



**LATVIAN  
FOREST SECTOR  
IN FACTS & FIGURES  
2018**

# 2018

## LATVIAN FOREST SECTOR IN FACTS & FIGURES

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## Sustainability

Forests in Latvia take up 3.383 million hectares of land, or 52% of the country's territory. The amount of forestland, moreover, is constantly expanding, both naturally and thanks to afforestation of infertile land and other land that is not used for agriculture. More important, however, is another indicator – the volume of timber in the forest is increasing three times more than the area of forestland. This proves that the forest area in Latvia is not expanding because of bushes that are not counted as part of the area of forest. On the contrary, forestry work in Latvia has been very targeted. An average of approximately 12 million m<sup>3</sup> of timber have been harvested each year in Latvia's forests during the past decade. That is less than the annual increment, and so forestry in Latvia can be described as sustainable.

## Wood processing

The forest sector is one of the cornerstones of the national economy at this time. Forestry, wood processing and furniture manufacturing represented 5,2% of GDP in 2016, while exports amounted to EUR 2 billion – 20% of all exports. There is no parish in Latvia with no larger or smaller wood processing company. Often these are the most important employers in the surrounding area, thus being the main pillar of support for local economies and residents.

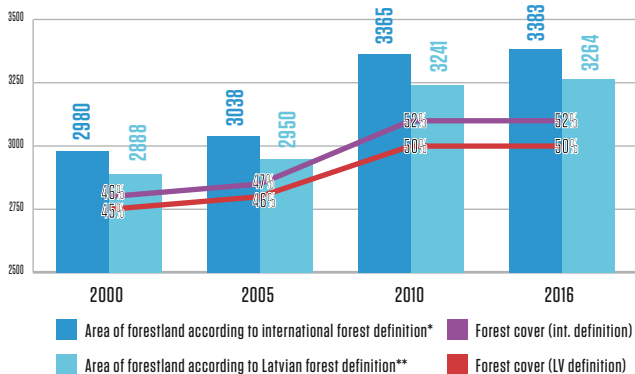
## Biological diversity

In historical terms, the intensive use of Latvia's forests for economic purposes began comparatively later than in many other European countries, and that has allowed us to preserve extensive biological diversity. Limitations on economic activity apply to 28,2% of Latvia's forests at this time, and most of this territory is owned by the state. 683 especially protected environmental territories have been set aside to protect nature. Many are included in the unified and pan-European NATURA 2000 network of protected territories.

## The forest and society

The Latvian state owns around one-half of the country's forests, while most of the rest of the forest belongs to approximately 135,000 private owners. Nearly everywhere, people are free to hike through the forest and to pick mushrooms or berries. The number of places for recreation is increasing every year in Latvia's forests, and the territories in which recreation is one of the main goals of forest management represent 8% of all forestland in Latvia.

## Forest Area (Thousand ha)



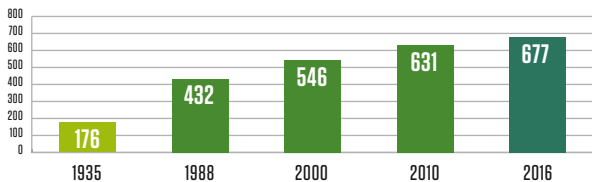
\*Include forest stands, damaged stands, burnt areas, windfalls, cutting areas, gaps and the land under forest infrastructure facilities.

\*\*Include forest stands, damaged stands, burnt areas, windfalls, cutting areas.

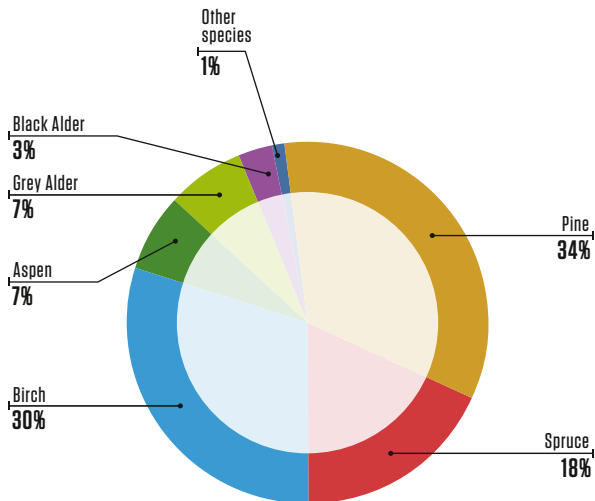
SOURCE: NATIONAL FOREST INVENTORY 2013 (NFI)

**LATVIA IS THE FOURTH MOST FORESTED COUNTRY IN EUROPE!**

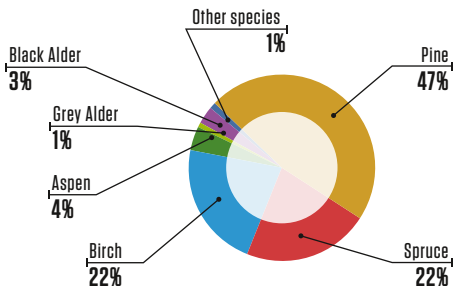
## Total growing stock volume (Million m<sup>3</sup>)



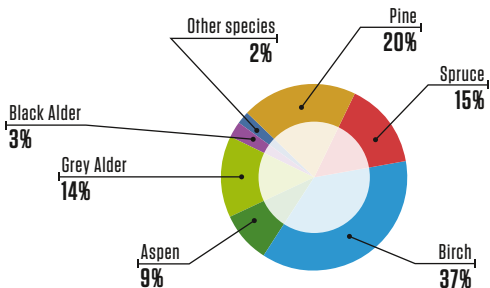
## Forest Area by Dominant Species. Whole country, 2016



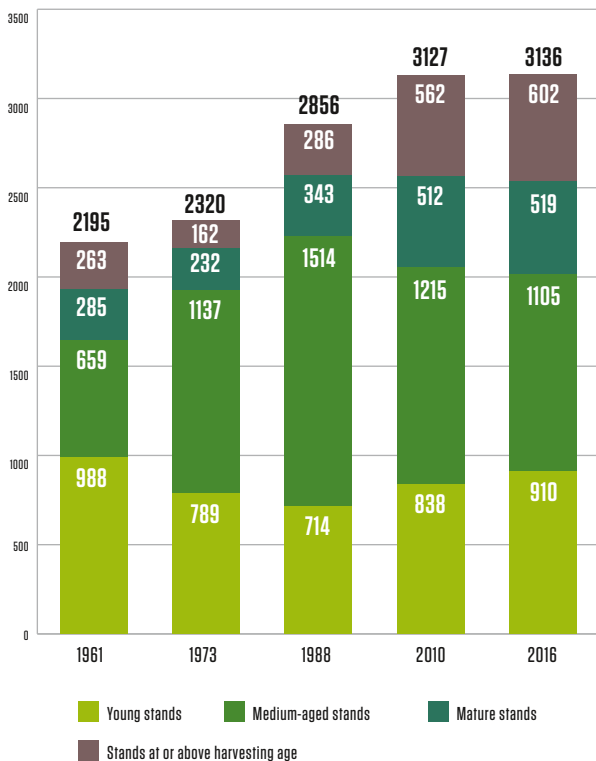
## Forest Area by Dominant Species. State-owned forests, 2016



## Forest Area by Dominant Species. Other forest owners, 2016

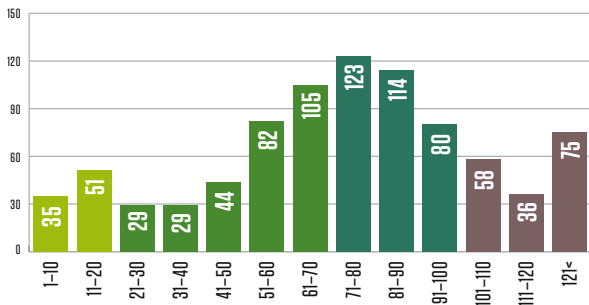


## Forest age structure (Thousand ha)

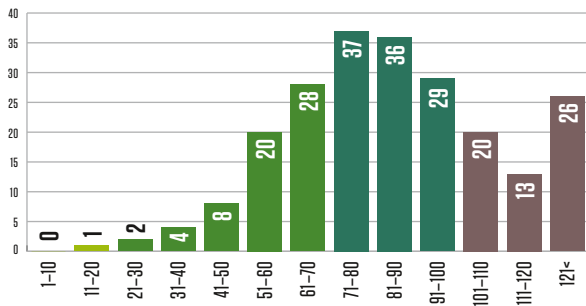




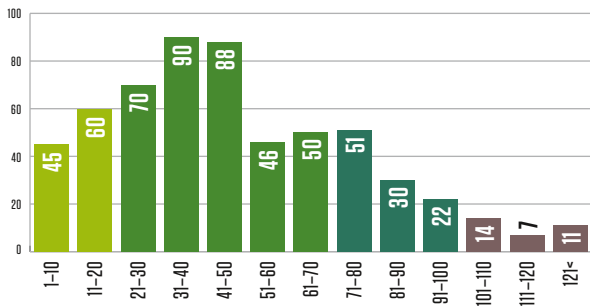
## Age structure of pine stands by area (Thousand ha), 2016



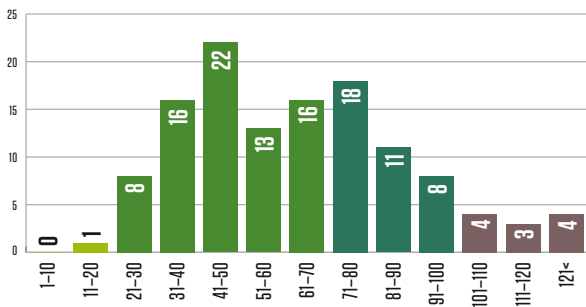
## Age structure of pine stands by growing stock volume (Million m<sup>3</sup>), 2016



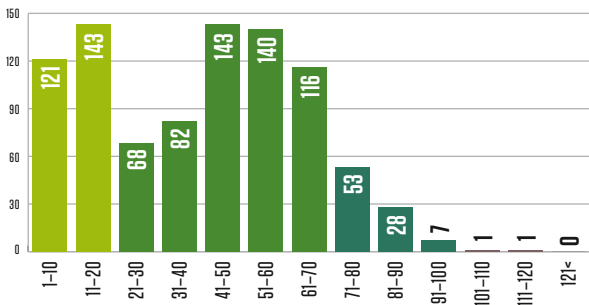
## Age structure of spruce stands by area (Thousand ha), 2016



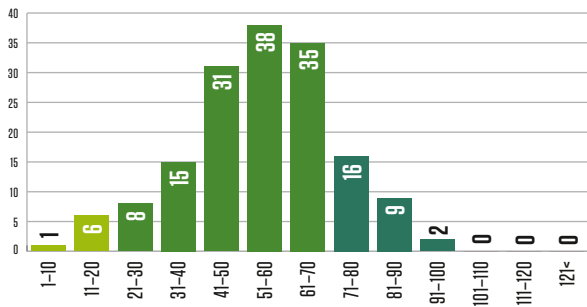
## Age structure of spruce stands by growing stock volume (Million m<sup>3</sup>), 2016



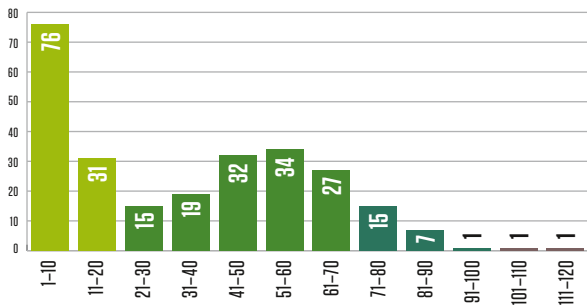
## Age structure of birch stands by area (Thousand ha), 2016



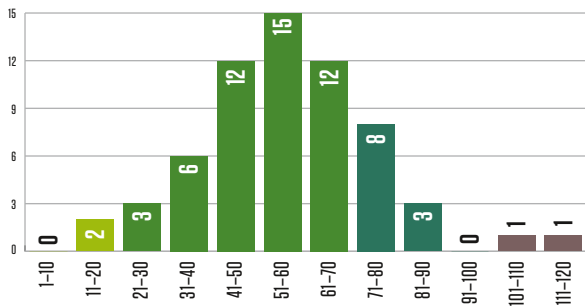
## Age structure of birch stands by growing stock volume (Million m<sup>3</sup>), 2016



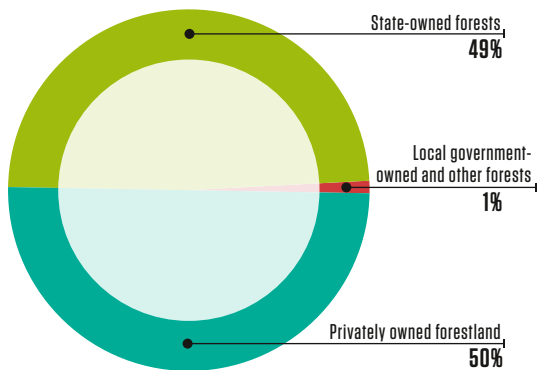
## Age structure of aspen stands by area (Thousand ha), 2016



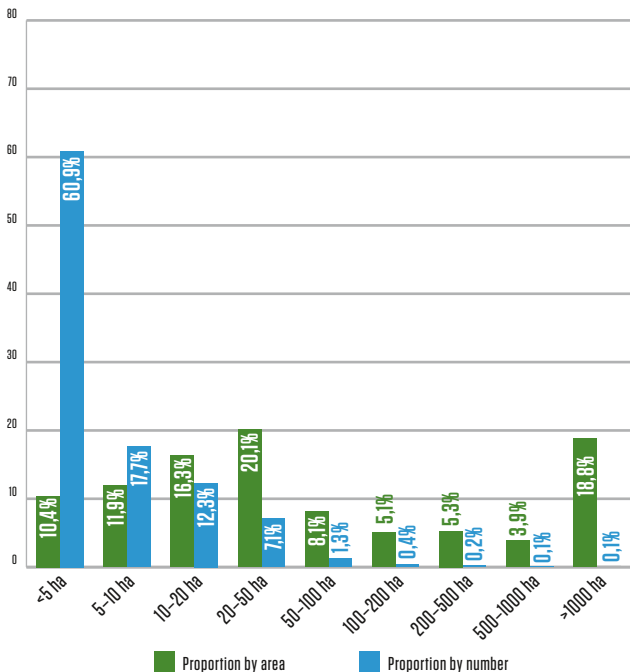
## Age structure of aspen stands by growing stock volume (Million m<sup>3</sup>), 2016



## Forest ownership by status, 2016



## Structure of Private Forest Owners, 2016



THE INTERESTS OF PRIVATE FOREST OWNERS ARE REPRESENTED  
BY THE LATVIAN FOREST OWNERS' ASSOCIATION.

[www.mezaipasniki.lv](http://www.mezaipasniki.lv)

## Forestry

The forest sector in Latvia is under the supervision of the Ministry of Agriculture. It works with stakeholders to draft forest policies, development strategies for the sector, as well as regulations on forest management, the use of forest resources, environment protection and hunting.

→ [www.zm.gov.lv](http://www.zm.gov.lv)

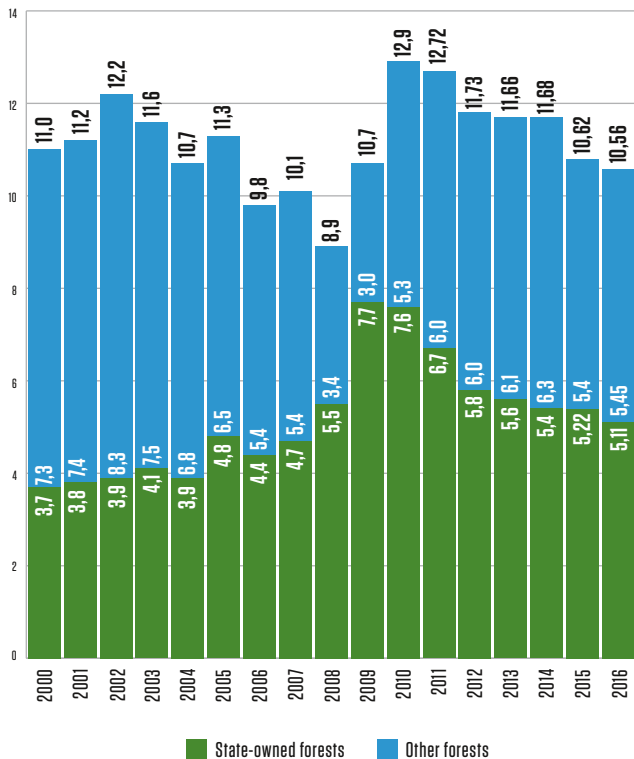
The State Forest Service, under the Ministry of Agriculture, is the responsible agency for supervising how the provisions of the laws and regulations are observed in forest management irrespective of the ownership type.

→ [www.vmd.gov.lv](http://www.vmd.gov.lv)

State-owned forests are managed by Stock Company "Latvian State Forests", which was established in 1999. It implements the state's interests in terms of preserving and increasing the value of the forest and enhancing the contributions of the forest to the national economy.

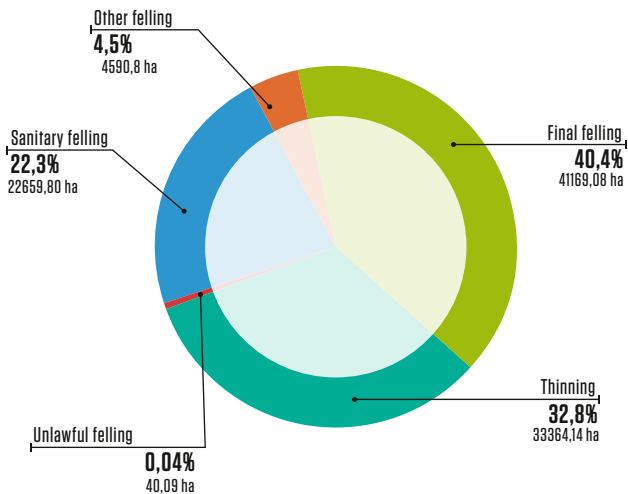
→ [www.lvm.lv](http://www.lvm.lv)

## Timber Production (Million m<sup>3</sup>)

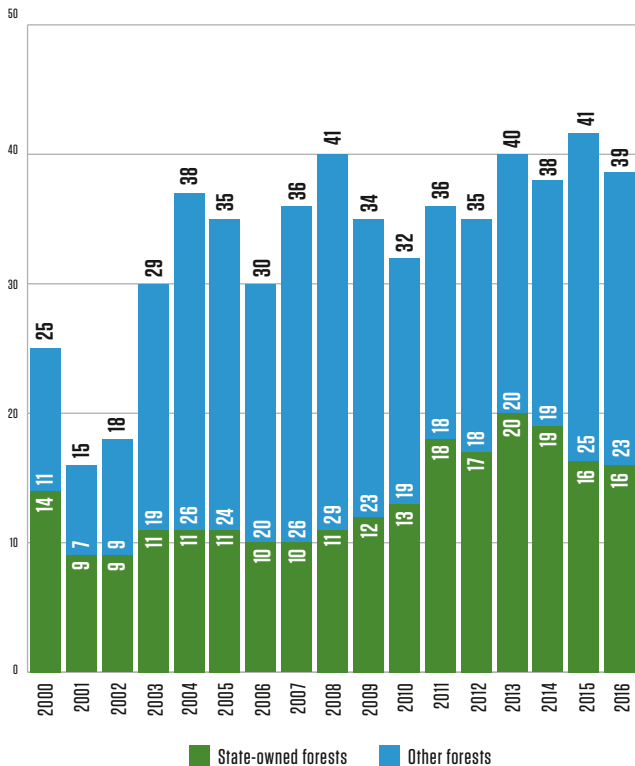




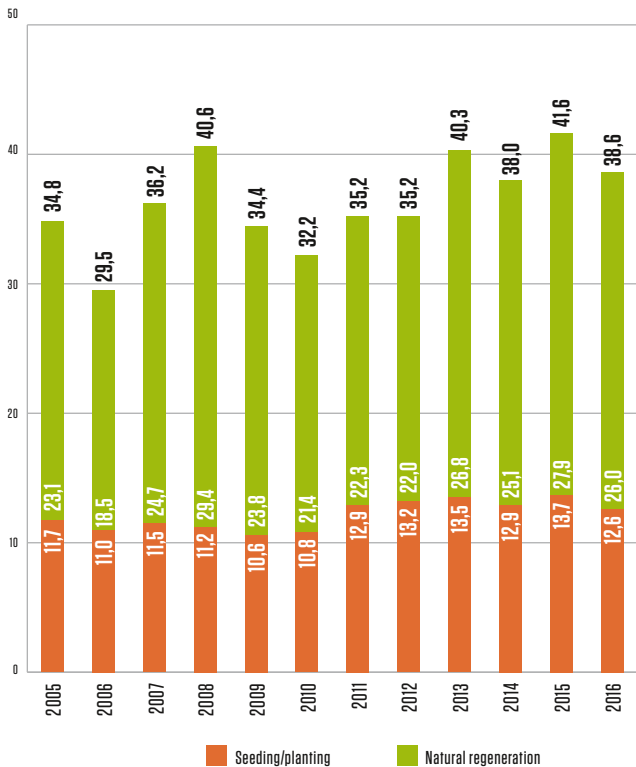
## Timber Production in Terms of Felling Type, 2016



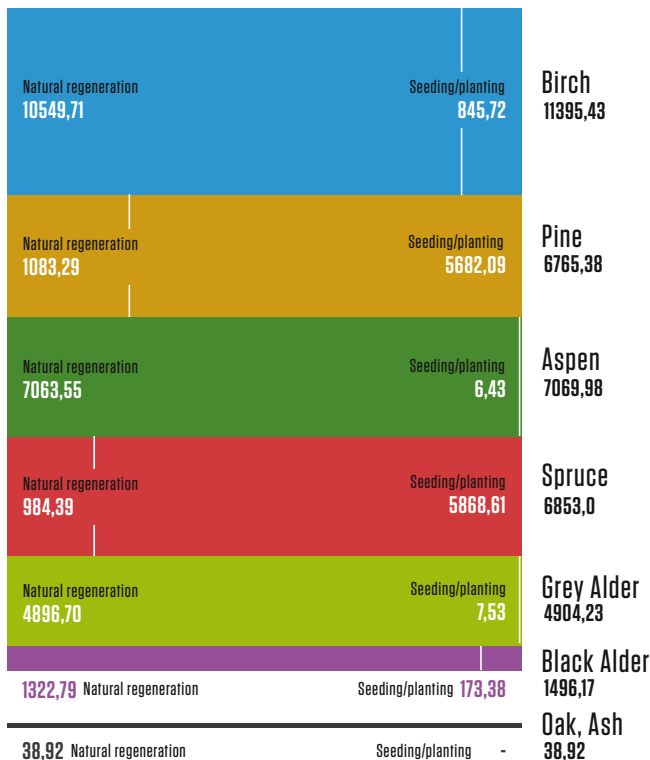
## Forest Regeneration by ownership (Thousand ha)



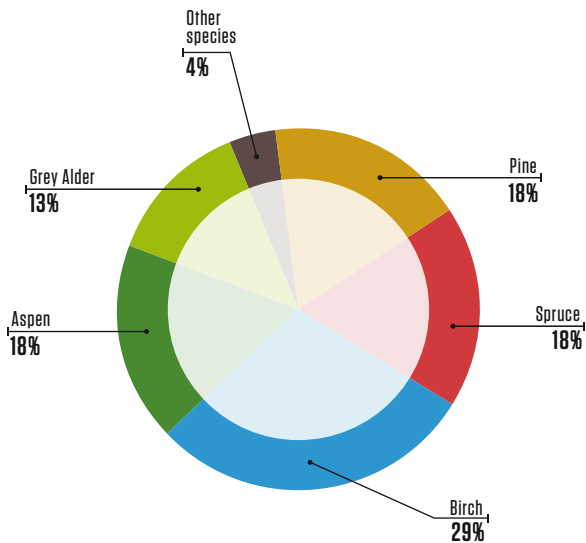
## Forest Regeneration by Type (Thousand ha)



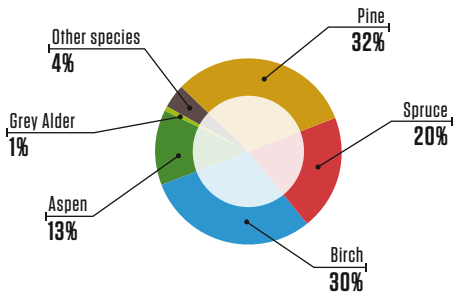
## Forest regeneration by species and by the type of regeneration (ha), 2016



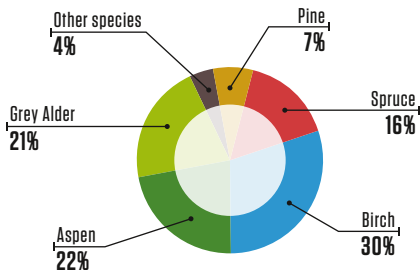
## Proportion of Species in Forest Regeneration. Whole country, 2016



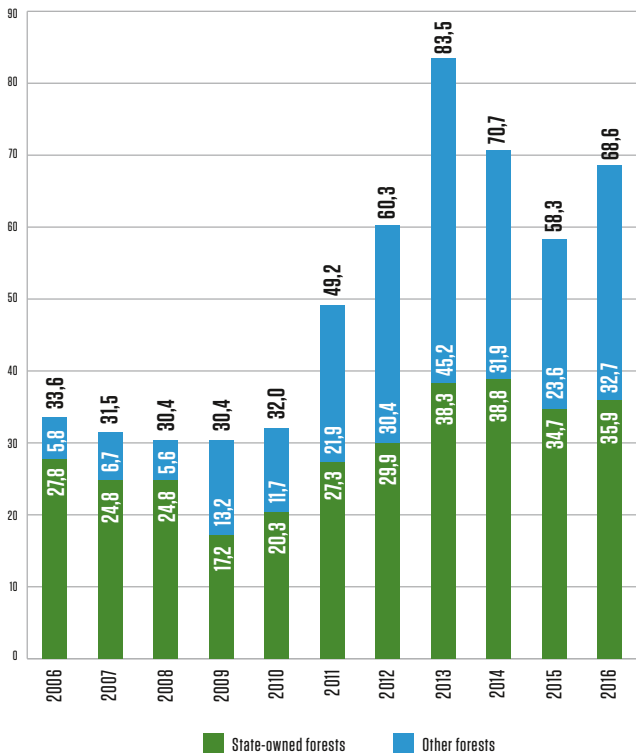
## Proportion of Species in Forest Regeneration. State-owned forests, 2016



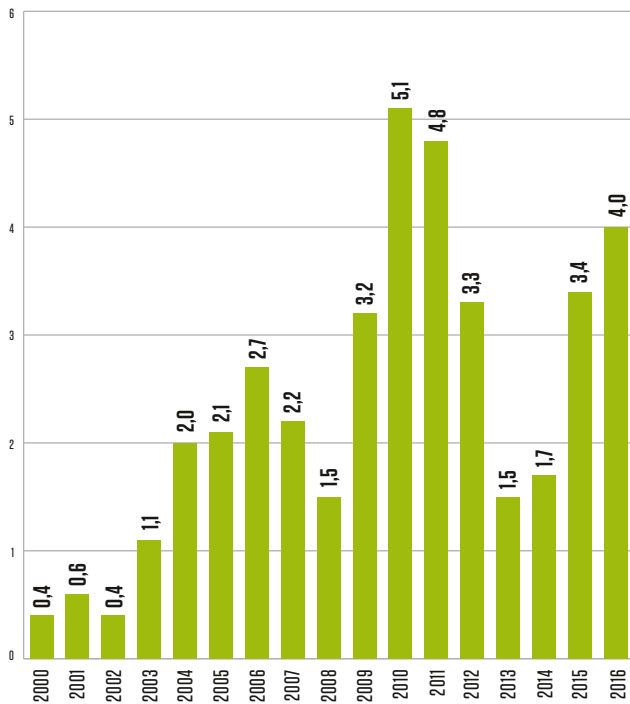
## Proportion of Species in Forest Regeneration. Other forests, 2016



## Thinning of young stands in Latvia (Thousand ha)

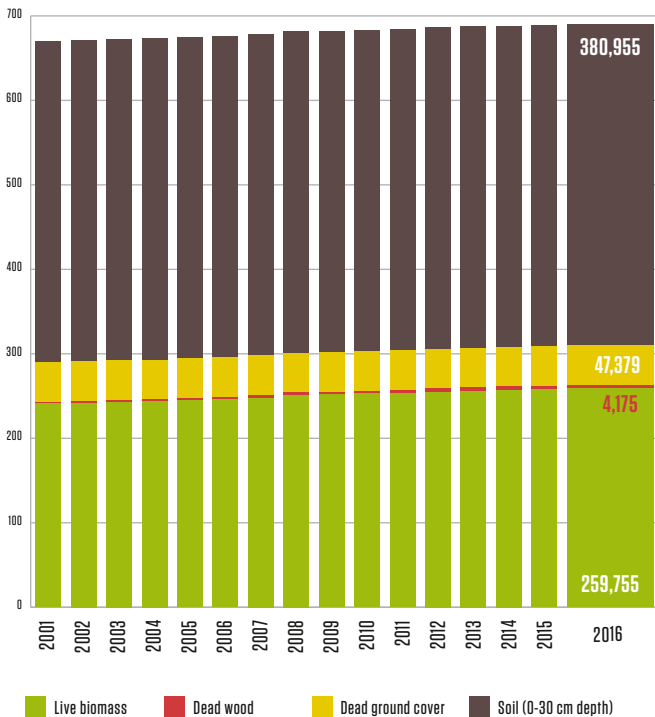


## Forest establishment in Latvia (Thousand ha)

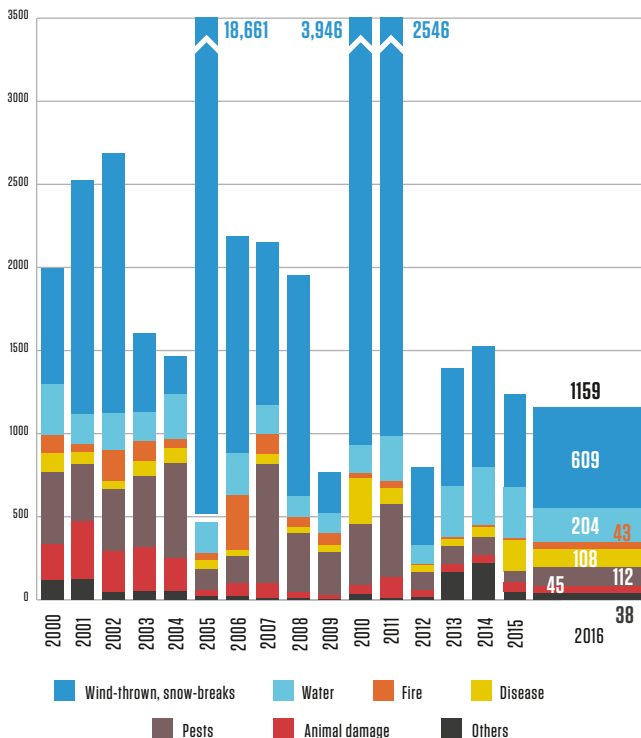




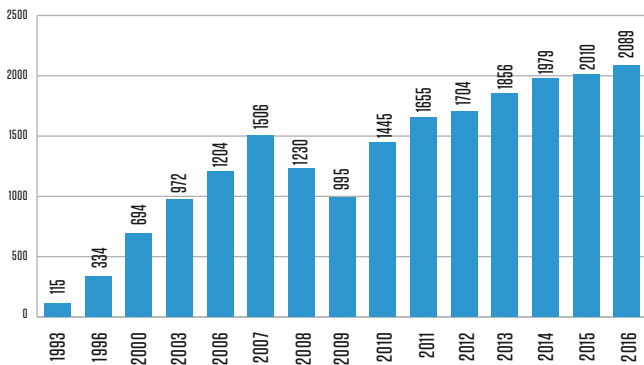
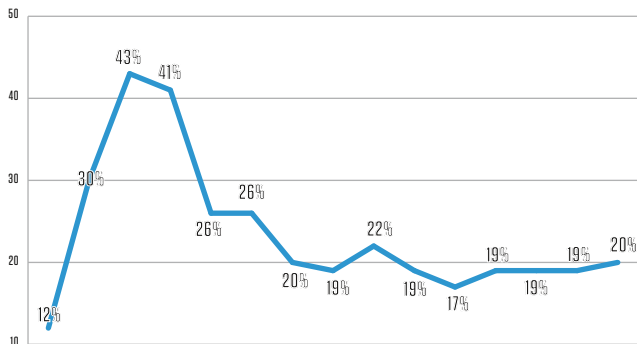
## Carbon stock (Million tons)

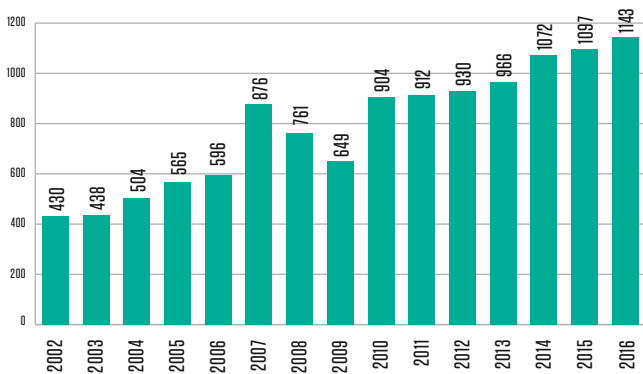
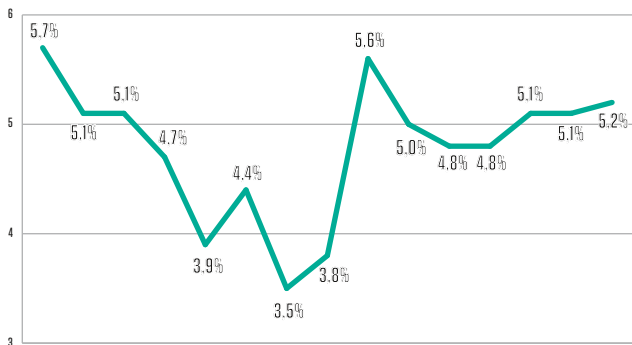


## Damaged forest stands (Thousand ha)

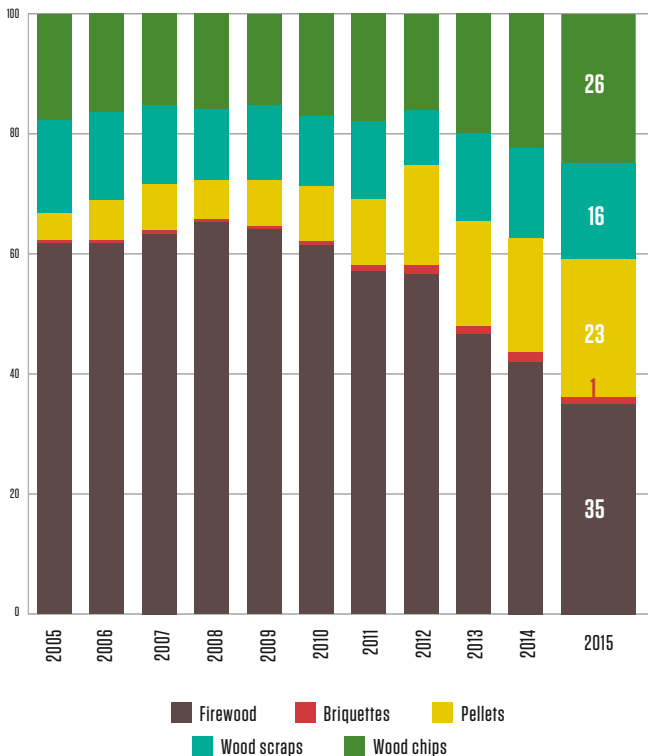


## Proportion of forest sector exports in total Latvian exports (Million EUR)

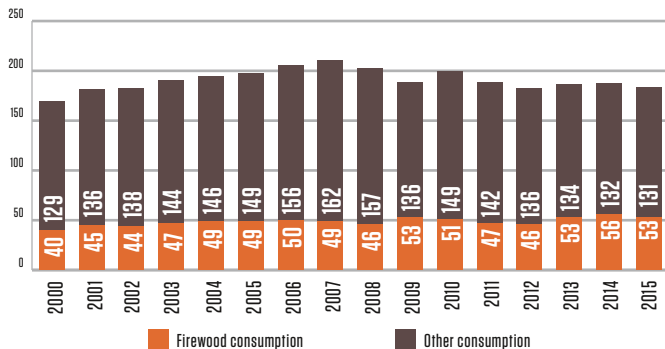




## Types of energy-wood in total output (%)

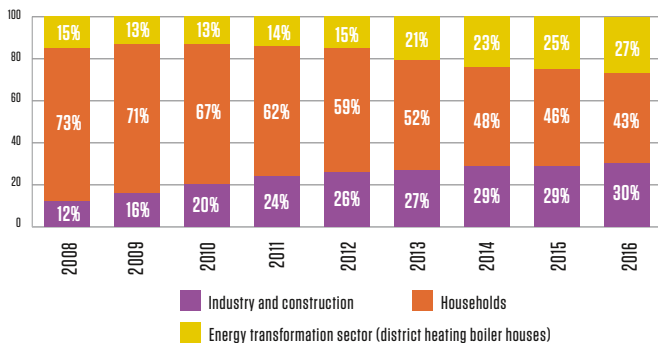


## Total consumption of energy resources (Thousand TJ)



SOURCE: CSB

## Wood biomass Consumption in Energy Production (%)



SOURCE: FOREST AND WOOD PRODUCTS RESEARCH AND DEVELOPMENT INSTITUTE

## Latvian timber industry associations

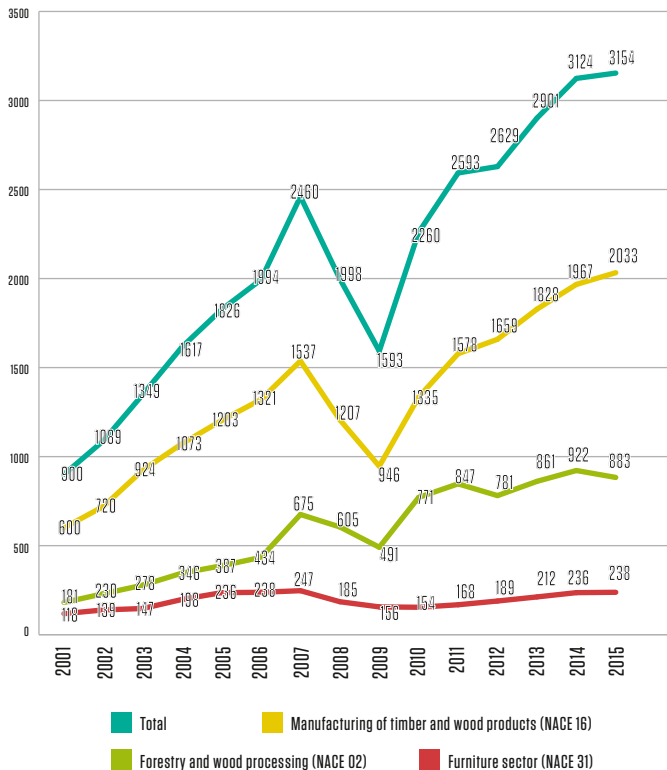
Association "Latvijas Mēbeles" (Latvian Furniture)  
Latvian Timber Producers' & Traders' Association  
Latvian association of wood processing companies and exporters  
Association "Latvijas Koks"  
Latvian Union of timber harvesting companies  
Latvian association of independent timber harvesting companies  
Latvian biomass association LATbio  
Latvian Wood Construction Cluster



Associations of companies in Latvia's forest industries joined together in the Latvian Forest Industry Federation in 2000. It works to develop Latvia's forest sector together with other stakeholders so as to establish a sustainable and stable economic environment that will develop the relevant companies, enhance their competitiveness, ensure the international representation of the industry's interests, and help to develop and co-ordinate the work of the member associations.

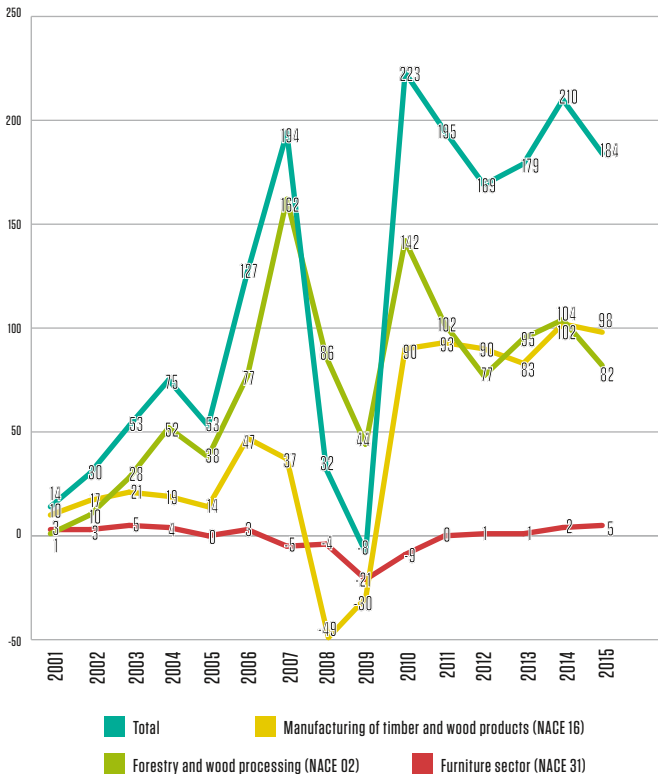


## Net turnover of Forest sector (Million EUR)

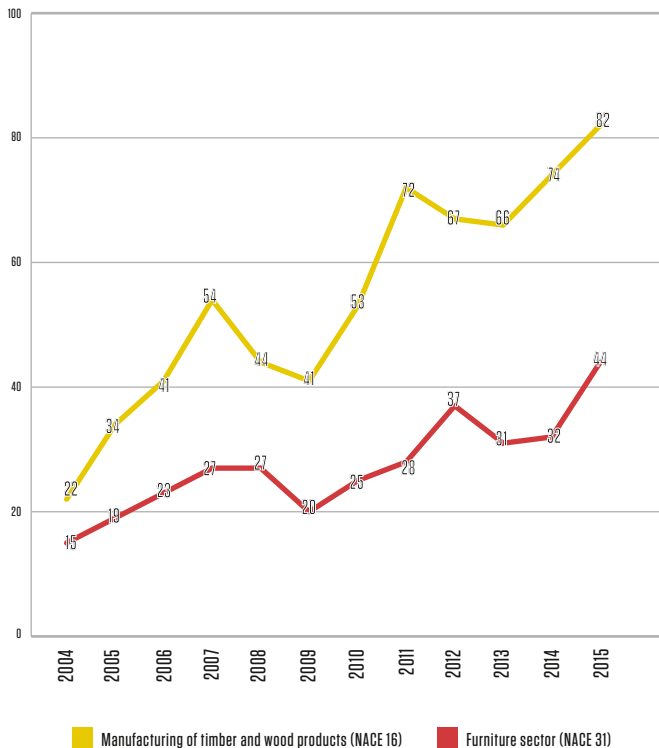




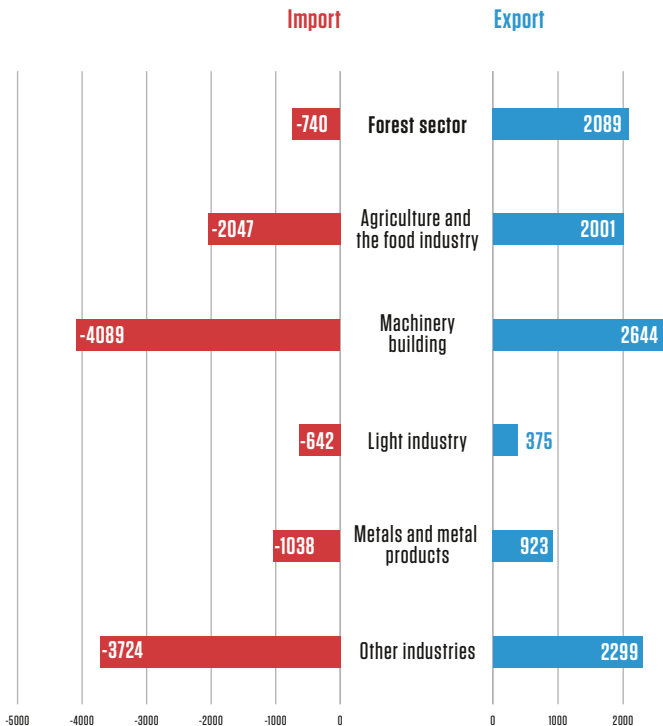
## Profit of Forest sector companies (Million EUR)



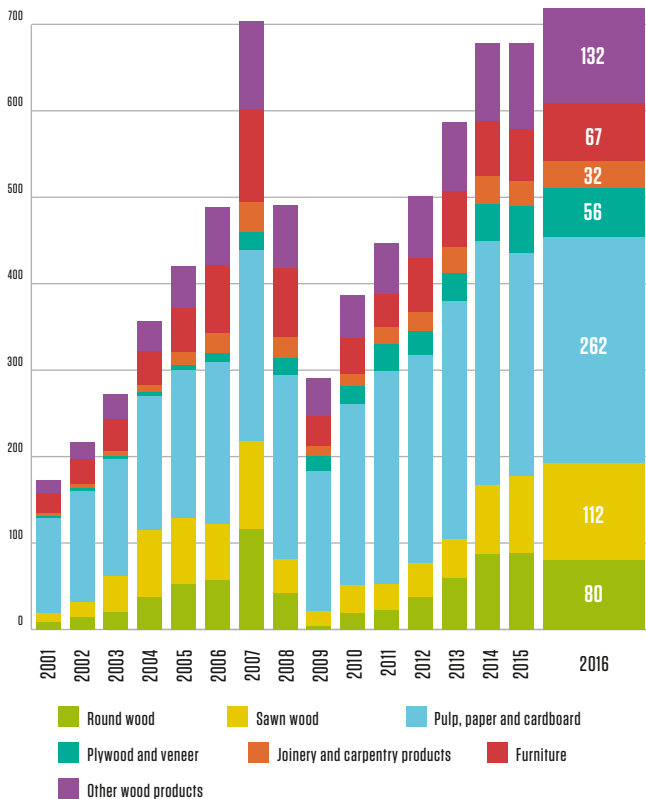
## Output per worker in actual prices (Thousand EUR)



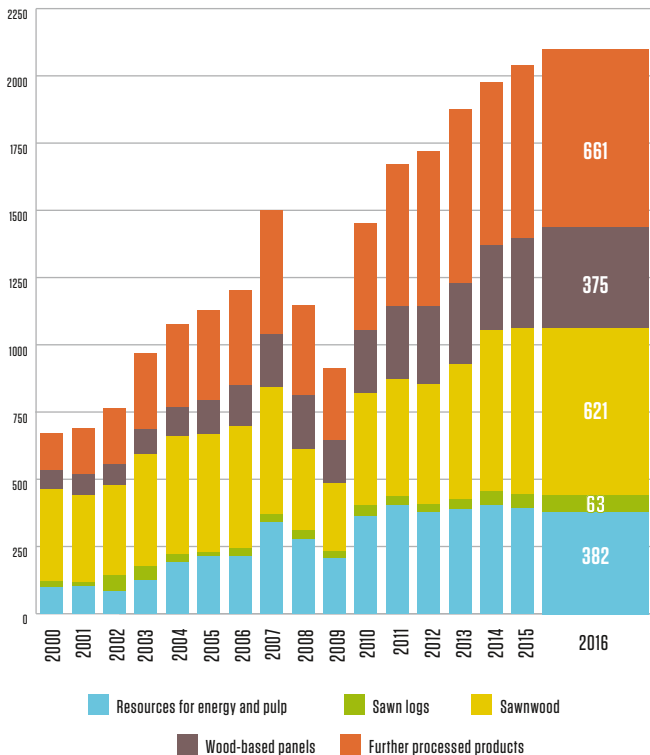
## Latvia's Import-Export Balance (Million EUR), 2016



## Forest Sector import development (Million EUR)

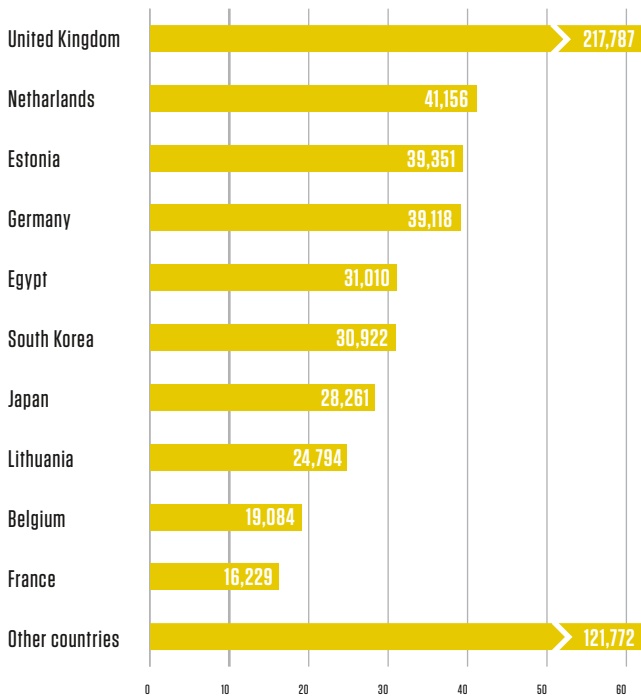


## Forest Sector Export development (Million EUR)



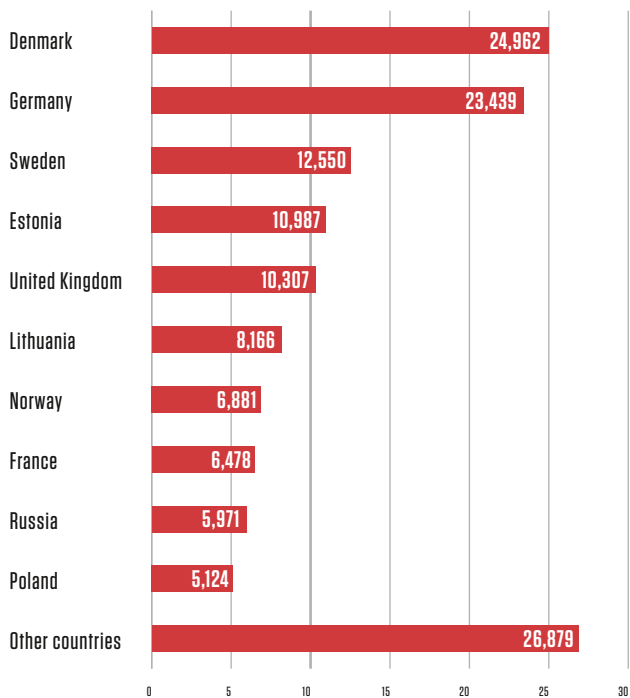
## Export Markets for the Main Products of the Forest Sector, 2015 (Million EUR)

### Sawnwood

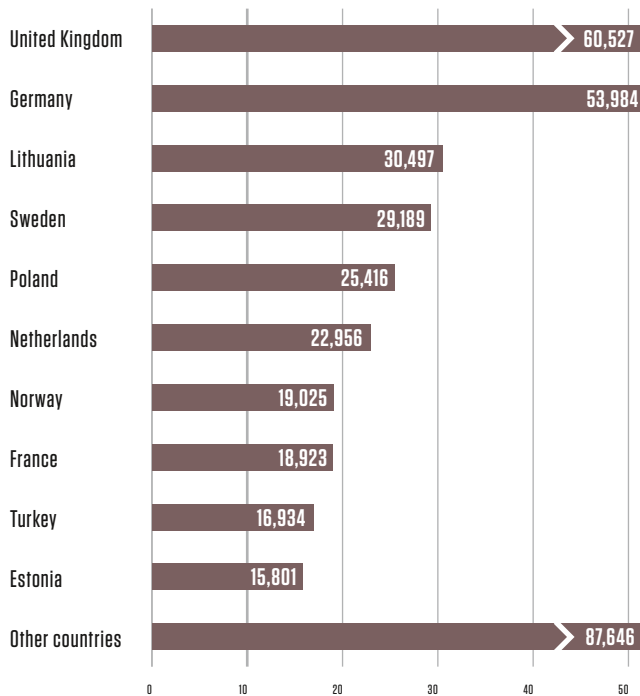


## Export Markets for the Main Products of the Forest Sector, 2016 (Million EUR)

### Wooden furniture



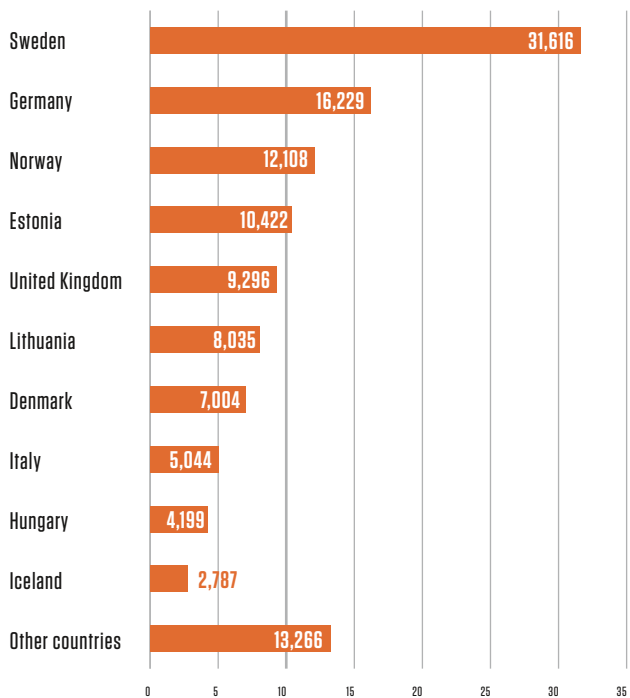
## Export Markets for the Main Products of the Forest Sector, 2016 (Million EUR) Wood-based panels (plywood, veneer, particle board, fibreboard)





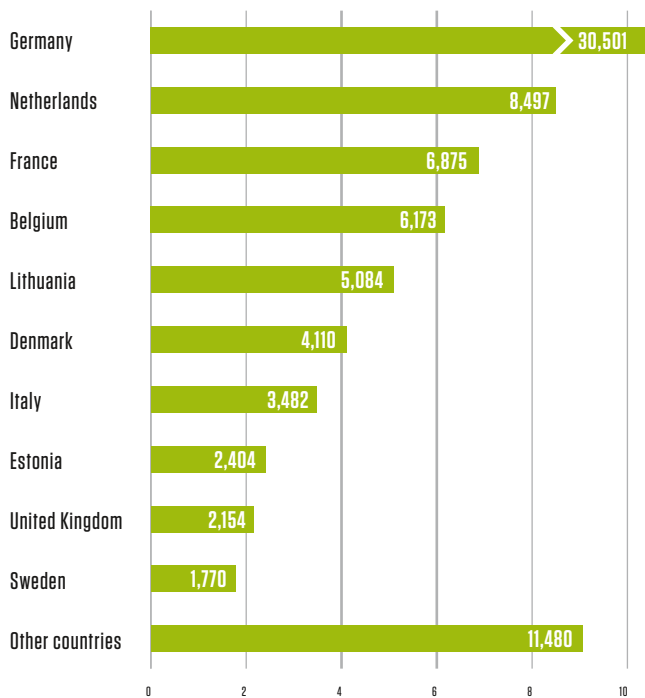
## Export Markets for the Main Products of the Forest Sector, 2016 (Million EUR)

### Joinery and carpentry products



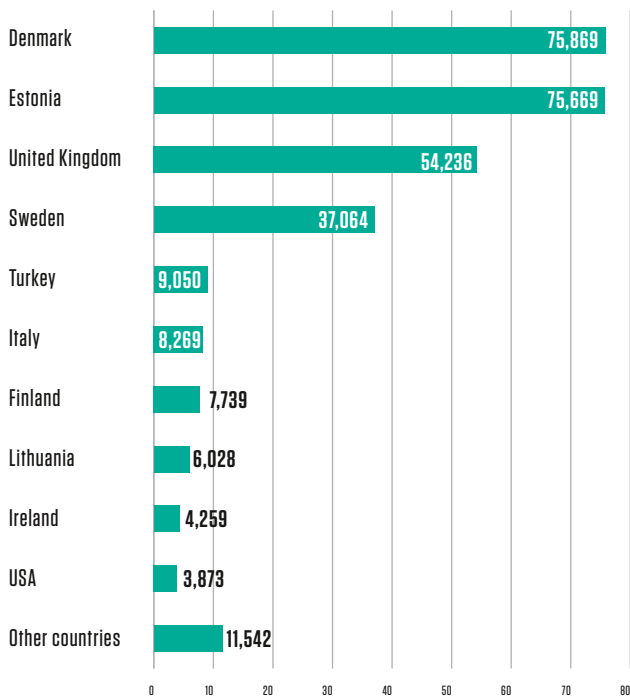
## Export Markets for the Main Products of the Forest Sector, 2016 (Million EUR)

### Packaging products



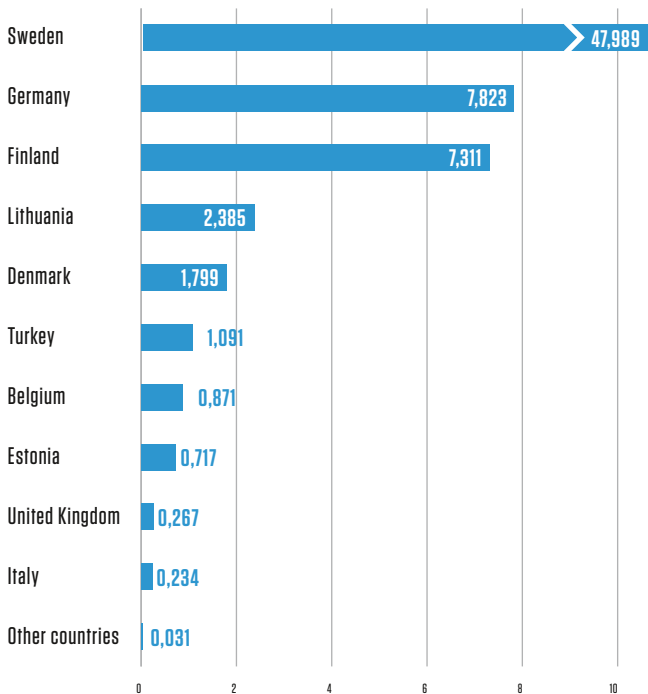
## Export Markets for the Main Products of the Forest Sector, 2016 (Million EUR)

### Firewood

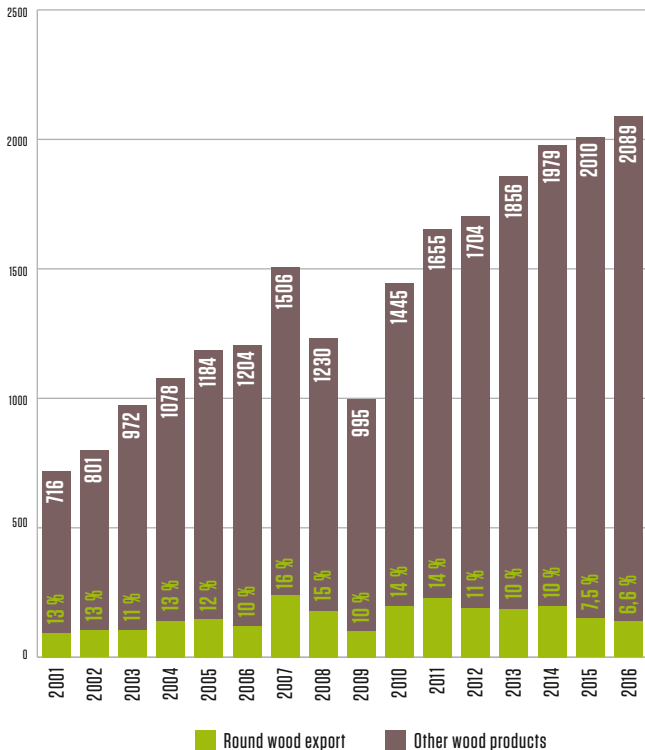


## Export Markets for the Main Products of the Forest Sector, 2016 (Million EUR)

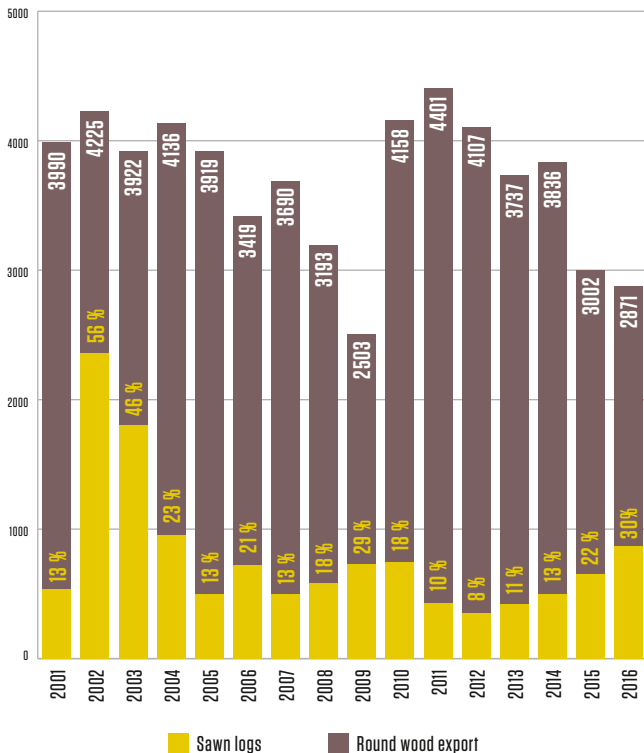
### Pulpwood



## Proportion of Round wood in forest sector export (Million EUR)



## Proportion of sawn logs in Round wood export (Thousand m<sup>3</sup>)



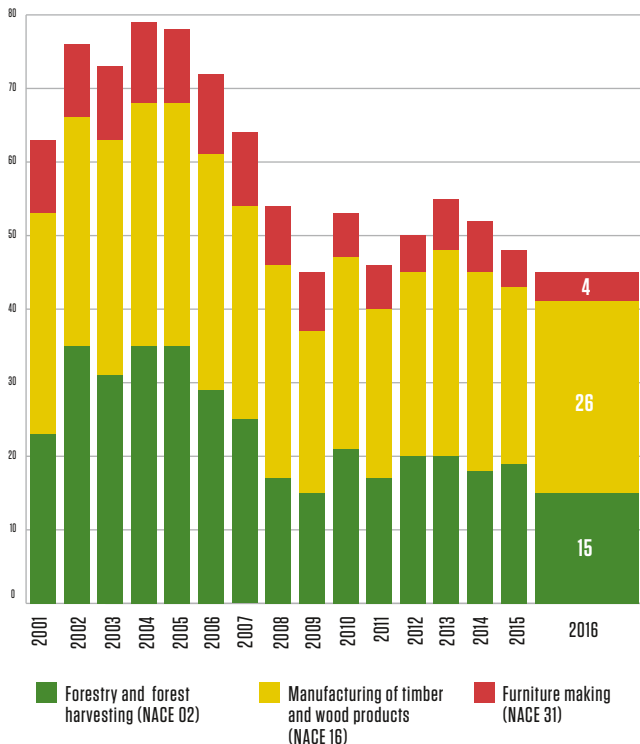
## Forest sector and society

Territories in which recreation is one of the main areas of forest management took up 8% of forestland (293,000 hectares) in 2016. Viewing platforms, educational trails, cultural and historical destinations, areas for picnics – those are just a few of the leisure infrastructure objects that are found in Latvia's forests. They are open to one and all at no cost at all. Special attention to improving such areas has been paid to state-owned forests.

**The areas of recreation-based forestland include** national parks (except reserves), nature parks, protected landscape areas, protected dendrology plants, protected geological and geomorphologic monuments, nature parks of local importance, the protected zone of dunes along the shores of the Baltic Sea, protected zones around cities, and forests in the administrative territories of cities.

Specially protected natural areas are supervised and managed by the Nature Conservation Agency of the Ministry of Environmental Protection and Regional Development.

## Employment in the forest sector (Thousand people)





## Education

Education in the area of the forest sector can be obtained at 17 professional educational institutions, the Forest Faculty of the Latvian Agricultural University (LLU), and the Textile Technology and Design Institute of the Rīga Technical University's Faculty of Material Sciences and Applied Chemistry. The Latvian Chamber of Craftsmanship has offered informal wood processing training sessions taught by experienced craftspeople. Graduates from such programmes receive a craftsman's card or a diploma as an apprentice or master craftsman.

## Meža fakultāte

The total number of students: **597** (06.09.2017.)

**109 new forest sector specialists** graduated from the LLU Forest Faculty in 2017.

### In Bachelor's degree programs:

- 15 Forestry Science
- 42 Forest Engineering
- 15 Wood Processing
- 19 Labour Safety

### In Master's degree programs:

- 5 Forest Ecology and Silviculture
- 5 Forest Economics and Policy
- 7 Forest Works and Machinery
- 1 Wood Materials and Technology

→ [www.mf.llu.lv](http://www.mf.llu.lv)

→ [www.ktf.rtu.lv](http://www.ktf.rtu.lv)

→ [www.lak.lv](http://www.lak.lv)

## Vocational schools where an education related to the forest sector can be obtained

Aizkraukles Profesionālā vidusskola	→ <a href="http://www.apvs.lv">www.apvs.lv</a>
Smiltenes tehnikuma Alsviķu teritoriālā struktūrvienība	→ <a href="http://www.smiltenestehnikums.lv">www.smiltenestehnikums.lv</a>
Cēsu Profesionālā vidusskola	→ <a href="http://www.cpv.lv">www.cpv.lv</a>
Kandavas Lauksaimniecības tehnikuma Cīravas teritoriālā struktūrvienība	→ <a href="http://www.ciravasskola.lv">www.ciravasskola.lv</a>
Daugavpils Būvniecības tehnikums	→ <a href="http://www.dbt.lv">www.dbt.lv</a>
Priekuļu tehnikuma Ērgļu teritoriālā struktūrvienība	→ <a href="http://www.ergliarods.lv">www.ergliarods.lv</a>
Jelgavas Tehnikums	→ <a href="http://www.jelgavastehnikums.lv">www.jelgavastehnikums.lv</a>
Kuldīgas Tehnoloģiju un tūrisma tehnikums	→ <a href="http://www.kuldigastehnikums.lv">www.kuldigastehnikums.lv</a>
Mālpils Profesionālā vidusskola	→ <a href="http://www.malpilsskola.lv">www.malpilsskola.lv</a>
Ogres tehnikums	→ <a href="http://www.ovt.lv">www.ovt.lv</a>
Liepājas Valsts tehnikums	→ <a href="http://www.lvt.lv">www.lvt.lv</a>
Rīgas Tehniskā koledža	→ <a href="http://www.rtk.lv">www.rtk.lv</a>
Rīgas Valsts tehnikums	→ <a href="http://www.rvt.lv">www.rvt.lv</a>
Valmieras tehnikuma Rankas teritoriālā struktūrvienība	→ <a href="http://www.rankasarodvidusskola.lv">www.rankasarodvidusskola.lv</a>
Rēzeknes tehnikums	→ <a href="http://www.rezeknestehnikums.lv">www.rezeknestehnikums.lv</a>
Rīgas Mākslas un mediju tehnikums	→ <a href="http://www.rmmt.lv">www.rmmt.lv</a>
Smiltenes tehnikums	→ <a href="http://www.smiltenestehnikums.lv">www.smiltenestehnikums.lv</a>

## Research areas:

### Increase of forest capital value

- Forest tree breeding, genetics and adaptation  
(Forest tree breeding; Forest genetics; Tree adaptation to climate change)
- Silviculture and forest resources  
(Silviculture and forest growing prognosis; Forest regeneration and establishment)
- Forest abiotic risks  
(Forest phytopathology and mycology; Forest entomology)
- Improvement of tree growth conditions

### Interaction of forestry and environment factors

- Transformation of forest ecosystems
- Forestry influence on forest, wetlands and water ecosystems  
(Circulation of biogen elements in ecosystems; Interaction of forest and water)
- Environment factors impact in forest ecosystems  
(Impact of wind on forest ecosystems; Impact of fire on forest ecosystems; Edafic processes in forest ecosystems)
- Latvian forest biodiversity in human

managed environment

### Non-timber services

- Forest energy
- Carbon removals in forest and non-forest ecosystems
- Non-timber products
- Forest social functions and values

### Agroforestry systems

### Development of forest techniques

### Wildlife management

### Management of forest research support

- Forest economics
- Remote sensing of forest and GIS
- Services of genetic analyses

### State delegated functions

- Genetic Resource Centre
- National forest inventory
- Accounting of greenhouse gas emissions and CO<sub>2</sub> removals
- Evaluation of improved forest reproductive material from EU states for use in Latvia

→ [www.silava.lv](http://www.silava.lv)

### Field of activity:

#### **Research of forest ecology and forestry**

The objective is to create and develop ecologically and agronomically reasoned methods and practices for forest restoration, maintenance and use in order to facilitate the creation of productive forest stands of high ecological quality. The main emphasis of the research has been placed on the comprehension of functioning regularities of the forest as an ecosystem, modelling the pace of stand growing and the increase of the growing stock, as well as the assessment of forestry risks in the forest growing process within the forestry cycle.

#### **Influence of forest work and machinery on the ecosystem of the forest, assessment of the derived products, and quantitative and qualitative indicators of measurement**

The objective is to assess the influence of different forest management and logging technologies on the ecosystem of a forest and compliance with forestry requirements, thus ensuring the quality of a forest. When working in the forest, wood products are moved, therefore it is important to determine and qualify the physical and mechanical characteristics of round wood, typical for the region of Latvia, by assessing the forest infrastructure's impact on the forest ecosystem.

#### **Forest resource economy and forest management planning**

The objective is to carry out research in the forestry economy, forest resource calculation and management planning by developing information technology solutions in cooperation with companies of the sector. The quality of forest inventory and the planning methods of forest management have a significant influence on the rational use of forest resources. By improving the quality of forest inventory and the planning of forest management, it is possible to increase the efficiency of the forest resource use and the capital value of the forest by 2.7 times.

#### **Research of wood materials and technologies**

The objective is to ensure the operation of a multi-functional forestry industry that is based on wood resources, where the main precondition in daily use and construction is the competitiveness of the wood products.

→ [www.mf.llu.lv](http://www.mf.llu.lv)

## Latvian State Institute of wood chemistry

### Field of activity:

The development of scientifically grounded, environmentally friendly, wasteless technologies for obtaining of competitive materials and products from wood and wood biomass.

→ [www.kki.lv](http://www.kki.lv)

## Forest and Wood Products Research and Development Institute

### Field of activity:

Institute is competence centre for wood material research, products testing and training within forest based sector in Latvia. Working area involves applied research and technology issues of wood and wood based products, forestry logistics, testing required for product conformity attestation according to European and other relevant standards, development of new products and innovation, development and implementation of further training activities, promotion of professional education development. Accredited tests offered by testing laboratory covers determination of physical and mechanical properties of the wood and wood based products, construction material reaction to fire tests required for European classification, furniture strength and durability tests, surface finishing quality tests, solid biofuel tests.

→ [www.e-koks.lv](http://www.e-koks.lv)

**THE FOREST RESEARCH STATION, WHICH IS AN AGENCY FOUNDED BY LATVIAN STATE FOREST RESEARCH INSTITUTE "SILAVA" AND LATVIA UNIVERSITY OF AGRICULTURE FOREST FACULTY, CONDUCTS SCHOLARLY RESEARCH IN THE AREA OF FOREST MANAGEMENT, ENSURING LONG-TERM AND UNINTERRUPTED RESEARCH IN THIS AREA.**

[WWW.AGENTURAMPS.LV](http://WWW.AGENTURAMPS.LV)



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