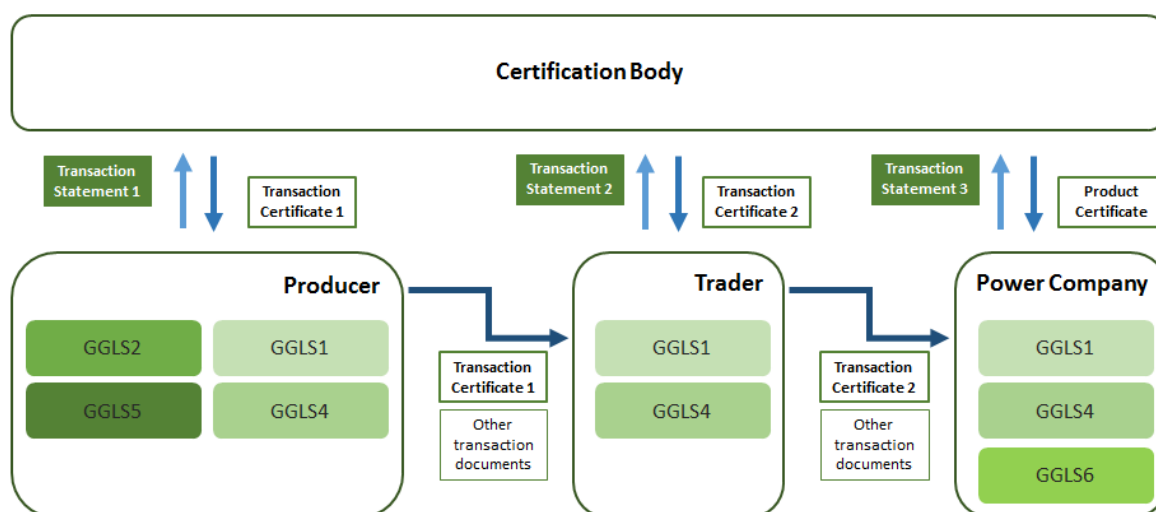## 4b. Transaction Statement guidance

This document is intended to support the correct use of document 4a Transaction Statement. This document focusses on section 1 of the transaction statement which covers the required greenhouse gasses (GHG) information as stipulated in GGLS1 (COC), GGLS4 (transaction and product certificates) and GGL 1a. Instruction document (GHG calculations). No additional requirements are introduced in this document but serves exclusively to ensure that all GGL Participants apply the GHG information in the same way, regardless of origin, product or position in the supply chain.

An essential part of the Green Gold Label certification scheme is the gathering, calculation and communication of GHG data. Each Participant within the GGL scheme is required to apply for a GGL transaction certificate with its Certification Body (CB) for each delivery of GGL certified product in order to ensure the correct application of the above listed standards and documents. The GGL transaction certificate is based on the transaction statement which is submitted to the CB. The transaction statement is checked for correctness by the CB and, if considered complete, issues a GGL transaction certificate. This process is described in GGLS4 with the following flowchart.

Schematic overview of Transaction Certificates and Transaction Statements (source: GGLS4)

The following pages will cover in more detail section 1 from the GGL transaction statement, including examples.

GGL transaction statement version 1-2 section 1

Below the table from the GGL transaction statement can be found. Including an example of GHG data as it would be reported by the GGL Participant. The shown data serves only as an example.

Example 1 (pellet mill)

General information	
Name of product	Wood pellets
Product supplied to	*Biomass trader 1*
Date on consignment	19-10-2018
Date On board on Bill of or transport documents	19-10-2018
Shipment / file number	P103339
Name of ship (if applicable)	Vessel X
Buyer's Reference Number	YVR/IMM001
Gross mass in MT (load port)	10455.32 mt
Net mass in MT (discharge port)	
E-value	918 148 kg CO2-eq ①
Country of origin of biomass	Canada ②

GHG data (figures from Biograce-II)		
CO2-eq Emissions for previous part of the chain:	N/A ③	$g\ CO_2/MJ$ biomass ☐ default value ☐ actual value
CO2-eq Emissions for cultivation (e_{ec}):	1.3 ④	$g\ CO_2/MJ$ biomass ☒ default value ☐ actual value
CO2-eq Emissions for processing (e_p):	2.22 ⑤	$g\ CO_2/MJ$ biomass ☐ default value ☒ actual value
CO2-eq Emissions for transport (e_{td}):	1.51 ⑥	$g\ CO_2/MJ$ biomass ☐ default value ☒ actual value
CO2-eq Emissions for fuel in use (e_u):	N/A ⑦	$g\ CO_2/MJ$ biomass ☐ default value ☐ actual value
Total in g CO2-eq/MJ	**5.03** ⑧	**$g\ CO2\text{-}eq/MJ$** ☐ default value ☐ actual value ☒ combination of disaggregated default values and actual values

The GHG numbers used by the GGL participant on their part of the supply chain can only be the values reviewed during their annual audit (or an additional remote audit), and as reported by the CB auditor. When default values are used they are for the whole chain.

① Total kg CO_2-equavalents for the total shipment at this point of the supply chain.

② The origin of the biomass is reported in this field. In case of multiple countries, state the MT % per country.

③ Since the pellet producer is the first GGL participant in the chain the initial calculation is also done by the pellet producer. This participant calculates the GHG from the Point of origin till the next participant in the chain. There will be no GHG received from the previous GGL participants therefore this field is not applicable (N/A) and should be indicated as such. When GHG are received from the previous GGL participant in the chain default value or actual value should be checked as was stated on the incoming transaction document. If it was a mix of actual and default values both boxes shall be ticked.
<In this example the pellets mill was the first GGL participant in the chain therefore it was set to N/A>

④ The GHG values for emissions from the extraction or cultivation of raw materials should be filled in except in cases where the raw material is for example a residue. Default values may be used when actual values cannot be attained with maximum effort or actual values calculated with the the Biograce II tool as described in instruction doc 1a and reviewed during the company's annual audit. The default value or actual value box shall be ticked accordingly. If this field is not applicable based on the Biograce II calculation (or default values), for example in the case of residues, it shall be noted as N/A (Not Applicable).
<In this example the pellet mill is using trunk wood. Being the first in the GGL certified supply chain he needs to do the calculation for the extraction or cultivation of raw materials. For some reason he was unable to do this calculation for he could not get the proper data with maximum effort (and was demonstrated to the CB). Therefore he was allowed to use the default value for e_{ec} as was verified during the annual audit. Since he is a pellet mill with wood boiler he should use 1.3 g CO_2/MJ biomass as verified>

⑤ Emissions from processing shall be noted as calculated with the the Biograce II tool (see also instruction doc 1a) and as reviewed during the company's annual audit. Default values may only be used when actual values cannot be attained with maximum effort. One of the boxes, default value or actual value, shall be ticked accordingly.
<In this example the pellet mill has done the biograce II calculation that was verified during the annual audit. The (actual) CO_2-eq Emissions for value for processing (e_p) is 2.22 g CO_2/MJ biomass>

⑥ Emissions from transport and distribution shall be recorded as calculated with the Biograce II tool (as described in instruction doc 1a) and as reviewed during the company's annual audit by the applicable CB. Default values may only be used when actual values cannot demonstrably be attained with maximum effort. In this case the most conservative value shall be taken meaning the longest (transport) distance. One of the boxes default value or actual value shall be ticked accordingly.

The total distance for short rotation coppice should be known and be below 10 000 km for that default value to be used since this default value is capped.

<In this example the pellet mill has done the Biograce II calculation for all raw material transport and transport of the pellets till the harbor storage that was verified during annual audit. The (actual) CO2-eq Emissions for value for transport and distribution (e_{td}) is: 2.22 g CO2/MJ biomass>

⑦ Shall not be filled by any other participant than the end user. This is for the final combustion at the end user only. It shall be noted as N/A (Not Applicable) for all other participants.

<in this example the pellet producer is not the end user and notes N/A>

⑧ The total g CO2/MJ biomass ($e_{ec} + e_p + e_{td} + e_u$) noted in the table on the transaction certificate shall be added here as an additional check and for the user to keep track of the current savings.

<In this example total g CO2/MJ biomass up until this part of the chain is 5.03 g CO2/MJ biomass which equals 1.3 + 2.22 + 1.51>

Example 2 (biomass trader)

General information	
Name of product	Wood pellets
Product supplied to	*End user X (power company)*
Date on consignment	03-11-2018
Date On board on Bill of or transport documents	19-10-2018
Shipment / file number	P103339
Name of ship (if applicable)	Vessel X
Buyer's Reference Number	YVR/IMM001
Gross mass in MT (load port)	10455.32 mt
Net mass in MT (discharge port)	10440.79 mt
E-value	1883130 kg CO2-eq ①
Country of origin of biomass	Canada ②

GHG data (figures from Biograce-II)		
CO2-eq Emissions for previous part of the chain:	5.03 ③	$g\ CO_2/MJ$ biomass ☒ default value ☒ actual value
CO2-eq Emissions for cultivation (e_{ec}):	1.3 ④	$g\ CO_2/MJ$ biomass ☒ default value ☐ actual value
CO2-eq Emissions for processing (e_p):	2.22 ⑤	$g\ CO_2/MJ$ biomass ☐ default value ☒ actual value
CO2-eq Emissions for transport (e_{td}):	1.51 **+ 4.89** ⑥	$g\ CO_2/MJ$ biomass ☐ default value ☒ actual value
CO2-eq Emissions for fuel in use (e_u):	N/A ⑦	$g\ CO_2/MJ$ biomass ☐ default value ☐ actual value
Total in g CO2-eq/MJ	**9.92** ⑧	**g CO2-eq/MJ** ☐ default value ☐ actual value ☒ combination of disaggregated default values and actual values

The GHG numbers used by the GGL participant on their part of the supply chain can only be the values reviewed during their annual audit (or an additional remote audit), and reported by the auditor. When default values are used they are for the whole chain.

① Total kg CO2-eqauvalents for the total shipment at this point of the supply chain.

② The origin of the biomass is reported in this field. In case of multiple countries, state the MT % per country.

③ This is the total g CO2/MJ biomass for the previous part of the chain. And can be used as a double check against the received transaction certificate. When a transaction certificate from the previous GGL participant in the chain included default value or actual value, it shall be checked on the incoming transaction document. If it was a mix of actual and default values both boxes shall be ticked.
<In this example the trader received the pellets from the pellet mill and the total in g CO2-eq/MJ GGL as written on the transaction certificate of the pellet mill is noted here: 5.03 g CO2/MJ biomass>

④ Here the GHG value for emissions from the extraction or cultivation of raw materials shall be filled, the same as it was on the received transaction certificate from the previous GGL participant in the chain. One of the boxes default value or actual value shall be ticked accordingly, identical to the received transaction certificate.
<In this example the trader copied the default value for e_{ec} (for trunk wood for a pellet mill with wood boiler) as was written on the transaction certificate from the previous participant: 1.3 g CO2/MJ biomass>

⑤ Here the GHG value for emissions from processing shall be filled, identical to the received transaction certificate from the previous GGL participant in the chain. One of the boxes (default value or actual value) shall be ticked as applicable, identical to the received transaction certificate. Note: When additional processing is done by the participant the verified Biograce II value shall be included next to the figure from the received transaction certificate and the "+" character to identify it as such (not applicable in this example).
<In this example the pellet trader copied the value for processing (e_p) as it was included on the transaction certificate from the previous participant: 1.51 g CO2/MJ biomass>

⑥ Here the GHG value for emissions from transport and distribution shall be added. The first number shall be identical as it was on the received transaction certificate from the previous GGL participant in the chain. The participant then adds the emissions from transport and distribution as calculated with the the Biograce II tool (as described in instruction doc 1a) and as reviewed during the company's annual CB audit for their own portion of the supply chain next to it. The two figures shall be separated by the "+"character. Default values may only be used when actual values cannot be attained with maximum effort, in that case the most conservative value shall be taken meaning the longest distance. If the transaction certificate from the previous participant came with the default value for the whole transport chain this figure shall be copied without adding any GHG value to it, since it is already included in the default value. One of the boxes (default value or actual value) shall be ticked as applicable. The total distance for short rotation coppice should be

known and be below 10 000 km for that default value to be used since this default value is capped.

<In this example the trader first copied the value for transport and distribution (e_{td}) for the previous part of the of the chain as was written on the transaction certificate from the previous participant: 1.51 g CO2/MJ biomass, but the trader also transported the material across the ocean, therefore he notes "+ 4.89" g CO2/MJ biomass which is the actual value calculated with Biograce II to transport the pellets from the harbor storage to the ARAG-range (Amsterdam, Rotterdam, Antwerpen and Gent harbors)>

⑦ This field shall not be filled by any other participant than the end user. This is for the final combustion at the end user only. It shall be noted as N/A (Not Applicable) for all other participants.

<In this example the pellet trader is not the end user and notes N/A>

⑧ The total g CO2/MJ biomass (e_{ec} + e_p + e_{td} + e_u) noted in the table on the transaction certificate shall be added here as an additional check and for the user to keep track of the current savings. The number of the previous part of the chain and the GHG figures added by the participant shall be the same as the total g CO2/MJ biomass noted here.

<In this example total g CO2/MJ biomass up until this part of the chain is 9.92 g CO2/MJ biomass which equals 1.3 + 2.22 + 1.51 + 4.89 or 5.03 + 4.89>