Sustainable Biomass Program

Supply Base Report: Avoti SWF SIA

Second Surveillance Audit

Edition 1, January 15th, 2020

Edition 2, May 25th, 2020

Edition 3, July 9th, 2020

Completed in accordance with the Supply Base Report Template Version 1.3

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

Document history

Version 1.0: published 26 March 2015

Version 1.1 published 22 February 2016

Version 1.2 published 23 June 2016

Version 1.3 published 14 January 2019

Contents

1 Overview

Producer name: "**AVOTI SWF" SIA**

Producer location: **" Avoti, Lizums, Gulbene's region, Latvia, LV4425**

Geographic position: 57.194944, 26.374747

Primary contact: Arnita Apine, phone: +371 64471187; e mail: arnita.apine@avoti.lv

Company website: http://www.avoti.lv/

Date report finalised: 15/01/2020

Close of last CB audit: 24/01/2020, Riga

Name of CB: SCS Global Services

Translations from English: Yes

SBP Standard(s) used: Standard 1 version 1.0, Standard 2 version 1.1, Standard 4 version 1.0, Standard 5 version 1.0, instruction document 5E version 1.1

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

SBP Endorsed Regional Risk Assessment: https://sbp-cert.org/documents/risk-assessments/latvia

Weblink to SBE on Company website: https://www.avoti.lv/en/wood-pellets

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations				
Main (Initial) Evaluation	**First Surveillance**	**Second Surveillance**	**Third Surveillance**	**Fourth Surveillance**
☐	☐	X	☐	☐

2 Description of the Supply Base

2.1 General description

AVOTI SWF SIA receives the most part of feedstock from Latvia as roundwood and wood residues after processing as well as a small part of feedstock from Lithuania; Estonia, Sweden; Finland, Russia, Poland indirectly after wood processing as secondary and tertiary feedstock.

SBP-controlled primary feedstock: 0,12% (from 2 suppliers)
SBP-controlled secondary feedstock: 10,27% (from 6 suppliers)
SBP- controlled tertiary feedstock: 0%

SBP-compliant primary feedstock: 59,8% (from 19 suppliers)
SBP-compliant secondary feedstock: 24,19% (from 4 suppliers)
SBP-compliant tertiary feedstock: 5,62% (from 2 suppliers)
SBP-noncompliant feedstock: 0 %

Species: Alnus glutinosa; Alnus incana (L.) Moench; Betula pendula; Betula pubescens; Fraxinus excelsior; Picea abies; Pinus sylvestris; Populus tremula; Quercus robur

Certified forest areas

Country	FSC, ha (Feb, 2020)	PEFC, ha (Sep, 2019)
Latvia	1 117 218	1 794 636
Lithuania	1 208 174	-
Estonia	1 170 504	1 238 453
Finland	1 918 126	18 082 222
Sweden	11 713 613	13 976 757
Poland	6 958 164	7 151 740
Russia	50 584 417	32 405 328

Source:

https://fsc.org/en/page/facts-figures
https://www.pefc.org/discover-pefc/facts-and-figures

Information about LATVIAN forest resources

Forests in Latvia cover 3,04 million ha (the State Forest Service, 2020). According to the data of the State Forest Service (concerning the surveyed area allocated to management activities regulated by the Forest Law), forest land amounts to 52 % (the ratio of the forest land to the entire territory of the country). The Latvian State owns 49% of the total forest area (1 495 616 ha), while the other 51% (1 560 961 ha) belong to other owners. The number of private forest land owners in Latvia is about 144 thousand.

The area covered by forests is increasing. The expansion happens both naturally and by afforestation of infertile land unsuitable for agriculture.

In the last decade, the timber production in Latvia has fluctuated between 9 to 13 million cubic meters.

Forest land consists of:

- forests: 3,04 million ha (90,6 %);
- marshes: 0,17 million ha (5,1 %);
- glades (forest meadows): 0,031 million ha (0,9 %);
- flooded areas: 0,017 million ha (0,5 %);
- infrastructure facilities: 0,081 million ha (2,4 %);
- other forest land: 0,017 million ha (0,5%).

(the State Forest Service, 2019)

Distribution of forests by dominant species:

- Pine: 32,95 %
- Spruce: 18,68 %
- Birch: 29,63 %
- Black alder: 3,29 %
- Grey alder: 7,07 %
- Aspen: 7,25 %
- Oak: 0,32 %
- Ash: 0,42 %
- Other species: 0,39 %

(the State Forest Service, Public report, 2019)

Share of species used in reforestation, by planting area:

- Pine: 15 %
- Spruce: 20 %
- Birch: 29 %
- White alder: 14 %
- Aspen: 18 %

- Other species: 4 %

(the State Forest Service, 2018)

Timber production by types of cutting, by volume produced:

- Final cuts: 82,94 %
- Thinning: 10,84 %
- Sanitary cuts: 3,05 %
- Deforestation cuts: 1,55 %
- Other types of cuts: 1,62 %

(the State Forest Service, 2019)

The net turnover of forestry and logging makes up 28% of the total turnover of the forest sector (Manufacture of wood and wood products – 64,46%, manufacture of furniture – 7,54%).

Forestry production

Area	Element	Item	Year	Unit	Value
Latvia	Production	Roundwood	2018	m3	12942170
Latvia	Production	Wood chips, particles and residues	2018	m3	4740200
Latvia	Production	Wood pellets and other agglomerates	2018	tonnes	1622000
Latvia	Production	Sawnwood	2018	m3	3775000
Latvia	Production	Wood-based panels	2018	m3	1363583
Latvia	Production	Fibreboard	2018	m3	0
Latvia	Production	Total fibre furnish	2018	tonnes	70000
Latvia	Production	Pulp for paper	2018	tonnes	0
Latvia	Production	Paper and paperboard	2018	tonnes	16000
Latvia	Production	Paper and paperboard, excluding newsprint	2018	tonnes	16000
Latvia	Production	Packaging paper and paperboard	2018	tonnes	16000
Source: *FAOSTAT - Forestry database*					

Forestry sector

The forestry sector in Latvia is managed by the Ministry of Agriculture, which in cooperation with the sector interest groups develops forest policy, development strategy as well as forest management, forest resource use, nature conservation and hunting draft regulatory enactments.

Implementation of the regulatory requirements included in the Latvian laws and the Cabinet of Ministers regulations in the management of forests, regardless of the type of property, is controlled by the State Forest Service under the supervision of 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 company ensures implementation of the best interests of the state by preserving value of the forest and increasing the share of forest in the nacional economy.

Biological diversity

Historically, extensive use of Latvian forests for economic purposes began relatively later than in many other European countries, therefore, greater biological diversity has been preserved in Latvia.

For the sake of conservation of nature values, 655 specially protected nature territories have been created (Nature Conservation Agency, 2017). Part of these territories is included in the Natura 2000, unified network of protected territories of European importance. The most part of the protected territories are in State ownership.

In order to ensure the protection of a specially protected species or a biotope outside specially protected nature territories, micro-reserves are created, if any of the functional zones does not provide it. According to the Nature Conservation Agency, the total area of the micro-reserves until September 1, 2019 was 45 789 ha. The identification of biologically valuable forest stands and the implementation of protective measures are performed 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.

Conservation CITES or IUCN species

Species	CITES status	IUCN classification
Oak (*Quercus robur*)	Not on the list	Least concern (LC)
Oak (*Quercus petraea*)	Not on the list	Least concern (LC)
Other CITES / IUCN registrations	Accession 1997 https://cites.org/eng/cms/index.php/component/cp/country/LV Other CITES species are present but do not include softwood or deciduous trees which are threatened. Full list: http://checklist.cites.org/#/en/search/country_ids%5B%5D=196&cites_appendices%5B%5D=I&cites_appendices%5B%5D=II&cites_appendices%5_B%5D=III&output_layout=alphabetical&level_of_listing=0&show_synonyms=1&show_author=1&show_english=1&show_spanish=1&show_french=1&scientific_name=Plantae&page =1&per_page=20	Common Ash (Fraxinus excelsior) – Near Threatened https://www.iucnredlist.org/species/203367/67807718 Full list https://www.iucnredlist.org/search?landRegions=LV&searchType=specie s

Forest and community

Forest territories in which provision of recreation is one of the main objectives of forest management account for up to 8 % of the total forest area (State Forest Service, 2018). Sight towers, cognitive trails, cultural heritage natural sites and recreational areas – these are just a few of the recreational infrastructure facilities available in forests that can be used by anyone. Special attention is devoted to creation of such areas in state-owned forests. Recreational forest areas include national parks (excluding strictly protected areas), nature parks, protected landscape areas, protected dendrological objects, protected geological and geomorphologic objects, nature parks of local significance, the Baltic Sea dune protection zone, protective zones around cities and towns, forests within administrative territory of cities and towns. Management and governance of specially protected natural areas in Latvia is coordinated by the Nature Conservation Agency under the Ministry for Environmental Protection and Regional Development.

Source:
https://www.zm.gov.lv
https://www.vmd.gov.lv
https://www.lvm.lv

Information about LITHUANIAN forest resources

According to 2018 forest statistics, the total forest land area was 2 195 600 ha, covering 33,6 % of the country's territoty. Since the 1st January 2003, the forest land area has increased by 150 300 ha corresponding to 2,3 % of the total forest cover. During the same period, forest stands expanded by 105 100 ha to 2 056 100 ha. Occupying 1 144 100 ha, coniferous stands prevail in Lithuania, covering 55,6 % of the forest area. They are followed by softwood deciduous forests (843 900 ha, 41,0 %). Hardwood deciduous forests occupy 68 100 ha (3,3 %). The total area of softwood decidous forest land increased by 145 500 ha over the last fifteen years. The area of hardwood decidous has decreased by 24 600 ha (mainly due to dieback of ash stands) and coniferous forest by 15 800 ha. Scots pine occupies the biggest share in Lithuanian forests – 711 900 ha. Compared to 2003, the area of pine expanded by 400 ha. Norway spruce stands covers 429 800 ha, with a reduction of 15 400 ha. Birch stands covers the largest area among deciduous trees. Since 2003, it increased by 61 400 ha and reached 453 600 ha by the 1st January 2018. Area of black alder increased by 40 100 ha, to 159 600 ha. The area of grey alder decreased by 200 ha reaching 121 800 ha. The area of aspen stands expanded by 38 400 to 95 800 ha. The area of oak stands increased from 35 700 ha to 46 700 ha. The average forest area per capita increased to 0,78 ha. Since 2003, total growing stock volume increased from 453,4 million m3 up to 546,9 million m3. The average growing stock volume in all forests since 2003 increased by 31 m3/ha up to 257 m3/ha.

In the beginning of 2018, the distribution of forests by functional groups was as follows:

- Group I (strict nature reserves): 25 300 ha (1,2 %);
- Group II (ecosystem protection and recreational): 257 800 ha (11,7 %);

- Group III (protective): 292 300 ha (13,3 %);
- Group IV (commercial): 1 620 100 ha (73,8 %).

Changes of forest land area distribution by forest groups based on the decisions of forest management schemes.

By 1st January 2018, around a half of all forest land in Lithuania was of State importance – 1 102 000 ha. 854 200 ha of private forests were registered in the State Enterprise Centre of Registers. After intersection of layers of all forests and private holdings the estimated area of private forests was 888 300 ha. The number of private forest owners amounted to almost 250 100, a forest estate averaging 3,4 ha.

Statistical information on the wood manufacturing sector is very limited in Lithuania. The wood products industry is adverse to sharing information or promoting its potential and business opportunities. Publicly data available is usually old and does not present the current market picture. The furniture and paper industries are the fastest developing segments within the industry. Forest and wood processing sector's share of total national value added reached 4,5%, with forestry adding about 0,6%. The biggest share of the value added in the sector was generated by the furniture industry, some 2%. The number of companies in forestry, logging and the forest industry diminished while their average size increased in recent years. The furniture and wood processing industries provide over 30% of the jobs available in the whole Lithuanian manufacturing industry. In recent times the furniture industry developed mostly due to foreign investments.

Forestry production

Area	Element	Item	Yea	Unit	Value
Lithuania	Production	Roundwood	2018	m3	6982000
Lithuania	Production	Wood chips, particles and residues	2018	m3	1934000
Lithuania	Production	Wood pellets and other agglomerates	2018	tonnes	510000
Lithuania	Production	Sawnwood	2018	m3	1280000
Lithuania	Production	Wood-based panels	2018	m3	856500
Lithuania	Production	Fibreboard	2018	m3	65800
Lithuania	Production	Total fibre furnish	2018	tonnes	207000
Lithuania	Production	Pulp for paper	2018	tonnes	0
Lithuania	Production	Paper and paperboard	2018	tonnes	156700
Lithuania	Production	Paper and paperboard, excluding newsprint	2018	tonnes	152000
Lithuania	Production	Packaging paper and paperboard	2018	tonnes	137200
Source: *FAOSTAT - Forestry database*					

National network of protected areas covered 1 026 200 ha or 15,7 % of the total Lithuanian territory by 1st of November 2018. The largest part of this area was occupied by regional parks – 44 %, biosphere polygons– 23 %, state and municipal reserves – 15 %, national parks – 14 %, reserves and biosphere reserve – 1,8 % each. Since 1st November 2017 new 157 protected natural heritage sites were established. Areas of Natura 2000 network (without marine areas) covered 846,5 ha at the 1st November 2018. It composes 13,0 % of the country's territory.

Various forest protection measures were applied by the state forest enterprises on 27 200 ha of forest land in 2017. Biological treatment was applied on 300 ha. Foresters from 900 ha removed 27 100 m3 trees damaged

by wind and snow. Chemical protection measures were used on area 2 600 ha. For sanitary protection, state forest enterprises set up 11 700 new nesting-boxes.

Lithuania has signed the CITES Convention in 2001. CITES requirements are respected in forest management, although there are no species included in the CITES lists in Lithuania.

Current harvest has reached some 3.0 million m^3 u.b. per year. The consumption of industrial wood in the domestic forest industry, including export of industrial wood, is estimated to be less than 2.0 million m^3. The remainder is used for fuel or stored in the forests, with a deteriorating quality as a result.

The potencial future annual cut is calculated at 5,2 million m3, of which 2,4 million m3 is made up of sawn timber and the remaining 2,8 million m3 of small dimension wood for pulp or board production, or for fuel. The figures refer to the nearest 10-year period.

The national laws on the conservation of protected species and measures available (breeding, reintroduction, management of habitats) are inadequate for the protection of species. Lithuania has about 20 protected species that require immediate special measures for their conservation. Plans and documents on the conservation of protected species for implementing measures to conserve specific protected species are not in place. In addition, in the decision making process on economic activities Lithuania makes insufficient use of the Protected Species Information System. Regulations on the conservation of location and habitat sites of strictly protected species have not been drawn up, and the evaluation of protected species in accordance with the categories established by the International Union for Conservation of Nature (IUCN) has not been carried out.

Conservation CITES or IUCN species

Species	CITES status	IUCN classification
Oak (*Quercus robur*)	Not on the list	Least concern (LC)
Oak (*Quercus petraea*)	Not on the list	Rare - status is rare because Lithuania is the edge of its growing range
Other CITES / IUCN registrations	Accession 2001 https://cites.org/eng/cms/index.php/component/cp/country/LT Other CITES species are present but do not include softwood or deciduous trees which are threatened. Full list: http://checklist.cites.org/#/en/search/country_ids%5B%5D=154&cites_appendices%5B%5D=I&cites_appendices%5B%5D=II&cites_appendices%5_B%5D=III&output_layout=alphabetical&level_of_listing=0&show_synonyms=1&show_author=1&show_english=1&show_spanish=1&show_french=1&scientific_name=&page=1&per_page=20	Common Ash (Fraxinus excelsior) – Near Threatened https://www.iucnredlist.org/species/203367/67807718 Full list https://www.iucnredlist.org/search?landRegions=LT&searchType=species

Source:
"Lithuanian Statistical Yearbook of Forestry 2018", https://osp.stat.gov.lt/en/statistikos-leidiniu-katalogas
https://www.fao.org/docrep/w3722e/w3722e22.htm

FAO: http://www.fao.org/3/w3722e/w3722e22.htm
cbd.int/doc/world/lt/lt-nr-05.en.pdf
23. Internationales Holzbau-Forum IHF 2017 Overview of Baltic Forest and Wood Industry | I. Erele, H. Välja, K. Klauss

Information about ESTONIAN forest resources

Estonia is a member of the European Union since 2004. The Estonian legislation is in compliance with the EU's legislative framework and directives. National legislative acts make references to the international framework. All legislation is drawn up within a democratic system, subject to free comment by all stakeholders.The Estonian legislation provides strict outlines in respect to the usage of forestry land and the Estonian Forestry Development Plan 2020 has clear objectives and strategies in place to ensure the forestland is protected up to the standards of sustainable forest management techniques. The Ministry of the Environment coordinates the fulfilment of state duties in forestry. The implementation of environmental policies and its supervision are carried out by two separate entities operating under its governance. The Estonian Environmental Board monitors all of the work carried out in Estonia's forests whereas the Environmental Inspectorate exercises supervision in all areas of environmental protection.

The forest is defined in the Forest Act. There are three main forest categories are described in this legislation: commercial forest, protection forest and protected forests. According to the ownership, forests are also divided into private forests, municipality forests and state owned forests. The state owned forest represent approximately 40% of the total forest area and is certified according to FSC and PEFC forest management and chain of custody standard in which the indicators related to forest management planning, maps and availability of forest inventory records are being constantly evaluated and addressed. The state forest is managed by State Forest Management Centre (RMK) which is a profit-making state agency founded on the basis of the Forest Act and its main duty lies in a sustainable and efficient management of state forest.

Currently more than 2 230 000 ha, equal to 51% of the Estonian land territory, is covered by forest as indicated in Figure 1 and the share of forest land is growing. According to FAO data, during 2000 - 2005, average annual change in the forest cover was +0.4 %. Forestry Development Plan 2012-2020 and Yearbook Forest 2013, that gives annual reports and facts about the forest in Estonia, state that during last decade the cutting rate in Estonian forests is from 7 to 11 mill m³ per year. The amount is in line with sustainable development principle when the cutting rate doesn't exceeds the annual increment and gives the potential to meet the long-term the economic, social and environmental needs. According to the Forestry Development Plan 2012-2020 the sustainable cutting rate is 12-15 mil ha per year.

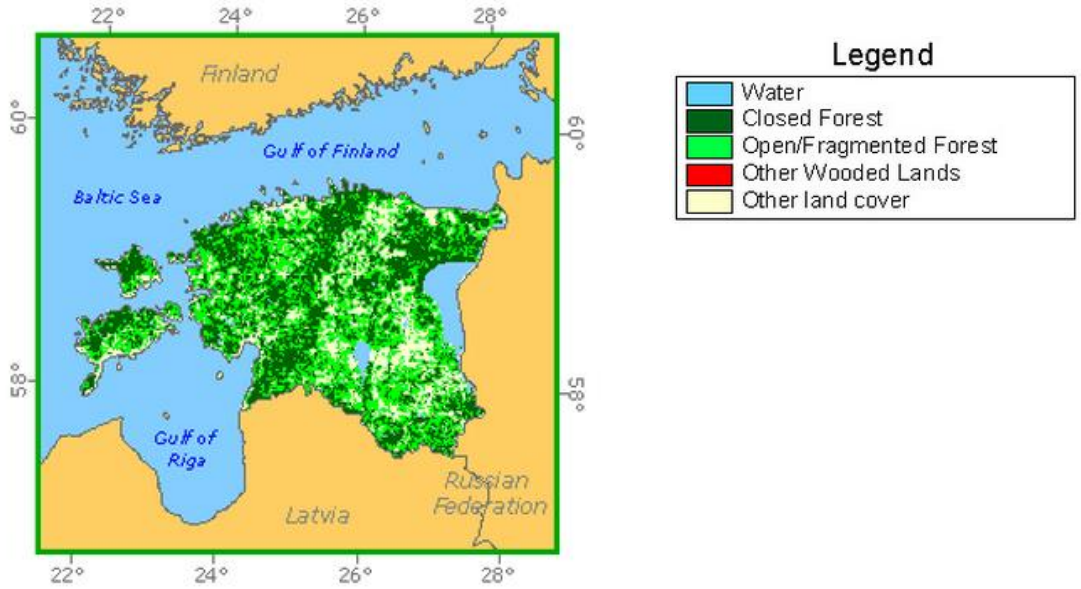


Figure 1. Forest cover of Estonia

The distribution of growing stock by tree species in Estonia is shown in Figure 2.

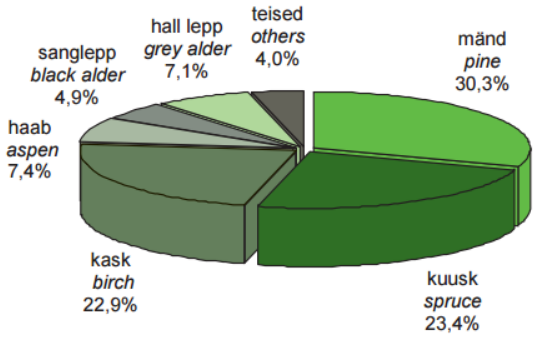


Figure 2. The distribution of growing stock by tree species (Yearbook Forest 2013).

For logging in any type of forest, it is required that a valid forest inventory or forest management plan, along with a felling permit issued by the Environmental Board, is available. All issued felling permits and forest inventory data is available in the public forest registry online database.

Area of protected forests accounts to 25.3% of the total forest area whereas 10% is considered to be under strict protection. The majority of protected forests is located on state property. The main regulation governing the preservation of biodiversity and the sustainable use of natural resources is the Nature Conservation Act. Estonia has signed the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1992 and joined the International Union for Conservation of Nature (IUCN) in 2007. There are no CITES or IUCN protected tree species naturally growing in Estonia.

Conservation CITES or IUCN species

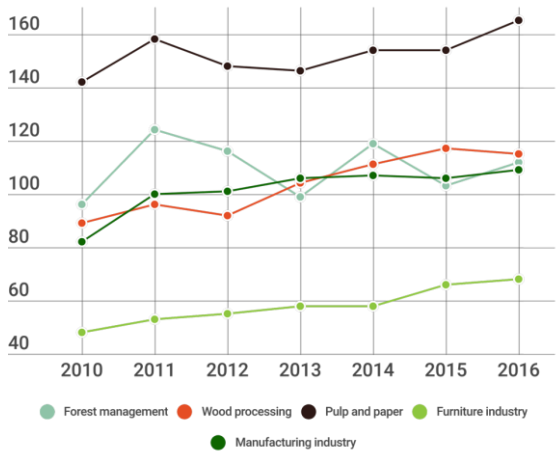
Species	CITES status	IUCN classification
Birch (*Betula pubescens*)	Not on the list	Least concern (LC)
Other CITES / IUCN registrations	Accession 1992 https://cites.org/eng/cms/index.php/component/cp/country/EE Other CITES species are present but do not include softwood or deciduous trees which are threatened. Full list: http://checklist.cites.org/#/en/search/country_ids%5B%5D=11&cites_appendices%5B%5D=I&cites_appendices%5B%5D=II&cites_appendices%5B%5D=III&output_layout=alphabetical&level_of_listing=0&show_synonyms=1&show_author=1&show_english=1&show_spanish=1&show_french=1&scientific_name=Plantae&page=1&per_page=20	Full list https://www.iucnredlist.org/search?landRegions=EE&searchType=specie s

According to the Forestry Yearbook 2014 the wood, paper and furniture industry (646,4 million euro) contributed 23,7% to the total sector providing 3,8% of the total value added. Forestry accounted for 1,5% of the value added.

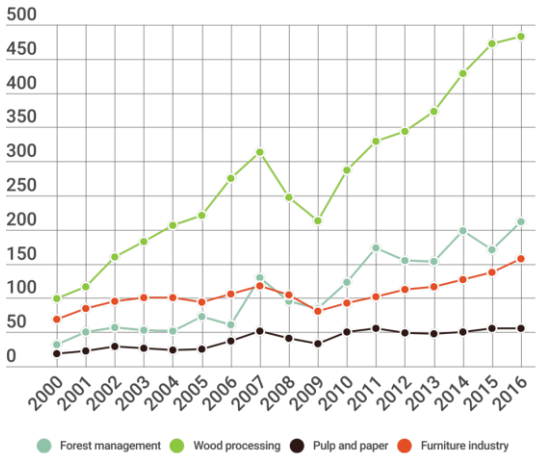
In Estonia, it is permitted to access natural and cultural landscapes on foot, by bicycle, skis, boat or on horseback. Unmarked and unrestricted private property may be accessed any time and pick berries, mushrooms, medicinal plants, fallen or dried branches, unless the owner forbids it. On unmarked and unrestricted private property camping is allowed for 24 hours. State forest management center (RMK) creates exercising and recreational opportunities in nature and in recreational and protection zones and provides education about the natural environment which are free to access.

Comparison of the scale of harvesting compared to other forest based industries in Estonia (2010-2016)

Labor productivity per person employed on the basis of sales revenue



Added value in forest and wood industries



Forestry production

Area	Element	Item	Year	Unit	Value
Estonia	Production	Roundwood	2018	m3	11452000
Estonia	Production	Wood chips, particles and residues	2018	m3	3000000
Estonia	Production	Wood pellets and other agglomerates	2018	tonnes	1335300
Estonia	Production	Sawnwood	2018	m3	1920000
Estonia	Production	Wood-based panels	2018	m3	395000
Estonia	Production	Fibreboard	2018	m3	75000
Estonia	Production	Total fibre furnish	2018	tonnes	326000
Estonia	Production	Pulp for paper	2018	tonnes	236000
Estonia	Production	Paper and paperboard	2018	tonnes	76300
Estonia	Production	Paper and paperboard, excluding newsprint	2018	tonnes	76300
Estonia	Production	Packaging paper and paperboard	2018	tonnes	76000
Source: *FAOSTAT - Forestry database*					

Source:
http://www.fao.org/forestry/country/en/est/)
http://europa.eu/about-eu/countries/member-countries/estonia/index_en.htm
Original title: „Eesti metsanduse arengukava aastani 2020"; approved by Estonians parlament decision nr 909 OE 15.February 2011.a
http://www.envir.ee/sites/default/files/elfinder/article_files/mak2020vastuvoetud.pdf
http://www.rmk.ee/organisation/operating-areas
http://www.rmk.ee/organisation/environmental-policy-of-rmk/certificates
http://www.fao.org/forestry/country/32185/en/est/
Yearbook Forest 2013 http://www.keskkonnainfo.ee/failid/Mets_2013.pdf (all key figures, graphs and tables are bilingual)
http://register.metsad.ee/avalik/
https://www.riigiteataja.ee/en/eli/517062015004/consolide
http://www.envir.ee/et/cites
http://www.envir.ee/et/iucn
https://www.eesti.ee/eng/topics/citizen/keskkond_loodus/maa/metsandus_1
https://estoniantimber.ee/statistics/

Information about SWEDEN forest resources

Sweden is a parlamentary constitutional monarchy that joined the EU in 1995.

The Swedish Forest Agency is the national authority responsible for matters relating to the forests. It strives to ensure that the nation's forests are managed in such a way as to yield an abundant and sustainable harvest while at the same time preserving biodiversity. The Agency also strives to increase awareness of the forest's significance, including it's value for outdoor recreation. The Agency has offices throughout the country. It's most important tasks are to give advice on forest-related matters, supervise compliance with the Forest Act, provide services to the forest industry, support nature conservation efforts and conduct inventories.

According to the latest forest inventory "Riksskogstakseringen" from 2018 the total area of Sweden is 40,7 million ha (100%). Of these 28,1 million ha (69%) are forest area and 23,5 million ha (58%) of these are defined as productive forests.

In Sweden there are at least 3 layers of tenure regimes influensing forest use and forestry: private land tenure, rights to use the land held by the Sami people in the northern parts of Sweden and the right of public access. While the private ownership of forest is based on possession rights, the two other forms relate to user rights. Private ownership has been important, first and foremost as a basis for sustainable land use and longterm planning and investments in the regeneration of forests. About half of all forest land in Sweden is owned by private enterprises. There are some 200 000 families with forests area bigger than 5 ha and most farms are passed on from one generation to the next. The average holding is 50 ha. Some 90 000 family forest entities are members of a forest cooperative. All the cooperatives together form a National Federation of Family Forest Owners, who seeks to influence national and international forest policies. A small number of large private sector industrial forest enterprises own approximately 25 % of all forest land in Sweden. Most of the State forest belongs to the state-owned company Sveaskog, which accounts for 14 % of all forest land. Sveaskog is Sweden's largest single forest owner and supply logs, pulp wood and biofuel.

The main intention of the Swedish National Forest Policy is to ensure sustainable forest management and it focuses on three major objectives, one for production, one for environmental concerns and one for social concerns. To obtain a long-term sustainable flow of timber from the forests, an even age-class distribution on the regional level is a longterm target in forest policy. The legal demands on forestry are mainly set by the Forestry Act and the Environmental Code. The forest sector is considered a commercial sector which should be economically self-sustained and not subsidized. There are, however some state subsidies to enhance the forest sector's environmental value. The National Forest Policy is influenced by several international regulations and agreements:

- EU Timber Regulation
- The Habitat Directive
- The Water Framework Direktive
- Convention on Biological Diversity (CBD)
- UN Framework Convention on Climate Change (UNFCCC)
- United Nations Forum on Forests (UNFF)

Scots pine (Pinus sylvestris) and Norway spruce (Picea abies) are the dominant tree species in all Sweden. Lodgepole pine (Pinus contorta) and the deciduous species Birch (Betula pendula), Aspen (Populus tremula) and Alder (Alnus glutinosa) are used to some extern in northern Sweden. European larch (Larix decidua), Douglas fir (Pseudotsuga menziesii) and Sitka spruce (Picea sitchensis) and oak (Quercus robur) and Beech (Fagus sylvatica) is used in the south. The main part of the deciduous forest cover is naturally regenerated.

The Swedish forest products industry provides direct employment for almost 60 000 people. Together with subcontractors and the forest operations, including transportation the sector source about 200 000 jobs. In several counties, the forest products industry accounts for 20 % or more of industrial employment.

The primary focus for conservation of Swedish forests are to protect high conservation forests and include sufficient biodiversity measures in all forest. Of Sweden's 28 million ha of forestland, approximately 2 millions are protected for conservation purposes, mostly in national parks and nature reserves. In these areas, timber extraction is not allowed unless it is to specifically improve the value of the land or nature and/or for cultural conservation. Unproductive forestland which accounts for some 4 million ha are protected tgrough the Forestry Act. On the remaining land the forests are managed with equal respect to biomass production and environmental and social goals.

Sweden has a number of IUCN categories mapped and registered:

- Strict nature reserves;
- National parks;
- Habitat/species management areas;
- Protected landscapes;
- Habitat Diorective sites and Bird Directive sites.

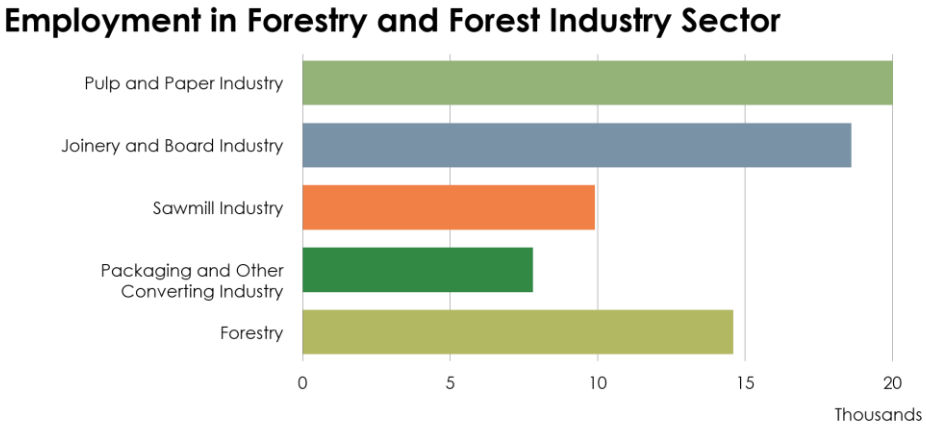
The system of red List categories and criteria has been developed by the IUCN to measure the conservation status of individual species. It strictly evaluates the risk of going extinct in Sweden, without any other considerations such as attractiveness or usefulness/harmfulness to man. The Red List is a powerful tool for making conservation prioritizations, but it has no juridical status. It is produced by the SLU Swedish Species Information Centre SLU, and ratified by the Swedish Environmental Protection Agency and the Swedish Agency for marine and Water Management.

The 2015 Red List of Swedish Species, published on April 28 2015, is the fourth Swedish Red List based on the international IUCN criteria.

Conservation CITES or IUCN species

Species	CITES status	IUCN classification
Oak (*Quercus robur, Quercus petraea*)	Not on the list	Least concern (LC)
Oak (*Quercus rubra*)	Not on the list	Least concern (LC)
Birch (*Betula pendula, Betula pubescens*)	Not on the list	Least concern (LC)
Beech (*Fagus silvatica*)	Not on the list	Least concern (LC)
Common Ash (*Fraxinus excelsior*)	Not on the list	Near threatened (NT)

		Reason: The Ash dieback is an infectious disease that has caused severe dieback of Common Ash throughout much of its range Region: Sweden: **Endangered**
Alder (*Alnus glutinosa*)	Not on the list	Least concern (LC)
Pine (*Pinus Sylvestris*)	Not on the list	Least concern (LC)
Spruce (*Picea abies*)	Not on the list	Least concern (LC)
Other CITES / IUCN registrations	Ratification 1974 https://cites.org/eng/cms/index.php/component/cp/country/SE Other CITES species are present but do not include softwood or deciduous trees which are threatened. Full list: http://checklist.cites.org/#/en/search/country_ids%5B%5D=77&cites_appendices%5B%5D=I&cites_appendices%5B%5D=II&cites_appendices%5B%5D=III&output_layout=alphabetical&level_of_listing=0&show_synonyms=1&show_author=1&show_english=1&show_spanish=1&show_french=1&scientific_name=&page=1&per_page=20	Horse Chestnut (Aesculus hippocastanum) – vulnerable https://www.iucnredlist.org/species/202914/122961065#conservationactions Full list: https://www.iucnredlist.org/search?landRegions=SE&searchType=species



Source: Statistics Sweden, Structural Business, figures 2017

Forestry production

Area	Element	Item	Year	Unit	Value
Sweden	Production	Roundwood	2018	m3	73028000
Sweden	Production	Wood chips, particles and residues	2018	m3	20519000
Sweden	Production	Wood pellets and other agglomerates	2018	tonnes	2135000
Sweden	Production	Sawnwood	2018	m3	18373000
Sweden	Production	Wood-based panels	2018	m3	635000
Sweden	Production	Fibreboard	2018	m3	0
Sweden	Production	Total fibre furnish	2018	tonnes	12612000
Sweden	Production	Pulp for paper	2018	tonnes	11464000
Sweden	Production	Paper and paperboard	2018	tonnes	10140999
Sweden	Production	Paper and paperboard, excluding newsprint	2018	tonnes	9163999
Sweden	Production	Packaging paper and paperboard	2018	tonnes	6224000
Source: *FAOSTAT - Forestry database*					

Sources:
https://www.slu.se/globalassets/ew/org/centrb/rt/dokument/skogsdata/skogsdata_2018
https://www.skogsstyrelsen.se/globalassets/in-english/forests-and-forestry-in-sweden_2015
https://www.artdatabanken.se/en/the-red-list/

Information about FINLAND forest resources

Finland is a Parlamentary Republic that is a member of the EU since 1995.

Forests cover more than 70 % of the land area of Finland. Measured by the proportional share of forest land, Finland is the most forested country in Europe. A total of 20.3 million ha is available for wood production, 61 % of this is privately owned.

In the past decades the volume of wood harvested has been clearly below the growth, which means that the wood resources keep growing. Today they are about 2.3 billion cubic metres. Finland has the fifth largest wood resources in Europe, after Russia, France, Sweden and Germany.

Three millon hectares of the Finnish forests are protected or under restricted use, which represents 13 % of the forest area. This is the highest share in Europe.

The Ministry of Agriculture and Forestry directs and develops forest policy and legislation in Finland and participates EU decision-making through the Government. Metsähallitus (State Forests), the Natural Resources institute and the Finnish Forest Centre operate under the guidance Ministry.

About 60 % of productive forest land in Finland is owned by private people. There are about 620,000 forest owners in Finland; this figure includes the owners and their spouses, as well as the shareholders of consortia and death estates, with holdings larger than two hectares. This means that almost 14 % of the population are forest owners.

The state owns 26 %, companies (including forest industry) 9 % and other entities 5 % of productive forest land. State forests are managed by the state forest company Metsähallitus.

A typical Finnish forest holding is small in size. The number of holdings over two hectares in size is about 344,000, and the average size is 30.5 hectares. The share of forest holdings over a hundred hectares in size is only five percent. The structure of forest ownership is polarized in that the number of both small and large holdings is increasing.

The share of productive forest land owned by families and individuals is higher than that owned by other groups, because lands owned by the state and partly also those owned by companies are mainly located in less productive areas in north and east Finland. As a result, the share of harvesting of private lands is clearly greater than their share of the ownership, or about 80 percent.

A significant share of the living species in Finland are directly or indirectly dependent on the forests. About 36 % of all threatened species live in mineral soil forests. However, only about 10 % of the assessed mineral soil species are threatened. This means that Finnish forests still contain most of the species that naturally occur there. In addition, a few percent of all threatened species live in forested peatlands.

According to the NFI, the annual increment of growing stock was 107 million m3 . The annual increment has exceeded the annual fellings by about 30%. The amount of harvested volume since the mid-1970s equals to the current volume of the tree stock. The allowable sustainable felling potential of Finnish forests is estimated as 84 million m3 per year for the years 2015 to 2024.

Finnish forestry is based on the management of native tree species. The management of forests seeks to respect their natural growth and mimic the natural cycle of boreal forests. The objective is to secure the production of high-quality timber, and to preserve the biological diversity of forests as well as the preconditions for the multiple use of forest.

Maintenance and enhancement of biological diversity of forests is an integral element of the Finnish forest policy, legislation and practices. In Finland certification systems (PEFC, FSC) drawn up in participatory processes which are independent of any public authorities are widely used on a voluntary basis to ensure the sustainability of forest management.

The backbone of forest biodiversity conservation is the network of protected areas. These are supplemented by voluntary forest protection and biodiversity conservation in commercial forests. Majority of national parks and strict nature reserves are located in northern Finland, thus voluntary forest protection is very important and promoted by the State in southern part of the country.

The vast majority of Finland is situated in the boreal coniferous zone. In the boreal coniferous zone the soil is poor and acid and there are only few forest tree species. Almost half of the volume of the timber stock consists of pine (Pinus Sylvestris). Pine predominates on 67% of forest land, spruce (Picea Abies) on 22% and broadleaves (Betula pubescens, Betula Pendula) on 11%. Broadleaves, which are important to forest biodiversity and the soil and grow mostly in mixed stands, account for 20% of the total volume of growing stock, which is clearly more than the total area of predominantly deciduous stands.

Public access allows everyone to move freely in Finnish forests and pick berries and mushrooms. No specific permits are needed for this, not even on private lands. The use of forests for recreation is founded on the so-called everyman's right. Certain rules regarding the activities that are allowed are laid down by law.

Most importantly, the exercise of everyman's right may not cause damage or disturbance to the environment or other people.

There are 40 national parks in Finland, with a total surface area of 10 002 square kilometres. Hiking areas on state lands offer excellent and diverse opportunities for camping and outdoor recreation. More challenging environments for experienced hikers can be found in the vast wilderness areas in Lapland. National parks and other hiking areas on state lands are managed by the Parks and Wildlife Finland, which is a unit of Metsähallitus.

Almost all Finns engage in some form of outdoor recreation and, for example, about two million Finns pick mushrooms. Relative to the total population, there are more hunters than in any other country in Europe (200000–300000). Recreational fishing is a national hobby, with almost every other Finn engaged in leisure fishing in one form or another.

A new assessment of threatened species indicates an increasing loss of biodiversity in Finnish nature. Of the 22,000 species evaluated, 11.9% were classified as threatened. The highest proportion of threatened species is found among birds and bryophytes (mosses). The primary threat is the decline and deterioration of natural habitat – urgent action is needed to stop this decline.

The threat status of Finnish species is evaluated every ten years; most recently in 2019. The results of the assessment are published in the Red List of Finnish Species, listing Regionally Extinct, Threatened, Near Threatened and Data Deficient species.

Experts in charge of the evaluation assess all species in Finland using the classification and criteria prepared by the International Union for Conservation of Nature (IUCN). This assessment takes account of matters such as the size and development or decline of the species' population, the size of and changes in the natural range of the species, fragmentation in its occurrences, changes in the quality and quantity of its natural habitats, and its reproductive capacity. Note is also taken of the habitats, causes of threat and threat factors of all species.

The 2019 Red List of Finnish species can be considered to be one of the most comprehensive performed in the world, as sufficient data forming the basis for evaluation has been gathered on almost a half of the approximately 48,000 species in Finland. Many more species than before have been included in this research, most of which are not threatened.

Finland joined CITES in 1976. Nowadays the national legislation for the implementation of CITES and relating EU regulations is the Nature Conservation Act (1096/1996), which came into force in the 1st of January 1997. IUCN National Committee of Finland was approved by IUCN Council in 1999.

Conservation CITES or IUCN species

Species	**CITES status**	**IUCN classification**
Spruce (*Picea abies*)	Not on the list	Least concern (LC)
Pine (*Pinus Sylvestris*)	Not on the list	Least concern (LC)
Common Ash (*Fraxinus excelsior*)	Not on the list	Near threatened (NT) Reason: The Ash dieback is an

		infectious disease that has caused severe dieback of Common Ash throughout much of its range Region: Finland: Regionally threatened in all areas where it occurs. http://www.iucnredlist.org/details/203367/0
Oak (Quercus petrea/robur)	Not on the list	Least concern (LC)
Other CITES / IUCN registrations	Accession 1976 https://cites.org/eng/cms/index.php/component/cp/country/FI Other CITES species are present but do not include softwood or deciduous trees which are threatened. Full list: http://checklist.cites.org/#/en/search/cites_appendices%5B%5D=I&cites_appendices%5B%5D=II&cites_appendices%5B%5D=III&output_layout=alphabetical&level_of_listing=0&show_synonyms=1&show_author=1&show_english=1&show_spanish=1&show_french=1&scientific_name=Plantae&page=1&per_page=20	Horse Chestnut (*Aesculus hippocastanum*) – vulnerable https://www.iucnredlist.org/species/202914/122961065#conservationactions Full list https://www.iucnredlist.org/search?landRegions=FI&searchType=species

A group considered as an indigenous people in Finland is the Sámi. Their rights have been secured in many laws e.g. the Constitution, the Sámi Parliament Act, the Act on the Finnish Forest and Park Service and the Act on Reindeer Husbandry. The Sámi Parliament is the supreme political body of the Sámi in Finland. The Sámi Parliament represents the Sámi in national and international connections, and it attends to the issues concerning Sámi language, culture, and their position as an indigenous people. The Sámi Parliament can make initiatives, proposals and statements to the authorities. The Sámi Parliament Act also states that the authorities have an obligation to negotiate with the Sámi Parliament for all important measures that concern the Sámi people. These include for example the use of state land and conservation areas.

Forestry production

Area	Element	Item	Year	Unit	Value
Finland	Production	Roundwood	2018	m3	68289165
Finland	Production	Wood chips, particles and residues	2018	m3	14138268
Finland	Production	Wood pellets and other agglomerates	2018	tonnes	407000
Finland	Production	Sawnwood	2018	m3	11840000
Finland	Production	Wood-based panels	2018	m3	1342000
Finland	Production	Fibreboard	2018	m3	20000
Finland	Production	Total fibre furnish	2018	tonnes	11900000
Finland	Production	Pulp for paper	2018	tonnes	11260000
Finland	Production	Paper and paperboard	2018	tonnes	10544019
Finland	Production	Paper and paperboard, excluding newsprint	2018	tonnes	10239027
Finland	Production	Packaging paper and paperboard	2018	tonnes	3819009
Source: *FAOSTAT - Forestry database*					

Sources:
https://mmm.fi/en/forests/forestry/forest-resources
https://smy.fi/en/
https://forest.fi/article/forest-sector-in-finland/
https://www.ymparisto.fi/en-US/Nature/Species/Threatened_species
https://www.iucn.org/news/europe/201903/red-list-finnish-species-every-ninth-species-finland-threatened

Information about Russian forest resources

Sourcing area in Russia is the Republic of Karelia. The supply area is represented by semi-natural managed forests (southern boreal) with native tree species. Tree species sourced are Pine (Pinus sylvestris) and Spruce (Picea abies). Other species (Betula sp, Larix, Populus, Alnus, Salix) are also present in the forests. The coniferous species make 68% of the forest area. No CITES listed forest tree species are represented in the sourcing.

Russia is home to nearly one-quarter of the planet's forests. However, around 65% of Russia's forests grow in severe climate conditions, which result in low productivity and a fragmentary nature of growing stock, as well as high harvesting and transportation costs. Around 76% of the country's forests are composed of coniferous species. Standing larch trees, which have limited applications in the timber industry, account for a considerable proportion of them. The annual allowable cut was established at 703 million cubic meters at the end of 2016 but no more than 30% of it is normally harvested. In accordance with Russia's Forest Sector Strategy until 2030, the proportion is projected to increase to 41% as harvesting is slated to rise to 286 million cubic meters to meet new demand from woodworking companies.

Harvesting volumes are lower than the allowable annual cut due to the following:

- No access to remote forests from main railway lines, motorways or rivers;
- Forest underutilization under forest parcel lease contracts;
- Lack of up-to-date data on forest resources;

• Inefficient forest regeneration to reproduce economically valuable species on the most productive and transport accessible forest land Areas of final felling have surpassed forest regeneration areas over the last decade.

Felled areas that were never replanted reached 1.4 million hectares in 2010-2016. The ratio of forest regeneration to areas of final felling dropped from 147% in 2000 to 74% in 2016.

Russia has around 11.47 million km^2 of forest land and other wooded land, which constitutes 49.8% of the total land area. The area of the forest land actually covered by forests is 7,95 million km^2. Around 33.5% of the total forested area is composed of primary forests, 64.1% of otherwise naturally regenerated forests, and the remaining 2.4% of planted forest. 100% of the Russian forest land is publicly owned.

The Russian landscape is highly diverse, including polar deserts, arctic and sub-arctic tundra, boreal and semi-tundra larch forests, boreal and temperate coniferous forests, temperate broadleaf and mixed forests, forest-steppe and steppe (temperate grasslands, savannahs, and shrub-lands), semi-deserts and deserts.

With 7,7 million km^2, Russian boreal forests (also known in Russia as the taiga) represent 67% of Russia's total forest land and is the largest forested region on Earth (larger than the Amazon). These forests have relatively few tree species, and are composed mainly of birch, pine, spruce, and fir, along with some other deciduous species. Mixed-in among the forests are bogs, fens, marshes, shallow lakes, rivers and wetlands, which hold vast amounts of water. These forests contain more than 55% of the world's conifers, and 11% of the world's biomass.

Many indigenous and local people in Russia's less developed regions rely heavily on the forest for timber harvesting, and non-timber forest product collection (e.g. berries, mushrooms, medicinal plants), traditional agriculture (e.g. grazing, hay making), and hunting. Almost all of the 45 officially registered indigenous nationalities depend on the use of forest and other wild natural resources (tundra, marine, freshwater) for their subsistence.

The forested area has been growing slightly, by 0.03% per year, mainly due to natural expansion, over the last 25 years. The main pressure on Russian forests is caused by timber extraction and other forestry activities. Demand for resources in world markets, such as timber in China and Southeast Asia, and pulp in Europe, is increasingly threatening Russian forests. Forest fires are also a major threat to the region. The forest loss due to fire ranges from one to three million hectares per year. Siberian forests are particularly at risk.

Russia has more than 12,000 national, regional, and local protected areas, covering 200 million hectares or 11.9% of the country. Federally-managed protected areas, including 102 strict nature reserves (*zapovedniks*), 47 national parks, 70 federal sanctuaries or wildlife refuges (*zakazniks*) and 28 reserved sites (natural monuments), cover 66 million hectares or about 3.9% of the country's territory. In addition to these protected areas, Russia has over 281 million hectares of protected forest (such as water protection zones, cedar nuts using zones etc.), 268 million hectares of reserve forest located in economically inaccessible territories, and many protected forest sites within exploitable forest. The share of protected forests is fluctuating from 3 to 60%, depending on the particular region and/or forest management unit. All of these categories of forests have different protection regimes and clear cutting is not allowed in most of them.

Most common production species in Russia are:

Coniferous:

- Pine (*Pinus spp.*)
- Spruce (*Picea spp.*)
- Fir (*Abies nephrolippis*)
- Larch (*Larix spp.*)
- Siberian pine (*Pinus siberica* – often mis-translated as Siberian cedar)

Deciduous:

- Oak (*Quercus spp.*)
- Beech (*Fagus sylvatica*)
- Birch (*Betula spp.*)
- Aspen (*Populus tremula*)
- Ash (*Fraxinus spp.*)
- Elm (*Ulmus spp.*)
- Linden (*Tilia spp.*)

In 2013, the Russian Federation introduced an eight year plan, "The Development of Forestry 2013-2020", aiming to reduce illegal logging and increase profits from the timber sector. The Criminal Code was also updated in 2014 to include stricter penalties for illegal logging, transport and sale. Timber labelling, tracebility and monitoring system requirements were updated in the 2013 Federal Law "On Amendments to the Forest Code of the Russian Federation". A new electronic system for recording timber related information, the Uniform State Automated Information System (EGAIS), was launched 1 January 2015. All organisations dealing in timber are required to submit information on the volume of timber harvested, labels used and timber sold. Forests are state owned and licences to harvest are issued to companies or individuals. The Russian Federation also maintains a list of tree and shrub species for which harvest is prihibited.

Forestry production

Area	Element	Item	Year	Unit	Value
Russian Federation	Production	Roundwood	2018	m3	235999999
Russian Federation	Production	Wood chips, particles and residues	2018	m3	18356000
Russian Federation	Production	Wood pellets and other agglomerates	2018	tonnes	2450000
Russian Federation	Production	Sawnwood	2018	m3	42701000
Russian Federation	Production	Wood-based panels	2018	m3	17334000
Russian Federation	Production	Fibreboard	2018	m3	3565000
Russian Federation	Production	Total fibre furnish	2018	tonnes	12129000
Russian Federation	Production	Pulp for paper	2018	tonnes	8679000
Russian Federation	Production	Paper and paperboard	2018	tonnes	9048000
Russian Federation	Production	Paper and paperboard, excluding newsprint	2018	tonnes	7521000
Russian Federation	Production	Packaging paper and paperboard	2018	tonnes	5896000
Source: *FAOSTAT - Forestry database*					

There are 4 CITES listed timber species in Russia – *Taxus cuspidata* (Appendix II), *Fraxinus mandshurica*, *Pinus koraiensis* and *Quercus mongolica* (Appendix III).

Conservation CITES or IUCN species

Species	CITES status	IUCN classification
Birch (*Betula pendula*)	Not on the list	Least concern (LC)
Oak (*Quercus robur, Quercus petrea)*	Not on the list	Least concern (LC)
Other CITES / IUCN registrations	Continuation 1992 https://cites.org/eng/cms/index.php/component/cp/country/RU Several species Full list: http://checklist.cites.org/#/en/search/country_ids%5B%5D=208&cites_appendices%5B%5D=I&cites_appendices%5B%5D=II&cites_appendices%5B%5D=III&output_layout=alphabetical&level_of_listing=0&show_synonyms=1&show_author=1&show_english=1&show_spanish=1&show_french=1&scientific_name=&page=1&per_page=20	Common Ash (Fraxinus excelsior) – Near Threatened https://www.iucnredlist.org/species/203367/67807718 Full list: https://www.iucnredlist.org/search?landRegions=RU&searchType=species

Sources:
https://www.timbertradeportal.com/countries/russia/
https://www.ey.com/Publication/vwLUAssets/ey-russia-wood-survey-eng/$FILE/ey-russia-wood-survey-eng.pdf
https://ec.europa.eu/environment/forests/pdf/Country_overview_Russian_Federation_03_10_2018.pdf

Information about Poland forest resources

The forest area in Poland is 9230 thousand ha (according to the Central Statistical Office, figure for 31 December 2016), which corresponds to forest cover of 29.5%. The forest cover is the highest in the Lubuskie province at 49.2%. According to the measurement standard adopted by the international assessment which also includes the lands associated with forest management, the forest area in Poland is 9435 thousand ha, as of 31 December 2016, and is close in size to the forest area of Ukraine and Italy. In six European countries (apart from Russia) this number was more than 10 million ha.

In the ownership structure of forests in Poland the public forests are predominant – 80.8%, of which 77.0% are under the administration of the State Forests National Forest Holding (the State Forests). In the post-war period the forest ownership structure was changing very slightly. In the years 1990–2016, the share of

privately-owned forests increased by 2.2 percentage points to the current 19.2%. Concurrently, the share of publicly-owned forests decreased from 83.0% to 80.8%.

Forests in Poland mainly occur in the areas with the poorest soils which is reflected by the distribution of the forest habitat types. In the structure of forest sites, coniferous forests are predominant as they account for 50.5% of the forest area, while the broadleaved habitats account for 49.5%. In both groups there are upland sites accounting for 6.5% of the total forest area and montane sites occurring in 8.7% of forests.

Coniferous species are dominant in 68.5% of the area of Polish forests. Pine, which according to the National Forest Inventory accounts for 58.2% of the area of forests in all ownership categories, 60.1% of the area managed by the State Forests, and 55.0% in private forests, has found in Poland optimal climatic and site conditions within its Euro-Asian natural range. Owing to this, pine managed to produce many valuable ecotypes such as Taborska or Augustowska pine. In the years 1945–2016, the structure of species composition in Polish forests changed significantly, which is evident also in the increased share of stands with predominant deciduous species. In the State Forests, where it is possible to track these changes owing to the annual updates of the forest area and timber resources, the area of broadleaved stands increased from 13.0 to 23.8%.

Forest ecosystems in Poland are the most valuable and the most representative components of all nature protection forms. They account for 38.2% of the land area under legal protection. In relation to the total forest area, the share of protected forests accounts for 41.9%, but taking into account the area of forest reserves it amounts to 43.0%. The area of forests and the timber resources of the country are increasing steadily. At present, their area is 9230 million ha, including 7105 million ha in the State Forests, volume of gross merchantable timber – 2550 million m3, of which in the State Forests 2005 million m3 and in private forests 424 million m3. At present, the average growing stock amounts 277 m3/ha; in the State Forests, however, this indicator is higher than in private forests – 282 m3/ha and 240 m3/ha, respectively. The average age of stands is 59 years in the State Forests and 48 years in private forests.

Forests in Poland are one of the most valuable elements of the environment and are protected by a variety of nature and landscape protection forms. There are national parks, nature reserves, areas of protected landscape, Natura 2000 sites, areas of ecological utility, nature and landscape complexes and documentation sites. The highest form of nature protection are national parks which currently number 23 and cover an area 315.1 thousand ha. Forests comprise 194.8 thousand ha, i.e. 61.8% of the total area of national parks. Nature reserves, 1493 in number, cover an area of 168.3 thousand ha. Majority of reserves (1281) are located within administrative boundaries of the State Forests. The combined forest area in nature reserves is 96.1 thousand ha. There are 122 landscape parks, created through administrative orders of provincial governors, of a combined area 2604.7 thousand ha, out of which 1319.1 thousand ha (50.6%) are forests. The areas of protected landscape include 385 objects of nature with a total area of 7085.9 thousand ha, of which forests constitute 2305.9 thousand ha (32.5%). Both forms of nature conservation account for over 50.2% of the area of the State Forests. Within Natura 2000 network, at the end of 2016 there were designated 145 special protection areas (SPAs) for birds with a total land and sea area of 5575 thousand ha, and 849 sites of Community importance (awaiting to be designated by the Minister of the Environment as special areas of

habitat conservation) with a total area of 3851 thousand ha. Currently, Natura 2000 sites cover 6853 thousand ha which is about 20% of the country's total area. In the areas administered by the State Forests, special protection areas for birds cover 2217 thousand ha (29.1%), and sites of Community importance 1678 thousand ha (21.8%). Following large extension of the Polish – Belarusian Bialowieza Forest World Heritage Site (inscribed in 2014) the entire Bialowieza Forest (a property of 141,885 ha with a buffer zone of 166,708 ha) is on the World Heritage List.

Poland's forests contain 968 million metric tons of carbon in living forest biomass. Biodiversity and Protected Areas: Poland has some 563 known species of amphibians, birds, mammals and reptiles according to figures from the World Conservation Monitoring Centre. Of these, 0,4% are endemic, meaning they exist in no other country, and 4.3% are threatened. Poland is home to at least 2450 species of vascular plants, of which 0.1% are endemic. 11.0% of Poland is protected under IUCN categories I-V.

Conservation CITES or IUCN species

Species	CITES status	IUCN classification
Oak (Quercus petrea/robur)	Not on the list	Least concern (LC)
Other CITES / IUCN registrations	Ratification 1989 https://cites.org/eng/cms/index.php/component/cp/country/PL Other CITES species are present but do not include softwood or deciduous trees which are threatened. Full list: http://checklist.cites.org/#/en/search/country_ids%5B%5D=75&cites_appendices%5B%5D=I&cites_appendices%5B%5D=II&cites_appendices%5B%5D=III&output_layout=alphabetical&level_of_listing=0&show_synonyms=1&show_author=1&show_english=1&show_spanish=1&show_french=1&scientific_name=&page=1&per_page=20	Common Ash (Fraxinus excelsior) – Near Threatened https://www.iucnredlist.org/species/203367/67807718 Full list https://www.iucnredlist.org/search?landRegions=PL&searchType=species

Foresters encourage everyone to rest in the bosom of nature. In the most attractive spots tourists may find forest sheds, tables and benches that are great for leisure or a picnic. Every spot, that is suitable for a fireplace or grill, is marked and secured in a way that prevents the uncontrolled spread of fire and the risk of conflagration.

Forestry production

Area	Element	Item	Year	Unit	Value
Poland	Production	Roundwood	2018	m3	46586000
Poland	Production	Wood chips, particles and residues	2018	m3	10300000
Poland	Production	Wood pellets and other agglomerates	2018	tonnes	1550000
Poland	Production	Sawnwood	2018	m3	5190000
Poland	Production	Wood-based panels	2018	m3	11355000
Poland	Production	Fibreboard	2018	m3	4970000
Poland	Production	Total fibre furnish	2018	tonnes	4146000
Poland	Production	Pulp for paper	2018	tonnes	1346000
Poland	Production	Paper and paperboard	2018	tonnes	4859000
Poland	Production	Paper and paperboard, excluding newsprint	2018	tonnes	4806000
Poland	Production	Packaging paper and paperboard	2018	tonnes	3260000
Source: *FAOSTAT - Forestry database*					

Sources:
http://www.lasy.gov.pl/pl/informacje/publikacje/in-english/forests-in-poland/lasy-w-polsce-2017-en.pdf
https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=The%20Forestry%20and%20Wood%20Products%20in%20Poland_Warsaw_Poland_3-23-2017.pdf
https://www.lasy.gov.pl/en/our-forests/polish-forests
https://www.wwf.pl/sites/default/files/2019-04/raport_bialowieza%20v2.pdf
https://www.iucn.org/news/secretariat/201707/unesco-urges-poland-immediately-stop-logging-old-growth-forests-bia%C5%82owie%C5%BCa-world-heritage-site-following-iucn%E2%80%99s-advice
https://rainforests.mongabay.com/deforestation/2000/Poland.htm

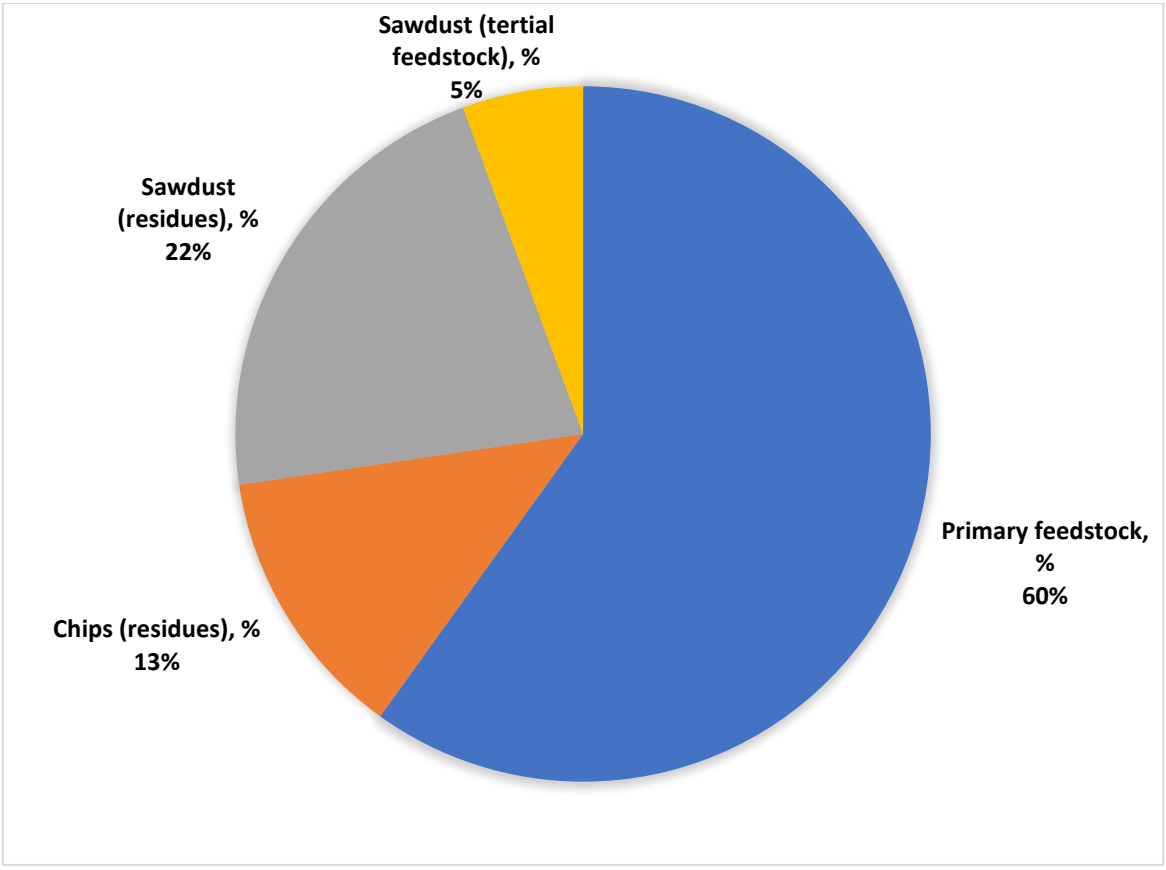
2.2 Actions taken to promote certification amongst feedstock supplier

For the production of SBP pellets, preference is given to suppliers certified according to FSC and PEFC systems and delivering certified material. In cooperation with suppliers of controlled wood, the company prefers those who undertake to mitigate the risks in accordance with the procedures developed by the company to obtain SBP compliant material. The efectiveness of the measures is evidenced by a significant increse in SBP-compliant material in recent years: before certification started SBP-compliant primary feedstock has increased from 20.46% (2017) to 99.84% (2019), secondary feedstock has increased from 35.98% (2017) to 73.99% (2019). The company policy is to give a preference to certified suppliers. Raw material (sawdust, chips) consists of wood waste from main production of suppliers. Therefore, uncertified and new suppliers are invited to certify their base production and get benefit from residues.

2.3 Final harvest sampling programme

The proportion of biomass quantity as primary raw material after final fellings is about 55,68 % compared to quantity of other raw material assortment. The primary raw material has been procured from the Supply Base area and it consists of round wood/firewood. The raw materials are procured in well developed, free and open market with competition of other customers. Different assortments of raw materials are obtained from the logging. All companies of forest industry have public price lists for the assortments. The price lists reflect the solvency of the industry for different assortments. The price lists clearly indicate that logs and veneer logs are the most valuable assortments while firewood (e.g. for pellet production) is less valuable assortment. This information is derived from the documents and data submitted by suppliers and forest developers.

2.4 Flow diagram of feedstock inputs showing feedstock type [optional]



2.5 Quantification of the Supply Base

Provide metrics for the Supply Base including the following. Where estimates are provided these shall be justified.

Supply Base

a. Total Supply Base area (ha): cumulative area of all forest types within SB 882 541 000 ha
b. Tenure by type (ha): privately owned 48 892 771 ha / state owned 833 648 229 ha
c. Forest by type (ha): boreal 765 163 047 ha / temperate 117 377 953 ha
d. Forest by management type (ha): 882 541 000 ha managed natural
e. Certified forest by scheme (ha): FSC certified forests 74 668 000 ha / PEFC certified forest 74 646 000 ha

Feedstock

f. Total volume of Feedstock: 200,000 – 400,000 tonnes
g. Volume of primary feedstock: 0 – 200,000 tonnes
h. List percentage of primary feedstock. Subdivide by SBP-approved Forest Management Schemes:
    - Certified to an SBP-approved Forest Management Scheme – 20%-39%
    - Not certified to an SBP-approved Forest Management Scheme – 0%-19%

i. List all species in primary feedstock, including scientific name:
Alnus glutinosa; Alnus incana (L.) Moench; Betula pendula; Betula pubescens; Fraxinus excelsior; Picea abies; Pinus sylvestris; Populus tremula; Quercus robur

j. Volume of primary feedstock from primary forest - 0%
k. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes:
    - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme- 0%
    - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme- 0%
l. Volume of secondary feedstock: 40%-59% - sawdust and chips (residues at sawmills) as production waste
m. Volume of tertiary feedstock: 0%-19%

* Compelling justification would be specific evidence that, for example, disclosure of the exact figure would reveal commercially sensitive information that could be used by competitors to gain competitive advantage. State the reasons why the information is commercially sensitive, for example, what competitors would be able to do or determine with knowledge of the information.

Bands for (f) and (g) are:

1. 0 – 200,000 tonnes or m^3

2. 200,000 – 400,000 tonnes or m^3

3. 400,000 – 600,000 tonnes or m^3

4. 600,000 – 800,000 tonnes or m^3

5. 800,000 – 1,000,000 tonnes or m^3

6. >1,000, 000 tonnes or m^3

Bands for (h), (l) and (m) are:

1. 0%-19%
2. 20%-39%
3. 40%-59%
4. 60%-79%
5. 80%-100%

NB: Percentage values to be calculated as rounded-up integers.

3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
X	☐

Provide a concise summary of why a SBE was determined to be required or not required.

SBP Biomass supply assessment includes:

- Primary feedstock (roundwood, wood chips from forests and agriculture lands),
- Secondary feedstock (wood chips, sawdust after processing).

"AVOTI SWF" SIA, having assessed the suppliers by performing specified SBP risk and FSC CNR risk audits before logging, during and after logging, defines the wood received for production of pellets as SBP-compliant biomass.

"AVOTI SWF" SIA bases its assessment on SBP Risk Assessment for Latvia:

https://sbp-cert.org/docs/SBP-endorsed-Regional-Risk-Assessment-for-Latvia.pdf

4 Supply Base Evaluation

4.1 Scope

Provide a concise summary of the scope of the evaluation.

Applicable to:

- primary and secondary raw material supply from Latvian forest properties before, during, or after logging.

4.2 Justification

Provide a justification for the approach used in the evaluation.

The basis of the provisions of agreements concluded by “AVOTI SWF” SIA with pellets buyers in 2017 is the supply of SBP-compliant products. Therefore, the decision of the company management is to design SBE risk minimisation measures, cooperate with suppliers, attract independent environmental specialists and experts to exclude the purchase of wood that does not meet the SBP-certified product status.

SBP endorsed SBP Regional Risks Assessments have been developed in accordance with SBP standard Nr.1 version 1.0 of March 2015 and SBP standard Nr.2 version 1.0 of March 2015, assessing the risk category for each SBP indicator. Through reviewing and assessing the risk, the company acquired an in-depth understanding of the wood supply risks that could affect the acceptance of SBP non-compliant material for biomass production.

“AVOTI SWF” SIA, by attracting independent biotope experts, professional logging company experts and nature conservation specialists, has designed a risk minimisation and control mechanism to assess and approve those biomass supplies and suppliers whose products supplied meet the SBP-compliant biomass status.

4.3 Results of Risk Assessment

Give a brief summary of the results of the risk assessment.

The risk assessment analysis includes the requirements provided for by the laws and regulations of the Republic of Latvia, regulatory activities of the State legislation and laws and regulations for primary and secondary wood supply from the Latvian forest properties.

Considering the specific nature of Latvia and expert recommendations, “Specified risk” was applied with regard to biotope conservation (HCV category 3), occupational safety, bird habitat preservation (HCV category 1), and historical and cultural objects (HCV category 6).

4.4 Results of Supplier Verification Programme

Give a brief summary of the results of the SVP.

4.4.1. Feedstock supplies from Latvian forest properties

SBP risk minimisation and supplier audits and results described below and related to specified risks are available to third and interested parties as documental evidence of the audits performed. Information, the database of assessments performed includes property names, cadastres, plots, notes on indicators of biological diversity, independent expert reports, recommendations, decisions made regarding biomass suppliers.

Information obtained during risk assessment and field testing of the information for all SBE risk categories confirmed that for 4 categories – biotope conservation (HCV category 3), occupational safety, bird habitat preservation (HCV category 1), and historical and cultural objects (HCV category 6) – a specified risk is applicable, whereas for the other categories the risk is low.

Risk assessment and risk minimisation mechanism in primary wood audits before logging confirm that specified risks are urgent in logging.

Secondary wood approval is possible only for those processors who have an “AVOTI SWF” SIA SBE-approved supplier and who have agreed to cooperation to assess and minimise risks before logging (biological and historical and cultural values), or during logging (occupational safety) at the wood procurement site.

4.5 Conclusion

Give a concise summary of the overall conclusions from the SBE as to whether the organisation meets SBP requirements. This summary should include a discussion of the main strengths and weaknesses of the supply base evaluation, and a statement about the confidence that the evaluators have that the Biomass Producer can ensure that all specified feedstock are in full compliance with SBP Standards.

4.5.1. Feedstock supplies from Latvian forest properties

Since January 2018, by introducing the SBE system and reviewing cooperation with wood suppliers, effective information exchange has been achieved, obtaining information on forest properties before logging, during and after logging. This is significant for effective implementation of corrective or preventive activities in case of possible risks to preserve biological diversity, study and initiate the implementation of occupational safety measures in the logging process, and to decline suppliers or materials supplied which may threaten the effectiveness of the SBE system where risks have been identified.

“AVOTI SWF” SIA can overall conclude that cooperation is effective with suppliers who take fair risk minimisation measures. All the information required for risk survey and prevention and the conservation of nature values is provided, in keeping with the recommendations of the experts invited.

Risk minimisation measures are implemented for wood processors (secondary raw material suppliers) for approved SBE suppliers. The system is based on primary raw material control and SBP-compliant material registration, registration of processed material in credit systems calculation.

5 Supply Base Evaluation Process

Give a general description of the process for Supply Base Evaluation including any relevant consultations with stakeholders. Specify whether the SBE was performed 'in house' or whether an external party was contracted to perform the SBE. If the latter, give a full description of the competencies of the contracted party that includes a justification for the appointment of personnel to the evaluation team.

Although not required by SBP, it is likely that the verification system will also include a sampling plan for assessing forest operations within the Supply Base. If such a plan has been developed for monitoring suppliers, it should be described here.

The system of risk minimisation measures, supplier audits, property plot visiting criteria, registers, assessment forms, expert involvement process, occupational safety assessment procedure, are defined in the general SBE system procedures.

SBE system effectiveness summary report and risk assessment results were achieved by performing forest plot risk assessment, physical audits with or without the presence of logging companies. Additional consultation took place with experts, other forestry and logging companies, and the results and experience gained were discussed at the company management level, the results are submitted to the auditor company.

For confirming the fulfilment of SBE risk minimisation requirements and assessing the competency of suppliers, logging companies, processors, and experts in occupational safety and biotope and bird nest surveys, as well as identification of possible historical and cultural objects were invited.

For SBE system design and supply assessment, the risk minimisation measures, audits, and communication with approved suppliers and experts is implemented by "AVOTI SWF" SIA quality manager with 15 years of experience in wood industry, many years of experience in FSC system maintenance and wood origin assessment in forestry, and 14 years of experience and knowledge in forestry and the field of wood supply, procurement and Legislation.

As the basis for the SBP SBE risk minimisation system, an audit programme has been designed and FSC CRN minimisation measures programme guidelines, FSC supply and FSC Forest certification system experience and knowledge in forestry and in the field of wood supply legislation have been used.

6 Stakeholder Consultation

Give a general description of the process of Stakeholder Consultation, including stakeholders contacted and method of communication.

The company, on 6 March 2018, published an SBP risk assessment on its website. An informative letter on the risk assessment designed in accordance with SBP Standard was e-mailed to the interested parties. The list of interested parties was created so as to include a maximum number of recipients who represent the economic, social, and environmental interests of society, and the local governments. The total number of recipients is approximately 86 correspondents.

SBP risk assessment is available on SBP website:

https://sbp-cert.org/documents/standards-documents/risk-assessments/latvia/

"AVOTI SWF" SIA quality manager has performed and performs consultations with interested parties in person, by phone, by attending seminars on biotope identification, logging processes and conservation of biological values of nature in logging, on the assessment of effects on the environment, on occupational safety in logging.

Responses to the comments received from interested parties.

An e-mail from the Nature Conservation Agency was received with recommendations for specifying the text of SBR report.

6.1 Response to stakeholder comments

Provide a summary of all stakeholder comments received and how the comments were taken into consideration in the SBE process.

In response to the Nature Conservation Agency, receiving the comments was acknowledged by e-mail.

All the specifying additions and corrections to SBR were made.

The general conclusion of the Nature Conservation Agency:

"The Agency appreciates that in January – March 2018 biotope monitoring risk audits were initiated in Vidzeme and Latgale and that logging companies will not supply wood from forests with high biological value."

7 Overview of Initial Assessment of Risk

Briefly describe the results of the Risk Assessment. This represents the initial evaluation of risk done prior to the SVP and prior to any mitigation measures.

This section provides an opportunity to detail how the BP's management system is effective in reducing risk.

List the result for each Indicator in Table 1.

Where multiple sub-scopes are involved, prepare a separate overview table for each sub-scope showing the initial risk ratings for each Indicator.

7.1. Feedstock supplies from Latvian forest properties

The risk assessment level reviewed by "AVOTI SWF" SIA for each indicator has been designed in accordance with the SBP-endorsed Regional Risk Assessment for Latvia (September 2017).

After publishing the risk assessment, "AVOTI SWF" SIA began the risk minimisation process for 3 risk categories shown. The results are presented in sections 8 and 9.

Risk assessment results are summarised in Table 1.

Table 1. Overview of results from the risk assessment of all indicators (prior to SVP)

Indicator	Initial Risk Rating		
	Specified	Low	Unspecified
1.1.1		X	
1.1.2		X	
1.1.3		X	
1.2.1		X	
1.3.1		X	
1.4.1		X	
1.5.1		X	
1.6.1		X	
2.1.1	X		
2.1.2	X		
2.1.3		X	

Indicator	Initial Risk Rating		
	Specified	Low	Unspecified
2.3.1		X	
2.3.2		X	
2.3.3		X	
2.4.1		X	
2.4.2		X	
2.4.3		X	
2.5.1		X	
2.5.2		X	
2.6.1		X	
2.7.1		X	
2.7.2		X	

2.2.1		X	
2.2.2		X	
2.2.3		X	
2.2.4		X	
2.2.5		x	
2.2.6		X	
2.2.7		X	
2.2.8		X	
2.2.9		X	

2.7.3		X	
2.7.4		X	
2.7.5		X	
2.8.1	X		
2.9.1		X	
2.9.2		X	
2.10.1		X	

8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

Give a general description of the Supplier Verification Program (SVP) including the criteria used for monitoring suppliers (e.g. supplier characteristics, risk factors, or local circumstances) as applicable. Describe how the control system in place will ensure that all Feedstock remains in compliance with SBP Standards. If applicable, explain how the sampling frequency and intensity was chosen, and why certain suppliers were grouped together for sampling purposes.

Primary and secondary feedstock supply from Latvian forest properties

Risk minimisation measures are applicable to the following categories of raw material:

- Primary raw material supply from Latvian forest properties before logging and after logging, as well as during logging. Primary biomass cannot be qualified and is not applicable to such tree species as the oak, ash, maple, elm, fluttering elm, if their diameter at the stump exceeds 70cm;
- Secondary raw material supply.

Supplier testing programme and selection criteria are described in the company SBE system procedure.

General description of the testing programme:

- Suppliers submit information on the properties planned for logging, additional documents, and the volumes supplied are tested at the moment of delivery according to available databases to identify risks.
- Having assessed the location of the properties, regional nature value mapping, the presence of protected territories, and information on possible biotopes, a plan is designed and sites are selected for visiting.
- Together with the supplier or without their presence, properties are visited where biotopes are possible and nature values are shown in available databases.
- Property audits can be performed regardless of whether wood will be supplied from the plot or not.
- During an audit, general, expert-approved biotope and occupational safety surveys are applied.
- If during the surveying, a possible biotope, bird nest, or a historical and cultural object is found, an expert is immediately invited to provide a complete report.

The result achieved by the supplier testing programme is that only such wood is received from suppliers which comes from production forests with low biological value, from properties without threatened nature values, where bird nests are surveyed and left intact, and where historical and cultural objects are preserved.

An independent international audit company performs SIA “AVOTI SWF” approved supplier compliancy assessment and verification. If during an audit it is found that a supplier has ignored a risk category determined by the audit, the SBE system effectiveness and risk assessment programme is reviewed.

Additional property assessment is performed together with forest owner. As a result of ineffective cooperation, further supply is discontinued.

8.2 Site visits

Describe any field assessments of Indicators.

Primary and secondary feedstock supplies from Latvian forest properties

Audits are performed before logging, during or after logging.

All the wood that is supplied or is going to be supplied to “AVOTI SWF” SIA, or for which information is provided as for planned forest properties from SBE NR-certified suppliers, is audited regardless of the location of the felling site. Property plots with signs of possible biotopes have priority, and all the logging teams of all suppliers are assessed in accordance with the company audit plan.

At the time of reviewing the SBE system effectiveness from January until 31 December 2019, the company “AVOTI SWF” SIA, with or without the presence of a supplier, has performed 112 woodland key habitat (WKH) audits. 2 of these forest sites where detected as WKH. The consultation with supplier were carried out to ensure that WKH verification system of these suppliers will be improved to prevent such cases from happening again.

Effectiveness of WHK risk mitigation actions is acceptable. Many suppliers are conducting habitat assessments prior to obtaining a cutting permit to prevent destruction of WKH.

In the period from January 1, 2019 to December 31, 2019, 23 occupational safety audits were performed in the forest:

- In some cases, there were detected some non-compliances, but the overall level of compliance with work safety requirements is acceptable. The non-compliances can be prevented in short period of time.
- Many of these logging companies use harvesters in logging operations, that reduces the risks.

The results of the audits show that the risk of violation of work safety is considered to be low.

8.3 Conclusions from the Supplier Verification Programme

Summarise conclusions from the SVP.

Primary and secondary feedstock supplies from Latvian forest properties

Occupational safety and health surveillance risk programme

Audits of occupational safety were started from 1 January to 31 December, 2019, and are being carried out to the independent audit and after it.

Audits were planned in order to inspect and carry out audits of all suppliers and their service providers within a year.

In total, 23 audits for the assessment of occupational safety are carried out. The suppliers of SBE NR perform logging mainly using logging equipment, rarer – worker teams with hand saws.

According to the audits carried out, it may be concluded that occupational safety and health risks related to logging are low for the approved suppliers of SBE NR since they employ their workers, logging experts and occupational safety experts who control service providers in the sphere of logging in order to ensure full compliance with the requirements for occupational safety.

Identification of biotopes, bird habitats and heritage objects and their surveillance risk programme

Audits of biotope surveillance risk programme were started from 1 January to 31 December, 2019, and are being carried out to the independent audit and after it within the framework of the programme before the commencement of works, logging and after logging in those felling areas where, according to data of “Latbio” and Nature Conservation Agency, potential natural wood biotopes are identified.

Territories to be audited and suppliers are chosen in order to cover maximum of various supply regions, as well as various logging and suppliers’ companies. Audit programme includes Vidzeme and Latgale regions. In relation to every audit, notes and observations are recorded.

The following conclusions are made on the basis of the audits carried out:

1) The suppliers have understanding about the mechanism of biotope assessment, they are aware of the need to carry out audit of biotope assessment before the commencement of logging works. During the audits, on-site inspection of potential felling areas in production forests or agricultural land with low probability of existing wood biotopes was carried out. In case of doubt, an expert in the sphere of wood and grassland habitats was involved or a consultation was organized.

2) During logging, objects of heritage value were not found in the chosen wood plots. During the audits, it was established that the suppliers are aware of the fact that protection of heritage values is governed by the legislation of the Republic of Latvia. Survey of logging companies allows concluding that, if a heritage object is found in the felling area during logging works, the State Forest Service and the respective local government is informed thereof in writing. Logging works are suspended until the decision is received from the responsible authorities.

3) During the audit, large (above 50 cm) nests were not found.

4) The suppliers have understanding about the required actions if large (above 50 cm) nests are noticed. Logging companies understand the need to leave the deadwood and ecologically important trees

in the forest clearings, as well as to comply with other nature conservation requirements in forest management. During the audits, it is established that various restrictions for logging in administrative territories are observed.

5) During the audit, it is established that logging companies are willing to show to the auditor of "AVOTI SWF" SIA the territories which are kept as biologically high-value forests (wood biotopes and natural wood biotopes of EU importance) where logging will not be performed, or the management of "AVOTI SWF" SIA will be informed about it. Timber from these forest units/properties (farms) will not be delivered.

9 Mitigation Measures

9.1 Mitigation measures

Describe any mitigation measures taken to address specified risks associated with Indicators.

Primary and secondary feedstock supplies from Latvian forest properties

Risk mitigation measures refer to the following risk categories of biomass supply:

- identification of characteristics of wood biotopes and natural wood biotopes of EU importance;
- identification of heritage monuments and objects of heritage value during logging process;
- identification of bird nesting sites;
- mitigation of occupational safety and health risks.

All logging objects are audited before removal of plant cover or logging works in agricultural land or during such removal or logging, evaluating all possible risks; however, extraction of biomass outside forest land refers to biomass fuels for producing energy and heat.

According to the results of surveillance audits and supplier assessment, management of the company makes a decision on further collaboration with a supplier, conditions for timber supply and supply volumes. The suppliers who refuse to inform “AVOTI SWF” SIA about the planned logging volumes and/or refuse to collaborate in performing audits may be removed from the list of suppliers.

“AVOTI SWF” SIA, by involving respective biotope experts, specialists, as well as occupational safety experts in the sphere of forest management, undertakes to organize additional informative seminars for the suppliers in order to provide the suppliers with maximum information on SBP’s requirements for the supplies of appropriate raw materials and potential risks thus mitigating the risks of the supplies of raw materials which do not comply with the requirements of SBP’s standards.

The assessment of effectiveness of risk mitigation measures and audit results are available for the interested parties on demand, meeting physically and explaining common mechanism of risk mitigation measures and benefits, as well as facilitating further collaboration in the process of minimizing risk identification.

9.2 Monitoring and outcomes

Describe how the Indicators are being monitoring and what the outcomes are (if known) from that monitoring.

Primary and secondary feedstock supplies from Latvian forest properties

During the supplier audits performed year 2019, 2 suppliers were not approved for timber supplies due to the breaches of occupational safety and unwillingness to collaborate with “AVOTI SWF” SIA in the process of biotope identification and minimizing risks of supplying inappropriate raw materials.

After on-site surveillance audits when the risks of possible biotopes and occupational safety were assessed, the management of the company has made a decision to remove from the list of suppliers those who failed to meet the criteria for permissible results of company’s risk mitigation programme.

Supply regions — Vidzeme, Latgale.

Detailed findings for every indicator are given in risk assessment.

Risk assessment: https://sbp-cert.org/documents/risk-assessments/latvia.

10 Detailed Findings for Indicators

Detailed findings for each Indicator are given in Risk Assessments.

Risk assessment for Latvia: https://sbp-cert.org/docs/SBP-endorsed-Regional-Risk-Assessment-for-Latvia.pdf

11 Review of Report

11.1 Peer review

If an external peer review of this report was done prior to finalisation, describe the process that was followed and the competency of the parties involved.

The final version of the report was sent to the specialists in the wood industry, forestry and forest environment processes.

The report was sent for review to:

Jānis Rozītis – CEO and Forest Programme Manager, Pasaules Dabas Fonds (WWF associated partner in Latvia) – experience in sustainable forestry practice, assessment:

The base supply report includes a general description of the base supply forest management, offering an insight into the governance of the forest sector, and describes the measures implemented to ensure biological diversity and social needs in the forest. The information provided in the report is current and corresponds to the information sources used.

The company's decision to configure a procurement of timber raw materials originating from forest managed in accordance with the requirements of the FSC forest management certification standard is commendable. It is recommended that the company should increase the proportion of procurements of timber raw materials sourced from forest managed in this way.

Realizing the huge degree to which protection of biological diversity and social needs are relevant to forest management in Latvia, the employees responsible within the company need to develop their knowledge of environmentally friendly and socially responsible forest management, which is also required through the introduction at the earliest opportunity of the SBE system, as well as developing a supervisory system and conducting audits at site where the timber resources of raw materials suppliers are produced.

11.2 Public or additional reviews

If another type of external review was done prior to finalisation of this report (e.g. publication for comments by stakeholders, NGOs, or other independent third parties), describe the process here.

The public version of the supply base report in the Latvian and English languages is publicly available at https://www.avoti.lv/en/wood-pellets for interested parties. After familiarization with the report, comments and clarifications can be sent to *arnita.apine@avoti.lv*

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	***Arnita Apine***	***Quality manager***	***09/07/2020***
	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.			
Report approved by:	***Uldis Misins***	***Chairman of the board***	***09/07/2020***
	Name	**Title**	**Date**
Report approved by:	***Janis Misins***	***Key Account manager***	***09/07/2020***
	Name	**Title**	**Date**

13 Updates

Note: Updates should be provided in the form of additional pages, either published separately or added to the original public summary report.

This Report updates are prepared for period: 01.12.2019.-31.12.2019.

13.1 Significant changes in the Supply Base

Provide a description of any significant changes to the supply base.

No changes in Supply Base.

13.2 Effectiveness of previous mitigation measures

For each mitigation measure identified during the evaluation, give a detailed account of whether the measures were shown to be effective or not.

13.2.1 Primary and secondary feedstock supplies from Latvia:

13.2.1.1 112 woodland key habitat (WKH) audits were performed. 2 of these forest sites where detected as WKH. The consultation with supplier were carried out to ensure that WKH verification system of these suppliers will be improved to prevent such cases from happening again. Effectiveness of WHK risk mitigation actions is acceptable. Many suppliers are conducting habitat assessments prior to obtaining a cutting permit to prevent destruction of WKH.

13.2.1.2 23 work safety audits were performed:

- In some cases, there were detected some non-compliances, but the overall level of compliance with work safety requirements is acceptable. The non-compliances can be prevented in short period of time.
- Many of these logging companies use harvesters in logging operations, that reduces the risks.
- The results of the audits show that the risk of violation of work safety is considered to be low.

13.3 New risk ratings and mitigation measures

Provide an update of risk ratings for all relevant Indicators.

For risks 2.1.1 and 2.1.2:

- Inspection of felling areas in Latbio database (http://latbio.lv/MBI/search_db)
- Potential WKH field audit using WHK assessment questionnaire
- Request of habitat expert evaluation

For risks 2.8.1:

- The system of field tests has been developed. Representative of SIA “Avoti SWF” perform a field audit to evaluate compliance with work safety requirements in logging operations.

- The questionnaire is used for the evaluation. It is based on requirements of Cabinet of Ministers Regulations No.310 “Labor protection requirements in forestry” (09.05.2012.)
- Emphasis is placed on loggers who use hand saws.

13.4 Actual figures for feedstock over the previous 12 months

*Using the categories in Section 2.5 ‘Quantification of the Supply Base’ (above), give an update on the actual figures for the previous 12 month period. Volume may be shown in a banding between XXX,000 to YYY,000 tonnes or m^3 if a compelling justification is provided**

Period January 1st, 2019 – December 31st, 2019:

a. Total volume of Feedstock: 131872.65 tonnes

b. Volume of primary feedstock: 79018.10 tonnes

c. List percentage of primary feedstock (b), by the following categories. - percentages may be shown in a banding between XX% to YY% if a compelling justification is provided*. Subdivide by SBP-approved Forest Management Schemes:

- Certified to an SBP-approved Forest Management Scheme – 21.79%
- Not certified to an SBP-approved Forest Management Scheme – 15.15%

d. List all species in primary feedstock, including scientific name:

Species: Alnus glutinosa; Alnus incana (L.) Moench; Betula pendula; Betula pubescens; Fraxinus excelsior; Picea abies; Pinus sylvestris; Populus tremula; Quercus robur

e. Volume of primary feedstock from primary forest – 0%
f. List percentage of primary feedstock from primary forest (e), by the following categories. Subdivide by SBP-approved Forest Management Schemes:
    a. Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme – 0%
    b. Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme – 0%

g. Volume of secondary feedstock: specify origin and type - the volume may be shown as a % of the figure in (a) and percentages may be shown in a banding between XX% to YY% if a compelling justification is provided* - 34.46% sawdust and chips (residues at sawmills) as production waste; Origin – Latvia, Estonia; Species - Alnus glutinosa; Alnus incana (L.) Moench; Betula pendula; Betula pubescens; Fraxinus excelsior; Picea abies; Pinus sylvestris; Populus tremula; Quercus robur

h. Volume of tertiary feedstock: specify origin and composition - the volume may be shown as a % of the figure in (a) and percentages may be shown in a banding between XX% to YY% if a compelling

justification is provided* - 5.62% (Pinus sylvestris; Origin - Latvia, Lithuania, Estonia, Sweden, Finland, Russia, Poland; sawdust from own solid wood furniture production, pre-consumer wood)

13.5 Projected figures for feedstock over the next 12 months

*Using the categories in Section 2.5 'Quantification of the Supply Base' (above), give an updated projection for the coming 12 month period. Volume may be shown in a banding between XXX,000 to YYY,000 tonnes or m³ if a compelling justification is provided**

Planned feedstock during period January 1st, 2020 – December 31st, 2020:

Total feedstock - approx. 140000 tonnes.

No significant changes in the proportion of the feedstock types is forseen.

* Compelling justification would be specific evidence that, for example, disclosure of the exact figure would reveal commercially sensitive information that could be used by competitors to gain competitive advantage. State the reasons why the information is commercially sensitive, for example, what competitors would be able to do or determine with knowledge of the information.

Bands are:

1. 0 – 200,000 tonnes or m³
2. 200,000 – 400,000 tonnes or m³
3. 400,000 – 600,000 tonnes or m³
4. 600,000 – 800,000 tonnes or m³
5. 800,000 – 1,000,000 tonnes or m³
6. >1,000, 000 tonnes or m³