SBP

Sustainable Biomass Program

Supply Base Report: Graanul Invest UAB

www.sbp-cert.org

Completed in accordance with the Supply Base Report Template Version 1.2

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

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Version 1.2 published 23 June 2016

Contents

1 Overview

Producer name:	Graanul Invest UAB
Producer location:	Artoju g 3c, Alytus, LT62175 Lithuania
Geographic position:	54°26'19.6"N 24°01'16.8"E
Primary contact:	Mihkel Jugaste, Head of Quality and Certification Systems, +372 5519000 mihkel.jugaste@graanulinvest.com
Company website:	www.graanulinvest.com
Date report finalised:	19/Oct/2018 (preliminary version before stakeholder consultation and initial evaluation)
Reference period:	01/Jan/2017-31/Dec/2017
Close of last CB audit:	18/Jan/2019
Name of CB:	NEPCon Lithuania
Translations from English:	Yes
SBP Standard(s) used:	Standard 2 version 1.0; Standard 4 version 1.0; Standard 5 version 1.0
Weblink to Standard(s) used:	https://sbp-cert.org/documents/standards-documents/standards
SBP Endorsed Regional Risk Assessment:	NA
Weblink to SBR on Company website:	https://www.graanulinvest.com/eng/environment/sbr

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

Graanul Invest group is a privately owned company, established in 2003, which operates in the fields of forestry, development of bioenergy and production of renewable energy. The company owns 11 wood pellet plants, UAB Graanul Invest plant being one of the smallest and oldest ones.

The plant uses mainly secondary and tertiary feedstock (sawdust, chips, shaving and off-cuts) which originates from Lithuania, Poland, Belarus, Russia and Estonia. Primary feedstock is not widely used and only accounts for 17,17% in the feedstock basket. Primary feedstock is sourced from Lithuania and is SBP-Controlled.

This report will account for total feedstock volumes but will not include a SBE (controlled material). Certified e.g. SBP-Compliant material accounts for 39,29% of all production feedstock.

The plant has around 45 stable suppliers.

Controlled Feedstock 60,71%

SBP-compliant Primary Feedstock 0,00%

SBP-compliant Secondary Feedstock 30,63%

SBP-compliant Tertiary Feedstock 8,66%

SBP non-compliant Feedstock 0%

Species: Picea abies; Pinus sylvestris; Alnus glutinosa; Alnus incana; Populus tremula; Betula pendula; Betula pubescens; Fraxinus excelsior; Tilia cordata; Salix spp.

Lithuania Forest Resources

According to 2017 forest statistics, the total forest land area was 2,189,600 ha, covering 33.5% of the country's territory. Since the 1st January 2003, the forest land area has increased by 144,300 ha corresponding to 2.2% of the total forest cover. During the same period, forest stands expanded by 107,400 ha to 2,058,400 ha. Occupying 1,145,100 ha, coniferous stands prevail in Lithuania, covering 55.6% of the forest area. They are followed by softwood deciduous forests (841,100 ha, 40.9%). Hardwood deciduous forests occupy 72,200 ha (3.5%). The total area of softwood deciduous forest land increased by 142,700 ha over the last fourteen years. The area of hardwood deciduous has decreased by 20,400 ha (mainly due to dieback of ash stands) and coniferous forest by 14,900 ha. Scots pine occupies the biggest share in Lithuanian forests - 713,200 ha. Compared to 2003, the area of pine expanded by 1,700 ha. Norway spruce stands covers 429,500 ha, witha reduction of 15,800 ha.Birch stands covers the largest area among deciduous trees. Since 2003, it increased by 64,400 ha and reached 456,600 ha by the 1st January 2017. Area of black alder increased by 36,600 ha, to 156,100 ha. The area of grey alder decreased by 400 ha reaching 121,600 ha. The area of aspen stands expanded by 36,500 to 93,800 ha. The area of oak stands

increased from 35,700 ha to 46,300 ha. The area of ash stands diminished by half to 18,200 ha. The average forest area per capita increased to 0.77 ha. Since 2003 total growing stock volume increased from 453.4 million m3 up to 542.7 million m3. The average growing stock volume in all forests since 2003 increased by 30 m3/ha up to 256 m3/ha.

In the beginning of 2017, the distribution of forests by functional groups was as follows. Group I (strict nature reserves): 24,900 ha (1.1%); group II (ecosystem protection and recreational): 260,800 ha (11.9%); group III (protective): 320,300 ha (14.6%); and group IV (commercial): 1,583,500 ha (72.3%). Changes of forest land area distribution by forest groups area based on the decisions of forest management schemes.

By 1st January 2017, around a half of all forest land in Lithuania was of State importance – 1088,600 ha. 848,800 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 882,900 ha. The number of private forest owners amounted to almost 250,100, a forest estate averaging 3.4 ha.

Various forest protection measures were applied by the state forest enterprises on 27,200 ha of forest land in 2016. Biological treatment was applied on 300 ha. Foresters from 2,600 ha removed 106,000 m3 of trees damaged by wind and snow. Chemical protection measures were used on area 2,700 ha. For sanitary protection, state forest enterprises set up 11,700 new nesting-boxes.

The potential 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. Thereafter a successive increase should be possible if more intensive and efficient forest management systems are introduced.

Certification of all state forests in Lithuania is done according to the strictest certification in the world – the FSC (Forest Stewardship Council) certificate. The audit of this certificate testifies to the fact that Lithuanian state forests are managed especially well – following the principles of the requirements set to protection of and an increase in biological diversity.

“Lithuanian Statistical Yearbook of Forestry 2017” found here https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=32300

http://www.fao.org/docrep/w3722E/w3722e22.htm

Poland forest resources

Poland’s forests cover 9.2 million hectares, 30.6 percent of the country’s territory making it one of the countries with the largest forest area in Europe. 81 percent of forest land belongs to public institutions and 19 percent to private owners. 77 percent of total forest land is administrated by the State Forests National Forest Holding. The rest of the State forests are national parks (2 percent). Other publicly owned land constitutes 2 percent of total forest area.

69 percent of all trees in Polish forests are coniferous trees, and they dominate stock volume for the wood industry. Coniferous stands are dominated by pine and larch (58.5 % of total forest stands). Other coniferous species in Polish forests include spruce (6.3 %), and fir (3.1 %). Broadleaved trees occupy 31 percent of total forest land. The predominant deciduous forest species in Poland are: oak (7.5% of total forest stands),

birch (7.4%), beech (5.8%), alder (5.5%), hornbeam (1.5%), aspen (0.7%) and poplar (0.1%). Stands aged from 40 to 80 years dominate Poland's forests, and the average age of forest stands is 60 years. According to the State Forests, stands aged 41–80 years, representing age classes III and IV, prevail in the forest age structure and cover 26 percent and 19.0 percent of the forest area respectively. Stands aged 41–60 years, class III, prevail in most ownership categories, while in private forests they occupy 35.5 percent of the area. Stands older than 100 years, account for 12.3 percent of the forest area managed by the State Forests. Private forests account for only 2.8 percent. Non-forested land in privately-owned forests accounts for 6.8 percent of their total area, and in the State Forests for 3.2 percent.

According to the country forest inventory, published by Poland's Statistical Office, growing stock of woods stands amounts to 2,491 million m3 of barked timber, of which in forests managed by the State Forests accounts for 79% of total timber, and in private forests for 16.4%. Resources, i.e. the average growing stock of standing wood calculated per 1 ha of forest area, amounts to 271 m3, of which in forests managed by the State Forests is 277 m3, and in private forests is 234 m3.

Soft sawn wood production accounts for 90 percent of total sawn wood production in Poland. In 2014 sawn softwood production amounted to 4.2 million m3.The majority of sawn hardwood was destined for the domestic market and only 18 percent of production was exported. According to Poland's statistics published in the United Nations Economic Commission for Europe (UNECE) report, imports of sawn hardwood by Poland accounted for 50 percent of its domestic production and amounted to 0.25 million m3 (compared to 0.22 million m3 in 2013).

Poland is a big producer of wood-based panels in the EU. In 2014 9.2 million m3 of this product was produced in Poland. Among high value added wood products furniture is of special importance. According to Poland's Ministry of Environment, the value of furniture production (including furniture elements) amounted to PLN 32.3 billion (U.S. $ 10.2 billion). The wooden packaging (mainly pallets) sector had high development dynamics during the last few years. The value of production amounted to PLN 1.9 billion (U.S. $ 0.6 billion).

In 2015 FSC certificates were held by 16 out of 17 State Forests Regional Directorates and 2 Forest Experimental Stations. According to the Ministry of Environment, FSC certification covers 6.9 million hectares of forests, or 75 percent of total forested area. In 2015 almost 3,000 FSC-CoC certificates were registered in Poland. Approximately 17 percent of certified companies (313) are certifiedalso in other systems, such as FSC-CW (FSC Controlled Wood). Additionally, 136 companies, or 7 percent, held FSC-RA (FSC Controlled Wood Risk Assessment) certificates, confirming implementation of a risk assessment system for wood supplies. Approximately 70 percent certificates were issued for production companies. These were mainly certificates for the producers of sawn wood, wooden garden products, builder's carpentry and joinery, furniture and its elements, wooden accessories, wood-based panels, wood pulp, and paper and secondary paper products.
https://gain.fas.usda.gov/Recent%20GAIN%20Publications/The%20Forestry%20and%20Wood%20Products%20in%20Poland_Warsaw_Poland_3-23-2017.pdf

Estonia 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[1].The Estonian legislation provides strict outlines in respect to the usage of forestry land and the Estonian Forestry Development Plan 2020[2] 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 described in this legislation: commercial forests, protection forests 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[3] and are certified according to FSC and PEFC forest management and chain of custody standards in which the indicators related to forest management planning, maps and availability of forest inventory records are being constantly evaluated and addressed[4]. 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 %[5]. Forestry Development Plan 2012-2020 and Yearbook Forest 2014, 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[6]. The amount is in line with sustainable development principle when the cutting rate doesn't exceed the annual increment and gives the potential to meet the long-term economic, social and environmental needs. According to the Forestry Development Plan 2012-2020 the sustainable cutting rate is 12-15 mil ha per year.

[1] http://europa.eu/about-eu/countries/member-countries/estonia/index_en.htm
[2] 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
[3] http://www.rmk.ee/organisation/operating-areas
[4] http://www.rmk.ee/organisation/environmental-policy-of-rmk/certificates
[5] http://www.fao.org/forestry/country/32185/en/est/
[6] Yearbook Forest 2014 (all key figures, graphs and tables are bilingual)

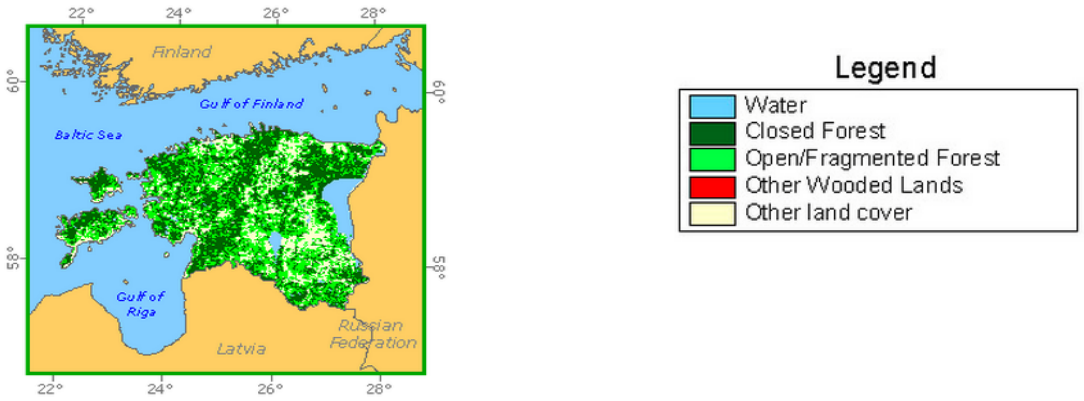
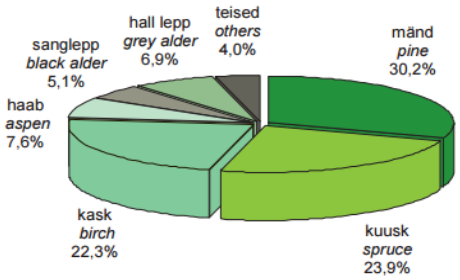


Figure 1. Forest cover of Estonia (FAO: http://www.fao.org/forestry/country/en/est/).

Figure 2. The distribution of growing stock by tree species (Yearbook Forest 2014).



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[7].

Area of protected forests accounts for 25.3% of the total forest area whereas 10% is considered to be under strict protection. The majority of protected forests are located on state property. The main regulation governing the preservation of biodiversity and the sustainable use of natural resources is the Nature Conservation Act[8]. Estonia has signed the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1992[9] and joined the International Union for Conservation of Nature (IUCN) in 2007[10]. There are no CITES or IUCN protected tree species naturally growing in Estonia.

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 to pick berries,

[7] http://register.metsad.ee/avalik/
[8] https://www.riigiteataja.ee/en/eli/517062015004/consolide
[9] http://www.envir.ee/et/cites
[10] http://www.envir.ee/et/iucn

mushrooms, medicinal plants, fallen or dried branches, unless the owner forbids it. On unmarked and unrestricted private property camping is allowed for 24 hours. RMK creates exercising and recreational opportunities in nature and in recreational and protection zones and also provides education about nature.

Russia forest resources

Twenty two percent of all forest land mass and 25 % of the world's wood reserves belong to Russia. Forests take up 69% of all land and the area occupied with forests amounts to 1,183.3 million ha. 1,144 million ha of which 97% is under federal ownership.

Most Russian forests are boreal. Predominant forest tree species are the larch, pine, spruce, Siberian pine, oak, beech, birch, and aspen. According to the 2010 forest account, the total growing stock of the forest estate is 80 billion m3.The country average growing stock of mature and overmature stands (without shrubs) is 132 m3 /ha. The mean annual increment in volume is rather low in Russia: it is no more than 1.23 m3 per hectare of forested land.

The annual allowable cut for 2010 was 634 million m3, including 61 million m3 for protection forests and 573 million m3 for production forests. The greatest allowable cut is set for coniferous forests (128 million m3). The actual cut is below 28% of the allowable cut.

In 45 Russian regions, the shares of timber and paper outputs range from 10% to 50% in their total industrial outputs. Forest enterprises and organisations employ over one million people

http://www.profor.info/sites/profor.info/files/Background-ForestGovernance-Russia-English.pdf

Belarus forest resources

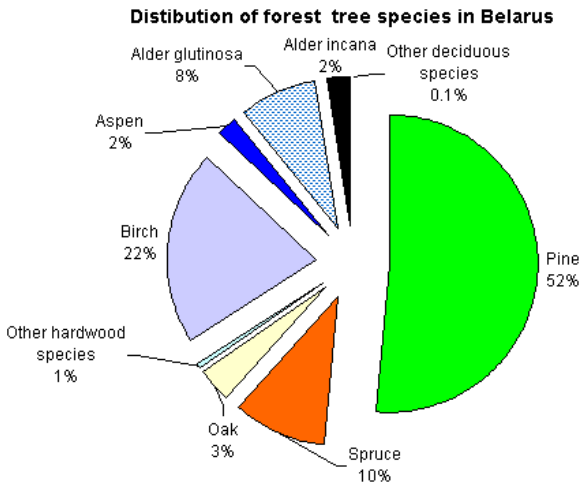
Forest is one of the few exploitable natural resources in Belarus. As a branch of economy the forestry in Belarus is highly perspective.

In general forestry is a part of the Belarusian Forestry and Forest industry consists of forestry, forest industry, wood processing and wood-pulp and paper industries etc. It includes nearly 5 thousand enterprises and production facilities with different forms of property (including over 470 large and medium-scale enterprises) with over 146 thousand employees.

Forestry resources are one of the main natural riches of Belarus. The total stock of timber constitutes 1.3 billion cubic meters.* The forestry fund occupies about 9.2 million hectares. The forest lands is about 8.3 million hectares. One third of the territory of Belarus is covered by forests.

Forests in Belarus are owned by the State and mostly belonged to the Committee of Forestry (about 7 mill. ha or 76.1% of the total area of the forestry fund). The rest part of forest owners is represented by the Committee of Defence, collective farms and associations, the research institutes and Administration.

A specific feature of the raw resources of timber in Belarus is domination of industrial valuable tree species (pine, spruce, birch, see figure below).



http://www.fao.org/docrep/ARTICLE/WFC/XII/0784-B1.HTM

2.2 Actions taken to promote certification amongst feedstock suppliers

In order to increase transparency in the supply chain and to reach higher certification levels inside the organisation, from 1st of January 2016 Graanul Invest AS started to purchase only certified feedstock. “FSC Controlled Wood” and “PEFC Controlled Sources” (controlled feedstock) were set as the minimum sustainability requirements in supplier contracts. Non-compliant feedstock is rejected at the pellet plant with zero tolerance.

2.3 Final harvest sampling programme

NA

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

Option was not chosen.

2.5 Quantification of the Supply Base

Supply Base

a. Total Supply Base area (ha): Lithuania 2,18 mln, Poland 9,2 mln; Belarus 9,2 mln; Russia 885 mln; Estonia 2,23 mln. Total: 907,81 mln ha
b. Tenure by type (ha): 903,87 ha mln state forests; 3,94 mln private forests.
c. Forest by type (ha): boreal 907,81 mln
d. Forest by management type (ha): 907,81 mln managed semi-natural
e. Certified forest by scheme (ha): FSC 63,629 mln (Lithuania 1,140; Poland 6,937; Belarus 8,846 mln; Russia 46,706 mln, Estonia 1,492 mln) PEFC 31,07 mln (Lithuania 0; Poland 7,160; Belarus 8,552 mln; Russia 14,117 mln, Estonia 1,241 mln)
f. Number of suppliers: 45

Feedstock

Note: ranges area used so that the numbers would be valid before and after the stakeholder consultation and also because reporting specific numbers would provide confidential information about our performance indicators and recipes.

g. Total volume of Feedstock: 400 000– 600 000 m3
h. Volume of primary feedstock: 0 – 200 000 m3
i. List percentage of primary feedstock (g),
   Subdivide by SBP-approved Forest Management Schemes:
   - Certified to an SBP-approved Forest Management Scheme (41,65%)
   - Not certified to an SBP-approved Forest Management Scheme (58,35% FSC CW, PEFC CS)
j. List all species in primary feedstock, including scientific name: Picea abies; Pinus sylvestris; Alnus glutinosa; Alnus incana; Populus tremula; Betula pendula; Betula pubescens; Fraxinus excelsior; Tilia cordata; Salix spp.
k. Volume of primary feedstock from primary forest: 0%
l. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes: N/A
m. Volume of secondary feedstock: 200 000 – 400 000 m3 which consist 40,57% of sawdust and 23,81 % of chips.
n. Volume of tertiary feedstock: 0 – 200 000 m3 which is shavings and offcuts

3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
☐	x

4 Supply Base Evaluation

NA

5 Supply Base Evaluation Process

NA

6 Stakeholder Consultation

This is a preliminary version of the SBR which will go through CB stakeholder consultation and then will be published on company's home page.

6.1 Response to stakeholder comments

No written comments received.

7 Overview of Initial Assessment of Risk

NA

8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

Only certified material included in scope.

8.2 Site visits

NA

8.3 Conclusions from the Supplier Verification Programme

NA

9 Mitigation Measures

NA

10 Detailed Findings for Indicators

NA

11 Review of Report

11.1 Peer review

This report was reviewed by AS Graanul Invest central office's top management: CEO, COO, Head of Quality and Certification Systems, Biomass Purchasing Manager and the Head of Forestry.

The SBR will be published to all stakeholders and feedback will be provided to whoever expresses interest or concern.

11.2 Public or additional reviews

The SBR will be published to all stakeholders and feedback will be provided to whoever expresses interest or concern.

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	*Mihkel Jugaste* 	*Head of Quality and Certification Systems*	*19.10.2018*
	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:	*Mindaugas Puodžiūnas* 	*Supply and logistics manager*	*19.10.2018*
	Name	**Title**	**Date**

13 Updates

13.1 Significant changes in the Supply Base

NA

13.2 Effectiveness of previous mitigation measures

NA

13.3 New risk ratings and mitigation measures

NA

13.4 Actual figures for feedstock over the previous 12 months

NA

13.5 Projected figures for feedstock over the next 12 months

NA