SBP

Sustainable Biomass Program

Supply Base Report: Altus Renewables Limited

www.sbp-cert.org

Completed in accordance with the Supply Base Report Template Version 1.3

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

Document history

Version 1.0: published 26 March 2015

Version 1.1 published 22 February 2016

Version 1.2 published 23 June 2016

Version 1.3 published 14 January 2019

Contents

1 Overview

On the first page include the following information:

Producer name: Altus Renewables Limited

Producer location: Mill Road, Tuan (off Tuan Road), Tuan Forest, Qld, 4650, Australia

Geographic position: Lat -25.638528; long 152.79470

Primary contact: David Valentine; d.valentine@altusrenewables.com; +61 7 3805 0200

Company website: www.altusrenewables.com

Date report finalised: 13 February 2020

Close of last CB audit: 28 June 2017 *(Subsequent audits waived by SBP)*

Name of CB: SCS Global Services

Translations from English: NA

SBP Standard(s) used: SBP Standard 2, Verification of SBP-compliant Feedstock, V 1.0, 26 March 2015

SBP Standard 4, Chain of Custody, V 1.0, 26 March 2015

SBP Standard 5, Collection and Communication of Data, V 1.0, 26 March 2015

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

SBP Endorsed Regional Risk Assessment: Not applicable

Weblink to SBE on Company website: www.altusrenewables.com

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

Altus Renewables Limited ("Altus" or "Company") operates a single wood pellet production facility located in the Tuan Plantation Forest resource approximately 15km southeast of the town of Maryborough, Queensland. The Tuan plant was built adjacent to one of Australia's largest softwood sawmills owned by Hyne and Son Pty Ltd. Altus' fibre (SBP-compliant Secondary Feedstock) is procured directly from the sawmill in the form of sawdust and wood shavings using a series of conveyors and storage silos. The Tuan plant does not have the capability to receive round wood or wood chip.

Due to the Tuan plants raw material utilisation profile, Altus' fibre procurement catchment indirectly includes the coastal region of southeast Queensland, Australia stretching from the town of Bundaberg in the north to the city of Brisbane in the south. This region supports a large area of intensively managed softwood plantations which are owned and managed by Hancock Queensland Plantations Pty Ltd (HQPlantations). This region is unique in that there is only one significant owner of plantation forests in the region.

HQPlantations holds a 99-year Plantation Licence to manage, harvest and re-grow plantation timber on Government-owned lands in Queensland. HQPlantations manages 339,436 hectares of land of which 209,358 ha is utilised (or planned) for softwood and hardwood plantation production. Each year some 2.5 million tonnes of wood is available for harvesting for sawn timber, plywood, reconstituted panels and woodchip products for domestic and international markets.

HQPlantations meets environmental, social and economic criteria and requirements for wood production as specified in the following standards:

- Australian Forestry Standard for Sustainable Forest Management (AFS) AS 4708 - 2013; and
- Forest Stewardship Council (FSC) Principles and Criteria for Forest Stewardship (FSC International Standard FSC-STD-01-001).

The scope of this certification is sustainable forest management operations associated with plantation and custodial lands managed by HQPlantations. This includes the major plantation assets under Plantation Licence as well as HQPlantations' freehold properties, joint ventures and land rentals.

HQPlantations defined forest area comprises:

- 203,582 ha (61%) of plantation production land, including land to be planted; and
- 129,199 ha (39%) of custodial lands (comprising buffer areas of mainly native forest) and infrastructure such as roads and forest offices.

Forest Resources

Species grown by HQPlantations include several 'southern pine species', Araucaria and several hardwood species. Species selection is predominantly determined by the requirements to maximise the return to the

investors, to meet commitments to customers and to minimise business risk. HQPlantations does not use genetically modified organisms.

Southern Pines (*Pinus species*)

For convenience, and to support international marketing, HQPlantations' *Pinus* plantings are collectively called 'Southern Pines'. The main Southern Pine taxa grown include:

Pinus elliottii var. *elliottii* (PEE) – Slash Pine: Currently makes up 3 percent of the Southern Pine estate by area, restricted to SEQ. Slash Pine has excellent wood properties, stem form and tolerance to water-logging. Since the development of the hybrid, new plantings are now restricted to the very wettest sites in SEQ (typically less than 50 ha per year).

Pinus caribaea var. *hondurensis* (PCH) – Honduran Caribbean Pine: Currently makes up 24 percent of the Southern Pine estate by area. PCH is the dominant species planted to date in Central and Northern Queensland (CQ and NQ respectively). PCH is more productive than PEE, is better adapted to tropical environments and has greater drought tolerance, although it has lower wood density and generally poorer form. Following extensive damage to plantations in the Ingham / Cardwell area in the wake of severe tropical cyclone Yasi in February 2011, it is planned to replace PCH with the closely related yet more wind-firm *P. caribaea* var. *caribaea* (PCC) on poorly drained sites.

Pinus elliottii var. *elliottii* × *Pinus caribaea* var. *hondurensis* hybrid (PEE x PCH) – Hybrid Pine: This hybrid currently makes up 70 percent of the Southern Pine estate by area. It exhibits the best properties from both of its parents and is now the dominant species planted in SEQ and CQ.

Araucaria

Araucaria cunninghamii (Hoop Pine) is one of the few endemic rainforest species that has been successfully domesticated for timber production. It is well-adapted and occurs naturally on the majority of sites where it is currently growing in managed plantations. *Araucaria bidwillii* (Bunya Pine) has also historically been planted on some frost-prone sites within the broader Araucaria estate however these sites are generally replanted with Hoop Pine (or hardwoods) using improved silvicultural techniques.

Araucaria plantations utilise improved genetic material through tree breeding programs derived from trees originally selected in natural forests occurring naturally within and surrounding the current plantation estate. These plantations do not present a significant risk in terms of natural spread or gene flow.

Hardwoods

HQPlantations hardwood plantation estate is dominated by species that occur naturally in south-east Queensland. Spotted gum (*Corymbia citriodora* sub. spp. *variegata*) is planted on most sites, Western white gum (*Eucalyptus argophloia*) is planted on frost-prone sites and Gympie messmate (*E. cloeziana*) is planted on higher rainfall sites on deeper soils. While most hardwood plantations adjoin cleared farmlands or heavily modified grazing lands, observations to date suggest that where hardwood plantations adjoin native forest areas, they have not become invasive.

Forest Management

Southern Pines

Southern Pines are grown for sawlog production over a 26-28 year rotation. A typical silviculture regime is as follows:

- 3 year tactical harvest plan sets out areas scheduled for harvesting and re-establishment and identifies any key planning considerations that may be required such as major roading projects, social impact assessments, planned nursery stock/seed demand;
- Operational planning commences 12 months prior to harvesting, on a site by site basis, how a plantation will be harvested and re-established with regard to a range of legislative, environmental, social and economic criteria;
- Site preparation, with a focus on debris retention and minimal inputs needed for effective establishment. Where possible, re-planting occurs along existing mounds or rows;
- Pre-plant tending, typically via aerial herbicide application;
- Hand planting when soil moisture is acceptable;
- Survival counts and refilling where required;
- A single fertiliser application within the first 12 months on some sites depending on soil type and past fertiliser history; and
- Post plant weed control using a combination of chemical and mechanical techniques. Generally, weed control occurs within the first 12 months plus a later age tend if woody weeds are a problem.

Araucaria

On the best sites, Araucaria is grown for high value clearwood over a 45-50 year rotation. Elsewhere, a standard sawlog regime is favoured. A typical silviculture regime is as follows:

- Tactical and operational planning as for Southern Pines;
- Site preparation, with a focus on maximum debris retention and minimal inputs needed for effective establishment;
- Pre-plant tending, typically via aerial herbicide application;
- Hand planting when soil moisture is acceptable;
- Fertiliser is generally not required, except on specific sites (e.g. compacted ramp sites);
- Post plant weed control using a combination of chemical and mechanical techniques. Generally, two to three treatments are applied within the first 12 months plus one or two later age treatments for access, woody weed control or to reduce habitat suitability for rats which can damage young plantations. Araucaria can tolerate a number of herbicides that are used to target a wide weed spectrum, allowing post plant aerial spraying to occur. This has significant H&S and economic benefits, especially on steep slopes where access is difficult;
- On high productivity sites (typically the best 15 percent depending on location and terrain), pruning is carried out on the most vigorous, straight 350 to 400 stems per hectare at age 10-12 years, to a height of 4.8m; and

- Pre-commercial thinning (PCT), involving the early removal of unpruned stems, at around pruning age, occurs on areas that are pruned to encourage clearwood production on the pruned section of the remaining stems. Unpruned stands are grown on until clearfall (i.e. no commercial thinning). For older stands that did not receive PCT, commercial thinning is an option, subject to access constraints and market conditions.

Hardwoods

Hardwood plantations are being established to produce high value timber products, including sawlogs, roundwood and composite products. Current plantations are still too young to harvest. The expected rotation age is around 25 years. As a consequence, suitable processing facilities have not yet been established. A typical silviculture regime is as follows:

- Tactical and operational planning as for Southern Pines;
- Site preparation typically involves some form of row cultivation on the contour as soils tend to be hard-setting;
- Pre-plant weed control involves combinations of slashing and herbicide application. Knock-down and residual herbicides are applied to row lines, or as an overall spray to control vigorous weeds;
- Hand planting occurs under favourable soil moisture and weather conditions;
- Fertiliser is applied within 3 months of planting. The main deficient element on hardwood sites is phosphorus, with boron, zinc and, to a much lesser extent, potassium and copper on specific sites. The type and rate of fertiliser applied varies based on results of soil analyses. Remedial fertiliser application may be applied later in the rotation if nutritional disorders are detected;
- Post plant weed control occurs using a combination of chemical and mechanical techniques. Generally, 2 to 3 treatments are applied within the first 12 months on ex-grazing or cultivated sites;
- Form pruning may be undertaken when plantations are young to maximise the number of trees that have a single leader;
- On some sites, pruning occurs in two lifts (ground pruning and carry up pruning to a height of 6m); and
- On productive areas pre-commercial thinning is generally carried within 1-2 years of pruning to remove unwanted stems and maintain residual stem vigour and stocking; the remainder is grown on until clearfall.

Plantation harvesting

Plantation management aims to produce a range of forest products including sawlog, plylog and pulpwood. Options exist in managing the crop in regard to thinning and age of events. Such options can be utilised to enhance product development, stand health and commercial results.

Clearfall typically occurs at age 26 to 28 years for Southern Pines. For Araucaria, clearfall age is around 50 years, although 40–45 years is targeted for areas planted with improved genetic stock that have grown under a low stocking regime from an early age. Harvesting of hardwood plantations is still some years away.

Harvesting is conducted within environmental guidelines to limit on and off-site disturbance and to maintain site productivity. Guidelines relate to implementation of buffer zones, limits on the placement of harvest extraction tracks, restrictions on locations where log processing can occur and guidelines on tree felling adjacent to sensitive areas such as native forests.

Most harvesting operations are fully mechanised and provide highly productive and safe work environments. Exceptions occur in some older plantations and on difficult terrain where either tree size or access is beyond safe machinery capabilities. In these cases, felling and/or log making occurs manually with chainsaws.

The key harvesting systems fall broadly into two categories:

- Ground-based harvesting; and
- Cable harvesting.

Selection of the appropriate system for a particular plantation unit is based on consideration of:

- environmental impact;
- customer requirements;
- cost;
- safety; and
- productivity in relation to terrain, slope and soil conditions.

Ground based harvest systems vary from long or tree length harvest to cut-to-length forwarder based operations. These systems utilise low ground pressure and other modern harvesting machinery and integrated harvesting systems (mechanical falling, processing, forwarding, loading and hauling) to minimise site disturbance and maximise operational flexibility during wet conditions. Cable extraction or shovel logging systems that utilise specialised equipment on a level-swing excavator are used on sites too steep for standard ground based systems.

It is a requirement for harvesting operators to demonstrate competency from a safety, environmental and operational perspective. Contractors are expected to operate with a high degree of self-management and to embrace these commitments by providing a high standard of production and operating performance.

Timber harvesting is carried out by contractors directly engaged by HQPlantations and by contractors engaged by log purchasers.

CITES, IUCN Species

CITES and IUCN are not impacted by forestry operations. In Australia, CITES and IUCN requirements are enforced under the *Environmental Protection and Biodiversity Conservation Act 1999.*

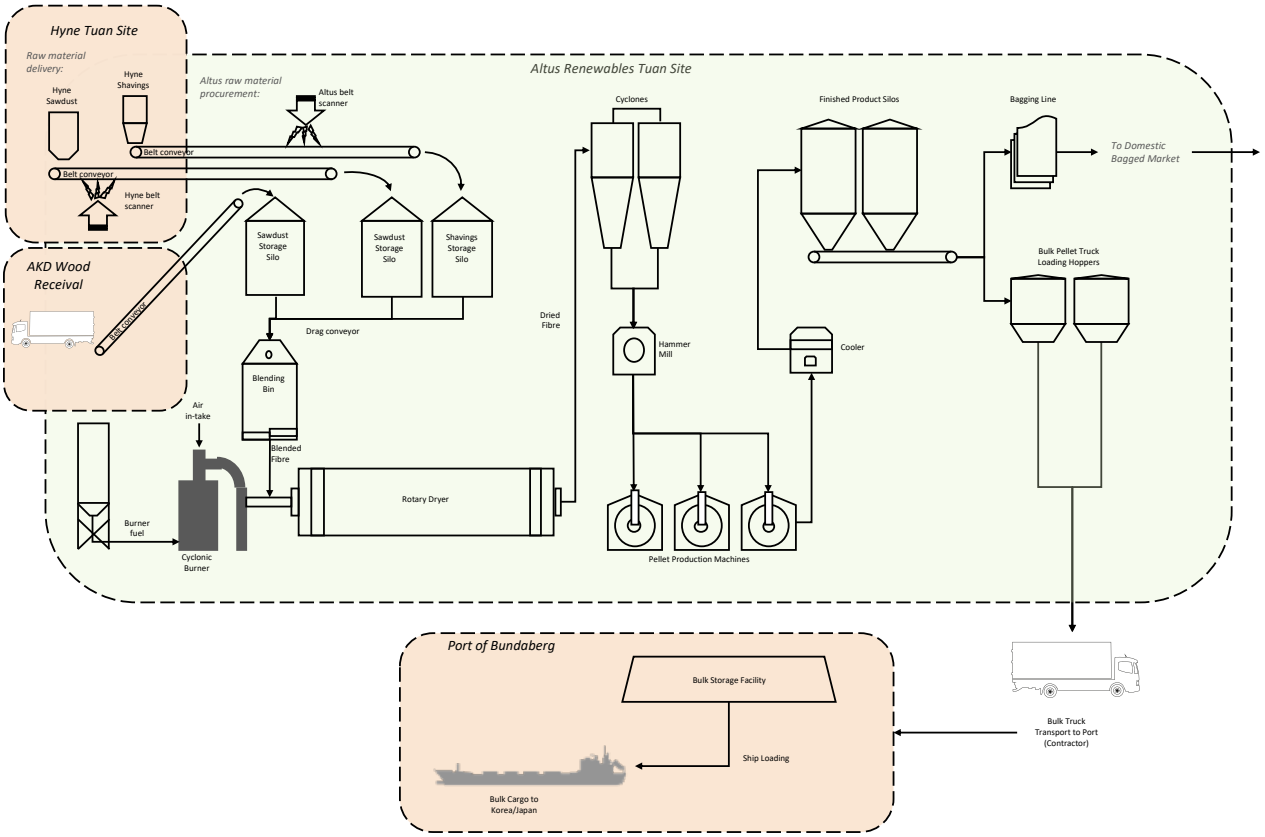
2.2 Actions taken to promote certification amongst feedstock supplier

Altus strictly procures raw material from fully certified suppliers. This policy is demonstrated through the Company's chain of custody management system. Producers in the region without certification are typically small-scale operators and do not have a commercial imperative to acquire certification. Altus actively promotes the benefits of certification to these suppliers through their exclusion from Altus' purchase options.

2.3 Final harvest sampling programme

The average rotation length for plantations grown in southeast Queensland is < 30 years for softwood species and < 25 years for hardwood species. Subsequently the final harvest age for all plantations in the southeast Queensland region is less than 40 years. As such, final harvest sampling is not requited.

2.4 Flow diagram of feedstock inputs showing feedstock type



2.5 Quantification of the Supply Base

Supply Base

a. Total Supply Base area (ha): 332,781 Ha
b. Tenure by type (ha): 332,781 Ha Leased (Government owned)
c. Forest by type (ha): 332,781 Ha Subtropical
d. Forest by management type (ha): 203,582 plantation/managed

e. Certified forest by scheme (ha): 332,781 PEFC certified forest

Feedstock

f. Total volume of Feedstock: tonnes or m^3 – 53,933 tonnes (July 18 – June 19)
g. Volume of primary feedstock: tonnes or m^3 – $0m^3$
h. List percentage of primary feedstock (g) - Not applicable
i. List all species in primary feedstock, including scientific name – Not applicable
j. Volume of primary feedstock from primary forest – Not applicable
k. List percentage of primary feedstock from primary forest (j) - Not applicable
l. Volume of secondary feedstock: specify origin and type –53,933 mt wood residue from Hyne sawmill and AKD, Caboolture sawmill.
m. Volume of tertiary feedstock: specify origin and composition – Not applicable

3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
☐	X

Section 8.2, SBP Standard 2 states that a Supply Base Evaluation is not required if feedstock is received with an SBP-approved CoC System claim. 100% Altus' feedstock is received as SBP-compliant secondary feedstock. As all feedstock is received with PEFC certified Chain of Custody claim, a Supply Base Evaluation is not included in this report.

4 Stakeholder Consultation

Section 13, SBP Standard 2 outlines the requirement for stakeholder consultation for a Supply Base Evaluation (SBE). As Altus is not required to complete a SBE, SBE consultation has not occurred.

Key stakeholders have been invited to peer review Altus' Supply Base Report.

4.1 Response to stakeholder comments

Response to stakeholder comments is not applicable as SBE is not required.

Peer review comments are included in Section 9.1 of this report.

5 Overview of Initial Assessment of Risk

Risk assessment is a requirement of the SBE. As Altus is not required to complete a SBE, this section is not applicable in this version of Altus' SBR.

6 Supplier Verification Programme

6.1 Description of the Supplier Verification Programme

SBP Instruction Note 2A states that 'in the context of a SBE, the BP shall implement a SVP, comprising a monitoring and control system'. As Altus is not required to complete a SBE, this section is not applicable in this version of Altus' SBR.

Altus maintains regular communication with its suppliers on all issues, including compliance with standards.

6.2 Site visits

SVP is a requirement of the SBE. As Altus is not required to complete a SBE, this section is not applicable in this version of Altus' SBR.

6.3 Conclusions from the Supplier Verification Programme

SVP is a requirement of the SBE. As Altus is not required to complete a SBE, this section is not applicable in this version of Altus' SBR.

7 Mitigation Measures

7.1 Mitigation measures

Mitigation measures is a requirement of the SBE. As Altus is not required to complete a SBE, this section is not applicable in this version of Altus' SBR.

7.2 Monitoring and outcomes

SVP is a requirement of the SBE. As Altus is not required to complete a SBE, this section is not applicable in this version of Altus' SBR.

8 Detailed Findings for Indicators

SVP is a requirement of the SBE. As Altus is not required to complete a SBE, this section is not applicable in this version of Altus' SBR.

9 Review of Report

9.1 Peer review

A copy of this report was provided to the Quality and Environment Risk Coordinator at Hyne & Sons Tuan Sawmill for review and comment. The Quality and Environment Risk Coordinator had no concerns with the content of the report.

9.2 Public or additional reviews

Due to the small size of Altus' supply chain, no further reviews were undertaken or required.

10 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	***David Valentine***	***Chief Operating Officer***	***4 March 2020***
	Name	**Title**	**Date**
The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.			
Report approved by:	***Ian Sandeman***	***Managing Director & Chief Executive Officer***	***4 March 2020***
	Name	**Title**	**Date**

11 Updates

11.1 Significant changes in the Supply Base

There are no significant changes to the supply base.

11.2 Effectiveness of previous mitigation measures

Not Applicable

11.3 New risk ratings and mitigation measures

Not Applicable

11.4 Actual figures for feedstock over the previous 12 months

- Total volume of Feedstock: tonnes or m3 – 53,933 tonnes (July 18 – June 19)
- Volume of primary feedstock: tonnes or m3 – 0m3
- List percentage of primary feedstock (g) - Not applicable
- List all species in primary feedstock, including scientific name – Not applicable
- Volume of primary feedstock from primary forest – Not applicable
- List percentage of primary feedstock from primary forest (j) - Not applicable
- Volume of secondary feedstock: specify origin and type –53,933 mt wood residue from Hyne sawmill and AKD, Caboolture sawmill.
- Volume of tertiary feedstock: specify origin and composition – Not applicable

11.5 Projected figures for feedstock over the next 12 months

Feedstock

- Total volume of Feedstock: tonnes or m3 – 77,500 tonnes (July 2019– June 2020)
- Volume of primary feedstock: tonnes or m3 – 0m3
- List percentage of primary feedstock (g) - Not applicable
- List all species in primary feedstock, including scientific name – Not applicable
- Volume of primary feedstock from primary forest – Not applicable
- List percentage of primary feedstock from primary forest (j) - Not applicable
- Volume of secondary feedstock: specify origin and type – Wood residue from Hyne and AKD sawmills (85% sawdust & 15% shavings)
- Volume of tertiary feedstock: specify origin and composition – Not applicable