



Supply Base Report: Kurzemes granulas SIA

Fourth Surveillance Audit

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Completed in accordance with the Supply Base Report Template Version 1.6

For further information on the SBP Framework and to view the full set of documentation see www.sbp-cert.org

Document history

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1 Overview

Producer name: Kurzemes granulas SIA

Producer address: Kustes dambis 22, LV-3601 Ventspils, Latvia

SBP Certificate Code: SBP-04-74

Geographic position: 57.391500, 21.597700

Primary contact: Alvis Graudins , +371 294 491 35,alvis.graudins@granulas.lv

Company website: www.granulas.lv

Date report finalised: N/A

Close of last CB audit: 17 Jul 2024

Name of CB: SCS Global Services

SBP Standard(s) used: SBP Standard 2: Verification of SBP-compliant Feedstock, SBP Standard 4: Chain of Custody, SBP Standard 5: Collection and Communication of Data Instruction, Instruction Document 5E: Collection and Communication of Energy and Carbon Data 1.5

Weblink to Standard(s) used: <https://sbp-cert.org/documents/standards-documents/standards>

SBP Endorsed Regional Risk Assessment: Not applicable

Weblink to SBR on Company website: N/A

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations					
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance	Re-assessment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2 Description of the Supply Base

2.1 General description

Feedstock types: Secondary

Includes Supply Base evaluation (SBE): No

Includes REDII: Yes

Includes REDII SBE: No

Includes RED II TOF: N/A

Feedstock origin (countries): Latvia, Lithuania, Norway, Sweden

2.2 Description of countries included in the Supply Base

Country: Lithuania

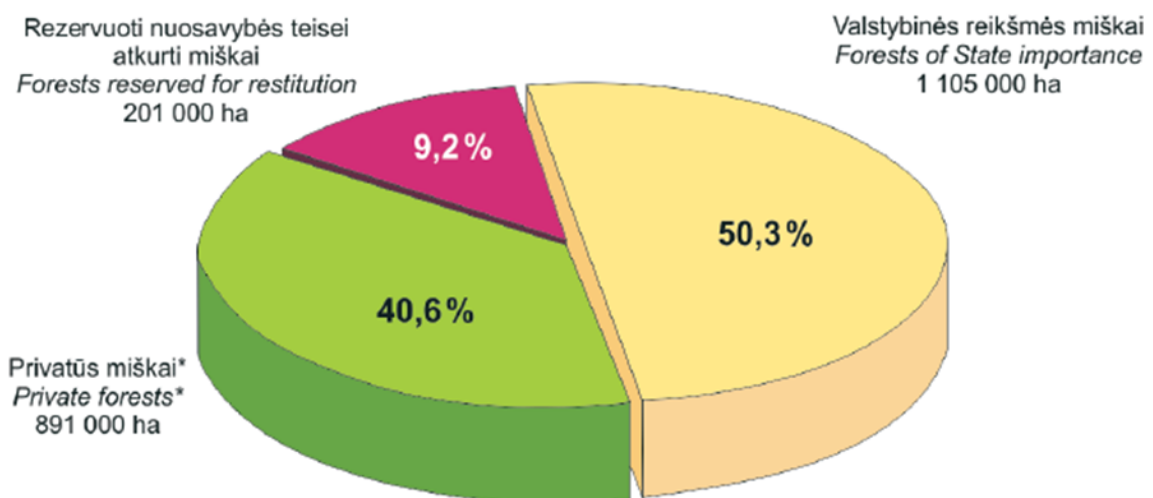
Area/Region: Whole

Sub-Scope: N/A

Exclusions: No

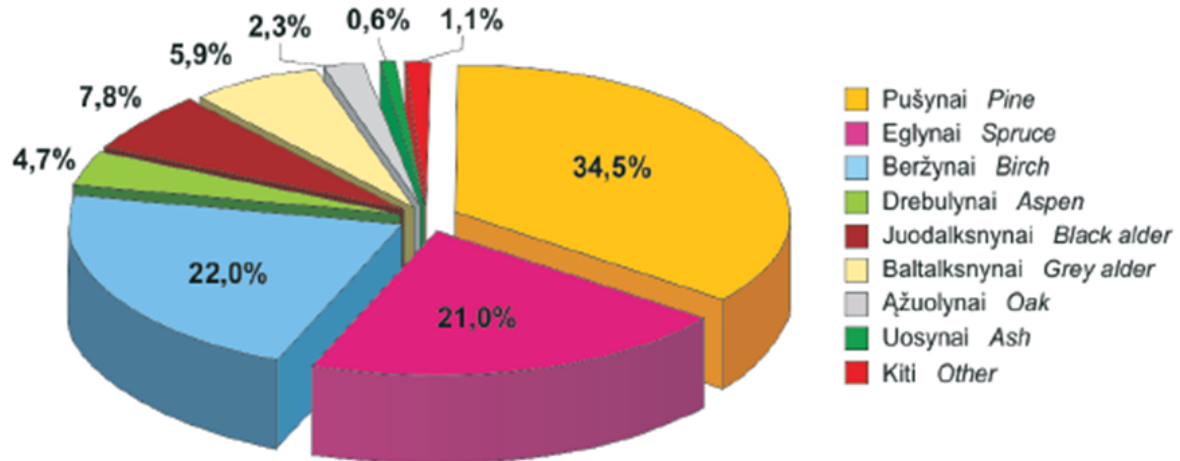
1. LITHUANIA's forest resources

Forest coverage of Lithuania is 33.1% of all land area. Growing stock volume of forests in 2019 is 553 000 000 m³. By ownership forest land is divided 50.3% State forests, 40.6% Private forests and 9.2% reserved for restitution.



Forest land by ownership

Lithuania is situated within the so-called mixed forest belt with a high percentage of broadleaves (44.5%) and mixed conifer-broadleaved stands (55.5%). Most of the forests - especially spruce and birch - often grow in mixed stands. Pine forest is the most common forest type, covering about 34.5% of the forest area. Spruce and birch account for about 21% and 20% respectively. Alder forests make up about 13.7% of the forest area, which is fairly high, and indicates the moisture quantity of the sites. Oak and ash can each be found on about 3% of the forest area. The area occupied by aspen stands is close to 5%.



Forest stands area by dominant tree species

Most of Lithuania's land area is covered by Agricultural land (52.2%) and forest land (33.1%). Agriculture and forestry are one of biggest economy sectors in Lithuania. The south-eastern part of the country is most heavily forested, and here forests cover about 45 percent of the land.

Land use categories	ha	%
Agricultural land	3404800	52.2
Forest land	2158900	33.1
Other wooden land (bushes)	195800	3.0
Roads	105400	1.6
Urban territory	239100	3.7
Water	265900	4.1
Swamps (bogs)	94500	1.4
Other land	64200	1.0
Total	6528600	100.0

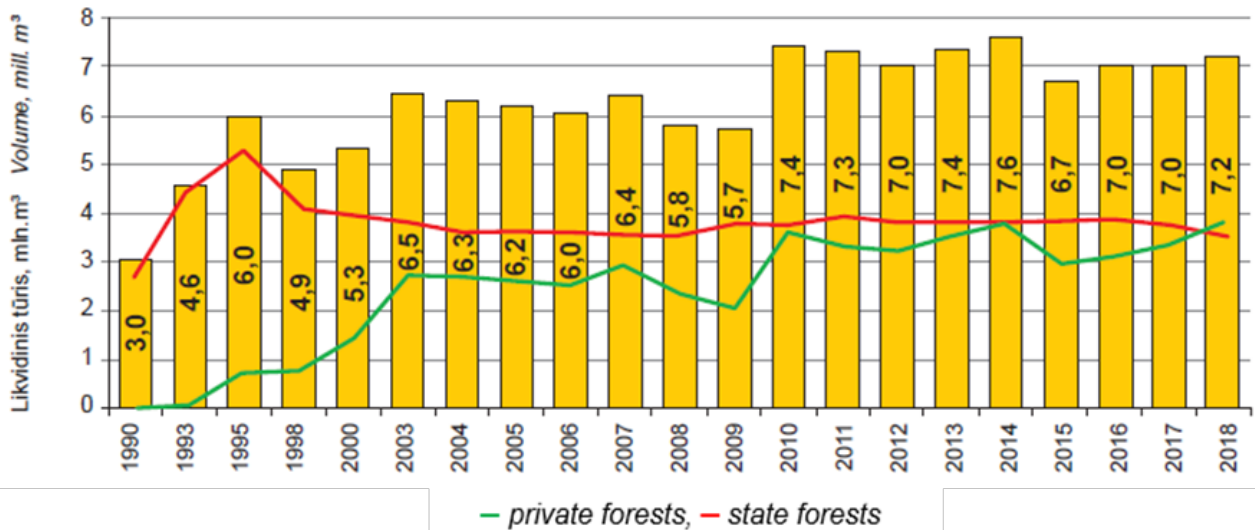
To preserve natural high conservation values and biodiversity in Lithuania, 73.9% of all forest areas are intended for economic activities only (included in group IV). Forests are divided into four categories. Group no. I, II and III are intended for the full or partial protection of forest areas. In reserves all types of cuttings are prohibited. In national parks, clear cuttings are prohibited while thinnings and sanitary cuttings are allowed. Clear cutting is permitted, however, with certain restrictions, in protected forests; and thinnings as well. In commercial forests, there are almost no restrictions as to harvesting methods.

Land use categories	ha	%
Group I – Forest reserves	25337	1.2
Group II – Special-purpose forests	260335	11.8
Group III – Protective forests	288156	13.1
Group IV – Exploitable forests	1623289	73.9

Lithuania has been a signatory of the CITES Convention since 2001. CITES requirements are respected in forest management, although there are no species included in the CITES lists in Lithuania.

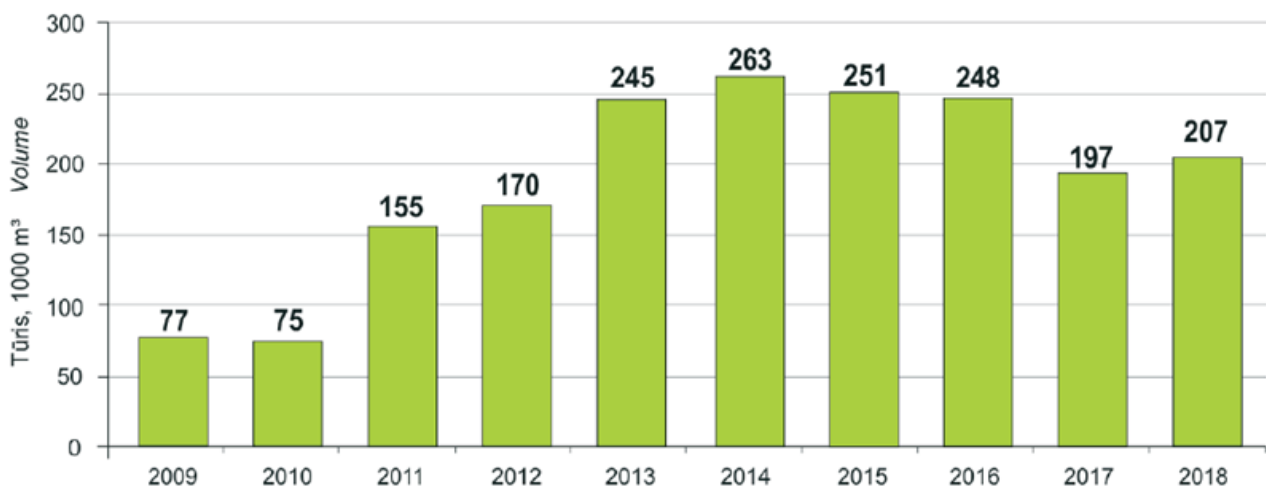
The total forest stock is 553 million m³. Over the last 20 years, the forest stock has increased by about 200 million m³. The gross annual increment for forest stands is about 20.4 million m³ in average and now contain 9.6 m³/ha per year.

By 2010, the volume of Lithuanian logging was increased to about 7 million cubic meters per year. It is maintained at the same level for the following years. In 2018, the annual forest felling of state forests for the first time in 20 years is lower than forest felling in private owner's forests.



Felling by forest ownership categories

During logging, a significant amount of felling residues is generated, which, if economically justified, is sold as energy wood. In 2018, this volume is 207,000 m³ in state forests. It has reached its largest volume in recent years in 2014, when 263,000 m³ were sold.



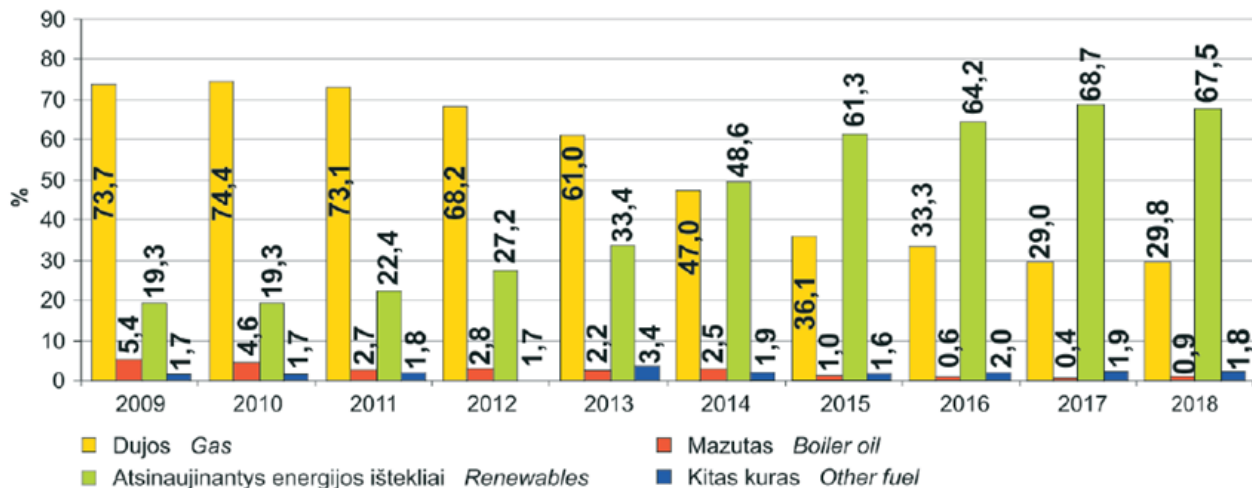
Sales of forest felling residues in state forests

The forest and timber industry in Lithuania employs more than 66,000 people in total. A total of about 10,300 people are employed in the forestry and logging sectors. In recent years, there has been a slight decline in the number of people employed in these sectors, due to the modernization of the sector and the replacement of workers by machinery. A similar trend is observed in the wood processing industry, there is a fall in employment due to the modernization of the sector. The number of employees in the paper and furniture industry has increased. The overall employment rate in the sector has not changed.

Metai Year	Miškininkystė ir medienos ruošą <i>Forestry and logging</i>			Medienos bei medienos ir kamštienos gaminių ir kita gamyba <i>Manufacture of wood and cork and other manufacture</i>			Popieriaus ir popieriaus gaminių gamyba <i>Manufacture of paper and paper products</i>			Baldų gamyba <i>Manufacture of furniture</i>		
	Iš viso Total	Vyrai Males	Moterys Females	Iš viso Total	Vyrai Males	Moterys Females	Iš viso Total	Vyrai Males	Moterys Females	Iš viso Total	Vyrai Males	Moterys Females
2015	11 852	9 720	2 132	22 886	17 147	5 739	4 255	2 401	1 854	27 724	16 618	11 106
2016	11 478	9 329	2 149	22 889	17 154	5 735	4 609	2 632	1 977	28 596	16 916	11 680
2017	11 000	8 886	2 114	21 456	16 019	5 437	4 960	2 821	2 139	29 365	17 251	12 114
2018	10 344	8 347	1 997	20 809	15 505	5 304	5 245	2 995	2 250	29 984	17 413	12 571

Number of persons employed in enterprises

The chart below shows how the type of fuel has changed from mostly fossil fuels to renewable energy over the last 10 years. The use of gas for heating has decreased by more than 50%, while the use of renewable resources for heating has tripled. Renewable resources include wood chips, biogas, liquid biofuels, hydropower, geothermal energy, wind energy, solar energy, waste heat. Wood chips make up 80% of the resources used for heat energy.



Šaltinis: Lietuvos šilumos tiekėjų asociacija

Source: The Lithuanian District Heating Association

The structure of fuel used for heat generation in district heating enterprises

Info:

<http://www.amvmt.lt/index.php/leidiniai/misku-ukio-statistika/2019>

Country: Latvia

Area/Region: Whole

Sub-Scope: N/A

Exclusions: No

In Latvia, forests occupy 3.435 million ha, which is 53% of the entire country's territory. About half of Latvia's forests belong to the state, while the majority of the rest belong to private land owners, whose total number is about 135 thousand.

Forest areas continue to increase continuously. The growth of forest areas occurs both naturally and by artificial afforestation of barren and unusable lands for agriculture. In the last decade, on average, around 11 million m³ of wood is harvested in Latvian forests. This is less than natural growth, so Latvian forestry can be described as sustainable.

Forest land consists of:

- forests: 3,094 mill. ha (90,6%);
- marshes: 0,17 mill. ha (5,0%);
- flooded areas: 0,018 mill. ha (0,5%)
- glades (forest meadows): 0,03 mill. ha (0,9%)
- objects of infrastructure: 0,09 mill. ha (1,8%).
- other forest lands: 0,019 mill. ha (0,5%)

Distribution of forests by the dominant species:

- pine 32 %;
- spruce 19 %;
- birch 30 %;
- black alder 4 %;
- grey alder 7 %;
- aspen 7 %;
- other species 1%

Share of species used in reforestation, by planting area:

- pine 18 %;
- spruce 24 %;
- birch 27 %;
- grey alder 12 %;
- aspen 14 %;
- other species 5 %.

Timber production by types of cuts, by volume produced:

- final cuts 32,23 %;
- thinning 25,32 %;
- sanitary cuts 37,87 %;
- deforestation cuts 0,09 %;
- other types of cuts 3,48 %.

The field of forestry

In Latvia, the field of forestry is supervised by the Ministry of Agriculture, which in cooperation with stakeholders of the sphere develops forest policy, development strategy of the field, as well as drafts of legislative acts concerning forest management, use of forest resources, nature protection and hunting.

Implementation of requirements of the national law and regulations notwithstanding the type of tenure is carried out by the State Forest Service under the Ministry of Agriculture.

Management of the state-owned forests is performed by the Joint Stock Company "Latvia's State Forests", established in 1999. The enterprise ensures implementation of the best interests of the state by preserving value of the forest and increasing the share of forest in the national economy.

Biological diversity

Historically, extensive use of forests as a source of profit began later than in many other European countries, therefore a greater biological diversity has been preserved in Latvia.

For the sake of conservation of natural values, a total number of 674 protected areas have been established. Part of the areas have been included in the European network of protected areas Natura 2000. Most of the protected areas are state-owned.

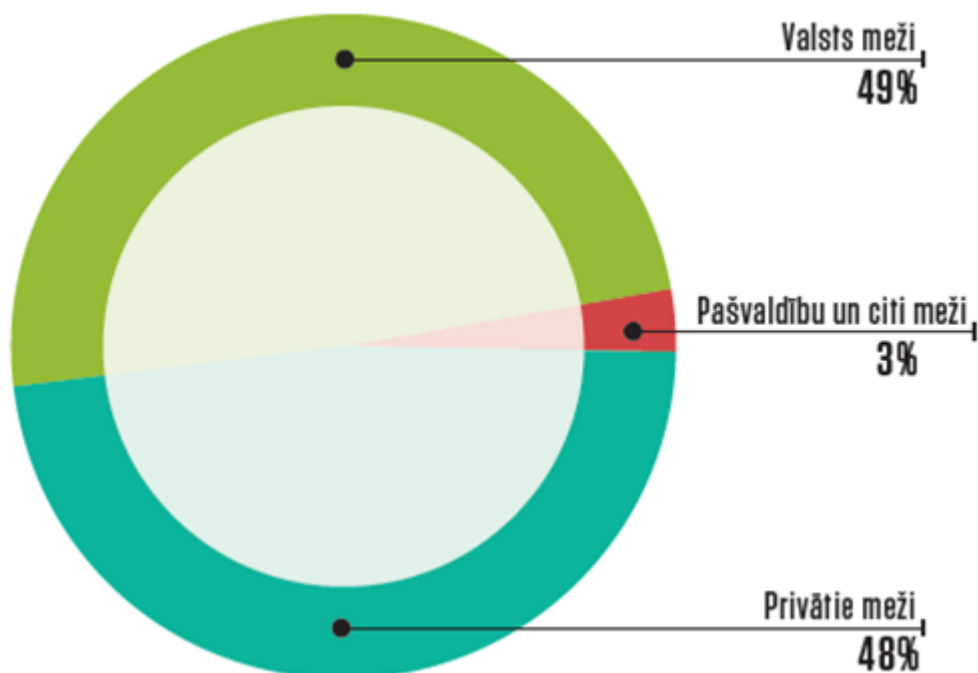
In order to protect highly endangered species and biotopes located without the designated protected areas, if a functional zone does not provide that, micro-reserves are established. According to data of the State Forest Service (2015), the total area of micro reserves is 40 595 ha. Identification and protection planning of biologically valuable forest stands is carried out continuously.

On the other hand, for preservation of biological diversity during forest management activities, general nature protection requirements binding to all forest managers have been developed. They stipulate that at felling selected old and large trees, dead wood, underwood trees and shrubs, land cover around wet micro-lowlands (terrain depressions) are to be preserved, thus providing habitat for many organisms.

Latvia has been a signatory of the CITES Convention since 1997. CITES requirements are respected in forest management, although there are no species included in the CITES lists in Latvia.

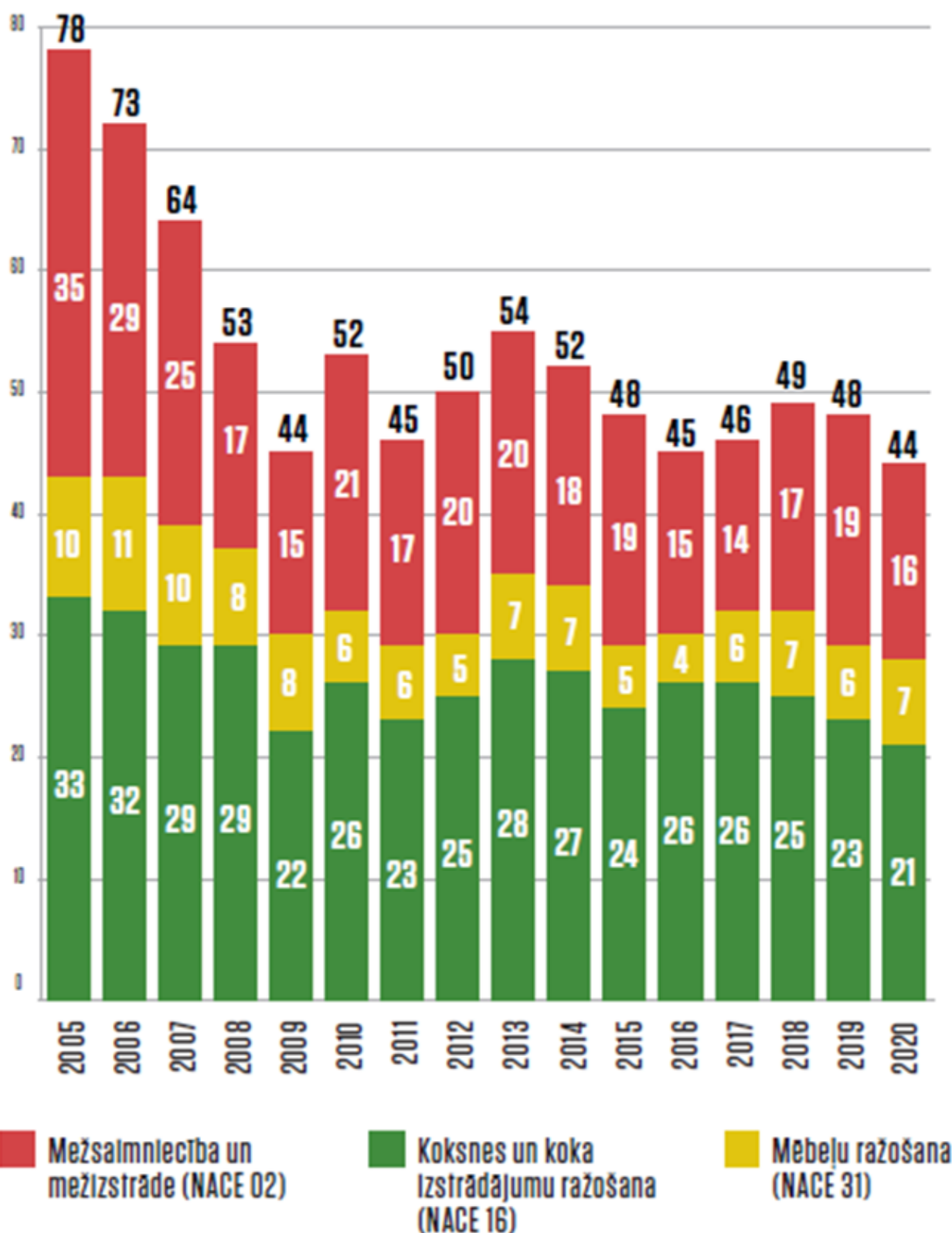
Forest and community

About half of Latvia's forests belong to the state, while most of the others belong to private landowners, the total number of which is about 135 thousand. In Latvia, it will be difficult to find forests that would not be publicly available - almost all people have the right to move freely, pick mushrooms or berries. The number of various recreational objects in Latvia's forests is increasing every year and the territories where recreation is one of the main goals of forest management occupy 8% of the total forest area in the country.



Picture No1 Ownership structure

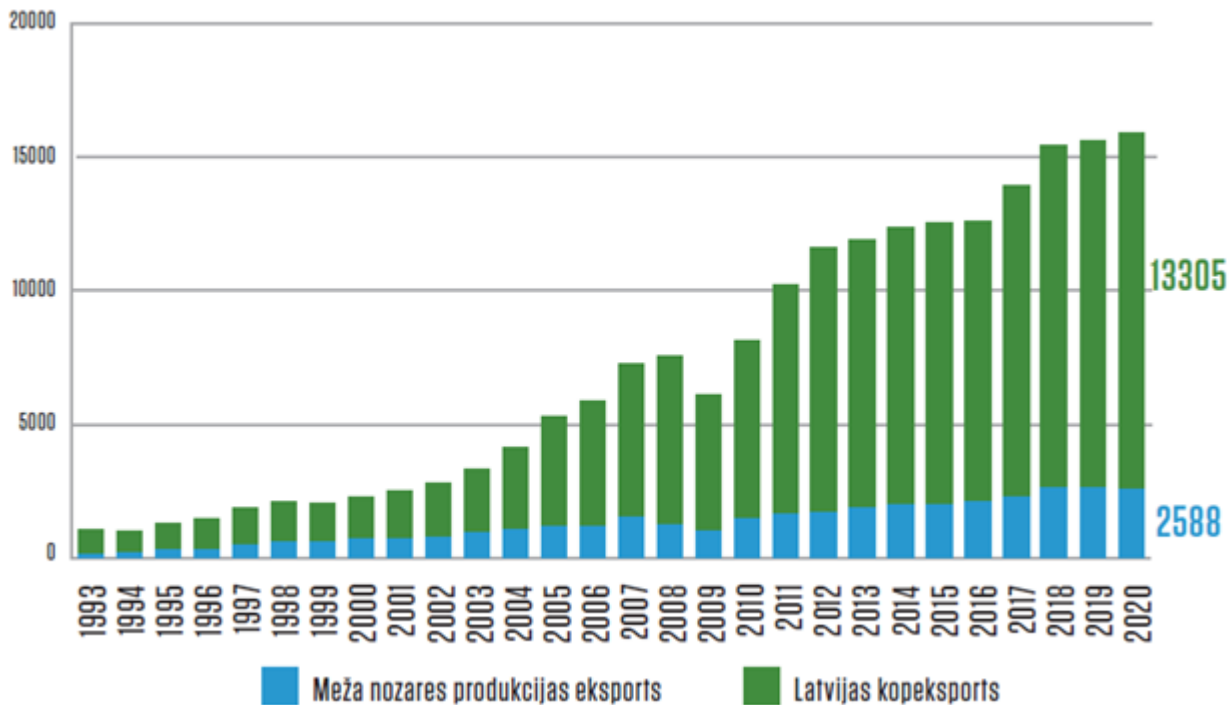
The forest sector employs about 44,000 people (3.7% of the number of able-bodied people in Latvia), the number of which has not changed significantly over the last 10 years. This type of indicator shows stability and growth in the sector, as financial indicators for the forest sector are growing. It also points to the modernization of the sector, as despite the increase in production volumes, there are no significant changes in the number of employees.



Picture No2 Employees in forest sector

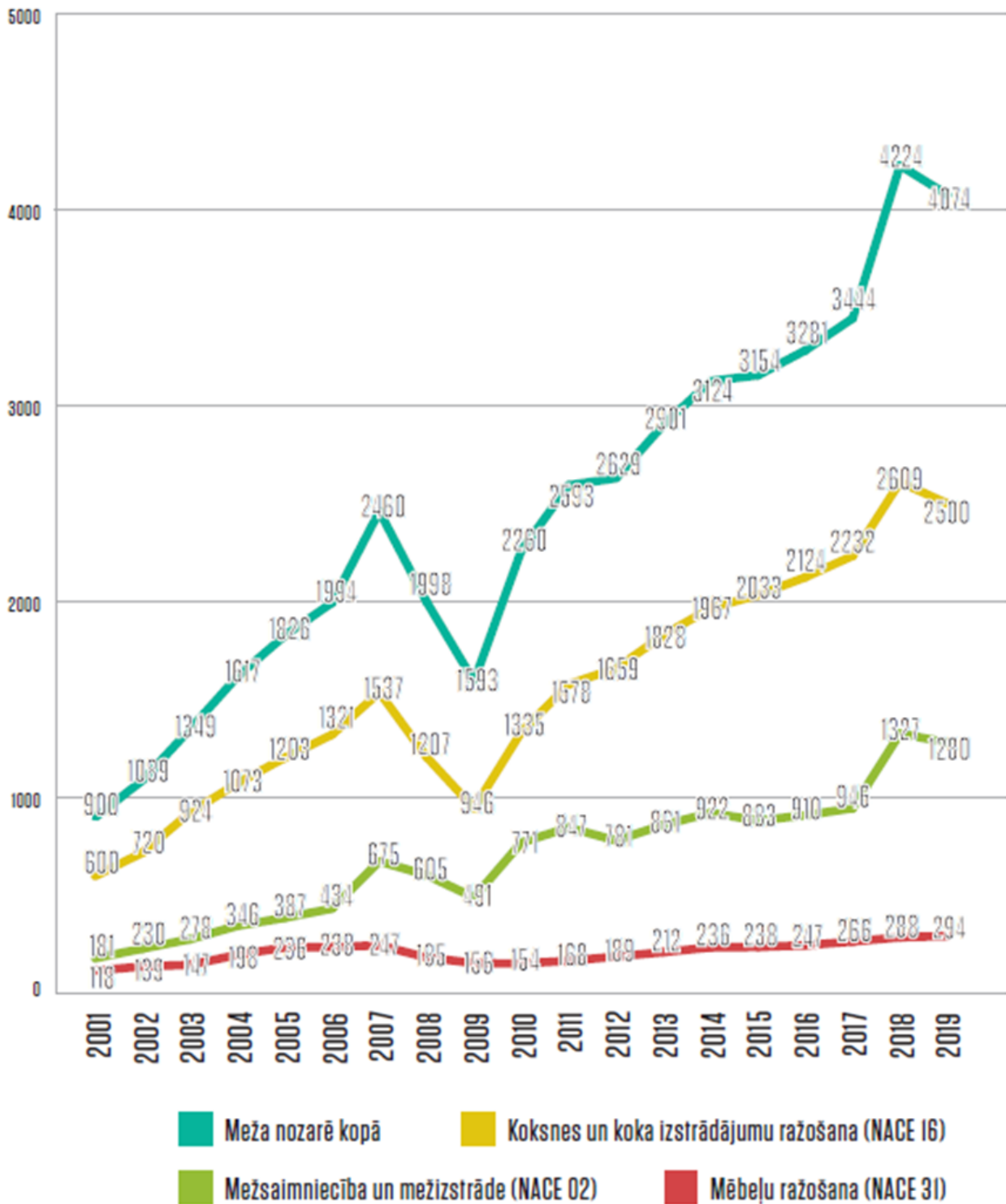
Economic indicators of the forest sector

Over the past 30 years, the forest sector has played a significant role in Latvia's export performance. Despite the fact that the percentage of these indicators for the forest sector is decreasing against the background of Latvia's total exports (this is related to the development of other sectors), the total volume of forest sector production is constantly increasing. In 2020, it makes up 16,3% of Latvia's total exports, which is 2588 million euros.



Picture No3 Export

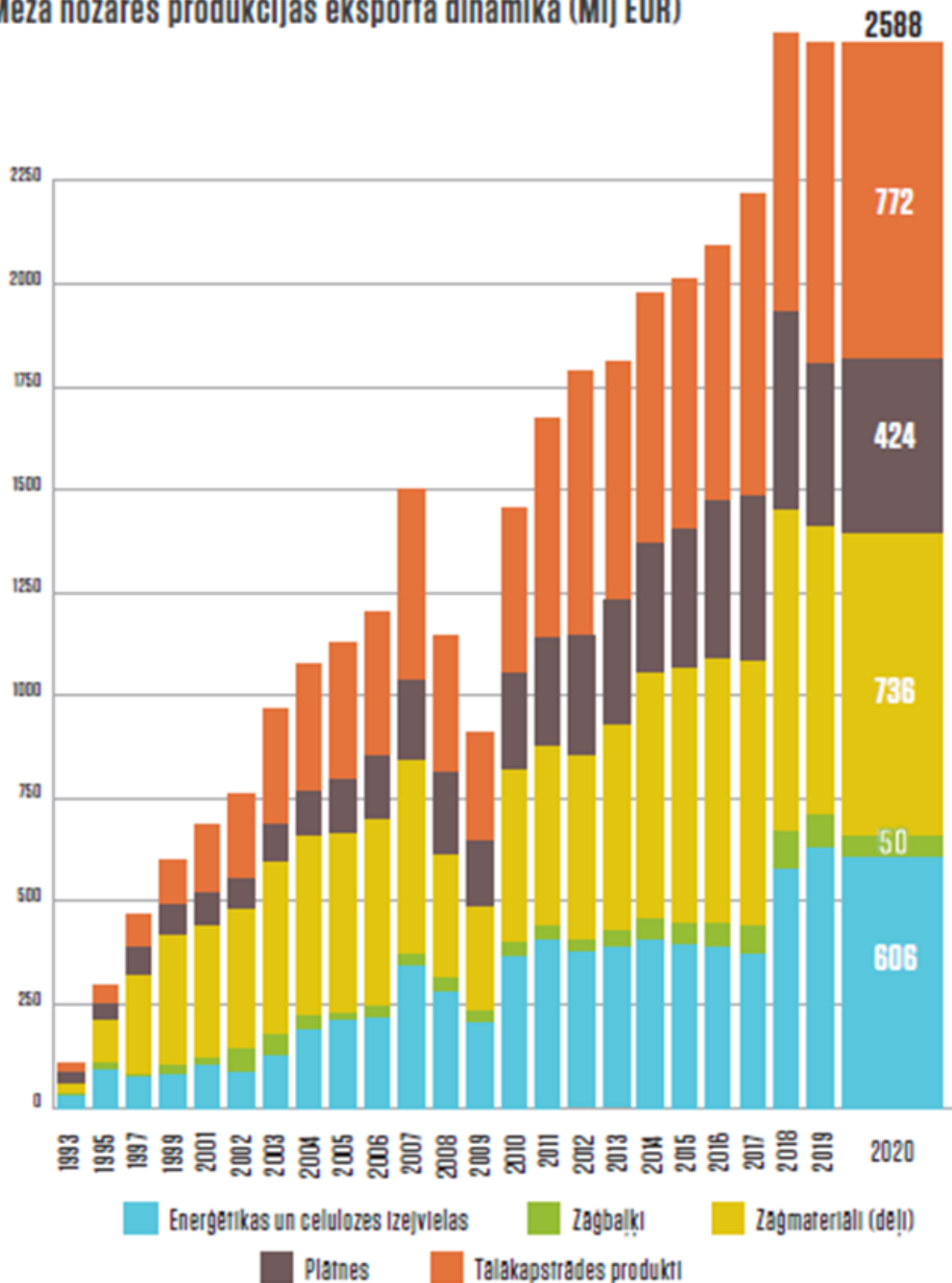
Compared to other forest-related industries, forestry and logging account for 31.4% of the total turnover of the forest sector. Recent years have seen a sharp rise. In the wood and wood products industry, logging volumes are rising accordingly. The furniture industry has seen a modest increase in turnover and stability over the last 15 years.



Picture No4 Forest sector turnover

The dynamics of forest sector exports has been steadily rising over the last 30 years. As can be seen, exports of energy and pulp raw materials maintain a stable position among other products such as sawlogs, sawn timber, board materials and further processing products. In 2020, exports of energy and pulp raw materials totaled 606 million euros, which is 23,4% of the total exports o forest products.

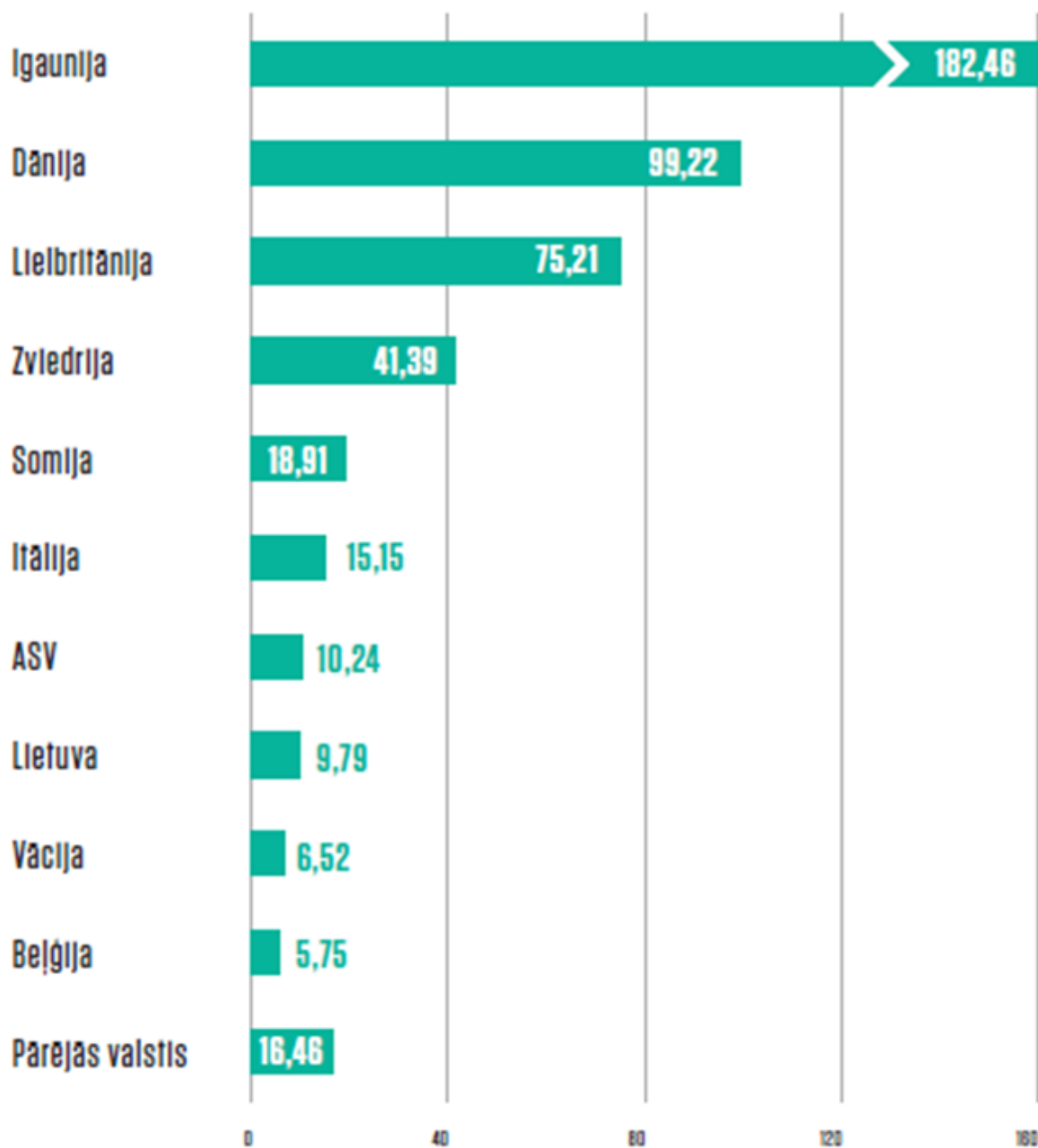
Meža nozares produkcijas eksporta dinamika (MIJ EUR)



Picture No5 Forest industry product export dynamics

Almost 90% of the amount of firewood is sold in 6 countries; Estonia (37.9%), Denmark (20,6%), the United Kingdom (15,6%), Sweden (8,6%), Finland (3,9%) and Italy (3,1%).

Meža nozares galveno eksporta produktu noietā tirgus sadalījums pa valstīm Kurināmā koksne (MIJ EUR), 2020

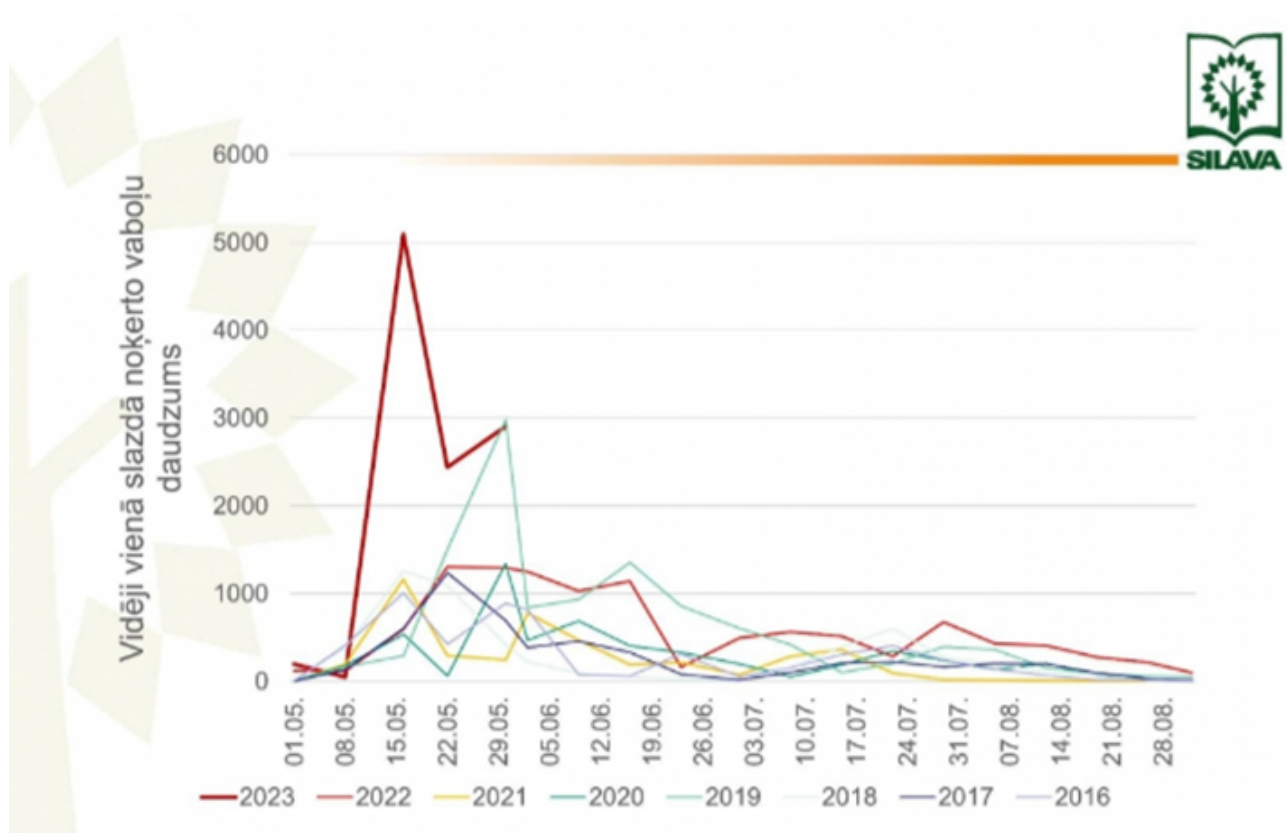


Picture No6 Export of firewood

Emergency situation in spruce stands

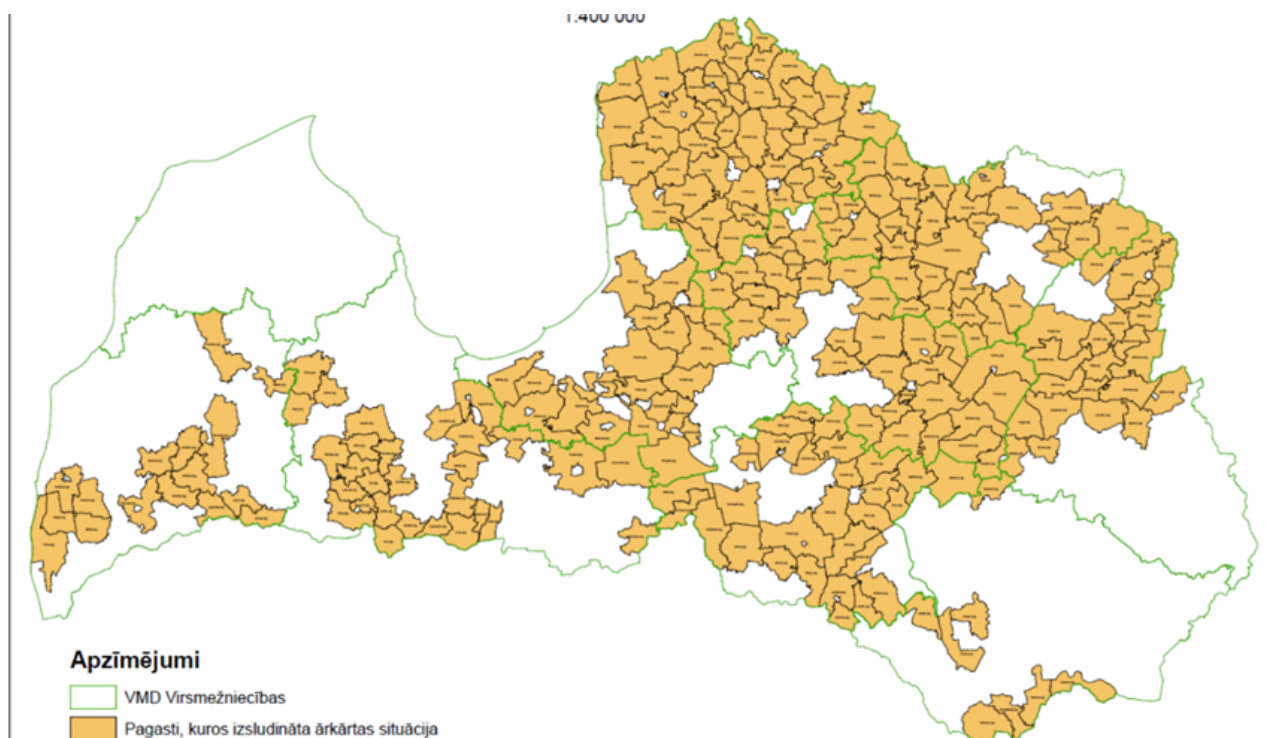
In connection with the rapid growth of the spruce eight-toothed bark beetle (*Ips typographus*) population, the Latvian government declared an emergency situation in spruce forests in the period from April 1 to June 30. Restrictions on economic activity have been established in the territory of the state of emergency, which provides for a ban on felling trees in the protection zones of valuable spruce stands. It is also determined that pheromone traps should be placed in suitable conifer clearings.

"LVMI "Silava" is monitoring the situation in Latvia related to the flight activity of the bark beetle, and from the obtained data it can be seen that the active flight has started on April 20 this year. The collected data is alarming - compared to 2022, the number of beetles caught in traps is twice as high, but on May 15 it was already 10 times higher than the previous year.



Picture No7. Average amount of beetles caught in one trap

The state of emergency was declared in 230 parishes of 32 counties of the Vidzeme, Kurzeme, Zemgale and Latgale regions from April 1 to June 30, 2023. During this period, economic activity restrictions and protective measures were determined in the valuable spruce forests and their protection zones, which were identified in cooperation with the experts of the State Forestry Service (VMD) and the Latvian State Forestry Institute "Silava" (LVMI "Silava") and others involved.



Picture No 8. Parishes in which a state of emergency has been declared.

According to the data of the State Register of Forests, cutting of trees has been suspended for the period of the emergency situation in 12,700 cuttings with a total area of 23,690 ha, of which JSC "Latvijas Valsts meži" has 4,353 cuttings in an area of 11,440 ha. The State Forestry Service carries out supervision so that no felling of trees is carried out in the suspended fellings, except when fresh spruces infested by the pest are found.

Since the beginning of this year, VMD has issued 970 sanitary opinions on an area of 1103 ha in connection with bark beetle damage, which is 3/4 of all sanitary opinions. A little more than half of the area to be felled is in the state forests, but the forests of the other owners are not far behind.

In the final reading, the Saeima supported the urgently recognized amendments to the Forest Law (effective from July 1 this year), which provides that the Ministry of Forestry has the right to set restrictions for combating the spread of pests without declaring a state of emergency.

Info:

<https://www.zlinfo>:

<https://www.zm.gov.lv/mezi/statiskas-lapas/buklets-meza-nozare-skaitlos-un-faktos-2020-?id=19172#jump>

www.zm.gov.lv

State forest service www.vmd.gov.lv

www.lvm.lv

Latvijas lauku konsultāciju un izglītības centrs. www.llkc.lv

LVMI "Silava"

Country: Sweden

Area/Region: Whole

Sub-Scope: N/A

Exclusions: No

Forest area, standing volumes and annual harvest

Sweden is the largest country in Northern Europe, Sweden has a total area of 447,430 km², 70% of Sweden is forest land and 80% of the forest land is in active use (<https://www.forestindustries.se/forest-industry/facts-and-figures/0>).

Forests cover 28 million hectares in Sweden, including 23.6 million hectares of productive forestland (SLU 2020), where 'productive forestland' is defined as forest producing at least 1 m³ of wood per hectare per year. The unproductive forests that do not reach that minimum threshold (often referred to as "forest impediments") are mostly found as open forests on peatlands, on rocky outcrops and at high altitudes. The area of productive forestland outside formally protected areas was 22.3 million hectares as of 2018. According to the Swedish National Forest Inventory (NFI), the total standing volume on all forestland was 3.55 billion m³ (stem and bark) in 2015–2019. Outside formally protected areas where forestry activities are not allowed, the total standing volume was 3.12 billion m³. This corresponds to an average standing volume of 139 m³ per hectare. The standing volume in Sweden has almost doubled since the beginning of the NFI in the 1920s. This increase is largely explained by enhanced growth through effective forest management (e.g. silvicultural treatments and associated changes in forest age-class distribution and tree species composition, use of genetically improved regeneration material), in combination with other factors such as afforestation of former agricultural land, the fertilizing effects of nitrogen deposition and climate change. Norway spruce and Scots pine together comprise 80 % of the standing timber volume in Swedish forests, with roughly equal shares (Table 1). Birch comes in the third place with 12 % of the standing volume, followed by 14 tree species with less than 2 % each (Table 1). On the national scale, introduced tree species comprise a relatively small share of the forest area in Sweden compared to many other European countries (Forest Europe 2015). The current Forestry Act states that introduced tree species can only be used in exceptional cases (SFA 2019c). Lodgepole pine (*Pinus contorta*), an introduced conifer originating from North America, is the most common nonnative tree species in Sweden. It occurs mostly in the northern parts of the country. This species nowadays stands for 1.4 % of the timber volume in Sweden as a whole and 2.3 % of the forest area (SLU 2018). Note, however, that lodgepole pine may be relatively abundant at the local scale in parts of north-central Sweden (SLU 2010). The average annual harvest in Sweden was about 84 million m³ (stem and bark) during the period 2015/16–2018/19. This corresponds to 72 million m³ solid wood per year (assuming a conversion factor of 0.82). The total harvest corresponds to an average of 3.8 m³ (stem and bark) per hectare of productive forestland per year (excluding nature reserves and other areas where forestry is not allowed). In forest statistics, Sweden is often divided into four regions with similar forest areas: Northern Norrland, Southern Norrland, Svealand and Götaland (from north to south). The harvested volume is largest in Götaland and smallest in Northern Norrland in accordance with the general south-north gradient of decreasing forest productivity. Approximately 60 % of the harvested timber volume originates from final felling, 30 % from thinning and 10 % from the felling of shelter trees and other kinds of Harvest. About 60 % of the total harvest comes from private forest (nonindustrial private forest owners) land and 40% from company-owned forests and state-owned forests.

Table 1. Volume share of different tree species (percent of standing volume) for four Swedish regions with similar forest areas, ordered from north to south (Northern Norrland, Southern Norrland, Svealand and Götaland; see Fig. 1). Source: SLU (2020)

	Northern Norrland	Southern Norrland	Svealand	Götaland	Total
Norway spruce (<i>Picea abies</i>)	49.8	42.5	40.1	45.9	40.3
Scots pine (<i>Pinus sylvestris</i>)	31.6	37.5	41.1	29.5	39.3
Birch (<i>Betula pendula</i> , <i>B. pubescens</i>)	15.5	13.3	10.7	10.8	12.4
Alder (<i>Alnus glutinosa</i> , <i>A. incana</i>)	0.2	1.4	2.1	2.8	1.7
Aspen (<i>Populus tremula</i>)	0.7	0.9	2.7	2.3	1.7
Lodgepole pine (<i>Pinus contorta</i>)	1.6	3.4	0.5	0	1.3
Oak (<i>Quercus robur</i> , <i>Q. petraea</i>)	0	0	0.7	4.1	1.3
Beech (<i>Fagus sylvatica</i>)	0	0	0	2.2	0.6
Goat willow (<i>Salix caprea</i>)	0.5	0.7	0.4	0.5	0.5
Other nemoral broadleaved trees	0	0	0.3	1.0	0.3
Rowan (<i>Sorbus aucuparia</i>)	0.1	0.2	0.2	0.3	0.2
Larch (<i>Larix</i> spp.)	0	0	0.1	0.2	0.1
Other non-nemoral broadleaved trees	0	0.1	0.1	0.3	0.1

Sweden is world's 5th largest exporter of pulp, paper and sawn timber and total of 85% of the produced forest products are exported. Every year, at least 380 million trees are planted in Sweden. Over the past 100 years, Sweden's forest resource has doubled (<https://www.forestindustries.se/forest-industry/facts-and-figures/>).

Current ownership structure

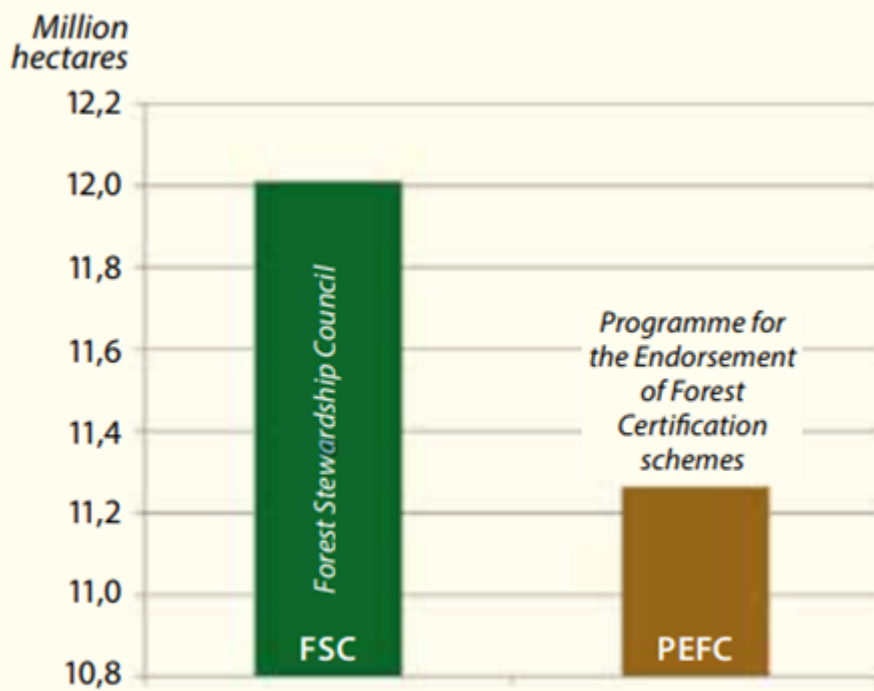
Sweden has a total population of 10,2 million, of which 115 thousands are employed in forest sector (> 1%). In Sweden there are more than 50 pulp and paper mills, 120 sawmills and 40 companies closely connected to the production of pulp, paper or timber goods, which provides jobs for forest workers (<https://www.forestindustries.se/forest-industry/facts-and-figures/>).

Approximately 330,000 non-industrial private forest owners (hereafter "individual forest owners"), representing 3 % of the Swedish population, together hold about half of the forestland. Approximately one-fourth (25 %) of the forestland is owned by forestry companies, 19 % by the state (the state-owned forestry company Sveaskog and the National Property Board Fastighetsverket) and other public owners, and 6 % by other private owners such as the Swedish Church, foundations and associations (SFA 2014). The share of forest area belonging to individual forest owners is highest in southern Sweden (approximately 80 %), while company and state-owned forests dominate in the northern parts of the country.

Certification

In 1998 Sweden became the first country in the world to get a national FSC standard approved, and the major forestry companies soon certified their forest operations. It was quickly followed by the introduction of the PEFC, a system more suited to private forest owners. More than 60 percent of forest areas are certified, and some forest lands are certified both through the FSC and PEFC (https://www.skogsstyrelsen.se/globalassets/in-english/forests-and-forestry-in-sweden_2015.pdf).

Certification



Note that part of the forest area is certified both through FSC and PEFC.

Source: The Swedish Forest Industries Federation, CEPI, PPI, FAO, National Associations.

Protected species and conservation areas

There are many different forms of protection for nature in Sweden. The most common are nature reserves and the strongest forms is national parks and Natura 2000. In Sweden, about 15 percent of the land area is protected in some form (<https://www.naturvardsverket.se/en/topics/protected-areas/>).

There are 5111 nature reserves in Sweden. These nature reserves form the largest proportion of protected nature in Sweden. The majority of nature reserves in Sweden, almost 85% by surface area, lie in the northern counties of Jämtland, Västerbotten and Norrbotten. Most of the alpine and sub-alpine nature reserves lie within these counties.

The initiative to protect an area in Sweden frequently comes from the county administrative board but can also come from municipalities, non-profit organisations, the public or landowners. The county administrative board consults with landowners and puts forward a proposal for decision about the nature reserve, which sets out aims, stipulations and a management plan. The state then hires an independent surveyor who calculates the market value depreciation which will result from converting the land into a reserve (<https://www.naturvardsverket.se/en/topics/protected-areas/different-types-of-nature-conservation/nature-reserve/>).

In total there are a total of 20391 protected areas in Sweden, 4125 Natura 2000 sites - 554 Special Protection Areas (Birds Directive) and 4028 Sites of Community Importance (Habitat Directive) - as well as 16266 sites designated under national laws.

The protected area network in Sweden is strongly influenced by the interaction between nationally designated sites and Natura 2000, with 70% of the total area covered by protected areas an overlap between Natura 2000 sites and nationally designated sites.

Protected areas

20391 Protected areas

14.09% of land

12.84% of marine waters

Species protected in Sweden under EU law are protected under the Habitats Directive and under the Birds Directive. The Habitats Directive has a total of 2 500 species on its list, the Birds Directive has a total of 500 species of wild birds protected

(<https://biodiversity.europa.eu/countries/sweden#:~:text=There%20are%20a%20total%20of,sites%20designated%20under%20national%20laws.>).

Protected species

277 species protected under EU law in Sweden

4028 species under the Habitats Directive

6 species are unique to Sweden

554 species under the Birds Directive

No CITES listed tree species are represented in the Swedish forestry.

Country: Norway

Area/Region: Whole

Sub-Scope: N/A

Exclusions: No

Forest area, standing volumes and annual harvest

Forests cover about 38 percent of Norway's land area, or about 122.000 square kilometers. Of this, around 86.600 square kilometers are productive forests - that is, they produce enough timber to be important for forestry. The main tree species by volume and economic importance are spruce, pine and birch. Hedmark is Norway's largest forest county (<https://www.regjeringen.no/en/topics/food-fisheries-and-agriculture/skogbruk/innsikt/skogbruk/id2009516/#:~:text=Forests%20cover%20about%2038%20percent,c%20or%20more%20in%20diameter.>).

Table 1 below represents the first Norwegian National Forest Inventory showed that increment and harvest were approximately in balance. Fellings includes the volume of all trees, living or dead, that are felled, including the volume of trees or parts of trees that are not removed from the forest (<https://forestecosyst.springeropen.com/articles/10.1186/s40663-020-00261-0>).

From: [A century of National Forest Inventory in Norway – informing past, present, and future decisions](#)

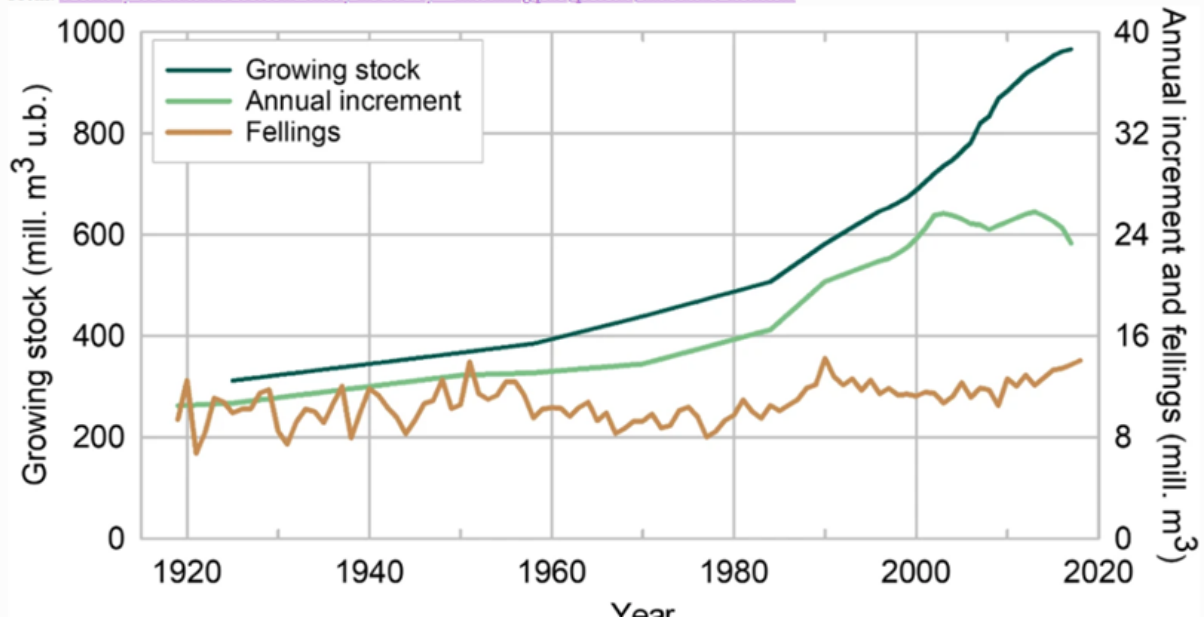


Table 1. Ratio between Growing stock, Felling and Annual Increment.

Current ownership structure

The Norwegian Forest Owners' Federation represent about 30 000 family forest owners. The Norwegian Forest Owners' Federation was founded in 1913, and is the central organisation for four regional cooperatives. The regional cooperatives cover almost the whole of Norway and represent about 30 000 family forest owners, with a market share of approximately 80 percent of the timber market (<https://skog.no/om-oss/about-us-english-version/>).

According to Norwegian Forest Owners Federation, rest of forest land is owned by State (13%), Industry/companies (2%) and other private forest owners (4%) (<https://www.cepf-eu.org/sites/default/files/document/Norway.pdf>). (Table 2).

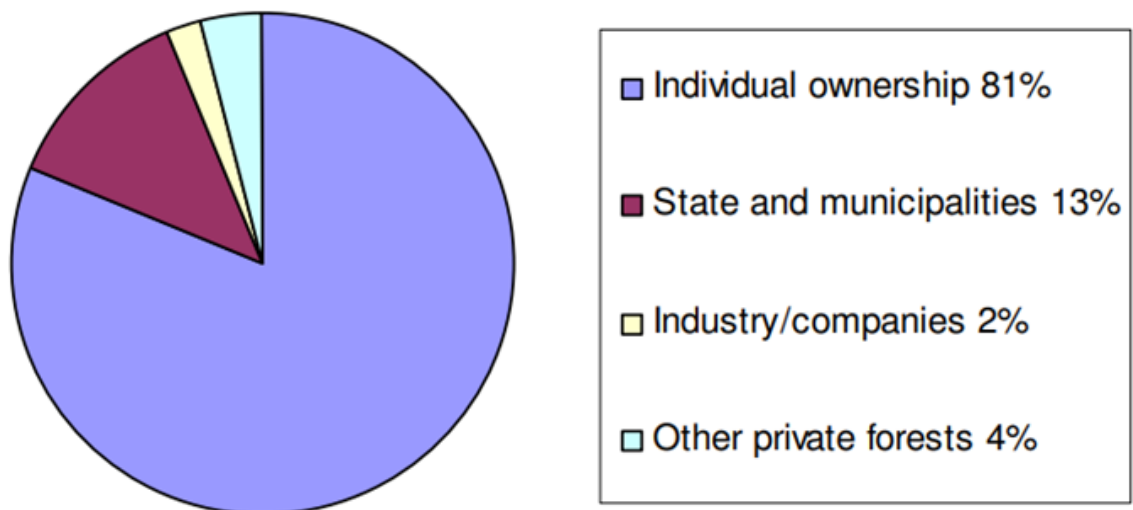


Table 2. Forest land by ownership (% of area).

Forestry is a traditional and important industry in Norway. About 50 % of the harvested timber is used by sawmills in Norway. There are 225 sawmills operating on an industrial scale. It provides jobs and export earnings. Around 25.000 (around 0.5% of total population) people are employed in the forest-based sector.

Norway is one of the world's leader in the development of wooden structures – bridges and buildings (<http://archnetwork.org/forestry-in-norway-2/>).

Certification

The Norwegian PEFC standard, also known as the Norwegian adaptation of the Programme for the Endorsement of Forest Certification, is the forest industry's own standard and certification scheme that sets criteria for sustainable forest management. Currently, 75% of Norway's forest land is certified under the PEFC standard (Ring et al. 2017). In practice, though, close to all forest produce on the Norwegian market falls under the PEFC standard, as the remaining 25% forest areas are not under active production. Other Nordic countries have their own national Forest Stewardship Council (FSC) standards for certification running in parallel with their PEFC standard. The Norwegian FSC standard was discontinued in 2010, together with the collapse of the Living Forests initiative, although negotiations for a new standard are underway. Regardless of the current absence of a national standard, some 3% of Norway's forest areas are certified by the international FSC standard (<https://link.springer.com/article/10.1007/s13280-020-01357-1>).

Protected species and conservation areas

In addition to Norway's 47 national parks, Norway have more than 3,200 other protected areas. Together, these comprise more than 17% of mainland of Norway. This area is dominated by high mountain areas , and several important habitat types have, which not yet been sufficiently captured. They have been given protected status to ensure that care will be taken of vulnerable plants, animals and habitats and that natural environments would be protected.

Norway received its first modern nature conservation law in 1970. The largest growth in protected areas and the number of protected areas took place in the 1980s and 2000s. In 2009, we had more and better opportunities to protect nature through the Biodiversity Act.

The Norwegian Red List of Species from 2021 provides an overview of species' predictions of extinction. 12 % of the species that have been assessed in the work on the red list are classified as endangered. Most are associated with forests and cultural landscapes and open lowlands (semi-natural land). Red list database: <https://artsdatabanken.no/lister/rodlisteforarter/2021> . CITES species are present in Norway.

Species classified as critically endangered include the Arctic fox, wolf and common guillemot. According to the Norwegian Environment Agency land-use change is a threat to 90% of all critically endangered, endangered and vulnerable species (threatened species). Commercial forestry is a threat to 41% of these vulnerable species. Forests account for the largest proportion of red-listed species. Almost half (48%) of all threatened species are found in forests, either exclusively or both in forests and in other areas. The largest numbers of threatened species in forest habitats are in the species groups fungi (353 species), beetles (230species), true flies or Diptera (128 species) and lichens (124 species).

(<https://miljostatus.miljodirektoratet.no/tema/naturomrader-pa-land/vernet-natur/>).

Forestry is administrated by The Royal Ministry of Agriculture. The Ministry may also decide that forest – or certain types of forest – shall be considered as protection forest when it may serve as protection against avalanches and landslides, flooding rivers, flood damage, sand drift or similar or as special protection for other forest, cultivated land or settlement (<http://archnetwork.org/forestry-in-norway-2/>).

2.3 Actions taken to promote certification amongst feedstock supplier

The company has established the FSC Mix credit/ PEFC 100% certified wood higher purchase price than non-certified. To increase the amount of SBP compliant Secondary feedstock emphasis is on certified deliveries from sawmills. Sawmills are encouraged to use more certified materials.

2.4 Quantification of the Supply Base

Supply Base

- a. **Total Supply Base area (million ha):** 38.20
- b. **Tenure by type (million ha):**28.08 (Privately owned), 10.12 (Public)
- c. **Forest by type (million ha):**38.20 (Boreal)
- d. **Forest by management type (million ha):**38.20 (Natural)
- e. **Certified forest by scheme (million ha):**22.09 (FSC), 25.94 (PEFC)

Describe the harvesting type which best describes how your material is sourced: Mix of the above

Explanation: Suppliers obtain the raw material (roundwood) in places where logging has been carried out (clear-cutting, selective cutting or thinning), as well as by harvesting overgrown agricultural land. In Latvia, the maximum area of clear-cutting can be 10 ha, but only 3 of the 23 types of forest growth conditions. Hand chainsaws are used for felling in small areas and to avoid soil damage in wet soils. For large areas and if the soil condition allows, harvesters are used to cut trees. Roundwood or branches are transported to the top stackers by a forwarder or an agricultural tractor adapted for forestry work.

Was the forest in the Supply Base managed for a purpose other than for energy markets? Yes - Majority

Explanation: In the supply base region, timber is harvested mainly for the production of wood and wood products. This industry generates a lot of logging residues, which are used in the production of wood chips. However, part of the material is also obtained from the overgrowth of overgrown agricultural land.

For the forests in the Supply Base, is there an intention to retain, restock or encourage natural regeneration within 5 years of felling? Yes - Majority

Explanation: Restoration of felled forests in Latvia is regulated by the Forest Restoration, Forest Planting and Plantation Forest Regulations (MK No. 308 effective from 09.05.2012). The rules state that the forest areas that have been cut down must be restored (naturally or artificially) within 5 years from the moment of cutting down. With exceptions in marshy forest types, where regeneration must be done within 10 years. In Latvia, this process is monitored by the state forest service.

Was the feedstock used in the biomass removed from a forest as part of a pest/disease control measure or a salvage operation? Yes - Minority

Explanation: Every year in Latvia, sanitary felling is carried out in areas damaged by diseases or pests. There is a possibility that material from such locations may be included in the supply chain. In 2020, a total of 50,000 ha of sanitary felling was carried out in Latvia. Such sanitary felling is carried out to avoid diseases or pests epidemics in forest areas.

What is the estimated amount of REDII-compliant sustainable feedstock that could be harvested annually in a Supply Base (estimated): 50000.00 tonnes

Explanation: Calculation of received feedstock in audit period.

Feedstock

Reporting period from: 01 Jun 2023

Reporting period to: 31 May 2024

- a. **Total volume of Feedstock:** 1-200,000 tonnes

- b. **Volume of primary feedstock:** 0 N/A
- c. **List percentage of primary feedstock, by the following categories.**
- Certified to an SBP-approved Forest Management Scheme: N/A
 - Not certified to an SBP-approved Forest Management Scheme: N/A
- d. **List of all the species in primary feedstock, including scientific name:**
- e. **Is any of the feedstock used likely to have come from protected or threatened species?** N/A
- Name of species: N/A
 - Biomass proportion, by weight, that is likely to be composed of that species (%):
- f. **Hardwood (i.e. broadleaf trees): specify proportion of biomass from (%):**
- g. **Softwood (i.e. coniferous trees): specify proportion of biomass from (%):**
- h. **Proportion of biomass composed of or derived from saw logs (%):**
- i. **Specify the local regulations or industry standards that define saw logs:** N/A
- j. **Roundwood from final fellings from forests with > 40 yr rotation times - Average % volume of fellings delivered to BP (%):**
- k. **Volume of primary feedstock from primary forest:** N/A
- l. **List percentage of primary feedstock from primary forest, by the following categories. Subdivide by SBP-approved Forest Management Schemes:**
- Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: N/A
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: N/A
- m. **Volume of secondary feedstock:** 1-200,000 tonnes
- Physical form of the feedstock: Chips, Sawdust, Other (specify)
- n. **Volume of tertiary feedstock:** 1-200,000 tonnes
- Physical form of the feedstock: Other (specify)
- o. **Estimated amount of REDII-compliant sustainable feedstock that could be collected annually by the BP:** 50000.00tonnes

Proportion of feedstock sourced per type of claim during the reporting period				
Feedstock type	Sourced by using Supply Base Evaluation (SBE) %	FSC %	PEFC %	SFI %
Primary	0.00	0.00	0.00	0.00
Secondary	0.00	40.00	60.00	0.00
Tertiary	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00

3 Requirement for a Supply Base Evaluation

Note: Annex 1 is generated by the system if the SBE is used without Region Risk Assessment(s). Annex 2 is generated if RED II SBE is in the scope.

Is Supply Base Evaluation (SBE) is completed? No

N/A

Is REDII SBE completed? N/A

N/A

4 Supply Base Evaluation

Note: Annex 2 is generated if RED II is in the scope.

4.1 Scope

Feedstock types included in SBE:

SBP-endorsed Regional Risk Assessments used: Not applicable

List of countries and regions included in the SBE:

4.2 Justification

N/A

4.3 Results of risk assessment and Supplier Verification Programme

N/A

4.4 Conclusion

N/A

5 Supply Base Evaluation process

N/A

6 Stakeholder consultation

N/A

6.1 Response to stakeholder comments

7 Mitigation measures

7.1 Mitigation measures

7.2 Monitoring and outcomes

N/A

8 Detailed findings for indicators

Detailed findings for each Indicator are given in Annex 1 in case the Regional Risk Assessment (RRA) is not used.

Is RRA used? N/A

9 Review of report

9.1 Peer review

N/A

9.2 Public or additional reviews

N/A

10 Approval of report

Approval of Supply Base Report by senior management			
Report Prepared by:	Alvis Graudins	Member of the Board	15 Jul 2024
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.			

Annex 1: Detailed findings for Supply Base Evaluation indicators

N/A

Annex 2: Detailed findings for REDII
Section 1. RED II Supply Base Evaluation

Country:**(i) The legality of harvesting operations**

Type of Risk Assessment used	<input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	N/A
Level B management system at the level of the forest sourcing area	N/A

(ii) Forest regeneration of harvested areas

Type of Risk Assessment used	<input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	N/A
Level B management system at the level of the forest sourcing area	N/A

(iii) That areas designated by international or national law or by the relevant competent authority for nature protection purposes, including in wetlands and peatlands, are protected unless evidence is provided that the harvesting of that raw material does not interfere with those nature protection purposes

Type of Risk Assessment used	<input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	N/A
Level B management system at the level of the forest sourcing area	N/A

(iv) That harvesting is carried out considering the maintenance of soil quality and biodiversity with the aim of minimising negative impacts

Type of Risk Assessment used	<input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	N/A
Level B management system at the level of the forest sourcing area	N/A

(v) That harvesting maintains or improves the long-term production capacity of the forest.	
Type of Risk Assessment used	<input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	N/A
Level B management system at the level of the forest sourcing area	N/A
LULUCF criteria 29(7)	
Type of Risk Assessment used	<input type="checkbox"/> Level A – proof at national or sub-national level <input type="checkbox"/> Level B – management system at forest sourcing area level
Level A risk assessment description	N/A
Level B management system at the level of the forest sourcing area	N/A

Section 2. RED II detailed findings for secondary and tertiary feedstock

10.1 Verification and monitoring of suppliers

A system for RED II conformity assessment has been established.

An agreement on compliance with RED II is concluded with the supplier.

The supplier's suitability is assessed using a questionnaire prepared in accordance with RED II requirements.

Only one supplier's material used for certified product production.

For audit period the supplier's material has been assessed as RED II compliant.

10.2 Feedstock inspection and classification upon receipt

When accepting the material, it is assessed whether the material meets the requirements of the secondary material. SIA Kurzemes granulas do not use materials that are not from sawmills due to quality considerations.

For pellet production three main materials is used:

1. sawdust
2. wood shavings
3. wood chips

Pellet production requires material without bark, so it is continuously evaluated to keep the bark content as low as possible.

10.3 Supplier audit for secondary and tertiary feedstock

The audit was carried out for one supplier that produces sawntimber.

Inspection was made on site. Supplier uses only round timber for production, only secondary feedstock is used from this supplier.

No data or evidences that they produce secondary feedstock from useful sawn timber. or high quality round wood.

Section 3. RED II detailed findings for TOF feedstock

NOTE: For “Trees outside forests (TOF) – Urban and landscape feedstock¹” no REDII sustainability requirements apply, only the GHG savings criteria apply (SBP REDII Bridging ID Section 4.2). The land use category in this case is neither forest land nor agricultural land. For “Trees outside forests (TOF) – Agricultural land feedstock” the applicable criteria are Article 29 paragraphs (2)-(5).