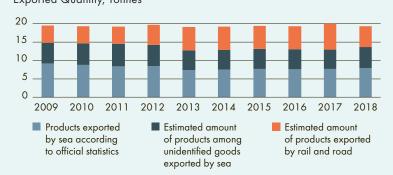


#### AVERAGE TRANSPORTATION DISTANCE

Road: 96 km Rail: 367 km Sea: 409 km

Source: Transport Analysis, 2018

# EXPORT OF FOREST-BASED PRODUCTS, ESTIMATED DISTRIBUTION BY TYPE OF TRAFFIC Exported Quantity, Tonnes



Source: Swedish Forest Industries Federation, Transport Analysis, 2018

### Want to find out more?

Forest management and raw material supply

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