Country Forestry Report Estonia

1. Brief Country Profile

Land area 45,336 km² **Population** 1.316 million

Population density 30 inhabitants per km²

Ethnic groups 69% Estonians, 25% Russians, 2% Ukrainians, 4%

others

Capital cityTallinnOfficial languageEstonianNational currencyEuro

GDP in 2016 20.9 billion Euro **Member of the European Union since 2004**

Location Northern Europe

REPUBLIC OF ESTONIA



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Natural environment:

| Coastline | 3,800 km (2,361 mi) |
|---------------------------|--|
| Number of islands | 2,222 |
| Largest islands | Saaremaa (2,671 km^2 / 1,031 sq mi), Hiiumaa (989 km^2 / 382 sq mi), Muhu (198 km^2 / 76 sq mi) |
| Longest rivers | Võhandu (162 km / 101 mi), Pärnu (144 km / 89 mi), Põltsamaa (135 km / 84 mi) |
| Largest lakes | Peipsi (3,555 km² / 1,373 sq mi, with 1,529 km² / 590 sq mi belonging to Estonia), Võrtsjärv (271 km² / 105 sq mi) |
| Highest point | Suur Munamägi (317.2 m / 1,040 ft) |
| National parks | Lahemaa (730 km² / 282 sq mi), Matsalu (490 km² / 189 sq mi), Soomaa (400 km² / 154 sq mi), Vilsandi (240 km² / 93 sq mi), Karula (124 km² / 48 sq mi) |
| Average daily temperature | Annual mean +6.7 °C / 44.1 °F, in January -7.7 °C / 18.1 °F, in July +17.8 °C / 64.0 °F (2016) |

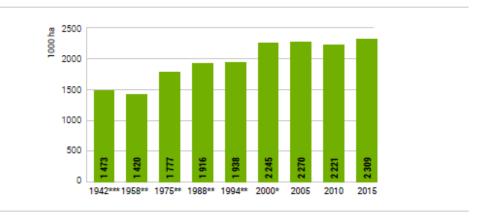
(Source for section 1: Statistics Estonia 2017)

2. Forestry and Forest

Forest area in 2016 2,312,548 ha
Forest area in 1942 1,473,051 ha

Forest area increase since 1942 57%

Figure 1.4.1.1 Changing of forest land area



Forest coverage in 2016 53% Forest coverage in 1942 34%

Forest classification: 35% primary forests, 56% modified natural forests, 9% semi-natural forests, 0.2% productive plantations.

Forest tree species structure and dynamics:

| Tree species | Area | | Volume | | Increment | Felling | |
|----------------|---------|-----|----------------------|-----|----------------------------|----------------------------|--|
| | | | | | | volume in | |
| | | | | | | 2015 | |
| | 1000 ha | % | mill. m ³ | % | mill. m ³ /year | mill. m ³ /year | |
| Scots pine | 736.0 | 32 | 137.3 | 29 | 4.9 | 1.9 | |
| Norway spruce | 428.4 | 18 | 117.4 | 24 | 3.6 | 3.5 | |
| Silver and | 681.3 | 29 | 103.5 | 22 | 4.2 | 2.2 | |
| downy birch | | | | | | | |
| European aspen | 138.2 | 6 | 38.9 | 8 | 1.2 | 0.4 | |
| Black alder | 82.8 | 4 | 23.1 | 5 | 0.6 | 0.6 | |
| Grey alder | 208.3 | 9 | 36.7 | 8 | 1.3 | 0.5 | |
| Others | 37.5 | 2 | 21.1 | 3 | 0.2 | 0.9 | |
| Total | 2312.5 | 100 | 478.0 | 100 | 16.0 | 10,1 | |

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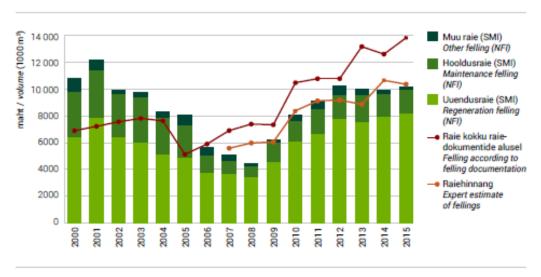


Figure 3.2.2.1 Felling volume by different data sources in 2000-2015

Felling operation:

The total volume of timber felled in recent 10 years (2007-2016) 85.5 million m³
The planned felling volume in the next 10 years 10-15 million m³/year

(Source for section 2: Yearbook Forest 2016, Environment Agency 2017)

3. Forest Management

Institutions associated with forestry

Governmental organizations:

Ministry of Environment http://www.envir.ee/en

Environmental Board https://www.keskkonnaamet.ee/en

Environmental Inspectorate https://www.kki.ee/en

Environment Agency http://www.keskkonnaagentuur.ee/en

State Forest Management Centre https://www.rmk.ee/en

Foundation Private Forest Centre http://www.eramets.ee/eng/

Non-governmental organizations:

Estonian Private Forest Owners Association http://www.erametsaliit.ee

Estonian Forest and Wood Industries Association http://www.estoniantimber.ee

Estonian Forest Society http://www.metsaselts.ee

Estonian Fund for Nature http://elfond.ee/en

Foundation for Forest Conservation http://www.metsahoiu.ee

Forestry employment

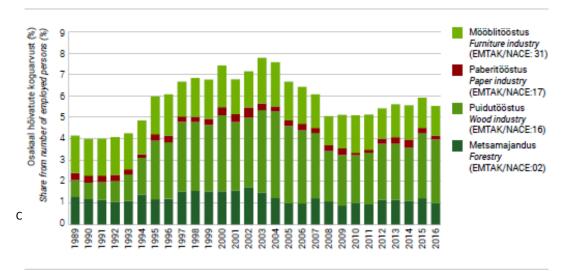
Number of employees in forest sector in 2016

| - | in forestry | 6,500 |
|---|----------------------------|--------------|
| - | in wood industry | 19,100 |
| - | in pulp and paper industry | 1,200 |
| - | in furniture industry | 8,900 |
| | TOTAL in forest sector | 35 700 (5 5% |

TOTAL in forest sector 35,700 (5.5% from employed people)

The dynamics of the number of employees in forest sector

Figure 10.6.3.1 Share of forest sector from total number of employed persons in 1989–2016



Forest ownership

The area and percentage of the forest ownership in 2016

| - | state f | orests | 1,171,600 ha | (51%) |
|---|-----------------|--------------------------------|--------------|-------|
| | 0 | State Forest Management Centre | 1,056,300 ha | (46%) |
| | 0 | other state forests | 115,300 ha | (5%) |
| | | | | |
| - | private forests | | 1,094,600 ha | (47%) |
| | 0 | private persons | 664,300 ha | (29%) |
| | 0 | legal entities | 430,300 ha | (18%) |
| | | | | |
| - | forest | area subject to privatization | 46,300 ha | (2%) |

The dynamic change in the proportion of the forest ownership

After the Soviet Union occupation ended in Estonia, the private ownership was restituted in 1991. Land reform is still ongoing.

Forestry policy

Estonia has quite liberal forest policy aiming at efficient forest management and sustainable use of forest resources. 14% of forests are strictly protected and 13% of forests have other restrictions on forest management.

Investigation and monitoring of forestry resources

Monitoring of forest resources is done by the National Forest Inventory and the Environmental Board. Public forest register is accessible at https://mets-ave.envir.ee.

(Source for section 3: Yearbook Forest 2016, Environment Agency 2017)

4. Forestry Research and Education

Forestry Research

Institute of Forestry and Rural Engineering, Estonian University of Life Sciences located in Tartu is the only institution directly involved in forestry research in Estonia (http://mi.emu.ee/en/). Other universities (University of Tartu, Tallinn University of Technology, Tallinn University) are also dealing with several specific aspects in forest research.

Forestry Education

Institute of Forestry and Rural Engineering, Estonian University of Life Sciences is the only institution in forest education on BSc, MSc and PhD levels in Estonia (http://mi.emu.ee/en/). Currently, there are 342 students studying forestry, wood processing and nature resource management at the Estonian University of Life Sciences, from them 6 students are foreign students.

(Source for section 4: Estonian University of Life Sciences 2017)

5. Forest economics

Forest contribution to GDP

Added value of forest sector to the country's GDP in 2016 was 4.6%.

Forest products import and export trade

Total export value of wood-based products from Estonia in 2016 was 1.91 billion euros (16% of export from Estonia).

Figure 10.3.7 Export and import of wood and articles of wood, paper and articles of paper, wooden buildings and furniture in 1995–2016

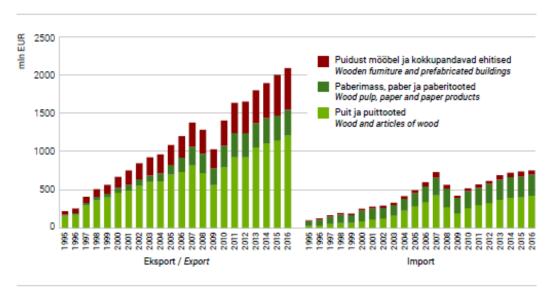


Figure 10.3.1.3.1 Distribution of revenues (EUR) from export of wood and wooden articles in 2016

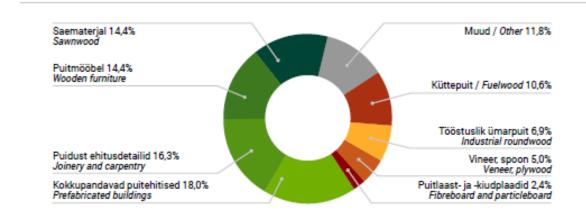
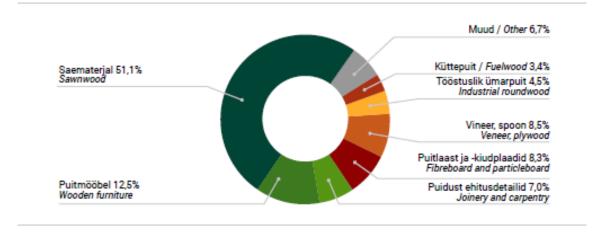


Figure 10.3.1.3.2 Distribution of value (EUR) of import of wood and wooden articles in 2016



(Source for section 5: Yearbook Forest 2016, Environment Agency 2017; Statistics Estonia 2017)