SBP Audit Report (SAR) on Energy and Carbon Data for Pellets

for Biomass Producers producing pellets¹

Version 2.2

SBP certificate holder number: SBP-08-23

SBP certificate holder name: Tin Nhan Company Limited

Please visit www.sbp-cert.org for more information about the biomass producer

Reporting period: Reporting period (should be based on 12 months) and the start date shall not be older than 18 months from the audit date.

From: 01-June-2023

To: 31-May-2024

SAR expiry date

(=date of the first audit closure for the reporting period+ 15 months): 28-November-2025

• ¹ and woodchips if both stationary chipping and thermal treatment are carried out on a separate processing site.

Contents

- 1 Generalities
 - 1.1 General information on the Biomass Producer
 - 1.2 Justifications for data provided and methodologies used
 - 1.3 Basic information on the Certification Body (CB)
- 2 Feedstock data
 - 2.1 Feedstock Groups as defined by local industry practice
 - 2.2 Use of energy and chemicals in forests or plantations for biomass feedstock (optional)
 - 2.3 Other relevant information, including justifications for data provided and methodologies used
 - 2.4 Validation by the Certification Body
- 3 Biomass production
 - 3.1 Total production
 - 3.2 Electricity use
 - 3.2.1 Other relevant information, justifications for data provided and methodologies used
 - 3.2.2 Validation by the CB
 - 3.3 Use of fossil fuels
 - 3.3.1 Other relevant information, justifications for data provided and methodologies used
 - 3.3.2 Validation by the CB
 - 3.4 Use of biomass fuels
 - 3.4.1 Other relevant information, justifications for data and methodologies used
 - 3.4.2 Validation by the CB
 - 3.5 Moisture content and drying
 - 3.5.1 No drying
 - 3.5.2 Drying applicable
 - 3.5.3 Information where a conventional boiler is used
 - 3.5.4 Information where a CHP is used
 - 3.5.5 Other relevant information, justification for data provided and methodologies used
 - 3.5.6 Validation by the CB
- 4 Transport of biomass
 - 4.1 General transport data
 - 4.2 Storage and handling of biomass
 - 4.3 Regional map demonstrating biomass producer and location of SDIs
 - 4.4 Other relevant information, including justifications for data provided and methodologies used
 - 4.5 Validation by CB
- 5 Dynamic Batch Sustainability Data (DBSD)
 - 5.1 Validation by the CB
- 6 Key dates and representatives
 - 6.1 Certificate Holder
 - 6.2 Certification Body
 - 6.3 SAR validation and upload in the DTS

Appendix 1: Photographs/illustrations

Appendix 2: Production process

1 Generalities

1.1 General information on the Biomass Producer

Company name	Tin Nhan Company Limited
Contact person on site	Nguyen Ngoc Han
Contact person's function	SBP Manager
E-mail address	han.nguyen@ayobiomass.com
Address (physical location of the biomass production unit, pellet plant or woodchips processing unit)	Lot A2, A3, Phu Tai Industrial Zone, Tran Quang Dieu Ward, Quy Nhon City, Binh Dinh Province, Vietnam
Telephone	+84896540385
DBSD enabled? (has BP established the system for feedstock groups and is allowed to use the 99 code in DTS)	Yes

1.2 Justifications for data provided and methodologies used

This space made be used to provide additional information appropriate to the whole SAR, for example selection of a reference period other than 12 months or how recording of data has been undertaken for a recently commissioned plant.

The reporting period is 12 months. The reporting period for this period is from June 1, 2023 to May 31, 2024. In subsequent years, the calendar year from June 1 to May 31 will be taken as the reporting period.

1.3 Basic information on the Certification Body (CB)

Name of the Certification Body	NEPCon OÜ trading as Preferred by Nature
Audit team members	Nguyen Thanh Trien Lam
Qualifications of team members	Liam obtained the certifications in Tropical Forest Landscape Conservation & Restoration

industry, he is qualified as an auditor for FSC CoC, FSC CW, PEFC, SBP and notably gained the FSC FM Expert Certification. Since joining Preferred by Nature in 2022, Liam has been actively planning and conducting a handful of audits in Vietnam and Southeast Asia.
from West Virginia University. With many years hands-on experience in the timber industry, he is qualified as an auditor for FSC

2 Feedstock data

2.1 Feedstock Groups – as defined by local industry practice

<u>Guidance</u>:please click on the column and then click on "+" button on the right to add another column It is not required to include feedstock that is ONLY used as biomass fuel, but optionally this can be done if data are available and verifiable.

If part of the Feedstock Group is diverted as biomass fuel, then consider the TOTAL mass here and add also a corresponding line in Table 3.5

Complete all columns, mark N/A if not relevant.

Give the total raw mass of feedstock as received		
used for biomass production on the reporting	150834.15	metric tonne as received
period, including shares diverted as biomass fuel ¹		

	1	2	3	
Origin	Final harvest from plantations	Final harvest from plantations	Final harvest from plantations	
Feedstock type	Low grade stemwood	Low grade stemwood	Low grade stemwood	
Physical description	Roundwood	Roundwood	Roundwood	
Country of harvest (new column for each country) ⁴	VN (Viet Nam) VN (Viet Nam) VN (Viet Nam)		VN (Viet Nam)	
Region/State	Bình ##nh Province	##k L#k Province	Gia Lai Province	
Raw mass as received in metric tonnes	24622.43	966.86	587.18	
Moisture % as received (weighted average, single figure) ²	41.94	41.42	41.51	
Weighted average distance (km)	31.13	199.41	114.00	
Maximum distance (km)	92.5	223.00	114.00	
Vehicle	Truck	Truck	Truck	
Vehicle powered by	Diesel oil	Diesel oil	Diesel oil	
Weighted average load of the vehicle				
Specify any pre- processing OUTSIDE the BP plant (chipping, drying, none) ³	None	None	None	

	4	5	6	
Origin	Final harvest from plantations	Final harvest from plantations	Final harvest from plantations	
Feedstock type	Low grade stemwood	Low grade stemwood	Low grade stemwood	
Physical description	Roundwood	Roundwood	Roundwood	
Country of harvest (new column for each country) ⁴	VN (Viet Nam)	VN (Viet Nam)	VN (Viet Nam)	
Region/State	Phú Yên Province	Qu#ng Nam Province	Qu#ng Ngãi	
Raw mass as received in metric tonnes	27158.99	42666.46	48667.34	
Moisture % as received (weighted average, single figure) ²	33.67	35.92	39.32	
Weighted average distance (km)	62.28	290.71	146.72	
Maximum distance (km)	100	319	211	
Vehicle	Truck	Truck	Truck	
Vehicle powered by	Diesel oil	Diesel oil	Diesel oil	
Weighted average load of the vehicle				
Specify any pre- processing OUTSIDE the BP plant (chipping, drying, none) ³	None	None	None	

	7	8	9
Origin	Final harvest from plantations	Processing residues	Processing residues
Feedstock type	Low grade stemwood	Sawmill and wood industry residues	Sawmill and wood industry residues
Physical description	Roundwood	Offcuts	Sawdust
Country of harvest (new column for each country) ⁴	VN (Viet Nam)	VN (Viet Nam)	VN (Viet Nam)
Region/State	Th#a Thiên Hu# Province	Bình ##nh Province	Bình ##nh Province
Raw mass as received in metric tonnes	5148.30	279.09	645.92

Moisture % as received (weighted average, single figure) ²	34	28.80	52.40
Weighted average distance (km)	174	20.20	26.57
Maximum distance (km)	174	31.4	31.4
Vehicle	Truck	Truck	Truck
Vehicle powered by	Diesel oil	Diesel oil	Diesel oil
Weighted average load of the vehicle			
Specify any pre- processing OUTSIDE the BP plant (chipping, drying, none) ³	None	None	None

	10	11	12
Origin	Processing residues	Processing residues	
Feedstock type	Sawmill and wood industry residues	Sawmill and wood industry residues	
Physical description	Offcuts	Shavings	
Country of harvest (new column for each country) ⁴	UY (Uruguay)	UY (Uruguay)	
Region/State			
Raw mass as received in metric tonnes	54.53	37.05	
Moisture % as received (weighted average, single figure) ²	12.05	9.7	
Weighted average distance (km)	5	5	
Maximum distance (km)	5	5	
Vehicle	Truck	Truck	
Vehicle powered by	Diesel oil	Diesel oil	
Weighted average load of the vehicle			
Specify any pre- processing OUTSIDE the BP plant (chipping, drying, none) ³	None	None	

2.2 Use of energy and chemicals in forests or plantations for biomass feedstock (optional)

Currently, it is common practice that End-Users use the disaggregated default value for eec, as provided in Annex VI of REDII. However, sometimes data on use of energy and chemicals in forestry operations may be available and may be collected by the Biomass Producer. The End-User may benefit from using actual values. The table below may be used in that case. You can also mark N/A where relevant (e.g., no fertilisers or other chemicals used).

Feedstock	Harvest	Diesel fuel	Electricity	Types and quantities of fertilisers	Quantity of	Quantity and
Group	yield (kg	consumption for,	consumption	used (specify (if applicable): quantity	chemicals (e.	type of raw
number	harvest	e.g., tractors,	(kWh/	of P2O5, K2O, CaO, mineral and	g. pesticides)	materials used (e.
(from	yield dry/	harvesters (l/	(ha*year))	organic N fertilisers (kg/(ha*year)))	(kg/	g., seeds) (kg/
previous	(ha*year)) ²	(ha*year))			(ha*year))	(ha*year))
table)						

2.3 Other relevant information, justifications for data provided and methodologies used

Please mention at the minimum:

- for the Origin, the evidence elements assessing the thinning character of the origin,
- for the Feedstock type, the evidence elements assessing the low grade character of the stemwood, in comparison with local high grade specifications (like sawlogs for local sawmills).
- you may also specify optional data on energy use and chemicals in forests

Origin: The origin of the feedstock is assessed based on evidence that demonstrates its thinning nature. This includes documentation or data proving that the wood used comes from forest management activities focused on thinning operations. Feedstock Type: The feedstock type is evaluated by comparing the characteristics of the stemwood against local high-grade standards, such as sawlogs used in local sawmills. Evidence supporting the lower grade classification of the stemwood is provided, ensuring it meets the required criteria for low-grade wood products. Optional Data: Additional optional data can be provided regarding energy use and chemicals applied in forest management activities. This data may include information on fuel consumption, electricity usage, and the types and quantities of chemicals used during forest thinning and harvesting operations. All feedstock is transported by truck, with distances calculated using Google Maps. The weight and moisture content of the feedstock are measured upon receipt to ensure accurate reporting.

2.4 Validation by the Certification Body

Parameter	Comments/information
Origins	What evidence was available on site to confirm the origins? (for example, CMR, supplier invoices, supplier contracts, registers), in particular for thinnings:

¹Sum of raw mass as received in metric tonnes for all feedstock types

²Where the moisture content of the feedstock is not recorded; the BP may provide an estimate or use a default value.

³If chipping or drying takes place inside the pellet or chipping plant then please specify the information in the relevant sections 3.3 and 3.4

⁴Nation or large region of nation (like State of USA, Province of Canada, Region of Russia)

	During the fourth surveillance, the auditor selected samples to verify contracts with suppliers, harvesting licenses and waybills, etc. Field visit to plantations confirms the origin and information in the documents reviewed.
Feedstock types	What evidence was available on site to confirm origins and feedstock types? (for example, CMR, supplier invoices, supplier contracts, registers, physical evidence on site), in particular for the low grade character of stemwood.
	During the fourth surveillance, the plantations were visited and the forest manager and the factory manager were interviewed. Visual inspection at the plantations and at the pellet mill to confirm timber not suitable for other industries is delivered to Tin Nhan plant.
Physical description	What evidence was available on site to confirm those data?
and raw mass	During the fourth surveillance, feedstock was observed at the pellet mill as well as at the plantations. The BP weights all trucks with feedstock at the gate. A database and the summary logs were verified.
Distances	Are the average distances validated by checking locations on a map?
	Yes
Vehicles	Was the auditor able to confirm the type of vehicles / transport facilities used to transport the feedstock to the production site? (visual checking?)
	Yes

3 Biomass production

Please see appendix 1 for photos and full description of the production process. Biomass product can be wood pellets or woodchips or energy logs

3.1 Total production

Annual production	Actual biomass production (1)	Production during reporting period	
		98667.71	metric tonnes
	Design capacity:	200000	metric tonnes of biomass product/year
	Average lower heating value:	17.25	MJ/kg (wet basis) average for the reporting period
(CB) What evidence is available to substantiate the reported annual biomass production? Options include: internal registers or annual reports.		The number of produced pellets is taken from the monthly reports. LHV is based on the results of measurements done by independent laboratories.	

3.2 Electricity use

Not applicable			
	✓from network	15214543 kWh	
Give the origins of the electricity	on-site generation	kWh	
	☐ CHP plant (see 3.5.4)	kWh	
used in the biomass production process during the reporting	wind or solar farm	kWh	
period (2)	other (specify)	kWh	
	Total specific electricity use sum of (2)/(1)	154.20 kWh/metric tonne	
Explain how this energy consumption has been evaluated: The calculation method based on electricity invoices is the most accurate and reliable one. This method must be used if feasible. Please provide the calculation itself	✓invoices of external electricity supplier and biomass production achieved, □ specific fuel consumption and electrical efficiency of installed cogeneration plant and biomass production		

3.2.1 Other relevant information, justifications for data provided and methodologies used

3.2.2 Validation by the CB

(CB) What evidence / explanation was made available to the auditor:

Invoices from the electricity supplier have been provided to the auditor. To

Invoices from the electricity supplier have been provided to the auditor. The BP receives invoices from the electricity supplier monthly. The values are retained in the spreadsheets. The invoices and the spreadsheets as well as the summary value provided in the SAR were validated during the fourth surveillance.

3.3 Use of fossil fuels

Each fossil energy source must be described in detail in the table hereunder. Use as rows as necessary in order to cover each fossil fuel. If any responses are marked as 'other', please include further detail in the box below (also for offsite chipping by third party)

	1	2	3
Type of fossil fuel	Diesel oil		
Total consumption during reporting period (value)	84726		
Units	Litre (liquid only)		
For gaseous fuels specify high or low heating value			
Processing step using fossil fuels	Handling		
How has this energy consumption been calculated:	Other (please specify) Internal Receipt Note		

3.3.1 Other relevant information, justifications for data provided and methodologies used

The internal warehouse receipt record.

3.3.2 Validation by the CB

(CB) What evidence / explanation was made available to the auditor :

A consumption is recorded by the material accountant and then communicated to accountancy. Quantity of diesel is summarized and the total consumption is reflected in the SAR. The values in the logs and the summary value were verified during the fourth surveillance. During the onsite visit, the auditor checked diesel consumed records of biomass productions and interviewed relevant staff.

3.4 Use of biomass fuels

Not	applicable
-----	------------

Use as many columns as necessary in order to cover each type of biofuel and each process.

	1	2	3
Feedstock ID Group in Table 2.1 if applicable or NA ¹	1,2,3,4,5,6,7		
Biomass type ²	Other (please specify) Low grade stemwood		
Total consumption during reporting period (value)	7116.69		
Units	Raw metric tonne		
Moisture content %as received, point of use	43.52		
Processing step using biomass fuels	Burner for drying		
How has this energy consumption been calculated:	Other (please specify) Based on fuel feedstock data		

¹If biomass fuel is diverted from Feedstock Groups, please mention them in column 1.

3.4.1 Other relevant information, justifications for data and methodologies used

The record is based on fuel feedstock data.

3.4.2 Validation by the CB

(CB) What evidence / explanation was made available to the auditor : Production logs have been provided to the auditor.

3.5 Moisture content and drying

Is feedstock dried as part of the biomass production process? If no, complete table 3.5.1. If yes, complete table 3.5.2.

3.5.1 No drying

Only complete this table if no drying is undertaken.

Feedstock Moisture content	
Initial moisture of the feedstock, as received	% (wet basis)
Explain, with reference to its origin, why the moisture content of the feedstock is sufficiently low to enable the production of biomass product without prior drying.	

 $^{^2\!}Each$ type of biomass used as a fuel must be described per type

Explain how it is monitored / evaluated?	weighted average of moisture measurements performed on each individual feedstock shipment (one measurement		
	per delivery) typical values based on some moisture measurement (frequency of measurements=)		
	supplier / process specifications (documents available:) other explanation:		
	no evidence or explanation available		
Biomass moisture content			
Moisture of biomass as produced	% (wet basis)		

✓ 3.5.2 Drying applicable

Only complete this table if drying is undertaken. This table must be completed for each type of dryer

Biomass Dryer 1

Moisture content		
Initial moisture of the feedstock, as received	37.16	% (wet basis)
Explain how it is monitored / evaluated Fick all boxes that apply and provide additional information in 3.3 as required	 ✓ weighted average of moisture measurements performed on each individual feedstock shipment (one measurement per delivery)	
Moisture of feedstock at the dryer outlet, if measured (target moisture)	14.71	% (wet basis)
Moisture of the finished biomass product (as produced)	8.56	% (wet basis)
Dryer		
Гуре	✓drum dryer □ belt dryer □ other (specify)	
Energy carrier (The energy carrier is the transfer medium circulated in pipes	□ steam □ hot water ✓hot air / flue gases □	

and used to transport the heat from the boiler/burner to the dryer.)	other (specify)			
Heat consumption If a heat meter is installed, calculate how much heat energy from the boiler is provided to the dryer and give details of the calculation.	☐ heat meter instal consumption = kWl ✓no heat meter instal	h		
Detailed calculation of the heat consumption	null			
Origin of the heat used in the drying process	✓burner ☐ conventional bot ☐ CHP (combined	iler heat and power)		
Not applicable Report fossil and biomass fuels used as input Total heat output from boiler that is effectively recuperated and used in an application during reporting period		under 'boiler'	kWh	
Total heat output from boiler that is used in drying during reporting period			kWh	
How has this data been calculated (e.g. metered data, theoretical calculation based on specific consumption of installed machinery)				
.5.4 Information where a CHP is used Not applicable				
CHP Information 1				
Report fossil and biomass fuels used as input resp. in 3.3 and 3.4 under 'onsite CHP' or '3rd party CHP' as relevant and calculate corresponding (1) and (2) values below.				
(1)				
Γotal fuel input quantity (unit= t, m ³ or litre)			
(2)				

Weighted average lower heating value	
of total fuel input, as received (resp. unit= MJ/t, MJ/m ³	
or MJ/litre)	
(3) Total fuel input =(1) x (2)/3.6	kWh
Electricity output of CHP	
(4) net electricity used on site of BP for biomass	
production as copy/pasted from 3.2 under 'CHP	kWh
plant'	
(5)	
net electricity used on site of BP but not for biomass	kWh
production	
(6)	
other net electricity generated by CHP that is not used on	kWh
site of BP and is not self-consumption by CHP	
(7) Total net electricity from CHP = $(4) + (5) + (6)$, excluding self-consumption by CHP	kWh
Heat output of CHP	
(8)	
Reference temperature of heat at the point of use (if	0 C
measured)	
(9)	kWh
net heat used on site of BP for biomass production	K VV II
(10)	
net heat used on site of BP but not for biomass	kWh
production	
(11)	kWh
other net heat used by any other party	K VV II
(12)	kWh
total net heat <u>used</u> from CHP = $(9) + (10) + (11)$	K VV II
CHP yield	
Total net CHP yield $(=(7) + (12))/(3)$	%
How has this data been calculated	
(e.g. metered data, theoretical calculation based	
on specific consumption of	
installed machinery)	

3.5.5 Other relevant information, justifications for data provided and methodologies used

When some data among (1) to (12) is not available, please justify. In all cases at least the best estimate possible for (3), (4), (7), (9) and (12) must be given, as well as the distinction between fossil or biomass origins of the fuels.

3.5.6 Validation by the CB

(CB) What evidence / explanation was made available to the auditor to substantiate the Biomass production chain moisture content of the feedstock and drying of feedstock: The auditor interviewed relevant staff and verified moisture records. Moisture measurements are done every shift and recorded in the spreadsheets.

4 Transport of biomass

Static Data Indicators (SDIs) included in this report: [In format XX-YY-ZZ]	Description of SDI (This should include geographic location, and where appropriate type of facility (e.g. port) and means of transport to location and any other identifier (e.g. FOB or transfer of ownership)) – 40 characters limit
SBP-08-23-09	To factory gate
SBP-08-23-10	FOB Qui Nhon port

Please add the number of SDIs as required.

4.1 General transport data

Please complete a column for each SDI.

If the SDIs do not match the format of the table below please change the orientation of the page or transposition the table.

	DATA	SBP-08-23-09	SBP-08-23-10	
Transport leg 1	SDI starting point		Factory Gate	
	Distance (km)	0	12.4	
	Transported to?		Qui Nhon port	
	Mode of transport	Road	Road	
	Transport powered by?	Fossil diesel oil	Fossil diesel oil	
	Transport capacity (tonnes)		28	
	Actual fuel use if known (litres)			
	Backhaul if known			
Transport leg 2	Starting location			
	Distance (km)			
(if	Transported to?			
needed)	Mode of transport			
	Transport powered by?			
	Transport capacity (tonnes)			
	Actual fuel use if known			

	(litres)			
	Backhaul if known			
Transport	Starting location			
leg 3	Distance (km)			
(if	Transported to?			
needed)	Mode of transport			
	Transport powered by?			
	Transport capacity (tonnes)			
	Actual fuel use if known (litres)			
	Backhaul if known			
	Scope end point	Factory Gate	Qui Nhon port	

4.2 Storage and handling of biomass

Please indicate address of off-site storage, handling or trans-shipment facility,

✓ Not	applicable
--------------	------------

Storage site 1	
Physical address	
Description of activity occurring at this location	
Maximum time of storage	
Relevant contact person	
Telephone / Fax company office	

Please indicate energy requirements for storage and handling of biomass, where information is available.

	Value	Unit
Electricity		kWh/t

Fossil fuels	Value	Unit
--------------	-------	------

4.3 Regional map demonstrating biomass producer and location of SDIs

(One map may be used for multiple SDIs where appropriate)

Link to Google Map: <u>maps.app.goo.gl/NDyymkHqngZzuEFR6</u>

4.4 Other relevant information, including justifications for data provided and methodologies used

4.5 Validation by CB

The CB must review the information delivered above and verify the data focusing on two parameters that play an important role in the CO2 emissions:

- - type of vehicles used for transport (visual check of vehicles / transport facilities on site)
- - destination and distances (to be checked on a map)

The CB should comment on the validation of the transport scheme as necessary.

During the fourth surveillance, trucks were visually observed and output transport documents were evaluated. Transport distance is provided on the map above. Auditor cross checked with Google map and confirmed the distance information is recorded accordingly.

5 Dynamic Batch Sustainability Data (DBSD)

Record all biomass with DBSD during the reporting period that have been shared to the DTS (as defined in Instruction Document 5E clause 5.2).

Biomass Category	Metric tonnes
SDE+ cat1	54,430.89
SDE+ cat5	733.11

5.1 Validation by the CB

(**CB**)What evidence / explanation was made available to the auditor. Has corresponding DTS data been verified? The auditor reviewed the DTS. The AVS and sales documents. Please refer public summary, NCR 01/24 for further details.

6 Key dates and representatives

This document is (select option)	New SAR with updated reporting period
Summary of changes if SAR was updated	

6.1 Certificate Holder

Name of the representative of the BP certifying	Nguyen Ngoc Han
that this template has been	
filled in to the best of his ability	

6.2 Certification Body

Date 1 (=date of closure of the last audit)	28-August-2024
Name of the auditor certifying that the data gathered in this form has been checked and validated in compliance with the last version of SBP Standard #5 and SBP certification procedures.	Liam Nguyen
Name of the technical reviewer having checked this document	Mikhail Rai
Name of the certification decision maker	Mikhail Rai

$\textbf{6.3} \quad \textbf{SAR validation and upload in the DTS}$

Date 2 (= date upload SAR in the DTS = SAR reference)	04-November-2024
Please indicate corresponding validity date on page 1. Keep validity date as in previous SAR version if it is an updated version without change of the reporting period.	28-November-2025
Name of the SBP officer in charge of validation	Agita Nagle

Appendix 1: Photographs/illustrations

This shall include photographs/illustration/pictures of at least the following:

- - Feedstock storage
- - Overview of biomass manufacturing plant
- - Dryer(s) (if any)
- Wood chippers (green island, dry island)
 Press(es) if wood pellets
- - Biomass storage and handling

A ground plan of the facilities and / or a flowchart shall also be included if available.

Please add dates when photographs were taken





















Appendix 2: Production process

Describe the on-site biomass production process, focusing on any variation from best practices, and including a <u>detailed</u> description of the processes undergone by feedstock.

Feedstock delivery	volume measuring	applicable to all feedstock groups applicable only to feedstock group nr not applicable
	Moisture monitoring	applicable to all feedstock groups applicable only to feedstock group nr not applicable
	Unloading	☐ truck tippingapplicable to feedstock group nr☐ live bottom truck
		applicable to feedstock group nr
		moving floor applicable to feedstock group nr
		grab/front end loader/crane
		applicable to feedstock group nr 1-7, 9, 11
		hopper/conveyor belt applicable to feedstock group nr
		blowpipe applicable to feedstock group nr
		other (specify) by hand
		applicable to feedstock group nr 8, 10
Feedstock storage		✓ wood yard
		applicable to feedstock group nr 1-7, 8, 10
		warehouse applicable to feedstock group nr 9, ``11
		silo silo applicable to feedstock group nr
		other (specify)

		applicable to feedstock group nr	
		no storage applicable to feedstock group nr	
Feedstock handling		rolling stock	
		conveyor	
		blowpipe other (specify)	
Feedstock preparation	Debarking	□ applicable to all feedstock groups □ applicable only to feedstock group nr □ not applicable	energy source electricity diesel other(specify)
	Chipping	□ applicable to all feedstock groups □ applicable only to feedstock group nr 1-7 □ not applicable	energy source electricity diesel other(specify)
	Drying	drum dryer applicable to all feedstock groups → other(specify) → other(specify) → other(specify) → hot air feedstock group nr 1- 7, 8, 10 ─ not applicable	energy source(s) biomass burner boiler fossil fuel burner/boiler (specify fuel) own biomass CHP third party fossil fuel CHP (specify fuel) own fossil fuel CHP (specify fuel) third party biomass CHP steam from biomass CHP other(specify)
Sizing (hammer mill)	Before dryer (green)	applicable to all feedstock groups	

	applicab not appli	le only to feedstock group nr 1-7 icable
		le to all feedstock groups le only to feedstock group nr icable
Pelletising	number of presses 8	design capacity of each press tonnes/hour
Product handling	rolling stock, conveyor belt, blowpipe, forklift, other (specify)	
Product storage	warehouse silo open air (woodchips or black pellets) dome (for pellets) other (specify) no storage	maximum storage capacity: 30000 tonnes

In this appendix, please concentrate on elements that might influence the calculation of the net fossil CO2 emissions (anything which will contribute >1% of the total Carbon emissions).

Other relevant information to the biomass production process not captured anywhere else