

Supply Base Report: Warmeston OÜ Jarvere

www.sustainablebiomasspartnership.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.sustainablebiomasspartnership.org

Document history

Version 1.0: published 26 March 2015

Version 1.1 published 22 February 2016

Version 1.2 published 23 June 2016

© Copyright The Sustainable Biomass Partnership Limited 2016

Contents

1	Overview.....	1
2	Description of the Supply Base	2
2.1	General description	2
2.1.1	Introduction	2
2.1.2	Estonia	4
2.1.3	Latvia.....	6
2.1.4	Lithuania.....	7
2.1.5	Finland	9
2.1.6	Sweden	10
2.2	Actions taken to promote certification amongst feedstock supplier	11
2.3	Final harvest sampling programme.....	11
2.4	Flow diagram of feedstock inputs showing feedstock type [1.12.2015-15.11.2016].....	12
2.5	Quantification of the Supply Base	12
3	Requirement for a Supply Base Evaluation.....	14
4	Supply Base Evaluation.....	15
4.1	Scope	15
4.2	Justification.....	15
4.3	Results of Risk Assessment.....	15
4.4	Results of Supplier Verification Programme	16
4.5	Conclusion.....	16
5	Supply Base Evaluation Process.....	17
6	Stakeholder Consultation.....	18
6.1	Response to stakeholder comments.....	18
7	Overview of Initial Assessment of Risk	19
8	Supplier Verification Programme	21
8.1	Description of the Supplier Verification Programme	21
8.2	Site visits	21
8.3	Conclusions from the Supplier Verification Programme.....	21
9	Mitigation Measures	22
9.1	Mitigation measures	22

9.2	Monitoring and outcomes	24
10	Detailed Findings for Indicators	25
11	Review of Report	26
11.1	Peer review.....	26
11.2	Public or additional reviews.....	26
12	Approval of Report	27
13	Updates	28
13.1	Significant changes in the Supply Base	28
13.2	Effectiveness of previous mitigation measures	28
13.3	New risk ratings and mitigation measures.....	28
13.4	Actual figures for feedstock over the previous 12 months	28
13.5	Projected figures for feedstock over the next 12 months.....	28

1 Overview

Producer name: Warmeston OÜ
 Producer location: Järvere village, Sõmerpalu parish, Estonia.
 Geographic position: 57°51 29 , 26°52 30
 Primary contact: Viljo Aros, +372 528 8250, viljo.aros@warmeston.ee
 Company website: <http://warmeston.ee/>
 Date report finalised: 30/Nov/2016
 Close of last CB audit: 05/Jul/2016; Järvere, Sõmerpalu vald, Võrumaa, Estonia
 Name of CB: Nepcon

Translations from English to Estonian

SBP Standard(s) used:

SBP standard 1 v 1.0 (26/03/2015);
 SBP standard 2 v 1.0 (26/03/2015);
 SBP standard 4 v 1.0 (26/03/2015);
 SBP standard 5 v 1.0 (26/03/2015).

Instruction Documents: Instruction Document 5A: version 1.1 (12/03/ 2016)
 Instruction Document 5B: version 1.1 (12/03/ 2016)
 Instruction Document 5C: version 1.1 (12/03/ 2016)

Weblink to Standard(s) used: <http://www.sustainablebiomasspartnership.org/documents>

SBP Endorsed Regional Risk Assessment: <http://www.sustainablebiomasspartnership.org/documents/risk-assessments/regional-risk-assessments-for-the-baltic-states/estonia>

Weblink to SBR/SBE on Company website: <http://warmeston.ee/>

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

2 Description of the Supply Base

2.1 General description

2.1.1 Introduction

WARMESTON OÜ is an Estonian based wood pellet producer which owns two production facilities in Estonia. The Current SBR describes the facility located in the southern part of the country in Sõmerpalu Parish as indicated in Figure 1..



Figure 1. Location of Warmeston OÜ production facilities (Google maps).

Warmeston OÜ sources all its raw materials for pellet production through various suppliers from Estonia. The suppliers include forest harvesting companies, sawmills, planing mills, secondary producers and traders. According to the EUTR Regulation No. 995/2010 Warmeston OÜ acts as "trader" and not as "operator" as the feedstock is purchased from other organizations within EU. However the supply base may extend beyond the borders of Estonia. As such Warmeston defines its supply base, to cover all current and potential future suppliers, as follows:

- Estonia
- Latvia

- Lithuania
- Finland
- Sweden

All primary material harvested outside Estonia reaches Warmeston as secondary feedstock that meets at least controlled feedstock criteria e.g. through FSC or PEFC certified Forest Management or Chain of Custody schemes. An overview of the proportions of SBP feedstock product groups is presented in the table below:

Table 1. Overview of Warmeston SBP feedstock profile 1st December to 15th November 2016

Feedstock groups	product	Estimated Proportion ¹	Indicative number of suppliers	Species mix
Controlled (primary)	Feedstock	5%	3	<i>Alnus</i> spp: <i>Alnus glutinosa</i> ; <i>Alnus incana</i> (L.) Moench; <i>Betula</i> spp: <i>Betula Pendula</i> , <i>Betula verrucosa</i> ; <i>Picea abies</i> ; <i>Pinus sylvestris</i> ; <i>Populus</i> spp: <i>Populus tremula</i> ;
Controlled (Secondary)	Feedstock	63%	14	<i>Alnus</i> spp: <i>Alnus glutinosa</i> ; <i>Alnus incana</i> (L.) Moench; <i>Betula</i> spp: <i>Betula Pendula</i> , <i>Betula verrucosa</i> ; <i>Picea abies</i> ; <i>Pinus sylvestris</i> ; <i>Populus</i> spp: <i>Populus tremula</i> ;
SBP-controlled Feedstock (Tertiary)		15%	7	<i>Alnus</i> spp: <i>Alnus glutinosa</i> ; <i>Alnus incana</i> (L.) Moench; <i>Betula</i> spp: <i>Betula Pendula</i> , <i>Betula verrucosa</i> ; <i>Picea abies</i> ; <i>Pinus sylvestris</i> ; <i>Populus</i> spp: <i>Populus tremula</i> ;
SBP-compliant Feedstock,	Primary	5%	2	<i>Alnus</i> spp: <i>Alnus glutinosa</i> ; <i>Alnus incana</i> (L.) Moench; <i>Betula</i> spp: <i>Betula Pendula</i> , <i>Betula verrucosa</i> ; <i>Picea abies</i> ; <i>Pinus sylvestris</i> ; <i>Populus</i> spp: <i>Populus tremula</i> ;
SBP-compliant Secondary Feedstock,		12%	7	<i>Alnus</i> spp: <i>Alnus glutinosa</i> ; <i>Alnus incana</i> (L.) Moench; <i>Betula</i> spp: <i>Betula Pendula</i> ,

			Betula verrucosa; <i>Picea abies</i> ; <i>Pinus sylvestris</i> ; <i>Populus spp</i> : <i>Populus tremula</i> ;
SBP-compliant Tertiary Feedstock	0%	1	<i>Alnus spp</i> : <i>Alnus glutinosa</i> ; <i>Alnus incana (L.) Moench</i> ; <i>Betula spp</i> : <i>Betula Pendula</i> , <i>Betula verrucosa</i> ; <i>Picea abies</i> ; <i>Pinus sylvestris</i> ; <i>Populus spp</i> : <i>Populus tremula</i> ;

2.1.2 Estonia

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 stakeholders². The Estonian legislation provides strict outlines in respect to the usage of forestry land and the Estonian Forestry Development Plan 2020³ 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 area⁴ 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 addressed⁵. 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. Overall there is Overall there is 1 265 000 ha of FSC certified and 1 132 000 ha of PEFC certified forest.

Currently more than 2 230 000 ha, equal to 51% of the Estonian land territory, is covered by forest as indicated in Figure 2 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 %⁶. Forestry Development Plan 2012-2020 and Yearbook Forest 2013,

² http://europa.eu/about-eu/countries/member-countries/estonia/index_en.htm

³ Original title: „Eesti metsanduse arengukava aastani 2020“; approved by Estonians parliament decision nr 909 OE 15. February 2011.a

http://www.envir.ee/sites/default/files/elfinder/article_files/mak2020vastuvoetud.pdf

⁴ <http://www.rmk.ee/organisation/operating-areas>

⁵ <http://www.rmk.ee/organisation/environmental-policy-of-rmk/certificates>

⁶ <http://www.fao.org/forestry/country/32185/en/est/>

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 year⁷. 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.

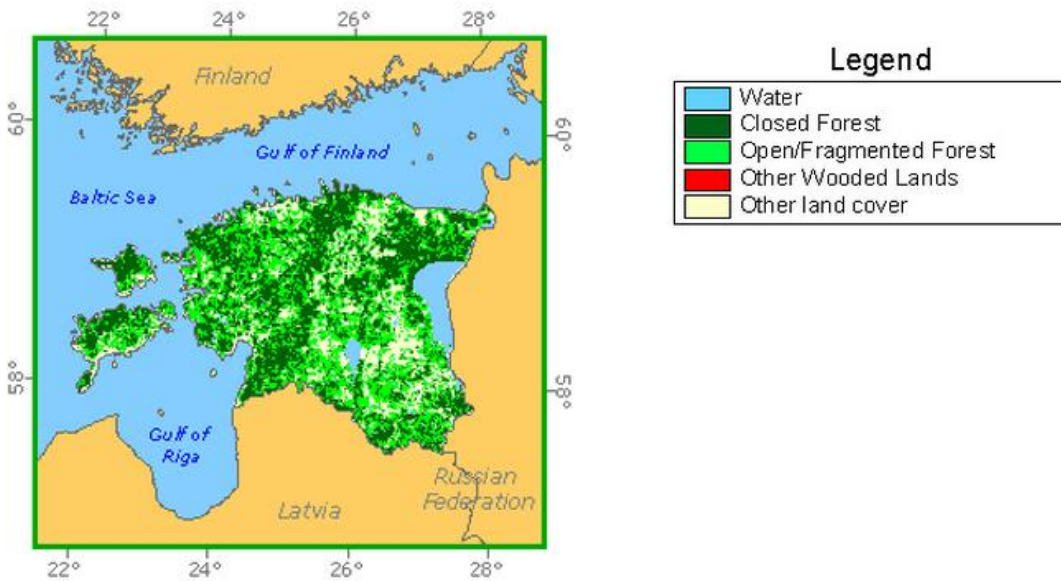


Figure 2. Forest cover of Estonia (FAO: <http://www.fao.org/forestry/country/en/est/>).

The distribution of growing stock by tree species in Estonia is shown in Figure 3.

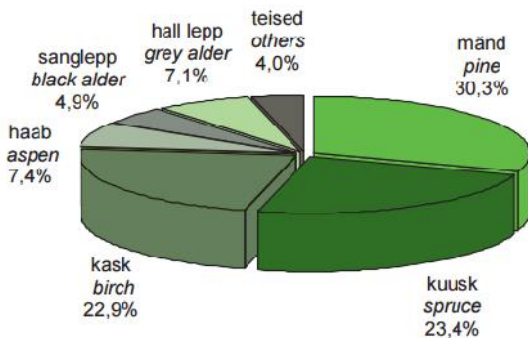


Figure 3. The distribution of growing stock by tree species (Yearbook Forest 2013).

⁷ Yearbook Forest 2013 http://www.keskkonnainfo.ee/failid/Mets_2013.pdf (all key figures, graphs and tables are bilingual)

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 database⁸.

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 Act⁹. Estonia has signed the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1992¹⁰ and joined the International Union for Conservation of Nature (IUCN) in 2007¹¹. 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 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. 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.¹²

2.1.3 Latvia

Latvia is a parliamentary republic that joined the EU in 2004. In Latvia, forests cover area of 3 354 000 hectares. According to the data of the State Forest Service (concerning the surveyed area allocated to management activities regulated by the Forest Law), woodenness amounts to 55.8%. The Latvian State owns 1 755 000 ha of forest, while 1 594 000 ha is privately owned. The area covered by forest is increasing. The expansion happens both naturally and by afforestation of infertile land unsuitable for agriculture. Within the last decade, the timber production in Latvia has fluctuated between 9 and 13 million cubic metres.

Distribution of forests by the dominant species:

- pine 34.3 %;
- spruce 18.0 %;
- birch 30.8 %;
- black alder & grey alder 10.0 %;
- aspen 5.4 %

⁸ <http://register.metsad.ee/avalik/>

⁹ <https://www.riigiteataja.ee/en/eli/517062015004/consolide>

¹⁰ <http://www.envir.ee/et/cites>

¹¹ <http://www.envir.ee/et/iucn>

¹² https://www.eesti.ee/eng/topics/citizen/keskkond_loodus/maa/metsandus_1

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

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

(Source: www.vmd.gov.lv).

Management of the state-owned forests is performed by the public limited company Latvijas Valsts Meži, established in 1999. The enterprise ensures implementation of the best interests of the state by preserving value of the forest and increasing the share of forest in the national economy. The share of forestry, wood-working industry and furniture production amounted to 6 % GDP in 2012.

(www.lvm.lv).

For the sake of conservation of natural values, a total number of 674 protected areas have been established. Part of the areas have been included in the European network of protected areas Natura 2000. Most of the protected areas are state-owned. In order to protect highly endangered species and biotopes located without the designated protected areas, if a functional zone does not provide that, microreserves are established. According to data of the State Forest Service (2015), the total area of micro reserves is 40 595 ha. Identification and protection planning of biologically valuable forest stands is carried out continuously. On the other hand, for preservation of biological diversity during forest management activities, general nature protection requirements binding to all forest managers have been developed. They stipulate that at felling selected old and large trees, dead wood, undergrowth trees and shrubs, land cover around micro-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, but there are no CITES tree species naturally growing in Latvia.

Areas where recreation is one of the main forest management objectives add up to 8 % of the total forest area or 293 000 ha (2012). Observation towers, educational trails, natural objects of culture history value, picnic venues: they are just a few of recreational infrastructure objects available to everyone free of charge. 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 co-ordinated by the Nature Conservation Agency under the Ministry for Environmental Protection and Regional Development.

All forest area of Latvijas valsts meži as well as some part of forests in private and other ownership are FSC and PEFC certified. All together there is ca 1 300 000 ha FSC certified and 1 700 000 PEFC certified forest in Latvia.

2.1.4 Lithuania

Lithuania is a parliamentary republic that joined the EU in 2004. Forested land consists of about 34.5% percent, with 2.17 million ha. Approximately 837 000 ha of the forest is privately owned. The southeastern part of the

country is most heavily forested, and here forests cover about 45 percent of the land. The total value added in the forest sector (including manufacture of furniture) reached LTL 4.9 billion in 2013 and was 10% higher than in 2012.

Forest land is divided into four protection classes: reserves (2 %); ecological (5.8 %): protected (14.9 %); and commercial (77.3 %). In reserves all types of cuttings are prohibited. In national parks, clear cuttings are prohibited while thinnings and sanitary cuttings are allowed. Clear cutting is permitted, however, with certain restrictions, in protected forests; and thinnings as well.

Lithuania has been a signatory of the CITES Convention since 2001. CITES requirements are respected in forest management. Lithuania is situated within the so-called mixed forest belt with a high percentage of broadleaves and mixed conifer-broadleaved stands. Most of the forests - especially spruce and birch - often grow in mixed stands. The dominant forest composition is the following:

- Scots pine - 37.6%,
- spruce - 24.0%,
- birch - 19.5%,
- alder – 11.2%,
- Ash - 2.7%;
- Aspen - 2.6%,
- Oak - 1.8%,

There are no CITES tree species naturally growing in Lithuania.

To secure and maintain SFM both state and private forests are monitored and inspected by the Lithuanian State Forest Department, which also develops the main forestry management rules. Before commercial activities in the forests can commence, the State Forest Department requires a long-term forest management plan for every forest unit and owner. After acceptance of the plan, the State Forest Department issues a Harvesting License for separate sites. The Harvesting Licence determines what kind of forest felling system is allowed and which species and in what amount can be harvested in the area. It also determines the forest regeneration method at each harvesting site. The Harvesting Licence (licence number) is the main document for suppliers to track the supply chain and secure sustainable log purchases.

Total annual growth comes to 11 030 000 m³ and current harvest has reached some 9 million m³ 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 m³. The remainder is used for fuel or stored in the forests, with a deteriorating quality as a result. 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.

The total value added in the forest sector (including manufacture of furniture) reached EUR 1.2 billion in 2011 and was 25% higher than in 2010. Its share in the total national value added has increased from 3.7% (2010) to 4.2% (2011). The biggest share (EUR 520 million) of the value added in the sector was generated by the furniture industry.

There is ca 1 100 000 ha FSC certified forest in Lithuania, but no PEFC certified forest area.

(Source: <http://www.fao.org/docrep/w3722e/w3722e22.htm>)

2.1.5 Finland

Finland is a parliamentary republic that is a member of the EU since 1995.

Forests cover 75 percent of Finland's land area which accounts to ca 22 218 000 ha. Almost half of the volume of the timber stock consists of pine (*Pinus sylvestris*). The other most common species are spruce (*Picea abies*) downy birch (*Betula pubescens*) and silver birch (*Betula pendula*). These species make for 97 percent of total timber volume in Finland.¹³

The Forest Act regulates the felling of timber in Finland. Regional Forestry Centres control the implementation of the forestry legislation and accept forest use declarations in which forest owners inform about the stand characteristics, intended measures, regeneration and ecological concerns on the site before the felling can take place. Regional Environment Centres control the implementation of Nature Conservation Act. The Finland's National Forest Programme also states the importance of legal wood and lists measures to promote sustainable wood and to control illegal logging both nationally and internationally.¹⁴

Private forest owners (mostly families) own the majority (60 %) of Finnish forests. Owner needs to get acceptance for forest use declaration from regional forest centres. The state owns 26 percent of the Finnish forests, private industries, such as forest industry companies nine and other bodies five percent. The state forests are mainly situated in the north of Finland, and 45 percent of them are under strict protection. State lands are managed by Metsähallitus.

Certification is voluntary for the forest owner however around 75% of Finnish forests have been certified under the PEFC certification system (Programme for Endorsement of Forest Certification). Certification criteria are stricter than decrees or legislation, which means that in practice, certification determines the standard of silviculture in Finland. Some Finnish forests have also been certified under the Forest Stewardship Council (FSC), however this forms only approximately 6% of the total forest area..

According to a report by UNECE¹⁵ the amount of illegal logging in Finland is negligible. An extensive national forest inventory, national forest programme and regional forest programmes, widely spread individual forest management plans and large share of private non-industrial ownership of forests contribute to almost non-existence of markets for illegal timber and negligible amount of illegal logging in Finland.

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.

The forest sector is one of key supporters of Finland's economy. In 2011 it employed directly about 70,000 people in Finland, which was 2.8 percent of all employees. One fifth of Finland's export income comes from forest industries. More than 60 percent of the value added generated by the forest industries came from pulp and paper industries and the rest from wood products industries in 2011. Regionally, the importance of the

¹³ <http://www.smy.fi/en/forest-fi/finnish-forests-resources/>

¹⁴ <http://fsc.force.com/servlet/servlet.FileDownload?file=00P3300000YU8ihEAD>

¹⁵ http://www.unece.org/fileadmin/DAM/timber/docs/sem/2004-1/full_reports/Finland.pdf

forest sector is largest in southeastern corner of Finland and in Etelä-Savo and Central Finland regions, where the sector produces some ten percent of the regional GDP.

Similar to Estonia Finland has a relatively rare concept of Everyman's rights (Jokamiehenoikeus) which gives everyone, Finns and other nationalities alike, the right to move freely outdoors. Picking berries and mushrooms is permitted even on privately owned land; thus free forest access provides, in addition to products for local or family consumption, income-earning opportunities for those who sell non-wood forest products. Everyman's right has traditionally been exercised with due concern for the environment and common courtesy to the landowner or those living in the vicinity.

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.

2.1.6 Sweden¹⁶

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

The Swedish Forest Agency is the national authority responsible for matters relating to the forest. 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. Its 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.

Sveaskog is Sweden's largest forest owner and is owned by the State. Sveaskog owns 14% of forest land in Sweden, spread across the entire country.

Sweden has Europe's second biggest afforested area after Russia. Sweden's productive forests cover about 28 million hectares. Spruce and pine are by large the predominant species in Swedish forests. These two species count for more than 80% of the timber stock. In northern Sweden pine is the most common species, whereas spruce, mixed with some birch, dominates in southern Sweden.

Due to effective and far-sighted forest management the timber stock in Sweden has increased by more than 60% in the last one hundred years and it is now 3000 million m³. In recent years felled quantities have been between 85 and 90 million m³, whereas annual growth amounts approximately to 120 million m³.

The amount of protected forests in Sweden amounts to circa 1.9 million hectares. A great extent, about 90% of these forests are the kind of forests in which minor interventions are allowed. The share of strictly protected forests, where no human interventions are allowed is 0.3 % from the forest area. National parks, nature reserves and nature conservation areas cover an area of 4.2 million hectares, i.e. 10% of Sweden's land area. There are at least 220.000 hectares of protected forests which still in terms of forest growth are productive. In addition, there are about 12.000 hectares of protected habitat types and 25.000 hectares of wood land set aside and protected by environment conservation

¹⁶ <http://www.nordicforestry.org/facts/Sweden.asp#En>

agreements. Large forest areas are also protected through forest owners' voluntary activities. Sweden signed the Convention on International Trade in Endangered Species of Wild Fauna and Flora in August 1974 and the convention entered into force in July 1975. Sweden has also established an IUCN National Committee.

Private forest owner families hold about 50% of Swedish forests, privately owned forestry companies about 25% and the State and other public owners have the remaining 25%. The ownership of forests in Sweden varies between regions. In Southern parts of the country forests are mainly owned by private persons whereas in Northern Sweden companies own more significant amounts of forests.

FSC certified forests amount to 12.2 million hectares and PEFC certified to 11.4 million hectares.

The forest products industry plays a major role in the Swedish economy, and accounts for between nine and 12 percent of Swedish industry's total employment, exports, sales and added value.

Similar to Estonia and Finland, Sweden everyone has the Right of Public Access to roam the Swedish countryside including walking, camping, climbing and picking flowers.

2.2 Actions taken to promote certification amongst feedstock supplier

Warmeston is promoting FSC certification for Sustainable Forest Management. We explain to our suppliers its criteria and importance and give priority to FSC/PEFC certified suppliers. Warmeston has prepared an environmental policy and a supplier's code of conduct that will be signed with all suppliers. These two documents promote legal and sustainable forest management and exclude timber from undefined sources and from Woodland Key Habitants.

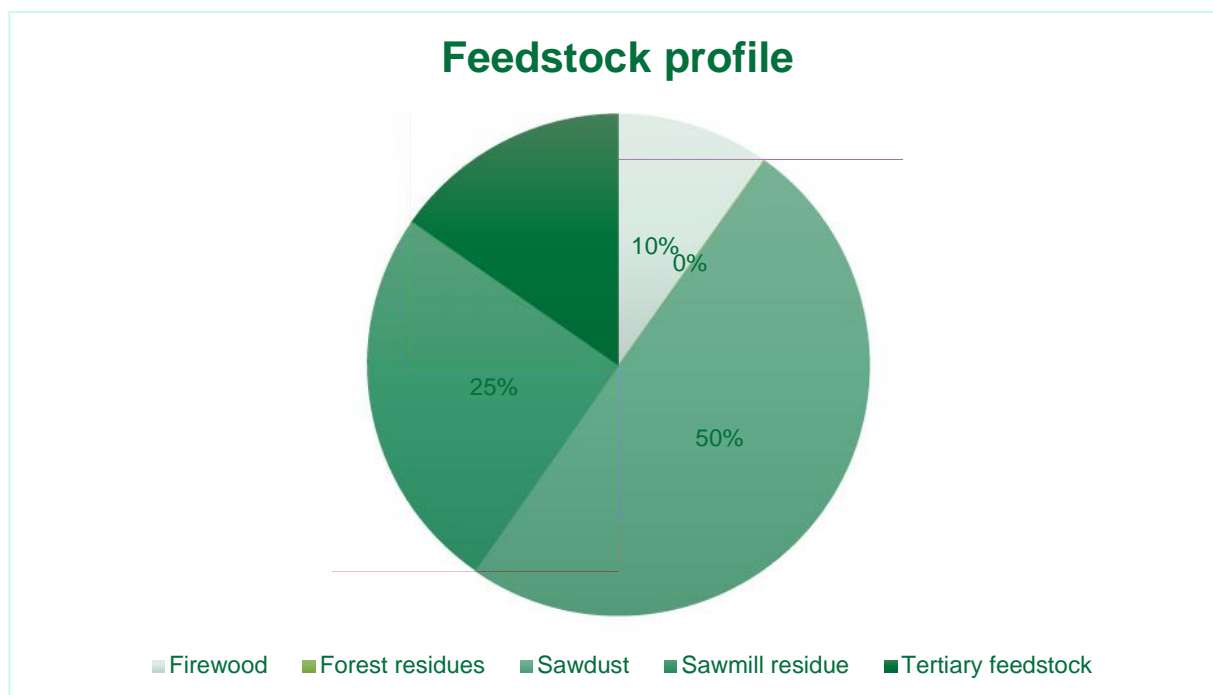
2.3 Final harvest sampling programme

The Estonian Environmental Agency, a governmental agency operating under the Ministry of Environment, analyses regularly the different types of fellings and proportion of sortments by collecting data from The State Forest Management Centre, private forest owners and Environmental Board. In addition a statistical forest inventory has been carried out by the authorities on selected sample sites to collect additional data for the statistical analyses. This data is published by the Environmental Agency in the "Yearbook Forest". According to the latest issue "Yearbook forest 2013"¹⁷ the proportion of firewood from the final felling volume is estimated to be 24%. This is in accordance with other sources that have estimated the proportion to be between 20 to 25%¹⁸.

¹⁷ http://www.keskkonnainfo.ee/failid/Mets_2013.pdf

¹⁸ http://www.agri.ee/sites/default/files/public/juurkataloog/BIOENERGEETIKA/Biokytuste_2006a_turu_ylevaate_lopparuanne.pdf;
http://www.eramets.ee/static/files/1356.Enn_Part_Puitu_on_ja_raiuda_tohib_14092012.pdf

2.4 Flow diagram of feedstock inputs showing feedstock type [1.12.2015-15.11.2016]



2.5 Quantification of the Supply Base

Supply Base

- | | |
|-------------------------------------|---|
| a. Total Supply Base area (ha): | 58 million ha |
| b. Tenure by type (ha): | 40 million ha private /18 million ha public |
| c. Forest by type (ha): | 51 million ha boreal / 7 million ha temperate |
| d. Forest by management type (ha): | 58 managed natural |
| e. Certified forest by scheme (ha): | 17 million ha FSC / 31 million ha PEFC |

Feedstock [1.12.2015-15.11.2016]

- | | |
|---|---------------|
| f. Total volume of Feedstock: | 55 000 tonnes |
| g. Volume of primary feedstock: | 5 500 tonnes |
| h. Percentage of primary feedstock | |
| - Certified to an SBP-approved Forest Management Scheme | 46% |
| - Not certified to an SBP-approved Forest Management Scheme | 54% |
| i. List all species in primary feedstock, including scientific name: | |
| <i>Alnus</i> spp: <i>Alnus glutinosa</i> ; <i>Alnus incana</i> (L.) Moench; <i>Betula</i> spp: <i>Betula Pendula</i> , <i>Betula verrucosa</i> ;
<i>Picea abies</i> ; <i>Pinus sylvestris</i> ; <i>Populus</i> spp: <i>Populus tremula</i> ; | |
| j. Volume of primary feedstock from primary forest | n/a |
| k. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes: | n/a |
| l. Volume of secondary feedstock: | 41 000 t |

- Origin Estonia, Latvia
- type: Sawdust (66%) and other sawmill residues (34%)
- m. Volume of tertiary feedstock: 8 500 t
 - Origin Estonia, Finland; Latvia, Lithuania, Sweden
 - Composition Shavings

3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
x	<input type="checkbox"/>

The demand for SBP-compliant biomass is exceeding the volumes of FSC/PEFC certified feedstock that is available for pellet production in the Baltic region. To meet the demand Warmeston OÜ will undertake a supply base evaluation for primary and secondary feedstock that is originating from Estonia according to the SBP Framework Standard 1: Feedstock Compliance Standard and Standard 2: Verification of SBP-compliant Feedstock.

The risk assessment of the SBE is based on the SBP-endorsed Regional Risk Assessment for Estonia. The risk assessment for Estonia has been approved by SBP's secretariat on 22nd April 2016 and is publically available on at: <http://www.sustainablebiomasspartnership.org/documents/risk-assessments/regional-risk-assessments-for-the-baltic-states/estonia>.

The scope of the SBE was chosen based on the availability of the SBP-endorsed Regional Risk assessments whereas the possibility to mitigate the identified "specified risk" with reasonable efforts was considered.

4 Supply Base Evaluation

4.1 Scope

Warmeston OÜ will carry out the SBE for primary feedstock (forest products) that is originating from Estonia and is sold without:

- a SBP-approved Forest Management Scheme claim;
- a SBP-approved Forest Management Scheme partial claim;
- or a SBP-approved Chain of Custody (CoC) System claim.

The risk mitigation measures will also be applied for secondary feedstock (e.g. sawdust from local sawmills) that originates from Estonian forest, is delivered with a SBP-approved Controlled Feedstock System claim and is to be used in the production on SBP-compliant biomass.

To mitigate the risks associated with primary feedstock, Warmeston will verify the origin of all primary feedstock (e.g. roundwood). For secondary feedstock, Warmeston will audit and work closely together with its suppliers who are purchasing and processing primary material. For a more detailed description of the risk mitigation measures please refer to Chapter 9 of the SBR.

4.2 Justification

Warmeston will rely on SBP-endorsed Regional Risk Assessment for Estonia (2016) that meets the requirements of SBP Framework Standard 1: Feedstock Compliance Standard and Standard 2: Verification of SBP-compliant Feedstock and has been approved by the SBP secretariat on 22nd April 2016.

Warmeston OÜ agrees with all the findings, conclusions and mitigation measures set out in the report and will not undertake an independent risk assessment.

4.3 Results of Risk Assessment

The risk evaluation and mitigation will be based on SBP-endorsed Regional Risk Assessment for Estonia (2016), where the only indicator evaluated as *specified risk* was indicator 2.1.2: “The BP has control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities”

According to the Estonian legislation, protection of Woodland Key Habitats (WKH) is optional for private forest owners. They can choose to sign a contract with the state to protect WKH. In this case, the state pays compensation to the owner for the protection of WKH. If the private forest owner does not want to protect WKH, the agreement ends and they are then allowed to cut it. In state forest and in FSC/PEFC certified private forest WKH are protected.

In cases where the sourced material derives from private forests, it is important to know exactly from where the material was cut (FMU, sub-compartment). Public databases that can be used to control if the material

comes from WKH or not, are available. In cases where no felling permits are issued and the FMU contains WKH, an on-site visit is required if the material is subject to the SBE.

All other indicators were assigned as “low risk”. For more detail please refer to the SBE-endorsed Regional Risk Assessment for Estonia (2016).

4.4 Results of Supplier Verification Programme

According to article 14.1 of the SBP Framework Standard 2: Verification of SBP-compliant Feedstock a Supplier Verification Programme will not be undertaken, as none of the indicators in the final risk assessment were assessed as “*unspecified risk*”. The need for a Supplier verification programme will be re-evaluated during the review of the risk assessment.

4.5 Conclusion

Based on the information available during the regional risk assessment process, the level of risk for each of the criteria was chosen. For Estonia all except one criteria were assigned low risk. The only “specified risk” was associated with the indicator 2.1.2: *The BP has control systems and procedures to verify that potential threats of forest management activities to the HCVs are identified and safeguards are implemented to protect them*. The indicator was assigned as “specified risk” due to the protection status of WKHs.

Based on the findings of the SBE it can be concluded: as long as the risks associated with the indicator 2.1.2 are mitigated, feedstock from Estonia is low risk and is meeting the requirements for SBP-compliant feedstock. For detailed mitigation measures please refer to Chapter 9 of the SBR.

5 Supply Base Evaluation Process

The SBP-endorsed Regional Risk Assessment is based on a number of different sources of information, including applicable legislation, reports from state authorities and other stakeholders, various databases and statistical data sources. This information was requested from state authorities such as the Environmental Inspectorate, the Estonian Tax and Customs Board, the Work Inspectorate, the Police etc. During the preparation of the RA, developers made a detailed baseline study for each of the SBP principles and criteria. During the first consultation period (26.03.2015 – 26.04.2015) SBP received comments and additional information from several stakeholders and from state institutions. Based on this information some of the specified risk designations were changed to low risk. The second stakeholder consultation period was from 05.05.2015 to 20.05.2015. During this consultation, some additional comments were raised. A detailed description of the situation for each criteria is presented in Annex 1 along with the chosen level of risk, which was based on the information provided. The regional risk assessment was approved by SBP on 22nd April 2016.

Based on the findings of the regional risk assessment Warmeston OÜ established procedures to mitigate the risks for primary and secondary feedstock that has been harvested in Estonia. For this purpose Warmeston will verify the origin of all primary feedstock and work closely together with its suppliers (primary processors) to do the same for secondary feedstock. For more detail please refer to chapter 9 of the SBR.

The stakeholder consultation process for Warmeston's SBE was undertaken from 4th May 2016 to 3rd June 2016.

6 Stakeholder Consultation

The first stakeholder consultation round of the RRA was completed from 26.03.2015-26.04.2015 and the second round from 05.05.2015-20.05.2015. The information about the risk assessment process development, along with the draft risk assessment, was sent out to all key stakeholders. The list of stakeholders can be seen in Annex 4 of the RRA. Three stakeholders, the Estonian Fund for Nature (ELF), Graanul Invest AS and the Estonian Forest and Wood Industries Association (EMPL) provided their feedback.

During the first consultation period (26.03.2015 – 26.04.2015) SBP received comments and additional information from several stakeholders and from state institutions. Based on this information some of the specified risk designations were changed to low risk. The second stakeholder consultation period was from 05.05.2015 to 20.05.2015. During this consultation, some additional comments were raised. A detailed description of the situation for each criteria is presented in Annex 1 of the RRA along with the chosen level of risk, which was based on the information provided.

SBP secretariat conducted an additional round of stakeholder consultations from 17 September 2015 to 16 October 2015. The results of these consultation process are available at:

<http://www.sustainablebiomasspartnership.org/documents/risk-assessments/regional-risk-assessments-for-the-baltic-states/estonia>.

Warmeston conducted its stakeholder consultation process of the SBE from 4th May 2016 to 3rd June 2016 by e-mail message to local municipalities, state institutions and authorities, State Forest Management Centre, Foundation Private Forest Centre, Estonian Private Forest Association, FSC Estonia, PEFC Estonia and the Estonian Forest and Wood Industries Association and to Loodusaeg's mailing list covering app 1000 followers including various nature conservation and protection organisations. No comments from the stakeholders were received.

In addition Nepcon, acting as the SBP approved certification body of Warmeston, will undertake an additional consultation process prior to the SBE audit.

6.1 Response to stakeholder comments

N/A

7 Overview of Initial Assessment of Risk

Based on the information available during the risk assessment process, the level of risk for each of the criteria was chosen in the RRA. All except one criteria were assigned low risk. Below is the summary of the indicator for which specified risk was identified.

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	
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	
2.3.1		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	
2.7.3		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	

WKH are forest habitats with high probability of present occurrence of endangered, vulnerable and rare species. WKH system is a tool to address high conservation value forest habitats in managed forests thus they are the primary mechanism for protection of ecologically valuable areas which are located within commercially managed forests.

According to the Estonian legislation WKHs protection is optional for private forest owners. They can sign a contract with state and protect the WKH. In this case, the state pays compensation to the owner for protecting the WKH. If private forest owner do not want to protect the WKH then it is allowed to cut it. It is possible to determine the location of WKHs in Public Forest Registry and in case felling permit is issued it is possible to see if the material is cut from WKH or not. In case the fellings are done without felling permit (it is allowed to do small scale sanitary cutting without felling permit) then on site visit is only way to see if the WKH is untouched or not. Please see section 9 for a description of the detailed mitigation actions.

In state forest and in FSC/PEFC certified private forest and in private forests where WKH contract has been signed, WKH are protected.

8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

According to article 14.1 of the SBP Framework Standard 2: Verification of SBP-compliant Feedstock a Supplier Verification Programme will not be undertaken, as none of the indicators in the final risk assessment were assessed as “*unspecified risk*”. The need for a Supplier verification programme will be re-evaluated during the review of the risk assessment.

8.2 Site visits

N/A

8.3 Conclusions from the Supplier Verification Programme

N/A

9 Mitigation Measures

9.1 Mitigation measures

The mitigation measures described below will only be applied for feedstock that is in the scope of the SBE as described in section 4.1. The responsible person for the implementation of the SBE is the Quality and Environmental manager of Warmeston who is also the overall responsible person for the company's FSC and SBP certification systems.

Primary feedstock

All deliveries of primary feedstock that has been harvested in Estonia, but is not FSC or PEFC certified, Warmeston will verify that it has not been sourced from WKHs. Additional control procedures, e.g. procedures according to FSC-STD-40-005: FSC Standard For Company Evaluation of FSC Controlled Wood, are applied if applicable. All feedstock subject to SBE must meet prior the evaluation at least SBP-approved Controlled Feedstock System requirements.

Warmeston will use the delivery documents, a list of approved suppliers and publicly available databases (e.g. maps at: <http://register.metsad.ee/avalik/> or at least biannually renewed databases from competent authorities¹⁹) to verify that the delivered primary feedstock has not been sourced from WKHs. During the reception and registration of primary feedstock the assistants will carry out the following control procedure within the SBE:

1. *Has the supplier signed an agreement and committed not to supply wood from WKHs?*
 - 1.1 *If yes, go to 2.*
 - 1.2 *If no, the products cannot be sourced.*
2. *Can the products be traced back to the logging site in forest?*
 - 2.1 *If yes, go to 3.*
 - 2.2 *If no, the products cannot be sourced.*
3. *Is there a felling permit issued?*
 - 4.1 *If yes go to 5*
 - 4.2 *If no go to 4.*
4. *Fellings without felling permit (according to forest act).*
 - 4.1 *If there is no WKHs on the FMU according to available information: the products can be sourced.*
 - 4.2 *If there is a WKHs on FMU an on-site the products cannot be sourced as SBP-compliant.*

¹⁹ An inquiry has been sent to the Environmental Agency of Estonia (the responsible authority responsible for updating the WKH databases) to clarify the of changes on the WKH register. If significant a more frequent update rate of the WKH database will be implemented. These databases will be shared with the suppliers who are included in the SBE.

5. Does the logging site defined in the felling permit, provided with the supplied material, match with the WKH location using the available information resources (updated maps or databases)?

5.1 If yes: the products cannot be sourced as SBP-compliant

5.2 If no: the products can be sourced.

All instances where primary feedstock from WKHs has been offered will be reported to the Quality and Environmental manager and recorded in a register.

Secondary feedstock

To mitigate the risks associated with secondary feedstock subject to SBE, Warmeston will:

- i) train its suppliers to apply the risk mitigation measures described above in points 2-5 and
- ii) verify during annual audits that the mitigation measures 2-5 have been properly implemented.

The trainings and annual audits will be carried out by Warmeston's Quality and Environmental manager who is also responsible for collecting and analysing suppliers' monitoring results of the WKHs.

The supplier audits will cover the following aspects:

- the scope of the suppliers FSC/PEFC certification
 - Depending on the scope of the certificate aspects such as material sourcing or the verification of origin (e.g. with the standard FSC-SDT-40-005) can be considered as low risk
- demonstration of the control procedure carried out by the supplier's responsible person(s);
- demonstration of recorded monitoring data (screenshots or printouts of the databases etc.);
- random selection of a sample of primary feedstock deliveries and the verification of the recorded monitoring results;
- demonstration of the supplier's WKH register and corrective actions taken;
- feedstock storage conditions;

All audit findings and results will be documented.

Warmeston will accept the delivered secondary feedstock only as "low risk" if:

- the supplier has been trained;
- the supplier has been audited (supplier audit) and no substantial issues in the WKH control procedures have been raised during the annual audits;
- the delivered feedstock can be traced back to an Estonian forest where no WKH are present at the felling site.
 - If a supplier is sourcing its feedstock from different countries a mass balance approach for determining the proportion of Estonian feedstock will only be accepted if i) the supplier holds a valid SBP-approved chain of custody certificate and ii) all primary feedstock of the

supplier meets at least the requirements of an SBP-approved Controlled Feedstock System. The supplier must demonstrate during the supplier audit, that this information is monitored and recorded on a regular basis. If this information is not available the material will not be accepted as SBP-compliant feedstock.

9.2 Monitoring and outcomes

Warmeston will keep a register of all cases where material originating from WKH has been offered and the suppliers are in violation with the code of conduct and feedstock purchase agreement. An investigation in all these cases will be carried out and the reason of such deliveries will be analysed. Suppliers who violate these terms repeatedly or on purpose and are not willing to take measures to avoid sourcing material from WKHs in the future will be excluded from the suppliers list and all deliveries will be stopped latest with the implementation of the FSC-STD-40-005 V3-0.

From 1.12.2015 to 30.11.2016 there have been no deliveries of primary feedstock that did not meet SBP-compliant criteria. SBE supplier(s) have successfully implemented monitoring of felling activities in FMU which are known to contain a WKH. The volume of secondary feedstock deliveries, where the risk for the delivery containing any material from Estonian WKH's was not considered low, was 0.2%.

These monitoring results indicate that the current risk mitigation measures have proven adequate. Considering that the new FSC-STD-40-005 V3-0 standard and the FSC centralised national risk assessments for Estonia, where the risk of WKH has been addressed, will be implemented during 2017, no additional mitigation measures have been planned.

10 Detailed Findings for Indicators

Detailed findings for each Indicator are given in the SBP Endorsed Regional Risk Assessment for Estonia available at: <http://www.sustainablebiomasspartnership.org/documents/risk-assessments/regional-risk-assessments-for-the-baltic-states/estonia>.

11 Review of Report

11.1 Peer review

The SBR has been reviewed and signed by senior management.

The report has been peer reviewed and returned with comments by professionals, educated and engaged in the wood industry and forestry. The reviewer concluded that the report gives an objective overview of Warmeston's supply base and the described mitigation measures are in sound with the importance of the assessed risks.

11.2 Public or additional reviews

The SBR is publicly available at Warmeston's homepage (<http://warmeston.ee/>). Received comments will be addressed and the certification body will be notified.

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	Viljo Aros	Quality and Environmental Manager	30.11.2016
	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:	Tanel Mihkelson	Member of Board	30.11.2016
	Name	Title	Date

13 Updates

13.1 Significant changes in the Supply Base

There are no significant changes in the supply base after the scope change audit

13.2 Effectiveness of previous mitigation measures

Please refer to section 9.2.

13.3 New risk ratings and mitigation measures

N/A

13.4 Actual figures for feedstock over the previous 12 months

Please refer to section 2.5.

13.5 Projected figures for feedstock over the next 12 months

No significant changes in the proportion of the feedstock types is foreseen. However, compared to 2.5 the volume of SBP compliant primary and secondary feedstock are projected to increase due the implementation of the SBE.