

SBP™

Supply Base Report for Biomass Producer

Stora Enso Division Wood Products

Stora Enso Timber AB / Gruvön Mill

8 February 2017

Template version 1.2

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

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1. Overview

Producer name: Stora Enso Wood Products / Stora Enso Timber AB / Gruvön Mill

Producer location: Timmervägen 2, 66433 Grums, Sweden

Geographic position: Lat E/W 59 degrees 34 minutes, Long N/S 13 degrees 12 minutes

Primary contact: Stefan Olsson, Technical Manager, Pellet Operation, Stora Enso Timber AB /Gruvön Mill, email: stefan.olsson@storaenso.com]

Company website: <https://www.storaenso.com>, <http://buildingandliving.storaenso.com>

Date report finalised: 8 February 2017

Close of last CB audit: Main evaluation audit 8-9 february 2017

Name of CB: DNV GL

Translations from English: SBR summary translated to Swedish

SBP Standard(s) used: Standards 2, 4, 5: version 1.0

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

SBP Endorsed Regional Risk Assessment: No endorsed SBP regional risk assessment for Sweden and Norway

Weblink to SBE on Company website: <http://buildingandliving.storaenso.com>

FSC® trademark licence number: C125195

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Description of the supply base

2.1. General Description

Provide a general description of the supply base within the regional context including country of harvest. Include a comparison of the scale of harvesting compared to other forest based industries in the region.

Provide a general description of the forest resources (land use and ownership status, socio-economic conditions, forest composition, profile of adjacent lands).

The description must include a description of the forestry management practices or land management practices used and the presence of any CITES or IUCN species.

Include an overview of the proportions of SBP feedstock product groups (Controlled Feedstock, SBP-compliant Primary Feedstock, SBP-compliant Secondary Feedstock, SBP-compliant Tertiary Feedstock, SBP non-compliant Feedstock) showing the proportions of each which are certified and uncertified. Provide an indication of the number of suppliers for each SBP feedstock product group. Include species mix.

<p>Gruvön Mill</p>	<p>Supply overview</p>	<p>Pellet production of the Gruvön Pellet Plant is based on sawmill residues only (sawdust and shavings). Primary or tertiary feedstocks are not used. The tree species used are Pinus sylvestris and Picea abies.</p> <p>The county of origin is Sweden and potentially Norway.</p> <p>All wood supply chains are covered by the Stora Enso wood traceability system, which is third party certified according to FSC Chain of Custody/Controlled Wood and PEFC Chain of Custody/Due Diligence system. All wood sourcing is in line with</p> <ul style="list-style-type: none"> • Stora Enso policy for the sustainable sourcing of wood and fibre, and land management • Stora Enso Supplier Code of Conduct • National and international laws • Applicable FSC or PEFC requirements. <p>The pellet mill and the integrated sawmill hold FSC Chain of Custody/Controlled Wood certificate (DNV-COC/CW-001077) and PEFC Chain of Custody certificate (169333-2014-AE-FIN-FINAS).</p> <p>50-60% of the input feedstock is eligible as SBP Compliant feedstock, and the rest is eligible as SBP Controlled Feedstock. Non-controlled feedstocks are not used.</p> <p>Countries, suppliers and their supply chains are risk assessed in line with the FSC Chain of Custody/Controlled Wood and PEFC Chain of Custody/Due Diligence rules.</p>
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		<p>Other than low risk supply chains are included in the annual supplier auditing programme.</p> <p>SBP National risk assessment is not available for Sweden or Norway.</p> <p>FSC country Risk Assessments or their drafts, or company made country risk assessments, including risks assessed for legality, High Conservation Values of forests, GMOs, indigenous peoples, and forest conversion are available at https://www.globalforestregistry.org and http://info.fsc.org</p>
Sweden	Supplier base, forest base and forest management practices	<p>Wood sourcing in Sweden takes place in semi-natural managed forests with native tree species in their natural growth environments. Tree species that are sourced are Pine (<i>Pinus sylvestris</i>) and Spruce (<i>Picea abies</i>). In addition, forests are with <i>Pinus contorta</i>, birch (<i>Betula</i> sp), Aspen (<i>Populus Tremula</i>) and Alder (<i>Alnus</i> sp). In Southern Sweden, other deciduous species (<i>Quercus</i>, <i>Fraxinus</i>) occur. No CITES listed tree species are represented in the sourcing.</p> <p>The forest area of Sweden is 28.6 million hectares. Different types of conservation areas (11%) and non-managed unproductive forest lands (14%) cover over 7 million hectares (25%) of the total forest land area.</p> <p>In Sweden, private people and families own more than 50% of the forest area. More than 30% of the forests are owned by companies, and the rest of the forests are publicly owned (state, municipalities).</p> <p>The total forest harvesting volume in Sweden is annually some 80 million m³, which is below the annual growth (ca 120 million m³) of forests.</p> <p>Forest management practices are based on the forestry law, forestry guidelines, and forest management planning practice. The forest rotation period is 60-100 years, mostly with 2-3 quality thinnings, a final harvesting and regeneration of a mature stand. Planting or natural seeding can be used in regeneration. GMO trees or introduced tree species are not used in regeneration.</p> <p>In recent years, continuous cover forestry practice has also become available. Continuous cover forestry is based on a 15-20 years harvesting cycle with selective harvesting, or forest regeneration through mini-logging sites (for instance 0.2 -0.5 ha each).</p>
	FM certification	<p>2/3 of the forest base is PEFC Forest Management certified and/or FSC Forest Management certified. Many of the forests are covered by both systems.</p> <p>Stora Enso runs a group certification according to FSC and PEFC for forest owners to ensure high level of forest certified area and to make the forest management certification available also to small forest owners.</p>
Norway	Supplier base, forest base	<p>Norway is represented by semi-natural, managed boreal forests. Tree species that are sourced are Pine (<i>Pinus sylvestris</i>, 33% of the</p>

	and forest management practices	<p>forests) and Spruce (<i>Picea abies</i>, 47% of forests). In addition, forests are with birch (<i>Betula sp</i>), Aspen (<i>Populus Tremula</i>) and Alder (<i>Alnus sp</i>). In Southern Norway, other deciduous species (<i>Quercus</i>, <i>Fraxinus</i>) can occur. No CITES listed tree species are represented in the sourcing.</p> <p>The total forest area of Norway is some 12 million hectares (7 million hectares are productive forest lands), which makes 38% of the total Norwegian land area. Different types of conservation areas cover some 2% of the productive forest area, and 14% of all lands.</p> <p>The Norwegian forests are owned by private owners (80%), state and municipalities (12%), companies (4%) and communities (4%).</p> <p>The total forest harvesting volume in Norway is annually little over one half of the annual growth of forests which is 35 million m³.</p> <p>Forest management practices are based on the forestry law, forestry guidelines, and forest management planning practice. In south-east Norway, the forest rotation period is 60-100 years, mostly with 2-3 quality thinnings, a final harvesting and regeneration of a mature stand. Planting or natural seeding can be used in regeneration. GMO trees are not used.</p> <p>In recent years, continuous cover forestry practice has also become available. Continuous cover forestry is based on a 15-20 years harvesting cycle with selective harvesting, or forest regeneration through mini-logging sites (for instance 0.2 -0.5 ha each).</p>
	FM certification	Over 90% of the forest base in Norway is PEFC Forest Management certified, and some 5% is FSC Forest Management certified.

2.2. Actions taken to promote certification amongst feedstock supplier

Globally, forests that are owned, partly owned or leased by Stora Enso are forest management certified. Most of the forest areas are double certified according to both FSC and PEFC Forest Management systems.

For the external wood suppliers, including private family forests, Stora Enso runs forest management certification groups. In Sweden, both FSC and PEFC forest management certification groups are available for forest owners to join. In a group, forest owners get the support for the preparation and annual maintenance of the certification.

2.3. Final harvest sampling programme

Provide a description of the process and results from the sampling programme undertaken to determine the proportion of final fellings which ends up in biomass compared to other end uses. This is only applicable for final fellings (not thinnings) from stands with an expected rotation length of more than 40 years

The wood procurement has a solid task to source wood in a responsible way, from sustainably managed forests, and to optimize the value of all wood that is made available for industrial use. Value optimization is important to all forest owners and to all actors in the value chain.

In wood harvesting, the value output of each tree stem is measured and optimized with automation-assisted measuring and cutting of each tree stem. In the harvesting machines, automatized systems measure each tree stem and optimize the yield of the high-value sawn wood and fibre wood. Logging residues such as branches and tree tops can be used for direct energy generation.

In the sawmill manufacturing, the output of high-value sawn wood is optimized through automatized measuring and cutting. Only barks and residues of manufacturing are used for energy generation and/or pellet production.

2.4. Flow diagram of feedstock inputs showing feedstock type

Annexed. Not public to avoid any conflict with the competition laws. Stora Enso is unable to publish the requested information due to the fact that it contains competitively sensitive information. In order to comply with applicable competition law rules (Article 101 of the Treaty on the Functioning of the European Union and equivalent national competition law rules) as well as Stora Enso's internal policy guidelines.

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): | 30 million hectares in Sweden and Norway |
| b. Tenure by type (ha): | Some 70 % are private forests |
| c. Forest by type (ha): | Boreal (central / southern boreal) |
| d. Forest by management type (ha): | Managed semi-natural forests (30 million ha) |
| e. Certified forest by scheme (ha): | Sweden: 12.2 million ha FSC, 9.1 million ha PEFC
Norway: 0.4 million ha FSC, 11.4 million ha PEFC |

Feedstock

- f. Total volume of Feedstock: tonnes or m³ - Band 1: 0-200 000 tonnes in 2016. Banding of feedstock and production figures is used to avoid any potential noncompliance with the competition laws. Stora Enso is unable to publish the requested information due to the fact that it contains competitively sensitive information. In order to comply with applicable competition law rules (Article 101 of the Treaty on the Functioning of the European Union and equivalent national competition law rules) as well as Stora Enso's internal policy guidelines, the answer is therefore published in a consolidated format.
- g. Volume of primary feedstock: tonnes or m³ - NA, no primary feedstock used
- h. List percentage of primary feedstock (g), by the following categories.

- Certified to an SBP-approved Forest Management Scheme NA
- Not certified to an SBP-approved Forest Management Scheme NA
- i. List all species in primary feedstock, including scientific name – NA, no primary feedstock used
- j. Volume of primary feedstock from primary forest – NA, no primary feedstock used
- 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- NA
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme-NA
- l. Volume of secondary feedstock: specify origin and type – Band 5 (secondary feedstock makes 100%)
- m. Volume of tertiary feedstock: specify origin and composition – NA, no tertiary feedstock used

* Bands for (f) and (g) 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

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

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

According to the SBP Framework Standard nr 2: "Verification of SBP compliant Feedstock" chapter, 8.2. the feedstock types which are used for pellet production (only SBP-approved CoC System or SBP-approved Controlled Feedstock claim material) may be excluded from a Supply Base Evaluation.

4. Supply base evaluation

4.1. Scope

NA

4.2. Justification

NA

4.3. Results of risk assessment

NA

4.4. Results of supplier verification programme

NA

4.5. Conclusion

NA

5. Supply base evaluation process

NA

6. Stakeholder consultation

6.1. Response to stakeholder comments

NA

7. Overview of initial assessment of risk

NA

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.

NA no SBE

8.2. Site visits

NA

8.3. Conclusions from the supplier verification programme

NA

9. Mitigation measures

9.1. Mitigation measures

NA

9.2. Monitoring and outcomes

NA

10. Detailed findings for indicators

NA

11. Review of report

11.1. Peer review

No peer review of the report.

11.2. Public or additional reviews

No additional reviews.

12. Approval of report

Approval of Supply Base Report by senior management			
Report Prepared by:	<i>Margus Kuusk</i>	<i>Production and Development Manager</i>	<i>[8 Feb 2017]</i>
	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:	<i>Stefan Olsson</i>	<i>Technical Manager, Pellet Operation</i>	<i>[8 Feb 2017]</i>
	Name	Title	Date
Report approved by:	<i>Pär H. Larsson</i>	<i>Mill Manager, Gruvön Mill</i>	<i>[8 Feb 2017]</i>

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 is the first version of the Supply Base Report 15 January 2017.

13.1. Significant changes in the supply base

This is the first version of the Supply Base Report 15 January 2017.

Minor corrections 8 February 2017

13.2. Effectiveness of the previous mitigation measures

See point 3.

13.3. New risk ratings and mitigation measures

This is the first version of the Supply Base Report 8 February 2017.

13.4. Actual figures for feedstock over 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 m³ if a compelling justification is provided**

2016: Band 1: 0-200 000 tonnes of feedstock were used. Banding of feedstock and production figures is used to avoid any potential noncompliance with the competition laws. Stora Enso is unable to publish the requested information due to the fact that it contains competitively sensitive information. In order to comply with applicable competition law rules (Article 101 of the Treaty on the Functioning of the European Union and equivalent national competition law rules) as well as Stora Enso's internal policy guidelines, the answer is therefore published in a consolidated format.

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**

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

2017: Band 1: 0-200 000 tonnes of feedstock. Banding of feedstock and production figures is used to avoid any potential noncompliance with the competition laws. Stora Enso is unable to publish the requested information due to the fact that it contains competitively sensitive information. In order to comply with applicable competition law rules (Article 101 of the Treaty on the Functioning of the European Union and equivalent national competition law rules) as well as Stora Enso's internal policy guidelines, the answer is therefore published in a consolidated format.