

**Green Gold Label
Guidance B.0.ii
FIT/FIP Transaction certificate
template**

For GGL Transaction certificates that comply with
Japanese FIT/FIP Regulations



Guidance B.0.i FIT/FIP Transaction certificate template

Version 1-1

Valid from 2 March 2026 (Adoption date)

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Document navigation

This document is part of the GGL Module for FIT/FIP. It concerns the template for Transaction certificates for all transactions between GGL Participants in GGL supply chains for FIT/FIP.

The Overall documents comprise the GGL Setup and Governance, GGL Standards and GGL Operating documents. Additionally, the GGL scheme offers Instructions and Guidances for specific regulatory frameworks (RED, FIT/FIP, SDE+/++), which can supersede clauses in the Overall documents. This applies only when explicitly stated in the relevant Instructions and Guidances.

Refer to the **GGL Document Structure** (as part of the GGL Setup and Governance documents) for more detailed information on navigating and interpreting GGL documentation.

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Changes and transitioning

This is the version v1-1 of the Guidance document and builds on Annex A from **GGLS4 – Transaction and Product Certificate Version v2-2 (March 2017)**.

In transitioning to this current version of this document, the following applies to Certification bodies, Participants and Certificates:

Publication date	7 November 2025
Adoption date	2 March 2026
Effective date	1 March 2027
Transition period	1 March 2028



Glossary

Term	Definition
Actual value	Actual value refers to the greenhouse gas emissions savings achieved during some or all stages of a specific biofuel, bioliquid, or biomass fuel production process. These savings are calculated according to the methodology outlined in the applicable GGL Module.
Adoption date	New (versions of) GGL documents include an Adoption date in the transitioning section. This date indicates when certification against the GGL Scheme and the specific document becomes possible. Certifications based on previous versions will remain valid until the Effective date of the new document.
Audit	Formal examination and inspection by a GGL-approved Certification Body of an organization's processes and activities to verify compliance in accordance with ISO-19011. In contrast, an audit differs from an internal audit.
Biomass producer	The first participant in the GGL supply chain for woody and agricultural biomass (covering GGL categories 1, 2, 3, and 4) is known as a Biomass Producer. This entity produces raw materials through harvesting or farming activities and is responsible for delivering Raw Materials Statements. Biomass Producers are similar to First Collectors in that they represent the initial participants in the GGL supply chain.
Biomass	Biomass refers to the biodegradable portion of products, waste, and residues derived from biological sources in agriculture, which includes both plant and animal materials. It also encompasses materials from forestry and related industries, such as fisheries and aquaculture. Additionally, biomass includes the biodegradable fraction of waste, including industrial and municipal waste of biological origin.
Certification Body / CB	An independent third party evaluates and certifies the certification process. Certification bodies approved by GGL for one or more GGL scopes are listed on the GGL website.
Default value	Greenhouse gas emission value attached to a batch of biomass material, listed as "default value" in the applicable GGL Module, and that may, in circumstances specified in that GGL Module, be used in place of an actual value.
Disaggregated default value	Greenhouse gas emission value for a part of a supply chain, listed as "disaggregated default value" in the applicable GGL Module. It may, in circumstances specified in that GGL Module, be used in calculating the total product greenhouse gas emission of the final product.
Effective date	New (versions of) GGL documents specify an Effective Date. This is the date after which certification can only be granted according to the GGL Scheme and the specific document that has the Effective Date. Certification based on previous versions of the document is no longer considered valid.
Eligible fuel	Any biomass fuel that listed in the relevant GGL Module and eligible for GGL certification.
FMU / Forest Management Unit	A well-defined land area that is predominantly (>50%) forested, incorporating planned human intervention within a forest ecosystem to meet specific goals and objectives.



Term	Definition
Foundation / GGL Foundation	The Green Gold Label Foundation owns the Green Gold Label (GGL) scheme, including all technical documents, promotional materials, logos, websites, and other intellectual properties related to GGL.
GGL Categories	Biomass is classified into one of five categories recognized by GGL: 1) Woody biomass from large FMU's (> 500 hectares) 2) Woody biomass from small FMU's (< 500 hectares) 3) Residues from natural site and landscape management 4) Agricultural biomass 5) Biogenic residues and waste
GGL Module	These Instructions and Guidance documents outline how GGL has been approved and recognized as a Certification scheme under various legal and voluntary frameworks (e.g., Renewable Energy Directive (RED) in Europe and FIT/FIP in Japan).
GGL Scope	Each GGL Participant and each Certification Body (CB) is restricted to performing activities under the GGL Scheme based on the specific GGL Scope for which they are recognized. GGL Biomass has a specific GGL Scope. The GGL Scope is a combination of (a) applicable regulatory GGL Modules and (b) the GGL Categories of biomass. Detailed definitions of GGL Scopes can be found in the GGL Scope definitions document.
GGL-Certified	Biomass that has been certified against all applicable GGL criteria, or against a certification scheme other than GGL, which has been endorsed and approved by the relevant authorities (e.g., EU for RED, METI for FIT/FIP) and holds equivalent status. GGL-Certified biomass meets all criteria for sustainability and legality.
GGL-Controlled	Woody biomass that has been certified against some of the applicable GGL criteria, or against a certification scheme other than GGL that has been endorsed and approved by the relevant authorities (e.g., the EU for RED or METI for FIT/FIP) holding equivalent status. GGL-Controlled biomass can only come from GGL categories 1, 2, or 3 for woody biomass and must meet specific key sustainability criteria. Therefore, the sustainability of GGL-Controlled woody biomass is certified to a lesser extent than that of GGL-Certified woody biomass.
GGLedger	GGL provides an IT platform designed to serve as a current and secure register for all types of Data, including both confidential and public information. Certification bodies (CBs) are responsible for ensuring that all data within GGLedger is accurate, up-to-date, and secure.
GHG (Greenhouse Gas) Emissions	Greenhouse gases are a group of gases that contribute to global warming and climate change. According to the Kyoto Protocol, they include seven gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, and nitrogen trifluoride. Converting them to carbon dioxide equivalents (CO ₂ eq) makes it possible to compare them and to determine their individual and total contributions to global warming.
Ligno-cellulosic material	Material composed of lignin, cellulose and hemicellulose, such as biomass sourced from forests, woody energy crops and residues and wastes from forest-based industries.

Term	Definition
Non-food cellulosic material	Material mainly composed of cellulose and hemicellulose, with a lower lignin content than ligno-cellulosic material, including food and feed crop residues such as straw, stover, husks and shells; grassy energy crops with a low starch content, such as ryegrass, switchgrass, miscanthus and giant cane; cover crops before and after main crops; ley crops; industrial residues, including those from food and feed crops after the extraction of vegetable oils, sugars, starches and protein; and, material from biogenic waste, where ley and cover crops are understood to be temporary, short-term sown pastures comprising grass-legume mixtures with a low starch content to obtain fodder for livestock and improve soil fertility to obtain higher yields of arable main crops.
Participant / GGL Participant	An economic operator that has been certified under the GGL Regulation Section G, or under another certification scheme endorsed and approved by the relevant authorities (e.g., EU for RED or METI for FIT/FIP), holds equivalent status. This includes forest and agricultural biomass producers, waste and residue producers, first gathering points, collectors, suppliers, traders, processing plants, and conversion plants (end-users).
PC / Product certificate	A certified statement confirming the final conversion of GGL Biomass by GGL Participants that meets the requirements of GGLS4 - Transaction and product certificate .
Point of origin	The location where the raw material directly originates, before its classification as GGL Biomass.
Processing	Conducting processes that alter the physical or chemical properties of biomass. For example, chipping, drying, and pelletization change the density or heating value, whereas digestion and pyrolysis modify its chemical characteristics.
Producer	Producer of raw material at a Point of origin for a First Collector or Biomass Producer, who may or may not be certified as a GGL Participant.
Publication date	New (versions of) GGL documents include their Publication date, which indicates when that version is published. Certification against a new version cannot occur until after its Adoption date.
Raw material	The batch of biomass from a single Point of origin before it is classified as GGL Biomass, for which a single Raw Material Statement is verified and that falls within a single GGL Category of biomass.
Residue	A substance that is not the primary, co- or by-product of a production process. It is not a primary goal of that process, and the process has not been intentionally adjusted to create it.
Site	Site refers to a specific geographical location, including logistical facilities and transmission or distribution infrastructures, characterized by defined boundaries within which products can be mixed.
Solid	Material that does not flow noticeably under moderate stress, differing from liquid or gaseous states.
Supplier	Supplier of raw material from a Point of origin to a First Collector or Biomass Producer. A supplier may or may not be certified as a GGL Participant.



Term	Definition
TC / Transaction certificate	A certified statement of a transaction between GGL Participants that meets requirements of GGLS4 - Transaction and product certificate .
Transition period	The new versions of the GGL documents specify the end of a Transition Period. This is the time until which (re-)certification decisions made before the Effective Date (based on the previous version of the document) remain valid. During the Transition Period, audits conducted by a Certification Body must be based solely on the valid (new) version of the GGL Scheme documents.
USI number	The unique identification number for GGL participants, Certification Bodies (CBs), and Users in GGLedger (consisting of 19 digits) is comparable to a certificate number.
Waste	Any substance or object that the holder discards, intends to discard, or is required to discard. It is not classified as a co- or by-product and does not include substances that have been intentionally altered or contaminated to fit this definition.



Transaction certificate template

The GGL Participant submits sections 1 and 2 of this statement to the applicable Certification Body. Section 3 is signed by the Certification Body to issue a Transaction certificate on behalf of GGL Foundation, once compliance with the applicable GGL Standards is confirmed and verified.

Section 1. General and GHG data

General information	
Name of product	
Previous TCs	<i>[provide unique codes of previous TCs]</i>
Plantation, farm, supplier/producer of raw material, or mill of origin (voluntary-based field)	<i>[provide name of the Biomass producer or supplier to the First Collector]</i>
Product supplied from	<i>[name of company selling product]</i>
Product supplied to	<i>[name of company purchasing product]</i>
GGL Scope	
Date on consignment	
Date onboard on Bill of Lading or transport documents	
Shipment/file number	
Name of ship (if applicable)	
Buyer's Reference Number	
Amount of biomass transacted in MT	<i>(Please use commas to indicate the tonnes of biomass: e.g. XXX,XXX)</i>
Amounts of biomass lost/gained since prior transaction or origination in MT	<i>(Split total difference in moisture changes, handling losses, processing losses and/or other losses/gains)</i>
Country of origin of biomass ¹	
GHG data (CO ₂ -equivalent, all in g CO ₂ eq/MJ biomass emitted per process step ²)	
Emissions for the previous part of the chain:	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions from soil carbon accumulation and land-use change (e _{stock}):	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for cultivation (e _{ec}):	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for processing (e _p):	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for transport (e _{td}):	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for fuel in use (e _u):	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emission savings from CO ₂ capture and sequestration (e _{ccs})	Actual value only
Emission savings from CO ₂ capture and alternative use (e _{ccr})	Actual value only
Total in g CO₂eq/MJ	<input type="checkbox"/> default value <input type="checkbox"/> actual value <input type="checkbox"/> combination of disaggregated default values and actual values

¹ When multiple countries, please state the MT % per country

² Please note specific instructions apply per **Instruction B.3 – FIT/FIP GHG Emissions**. In addition, specific requirements are in place for the use of default or actual values as per the same instruction.

Section 2. Biomass categories information

Biomass Category	% MT per category		% Originate from Endorsed schemes	GGLS1 – Chain of Custody and GGLS4 – Transaction and Product certificate certified	GGLS2 – Agricultural source criteria certified	GGLS5 – Forest management criteria certified	Japan FIT/FIP biomass category (from GGL Instruction B.0 – FIT/FIP Module section B.1 or C.1)
1. Woody biomass from large FMUs (>500ha)	GGL-Certified			<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	
	GGL-Controlled			<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	
2. Woody biomass from small FMUs (<500ha)	GGL-Certified			<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	
	GGL-Controlled			<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	
3. Residual biomass from natural site or landscape management	GGL-Controlled			<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	
4. Agricultural biomass	GGL-Certified			<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	
5. Biogenic residues and waste	GGL-Certified			<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no	



Section 3. To be filled out by the Certification Body (CB)

Unique CB Code:	
GGL Scope:	
Description of verification activities	
<i>Include CB certification and verification activities relevant to this statement.</i>	
Nonconformities:	
<i>Include NC's relevant to this statement that were identified, including the category of NC.</i>	
Statement	
The Certification Body has reviewed the documents and information submitted by the GGL Participant relevant to this statement. It has issued a Transaction Certificate in accordance with the GGLS4 Transaction and Product Certificate requirements. This statement is only valid when signed by a GGL-approved Certification Body, and for the applicable GGL Scope.	
(CB name, surname & signature + stamp)	
Date of issue:	<i>dd-mm-yyyy</i>

A. Transaction Certificate Guidance

A.1

This chapter is intended to support the correct use of Section 1 (General and GHG data) of this Guidance, which covers **GGLS1 – Chain of custody criteria**, **GGLS4 – Transaction and product certificate**, and the required greenhouse gases (GHG) information as stipulated in **GGL Instruction B.2 – FIT/FIP GHG Emissions**.

A.2

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 or GGL-Controlled product to ensure the correct application of all GGL Standards and documents.

A.3

The GGL Transaction Certificate is based on the transaction statement submitted to the Certification body. The Transaction statement is checked for correctness and certified by the CB. If considered complete, the CB issues a GGL Transaction Certificate on behalf of the GGL Foundation.

A.4

Illustration i details how transaction certificates and transaction statements warrant compliance across GGL supply chains and is derived from **GGLS1 – Chain of custody criteria**.

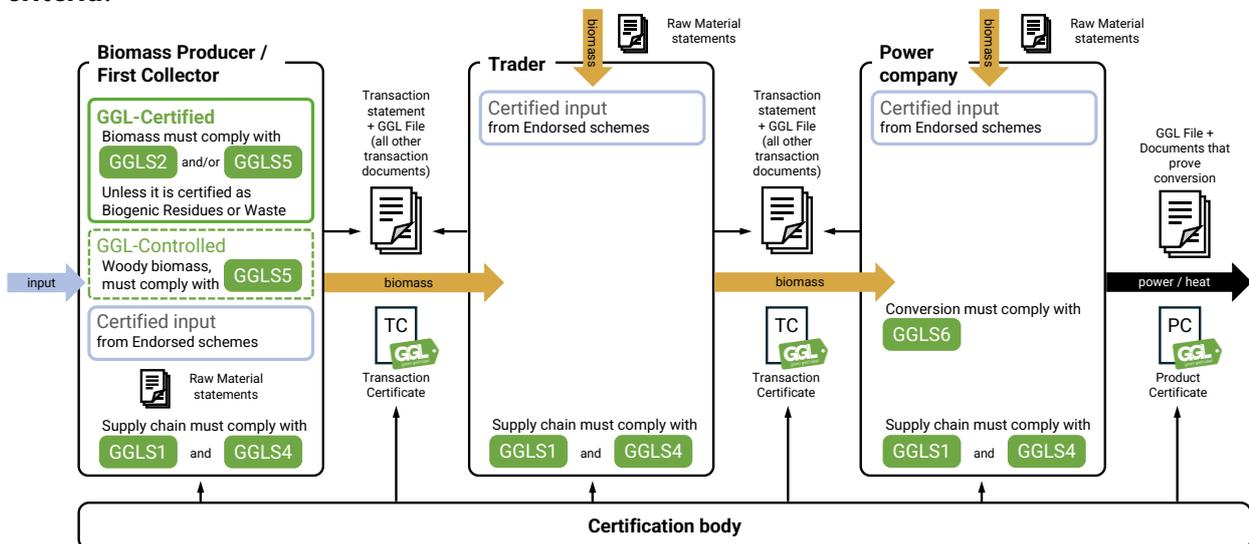


Illustration i - Schematic overview of transaction certificates and transaction statements

A.5

An essential part of the GGL Scheme is the gathering, calculation and communication of GHG data. The following Annex A provides general guidance on the Transaction Certificate, illustrated by the fictional Examples 1 and 2 to show how the GGL Participant should complete the general and GHG data.



Annex A. Guidance on the Transaction statement

This Annex provides guidance and background information on the GHG data included in the transaction statement that the Participant submits to its Certification Body.

General information	
Name of product	{provide unique name of the transacted product}
Previous TCs	{provide unique codes of previous TC issued}
Plantation, farm, supplier/producer of raw material, or mill of origin (voluntary-based field)	{provide name of the supplier from which the material originated}
Product supplied from	{name of Participant selling product}
Product supplied to	{name of Participant purchasing product}
GGL Scope	{List the GGL Scope(s) against which the biomass is certified}
Date on consignment	
Date onboard on Bill of Lading or transport documents	
Shipment/file number	
Name of ship (if applicable)	
Buyer's Reference Number	
Amount of biomass transacted in MT	
Amounts of biomass lost/gained since prior transaction in MT	
Country of origin of biomass	(1)

GHG data (CO ₂ -equivalent, all in g CO ₂ eq/MJ biomass)		
Emissions for previous part of the chain:	(2)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions from soil carbon accumulation and land-use change (e _{stock}):	(3)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for cultivation (e _{ec}):	(4)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for processing (e _p):	(5)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for transport (e _{td}):	(6)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for fuel in use (e _u):	(7)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emission savings from CO ₂ capture and storage (e _{ccs})	(8)	Actual value only
Emission savings from CO ₂ capture and replacement (e _{ccr})	(9)	Actual value only
Total in g CO₂eq/MJ	(10)	<input type="checkbox"/> default value <input type="checkbox"/> actual value <input type="checkbox"/> 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 auditor of the Certification Body (CB). When default values are used, they apply to the whole chain.

- (1) The countries of Point of origin of the biomass are reported in this field. If the biomass originates in multiple countries, the share of the total biomass (in %) shall be stated for each country.
- (2) This concerns the total g CO₂/MJ biomass for the previous part of the supply chain. It can be used as a double check against the received Transaction certificate. When a GHG value is received from a previous GGL Participant in the chain, the total GHG value stated on the incoming transaction certificate shall be recorded in the second column. In the third column, the applicable box shall be ticked to indicate whether the previous GGL Participant used a default value, an actual value, or a combination of actual and disaggregated default values, as indicated on the incoming Transaction certificate.
If the GGL Participant is the first GGL Participant in the chain, this second column shall be marked as not applicable (N/A) and in the third column, none of the boxes shall be ticked.
- (3) The biomass originates from a primary crop in GGL Category 1. Therefore, potential land-use change emissions and savings from soil carbon accumulation (*e_{stock}*) must be considered.
- (4) The GHG values for emissions from the extraction or cultivation of raw materials shall be filled in, except in cases where the raw material is a residue. Default values may be used when actual values cannot be attained with maximum effort. In the third column, one of the boxes “default value” or “actual value” shall be ticked according to which of these was used. If the raw material is a residue, these emissions are not applicable and shall be noted as such (N/A).
- (5) Emissions from processing shall be noted here. The values must correspond to those reviewed during the company’s annual audit. Default values may only be used when actual values cannot be attained with maximum effort. In the third column, one of the boxes “default value” or “actual value” shall be ticked according to which of these was used.
- (6) Emissions from transport and distribution shall be calculated as a function of the transport mode and distance travelled. The calculation shall be performed with impact factors in line with the JRC Guidance (Solid and gaseous bioenergy pathways: input values and GHG emissions, Version 2, 2017), and as reviewed during the company’s annual audit by the applicable CB. A default value may only be used when an actual value 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 according to which of these was used.
When transporting short-rotation coppice, the operator can only use a disaggregated default value for GHG emissions from that transport if the total distance travelled is known and is below 10,000 km, since no default value is available for transport distances above 10,000 km.
- (7) The Emissions for fuel in use shall be entered only by the end user. Any GGL Participant, other than the end user, shall note this as N/A (Not Applicable).



- (8) Emission savings from carbon capture and storage e_{CCS} are nil in this case.
- (9) Emission savings from carbon capture and replacement e_{CCR} are nil in this case.
- (10) The total emission value shall be noted here in g CO₂eq/MJ. This value is the sum of all previous values except for the 'emissions for previous parts of the chain', i.e. the value follows from $e_{stock} + e_{ec} + e_p + e_{td} + e_u - e_{CCS} - e_{CCR}$.



Example 1 – Biomass producer

General information	
Name of product	Wood pellets
Previous TCs	{provide unique codes of previous TC issued}
Plantation, farm, supplier/producer of raw material, or mill of origin (voluntary-based field)	{provide name of the biomass producer}
Product supplied from	{name of company selling product}
Product supplied to	{name of company purchasing product}
GGL Scope	FIT/FIP – GGL Category 1
Date on consignment	19-10-2018
Date onboard on Bill of Lading or transport documents	19-10-2018
Shipment/file number	P103339
Name of ship (if applicable)	Vessel X
Buyer's Reference Number	YVR/IMM001
Amount of biomass transacted in MT	10,455.32 MT
Amounts of biomass lost/gained since prior transaction or origination in MT	Moisture change: -0.52 MT Handling losses: -0.60 MT
Country of origin of biomass	Canada (1)

GHG data (CO₂-equivalent, all in g CO₂eq/MJ biomass)		
Emissions for previous part of the chain:	N/A (2)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions from soil carbon accumulation and land-use change (e _{stock}):	0 (3)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for cultivation (e _{ec}):	1.3 (4)	<input checked="" type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for processing (e _p):	2.22 (5)	<input type="checkbox"/> default value <input checked="" type="checkbox"/> actual value
Emissions for transport (e _{td}):	1.51 (6)	<input type="checkbox"/> default value <input checked="" type="checkbox"/> actual value
Emissions for fuel in use (e _u):	N/A (7)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emission savings from CO ₂ capture and storage (e _{ccs})	N/A (8)	Actual value only
Emission savings from CO ₂ capture and replacement (e _{ccr})	N/A (9)	Actual value only
Total in g CO₂eq/MJ	5.03 (10)	<input type="checkbox"/> default value <input type="checkbox"/> actual value <input checked="" type="checkbox"/> combination of disaggregated default values and actual values



- (1) In this example, the biomass originates from Canada, so this is indicated in the table.
- (2) Since the pellet producer is the first GGL Participant in the chain, the initial calculation shall be done by this pellet producer. This Participant calculates the GHG emissions for the supply chain segment from the Point of Origin until the next Participant in the supply chain. Since there is no GGL Participant upstream in the supply chain, the field “Emissions from previous part of the chain” shall be marked as not applicable (N/A).
- (3) The biomass originates from a primary crop in GGL Category 1. Therefore, potential land-use change emissions and savings from soil carbon accumulation (e_{stock}) must be considered. However, in this case, it was evidenced that the biomass is sourced from a field or forest that previously (before 2008) had no other land use. Therefore, e_{stock} is zero.
- (4) In this example, the pellet mill is using woody biomass derived from final felling at an age of less than 20 years (GGL Category 1). As the first in the GGL-certified supply chain, the pellet mill operator needs to perform calculations for the extraction or cultivation of raw materials. For some reason, they were unable to perform this calculation and demonstrated to the CB that they could not obtain the proper data despite maximum effort. Therefore, the GGL Participant was allowed to use the default value for e_{ec} as was verified during the annual audit. As a pellet mill with a wood boiler, they should use 1.3 g CO₂eq/MJ biomass as verified.
- (5) In this example, the pellet mill operator has calculated an actual value that was verified during the annual audit. The (actual) CO₂eq value for Emissions from processing (e_p) is 2.22 g CO₂eq/MJ biomass.
- (6) In this example, the pellet mill operator has calculated the actual values for all raw material transport and pellet transport to the harbour storage, which were verified during the annual audit. The (actual) CO₂eq value for Emissions from transport and distribution (e_{td}) is 1.51 g CO₂eq/MJ biomass.
- (7) In this example, the pellet producer is not the end user, and the note is N/A.
- (8) Emission savings from carbon capture and storage e_{ccs} shall be reported by Biomass producers when verified.
- (9) Emission savings from carbon capture and replacement e_{ccr} shall be reported by Biomass producers when verified.
- (10) In this example, the Total Emissions value (in g CO₂eq/MJ biomass) up to this point in the chain is 5.03 g CO₂eq/MJ biomass, which follows from the sum 1.3 + 2.22 + 1.51.



Example 2 - Trader

General information	
Name of product	Wood pellets
Previous TCs	{provide unique codes of previous TC issued}
Mill of origin (Voluntary-based field)	{provide name of the biomass producer}
Product supplied from	{name of company selling product}
Product supplied to	{name of company purchasing product}
GGL Scope	FIT/FIP – GGL Category 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)	Moisture change: -0.52 MT Handling losses: -0.60 MT
Country of origin of biomass	Canada (1)

GHG data (CO₂-equivalent, all in g CO₂eq/MJ biomass)		
Emissions for previous part of the chain:	5.03 (2)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions from soil carbon accumulation and land-use change (e _l):	0 (3)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for cultivation (e _{ec}):	1.3 (4)	<input checked="" type="checkbox"/> default value <input type="checkbox"/> actual value
Emissions for processing (e _p):	2.22 (5)	<input type="checkbox"/> default value <input checked="" type="checkbox"/> actual value
Emissions for transport (e _{td}):	1.51 + 4.89 (6)	<input type="checkbox"/> default value <input checked="" type="checkbox"/> actual value
Emissions for fuel in use (e _u):	N/A (7)	<input type="checkbox"/> default value <input type="checkbox"/> actual value
Emission savings from CO ₂ capture and sequestration (e _{ccs})	N/A (8)	Actual value only
Emission savings from CO ₂ capture and alternative use (e _{ccr})	N/A (9)	Actual value only
Total in g CO₂eq/MJ	9.92 (10)	<input type="checkbox"/> default value <input type="checkbox"/> actual value <input checked="" type="checkbox"/> combination of disaggregated default values and actual values



- (1) In this example, the biomass originates from Canada, as indicated in the table.
- (2) In this example, the GGL Participant received the pellets from a previous GGL Participant (the pellet mill operator). Therefore, the GGL Participant records the Total Emissions value in g CO₂-eq/MJ, as stated on the pellet mill operator's transaction certificate, which equals 5.03 g CO₂/MJ biomass. The Total Emissions are therefore a mix of default and actual emission values.
- (3) The biomass originates from a primary crop in GGL Category 1. Therefore, potential land-use change emissions and savings from soil carbon accumulation (e_{stock}) must be considered. However, in this case, it was evidenced that the biomass is sourced from a field or forest that previously (before 2008) had no other land use. Therefore, e_{stock} remains zero.
- (4) In this example, the trader copies the default value for e_{ec} (for trunk wood for a pellet mill with a wood boiler) from the Transaction certificate of the previous Participant: 1.3 g CO_{2eq}/MJ biomass.
- (5) In this example, the pellet trader copied the processing value (e_p) from the Transaction certificate issued by the previous Participant: 2.22 g CO_{2eq}/MJ biomass.
- (6) In this example the trader first copies 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 CO_{2eq}/MJ biomass, but the trader also transported the material across the ocean, therefore they also note "+ 4.89" g CO_{2eq}/MJ biomass which is the actual value calculated for the transport of the pellets from the harbor storage to the ARAG- range (Amsterdam, Rotterdam, Antwerpen and Gent harbors).
- (7) In this example, the pellet trader is not the end user and is noted as N/A.
- (8) Emission savings from carbon capture and storage e_{ccs} are not applicable for Traders.
- (9) Emission savings from carbon capture and replacement e_{ccr} do not apply to Traders.
- (10) In this example, the Total Emissions value up to this point in the chain is 9.92 g CO_{2eq}/MJ biomass, which equals 1.3 + 2.22 + 1.51 + 4.89. This also equals the Emissions value from previous parts of the chain plus the Emissions from transport and distribution that occurred in this part of the chain (9.92 = 5.03 + 4.89).