



# Green Gold Label Program

## Introduction & scope

Green Gold Label biomass are (residual) products of agricultural or forestry origin and related industries that are compliant with the relevant national requirements for sustainable biomass in the Netherlands.

The geographical scope is global and covers the whole supply chain from biomass production until the final user of the biomass. GGL biomass consists of organic material from responsibly managed forestry, agricultural production and plantations in accordance with the Green Gold Label standards (GGLS). The GGL standards cover all transactions of products produced, processed and sourced in order to demonstrate the responsible origin of the materials by GGL participants.

The GGLS1 standard is intended for participants of the GGL chain of custody (COC). Generally the biomass producer is the first step in the GGL chain of custody. Participants trade and/or produce the material sold as GGL certified (biomass). In case the participant is partly or completely outsourcing the production of the GGL products and (raw) materials, the involved production units must comply with the GGLS1 standard as well. This standard applies to each individual participant.

In order to meet all requirements of the GGLS1 standard, the participant shall also comply in full with GGL 1a. instruction document (GHG). In order to sell (claim) GGL certified material a participant must meet all relevant requirements from GGLS4 (Transaction and Product Certificate).

Principle 6 does not apply to GGL participants that only trade (without processing) in GGL certified materials/biomass.

All GGL standards and supporting documents are considered normative unless stated otherwise.

## Glossary

See GGL Glossary

## Principles

Principle 1      Quality management system

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| Criteria | <ol style="list-style-type: none"><li>1.1 A quality management system shall be available and documented and ensure that the quantity of biomass material included in the GGL product groups is measured and recorded.</li><li>1.2 The quality management system shall contain documented procedures and methods covering all relevant aspects of the GGL standards within the scope of the participants GGL certificate.</li><li>1.3 In order to enable adequate tracking and tracing of the inputs and outputs, the participant shall describe the main processing steps in appropriate detail considering the processes, the information flow and the physical biomass movement within the organisation. Procedures and instructions shall be available for the monitoring of critical control points.</li><li>1.4 All process documentation and procedures shall be kept up-to-date.</li><li>1.5 The participant shall demonstrate its commitment to occupational health and safety.</li><li>1.6 Health and safety procedures shall be documented, maintained and implemented. Personnel shall be trained and appropriate safety measures taken.</li><li>1.7 An internal audit shall be carried out at least annually, covering all applicable requirements from this standard and be carried out by personnel who are independent from those directly responsible for the activity on which the audit is to be carried out, and may be performed by subcontractors</li></ol> |
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- 1.8 The results of the internal audit shall be recorded and brought to the attention of personnel who are responsible for the area in which the audit is carried out. With regard to any shortcomings observed during the audit, corrective measures must be taken promptly. The implementation and effectiveness of the measures taken shall be verified and recorded;
- 1.9 Documented quality management system procedures shall include:
  - a) storage, transportation and handling of raw materials and final (biomass) products;
  - b) receipt of incoming raw materials including biomass;
  - c) definition of GGL product groups
  - d) registration of quality and quantity of GGL certified and GGL controlled biomass and raw materials;
  - e) utilising biomass or fuels for production of energy/heat;
  - f) safety procedures;
  - g) mass balance and traceability;
  - h) credit system
  - i) records and registrations;
  - j) purchase of biomass/materials;
  - k) registration and documentation of evidence and figures used in the GHG calculations and data gathering;
  - l) Rightful GGL claims;
  - m) Outsourcing/sub-contracting;
  - n) planning and carrying out internal audits.
- 1.10 If applicable, agreements with service providers relating to compliance with the GGL criteria must be in place.
- 1.11 A procedure to establish, document and implement corrective and preventive measures shall be maintained in order to avoid reoccurrence of identified non-conformities and short comings. Changes that arise from the corrective and preventive measures must be implemented and recorded.
- 1.12 Any changes in the GGL standards, Principles and Criteria shall be included in the participants (quality) management system.
- 1.13 In case any incorrect claims, labels, logos (seen appendix A) or statements have been issued by the participant the following procedure shall be followed:
  - a) Inform any involved parties of the identified non-conformity, including clients and the Certification Body within 5 working days;
  - b) The root-cause shall be analysed ensuring sufficient follow-up to avoid reoccurrence;
  - c) Cooperate with the Certification Body to resolve the identified non-conformity.
- 1.14 Participants shall meet all applicable legal requirements including those of the EUTR and the Lacey Act.  
*Note: the EU Timber Regulation places requirements on companies that place timber and timber products (including biomass) on the EU market. The due diligence system must include procedures, access to information, risk assessment and risk mitigation in order to meet all requirements. More information can be found here:*  
[http://ec.europa.eu/environment/forests/timber\\_regulation.htm](http://ec.europa.eu/environment/forests/timber_regulation.htm)
- 1.15 Participants shall provide access to relevant information to buyers if they are required to meet legal requirements.

**Principle 2 Authorisations and responsibilities**

- Criteria**
- 2.1 The responsibilities, authorisations and qualifications of all personnel who manage and carry out work related to the GGL standard requirements shall be recorded in writing. The participant shall record the responsibility structure in an organisation chart. This also applies to temporary personnel.
  - 2.2 The participant shall establish, implement and maintain procedures and/or work instructions covering all applicable requirements of this standard, according to its scale and complexity.

- 2.3 Appropriate records shall be maintained of the experience, expertise and (required) training of the employees concerned.
- 2.4 A document-management procedure must be in place to identify the applicable revision status of documents to prevent the use of invalid and/or obsolete documents. A reference list or similar [document] may be used. A system must be available for updating and managing documents.
- 2.5 Management shall appoint a (management) representative who, irrespective of other responsibilities, shall have a clearly defined authority:
  - a) to ensure that the quality management system, complying to the requirements of this standard is implemented and maintained, and;
  - b) to report to management on the results of the quality management system, in order to result in improvements of this system.
- 2.6 Top level management shall define and document its commitment to complying with the GGL requirements. This will include (reference to) the following:
  - a) Ensure that all relevant staff demonstrates awareness of the participants procedures and competence in implementing the GGL requirements;
  - b) Management review;
  - c) Availability of necessary resources;
  - d) Internal audits.
- 2.7 A publicly available statement on its commitment shall be available.

**Principle 3** Provisions relating to transport

- Criteria**
- 3.1 Material entering the GGL system (i.e. raw, half-finished and finished materials and products) may only be transported in a manner that prevents substitution or mixing of the contents.
  - 3.2 Material transported between GGL participants (i.e. products with a GGL claim) shall be:
    - a) transported in a manner that prevents substitution of contents with different characteristics (e.g. different biomass types).
    - b) accompanied with all relevant documents for the (GGL) chain of custody (e.g. transport documents of the actual shipment, Raw Material Statement, Transaction Certificate), proof of cleanliness for the means of transport and documents and information ensuring legal compliance in both the country of origin and its destination (e.g. EUTR, Lacey Act) (see 1.14).
  - 3.3 Transport documents must be available for every transport that takes place in the chain from the supplier of the raw material until the final user. The transport documents shall state:
    - a) The name and address of the participant and the sender or receiver
    - b) The name and quantity/volume of the shipped product
    - c) The date of the shipment
  - 3.4 Proof of cleanliness shall be laid down, for example with a certificate of cleanliness, for every cargo hold that is designated to contain GGL certificated material, such as (but not restricted to):
    - trucks
    - rail wagons
    - inland waterway barges
    - sea going vessels
    - containers
    - land based storage facilities

When dedicated transport is used, a written declaration from the transport company is sufficient. The declaration shall state that the trucks and vessels are used for the transport of material from organic origin only. The trucks must to be checked randomly. Reports of the checks have to be available upon request.
  - 3.5 If applicable, proof of legal compliance (e.g. Lacey Act, EUTR) shall be maintained for each transported GGL certified material.

- 3.6 A Transaction Certificate is issued by an approved Certification Body for every transaction between GGLS1 (producer/trader) or GGLS6 (power company) certified parties on GGL claimed material.

Principle 4 Control of incoming products.

- Criteria 4.1 Upon receipt of GGL claimed products or GGL claimed raw materials the participant shall check:
- a) the accompanying documents (e.g. invoices and delivery documents)
  - b) If applicable the formal GGL claims
  - c) whether the particulars referred to in principle 3 have been provided
  - d) general condition of the product
  - e) quantity of the material
  - f) contamination with GGL prohibited materials
- If this inspection raises doubts whether the product involved complies with the above then it must be segregated and not further processed. The product may not be sold or processed as GGL certified until conformity has been proven. Records of the above shall be maintained.
- 4.2 If materials are covered by a GGL endorsed scheme or supplied by a GGL certified supplier the following information shall be checked and recorded:
- a) The name and address of the participant
  - b) The certificate number and GGL endorsed scheme name
  - c) Validity and scope of suppliers certificate
  - d) If applicable any checks of online databases regarding the suppliers certificate.
- 4.3 All incoming materials covered by the participants GGL system shall comply with, and registered as, the following two formal GGL claims:
- GGL-Certified
  - GGL-Controlled
- 4.4 GGL-Certified input is material:
- Sourced under a GGL endorsed scheme and corresponding claim(s). See document GGL 1c. Endorsed Schemes for a list of endorsed schemes and which GGL requirements are covered. *Note requirement 1.14 from this standard also applies.* **or:**
  - Non-endorsed wood sourced from forest management units and received with a Raw Material Statement<sup>1</sup> and meeting all requirements of GGLS5, **or:**
  - Residual products from natural site and landscape management received with a Raw Material (residual) Statement (*note: Principle 11 of GGLS2 also applies*), **or:**
  - Agricultural residual material received with a Raw Material (residual) Statement (*note: Principle 11 of GGLS2 also applies*), **or:**
  - Biogenic/recycled waste/residues material received with a Raw Material Statement.
- Until 2022 GGL certified raw materials temporarily also include materials sourced from small holders (<500 ha FMU) within an area with a certified GGL risk based approach as described in GGLS5 under appendix A (and further complying with all GGL controlled requirements).
- 4.5 GGL-Controlled input is material:
- Sourced under a GGL endorsed (controlled) scheme and corresponding claim(s). See document GGL 1c. Endorsed Schemes for a list of endorsed (controlled) schemes and which GGL requirements are covered, **or:**

<sup>1</sup> Template and format for the Raw Material Statement (GGL 1b.) and Transaction Statements are available at [greengoldlabel.com](http://greengoldlabel.com)

- Material sourced under the participants own certified endorsed controlled system, See GGL 1c. Endorsed Schemes for the full list of endorsed (controlled) schemes.

*Controlled raw materials shall also comply with criteria 1.14 of this standard and principle 7, principle 8, principle 9, criteria 2.1 and criteria 2.3 of GGLS5. A Raw Material Statement shall be signed by the supplier(s).*

- 4.6 The participant shall identify GGL claimed certified material as GGL-Certified.
- 4.7 The participant shall identify GGL claimed controlled material as GGL-Controlled.
- 4.8 The participant shall identify the correct proportion of material received with a mix claim from endorsed schemes and allocate this as GGL-Certified and GGL-Controlled (e.g. 100 metric tonnes of Scheme Y Mix 70% shall be registered as 70mt GGL-Certified and 30mt as GGL-Controlled).
- 4.9 The participant shall monitor and register the volumes of GGL material supplied (incoming). In case the amount of materials supplied deviates from the amount stated in the statement and invoices, the participant shall verify this deviation with the supplier and record it.
- 4.10 All material delivered to a participant that is not covered by a GGL-Certified or GGL-Controlled claim (as stipulated under criteria 5.5) or GGL endorsed certificate scheme shall be provided with a Raw Material Statement (document 1b) indicating the material as:
  - Wood origin (non-endorsed) >500ha and 500<ha size FMU
  - Residues (landscape, agricultural or biogenic waste/recycled)

*Note: all relevant previous suppliers shall sign the Raw Material Statement in order to identify the original producer of the (residual) materials and ensure that the GGL definitions and requirements are met.*

*Note: a template for the Raw Material Statement is available on [greengoldlabel.com](http://greengoldlabel.com) and shall be used by Participants.*

*Requirements 4.11 – 4.14 only apply when verification takes place against GGLS5 (FM criteria) or GGLS2 (Agricultural criteria) by the Participant*

- 4.11 The Raw Material Statement shall be used to verify compliance against the relevant requirements from the GGLS5 (forest management criteria) and GGLS2 (agricultural source criteria) by both the participant and the Certification Body. Any legal owners (including sub-suppliers) of the material shall sign the Raw Material Statement (or separate statements) in order to identify the full supply chain and to prove/ensure that materials covered by the Raw Material Statement meet the GGL criteria. All relevant evidences shall be requested from suppliers if there is any doubt whether the material meets the applicable GGL criteria.
- 4.12 Verification against GGLS5 and GGLS2 requirements by the participant shall take place prior to selling the material as GGL certified and must meet the following requirements:
  - a) Shall be carried out at FMU/supply unit level for each FMU/supply unit included in the scope.
  - b) Shall be reported and documented adequately in order to allow its results to be reproduced by third parties.
  - c) Its scope shall be clearly defined as relevant to the applicable deliveries and origin (e.g. which FMU, supply area, suppliers, etc.)
  - d) Its results and evidences shall be available to the Certification Body upon request.
  - e) Shall be carried out by qualified and experienced personnel, relevant to the scope of the verification. This also applies if any part of the verification against the GGL standards is outsourced to a third party. Evidence of relevant qualifications and experience by either the participants personnel or a sub-contractor shall be documented and be available upon request.

- f) Relevant stakeholders and experts shall be consulted at least 6 weeks prior to the verification taking place.
  - g) Must be carried out covering the full supply chain including the forest management unit and/or agricultural supply unit of origin.
  - h) Identified non-conformities, risk mitigation and corrective actions resulting from the verifications shall be clearly recorded and documented.
- 4.13 Verification against the GGLS5 and GGLS2 standard shall be repeated every 12 months upon continued or repeated deliveries from the same forest management unit or agricultural supply unit.
- 4.14 Any non-conformities or well-funded complaints/allegations regarding the forest management unit or any part of the supply chain shall be investigated within 2 months of identifying the non-conformity or receiving the complaint/allegation. The Certification Body shall be informed within this deadline.

Principle 5 Administration and outputs

- Criteria
- 5.1 The participant shall ensure that:
- a) (Raw) material source, origin, nature and quantities supplied to the participant and delivered product that has left the unit/facility are traceable.
  - b) All biomass mentioned under 5.1a are checked for additives and substances for manufacturing and the composition of the prepared GGL material.
  - c) The status of GGL-Certified and GGL-Controlled material/product of incoming and outgoing is tracked.
- 5.2 The participant shall keep records of the nature, quantities, origins and/or destinations (including name, address and certificate numbers of the buyers concerned and the dates of delivery) of all products received, delivered and sold.
- 5.3 The participant shall keep records of the GGL related information on shipments. This includes the Transaction Certificate and, in case of the producer, also the Raw Material Statements (if applicable).
- 5.4 There are two formal GGL claims:  
GGL-Certified  
GGL-Controlled  
The GGL claims as stated above shall be used when communicating the claim to third parties (i.e. clients).  
*Note: GGL claims may only be applied to material/products that meet the input requirements of 4.4 and 4.5.*
- 5.5 The participants invoices shall contain:
- a) The formal GGL claim(s) per identified product/material as:
    - i. GGL-Certified, or;
    - ii. GGL-Controlled
  - b) Reference to a GGL Transaction Certificate
  - c) Name and contact details of the participant
  - d) Information necessary to identify the buyer including name and address
  - e) Document date
  - f) Quantities
- 5.6 All inputs and outputs shall be categorised according their material origin and GHG composition based on the following material categories:
- Category 1: Wood (originating from >500ha FMU's)
  - Category 2: Wood (originating <500ha FMU's)
  - Category 3: Residual products from natural site and landscape management
  - Category 4: Agricultural residues

- Category 5: Biogenic/recycled waste/residues

*Note 1: If inputs and outputs cannot be correctly identified as meeting any of the above categories and corresponding definitions previous (sub-)supplier(s) shall be contacted and be requested to provide evidence of meeting the above listed categories. Material(s) that do not meet the definition and criteria of the biomass categories shall not be used within the GGL system and be considered non-eligible input. See also the GGL glossary.*

*Note 2: The transaction statement (GGLS4) includes the relevant biomass categories for a specific delivery/transaction between GGL participants.*

- 5.7 Results of checks, measurements, sampling and inspections shall be recorded and filed. The records must show clearly who has performed the inspections and tests and their accreditation. Analyses must be performed by an accredited laboratory.
- 5.8 Records and documents relating to all aspects of the GGL system (including all GGL standards) must be maintained for at least 5 years, including but not limited to:
  - Sales
  - Purchase
  - Production
  - Deliveries (incoming and outgoing)
  - Transaction Certificates
  - GHG data
  - Annual summaries
  - Complaints and non-conforming products
  - Suppliers
  - Outsourcing/sub-contracting
  - Verification evidences against GGLS5 and/or GGLS2

**Principle 6 Control of processed products**

**Criteria**

- 6.1 All raw materials and all products, before, during and after the processing must be traced and identified. Where risk of pollution with foreign material (or non-GGL Certified/Controlled) or mixing with products polluted with foreign materials are identified, specified and documented.
- 6.2 No additives may be used that are prohibited by GGL<sup>2</sup>. Additives of vegetable origin used as binding compounds or for other purposes are permitted. Reports of the chemical properties of the additives shall be available upon request.
- 6.3 When (semi-finished) products or raw materials are processed, handled or stored that contain prohibited contents:
  - a) These non-complying materials must be stored separately (prior to and after processing);
  - b) A batch of non-complying materials must be processed at once and without interruptions and be separated physically, or separated in time, from equivalent treatments relating to non-certified (polluted) and non-eligible products.
  - c) Measures must be taken to ensure identification of the batch and to avoid contamination with products, which have not been obtained in accordance with the GGL standards.
  - d) Processing and storage must be organized and executed in such way that pollution with non-vegetable materials or prohibited materials<sup>4</sup> is prevented.
- 6.4 Transport used for GGL material shall be clean to avoid mixture or contamination with products that have not been obtained in accordance with the GGL standards.
- 6.5 Specifications of raw materials, (semi-finished) products shall be recorded and made available to relevant personnel.

<sup>2</sup> A list of prohibited materials is available at [Greengoldlabel.org](http://Greengoldlabel.org).

- 6.6 Any external storage shall be considered a part of the facility, and procedures and requirements applicable to the facility shall also apply to the storage. In case a participant makes use of an external storage facility, the participant shall demonstrably ensure that the external storage facility complies in full with all applicable requirements of criteria 6.3, 6.4 and principle 8. The participant shall in such cases include the requirements in an agreement with the manager of the facility or its legal representative, for example in a contract.
- 6.7 Any outsourced activities shall be covered by an outsourcing agreement to ensure that the sub-contractor is aware of all responsibilities and procedures regarding GGL certified materials and must cover:
  - a) mutual responsibilities
  - b) segregation requirements for GGL certified (including GGL controlled) materials
  - c) verification and checks of incoming materials covered by the agreement
  - d) the right for the Certification Body to conduct audits if deemed necessary
  - e) any procedures and training required to carry out the outsourced activities as defined in this standard
  - f) GGL claims, labels and logos are not to be applied in any way by the sub-contractor.

Principle 7 Application of the volume credit system.

- Criteria
- 7.1 GGL-Certified materials may only be mixed with non-certified and GGL-Controlled materials if these materials comply with criterion 1.14 of this standard, principle 7, principle 8, principle 9, criteria 2.1 and criteria 2.3 of GGLS5.
  - 7.2 The corresponding characteristics, claims and quantities of the material shall be the same after application of the conversion factor. It shall be ensured that mixed outputs can be traced to individual inputs.
  - 7.3 The claim period shall be specified with a maximum of 12 months. During this period all inputs and outputs are recorded for the specified period.
  - 7.4 It shall be ensured that within the specified claim period the quantities of the material having the same characteristics of inputs, after application of the conversion factor, are corresponding with the output products.
  - 7.5 For each product group a GGL credit account shall be maintained in which added and deducted credit/volumes are recorded based on the supplied claims according to criteria 4.8.
  - 7.6 Added credits shall meet the requirements of criteria 4.4. The applicable output claim shall be GGL-Certified and/or GGL-Controlled based on the proportion of input claims.
  - 7.7 The participant shall ensure that credits from the account can never be overdrawn.
  - 7.8 The volume credit system shall be applied at the level of single physical site.
  - 7.9 The volume credit system shall be audited annually by the certification body, and the participant shall make all relevant data, records, and documents readily available at the annual audit. The GGL (certified) status of physical stocks still present may be carried over to the next period.

Principle 8 Facilities and equipment.

- Criteria
- 8.1 The facility and its equipment must be designed and operated in such a way to ensure full compliance with the applicable legislation regarding environmental principles, practices and safety.
  - 8.2 Measures must be taken in the processing facilities and its equipment to avoid injuries to personnel (including contractors). Dust and hazardous fumes must be extracted from the working space and filtered before release.



- 8.3 Safety shall be a demonstrable concern of the participant and regular evaluation shall be performed.  
A safety plan shall be documented, monitored and implemented. The plan shall include safety issues and feasible deadlines for implementation.
- 8.4 Personal protection equipment shall be made available for all personnel by the participant and a registration of issued safety equipment shall be kept up to date.

Principle 9 Transaction Certificates, energy and GHG data

- Criteria
- 9.1 All material received with a GGL claim (GGL-Certified or GGL-Controlled) must be accompanied by a valid GGL Transaction Certificate.
  - 9.2 For all material covered by a GGL Transaction Certificate the trader of GGL-Certified and GGL-Controlled material shall register at least:
    - a) the name, address, location and legal representative of the trader or producer delivering the shipment
    - b) the name, address, location and legal status of the biomass producer
    - c) any information required under 1.14
    - d) the GGLS1 certificate number of the trader delivering the material
    - e) the GGLS4 Transaction & Production Certificate number of the batch
    - f) the gross mass as stated on the Transaction Certificate
    - g) the net mass as stated on the Transaction Certificate
    - h) total emissions from the use of the fuel (E) as stated on the Transaction Certificate,
    - i) the transport documents of the shipment
    - j) the Load Compartment Inspection (LCI) belonging to the shipment
  - 9.3 For outputs at least the following information shall be registered:
    - a) the name, address, location and legal representative of the producer or trader who has supplied the timber and timber products;
    - b) the name, address, location and legal representative of the producer or traders to whom they have supplied timber and timber products.
    - c) the GGLS4 Transaction Certificate number under which the batch is sold
    - d) the gross mass as stated on the Transaction Certificate
    - e) the net mass as stated on the Transaction Certificate
    - f) total emissions from the use of the fuel (E) as stated on the Transaction Certificate
    - g) the Transaction Certificate numbers of the batches that are part of the outgoing batch
  - 9.4 An outgoing batch may contain material from several batches covered by a GGL Transaction Certificate, but may not contain any material that is not covered by a GGL Transaction Certificate. An outgoing batch under a GGL Transaction Certificate may not contain any material that does not comply with clause 1.14 of this standard.
  - 9.5 The accumulated total amount of outgoing material originating from a batch as covered by an incoming Transaction Certificate number may not exceed the net amount of material as registered on that Transaction Certificate. Similarly, the accumulated calculated total emissions from the use of the fuel (E) in outgoing material originating from a batch as covered by an incoming Transaction Certificate number may not exceed the total emissions from the use of the fuel (E) as registered on that Transaction Certificate.
  - 9.6 The value for E to be claimed on an outgoing Transaction Certificate shall be calculated as follows, according to GGL 1a. instruction document:  

$$E_b = (RE_1 * A_1) + (RE_2 * A_2) + \dots + (RE_n + A_n)$$
 Where

- $E_b$  = calculated emissions from the use of the fuel in this batch
  - $RE_1$  = emissions value E per MT calculated as E stated on the originating Transaction Certificate / net mass as stated on the originating Transaction Certificate of batch 1
  - $A_1$  = amount of material used from batch 1
  - $RE_2$  = emissions value E per MT calculated as E stated on the originating Transaction Certificate / net mass as stated on the originating Transaction Certificate of batch 2
  - $A_2$  = amount of material used from batch 2
  - $RE_n$  = emissions value E per MT calculated as E stated on the originating Transaction Certificate / net mass as stated on the originating Transaction Certificate of batch n
  - $A_n$  = amount of material used from batch n
- 9.7 The producer shall collect all necessary information to calculate the accumulated total greenhouse gas emissions (E) of the product starting with the growing of the crop and relevant forest management activities up until and including the energy used in the producing and storage of the product.
- 9.8 Every following link in the chain is obliged to calculate the accumulated total greenhouse gas emission (E) at the point of delivery, by taking the accumulated total greenhouse gas emissions (E) of the received product and as stated on the Transaction Certificate, increased with the greenhouse gas emissions (E) since receipt (e.g. energy from storage, transport).
- 9.9 Each batch of GGL-Certified or GGL-Controlled material shall be provided with all relevant GHG and energy data required to carry out the GHG calculations and shall be based on a reference period of 12 months prior to production of that specific batch.
- 9.10 Each batch of GGL-Certified or GGL-Controlled material shall be provided with all relevant feedstock and raw material information in order to meet any requirements further up the supply chain.

Principle 10 Greenhouse gases and energy balance calculation and savings

- Criteria
- 10.1 A greenhouse gas and energy balance calculation must be carried out and maintained according to GGL 1a. instruction document (GHG).
  - 10.2 All individual supplies of biomass shall result in emissions below or equal to a value of 74 g CO<sub>2</sub>-eq/MJ for electricity and 32 g CO<sub>2</sub>-eq/MJ for heat.
  - 10.3 The targeted reduction, for the end-user (power plant), in CO<sub>2</sub>eq emissions is calculated to be a minimum of 70% per year on average based on the EU reference value. The average emissions have a maximum of 56 g CO<sub>2</sub>-eq/MJ for electricity and 24 g CO<sub>2</sub>-eq/MJ for heat. No consignment of biomass shall result in emissions above 74 g CO<sub>2</sub>-eq/MJ for electricity and 32 g CO<sub>2</sub>-eq/MJ for heat.
  - 10.4 The targeted reduction, for the end-user (power plant), of CO<sub>2</sub>-eq emissions over an average of one year shall be a maximum of 56 g CO<sub>2</sub>-eq/MJ for electricity and 24 g CO<sub>2</sub>-eq MJ for heat. Emission reductions shall be calculated using BioGrace-II.
  - 10.5 The total GHG emissions in gram CO<sub>2</sub> of sustainable biomass processed into renewable electricity and/or heat shall be calculated by the power plant based on BioGrace-II, default values in GGL 1a. instruction document (GHG) or a combination where applicable. See for more information instruction document 1a.
  - 10.6 Evidence must be available to prove that the figures used in the calculation are accurate and up-to-date.
  - 10.7 Every part of the supply chain must be included if relevant to the specific batches that are sourced and/or sold as GGL-Certified and GGL-Controlled.



### **Appendix A. Logo use requirements**

A1 On product labelling is not permitted.

A2 GGL can only be claimed on products covered by a Transaction Certificate as described in GGLS4.

A3 The registered and copyrighted GGL logo is made available to participants with a valid GGL certificate as shown below.



A4 The GGL logo (above) may be used off product, including on stationery, promotional materials, business cards and brochures.

A5 The GGL logo artwork may be used only in horizontal alignment.

A6 The minimum size for the GGL logo is 12mm in height.

A7 Claims regarding electricity produced from GGL certified biomass are laid down in GGLS6.

A8 Any applied percentages shall reflect the actual percentages of certified material included in a product or batch, in case recycled material is included in GGL certified materials information shall be provided on the percentages and quantities of the included recycled materials.

A9 The GGL logo shall not be used in relation to any GGL controlled claims and statements.

A10 Approval shall be received from the Certification Body for applying any GGL logo's and claims for promotional purposes. Approvals shall be recorded and retained.

# GGLS1 – Chain of Custody criteria



## Appendix B. GGL standard framework

