



GGL 1d. Instruction document for supplying the Japanese market.

Version 1-8

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A. Introduction

The principles and criteria in this instruction document are required for voluntary certification of:

- Woody biomass from large forest management units (FMU's > 500ha) in category 1,
- Woody biomass from small FMU's (<500 ha) in category 2,
- Residues (including woody biomass) from nature and landscape management in category 3,
- Agricultural (primary) residues in category 4, and
- Biogenic residues and (secondary) waste flows in category 5, not being post-consumer products.

These principles are an extension to the existing GGL normative framework. The GGL Foundation will evaluate these principles and criteria annually, and thus reserves the right to make changes as it considers appropriate.

A verification based on the principles in this standard with a positive result will lead to the entity being accepted as a source of biomass under the GGL scheme requirements for the Japanese market. This document is to ensure that biomass delivered to the Japanese market is in compliance with the METI (Ministry of Economy, Trade and Industry) FIT (Feed-in Tariff) and FIP (Feed-in Premium) scheme.

All GGL standards and supporting documents are considered normative unless stated otherwise. Unless specified in this GGL Instruction 1d, all other GGL regulations and norms (including for example, but not limited to: ISO 17065 requirement for certification bodies from an IAF-recognized accreditation authority per article 3.3 of GGL Regulation) apply.

B. Scope

The GGL Glossary defines biomass categories and applicable GGL Standards. For clarification purposes only, please also see t Appendix A.

B.1 Agricultural residues in GGL-categories 4 or 5:

Eligible fuels for Japanese FIT / FIP are:

- Palm kernel shells (PKS);
- Palm tree trunks; and
- Empty fruit bunches (EFB);

The following sources are newly eligible fuels for Japanese FIT/ FIP per 1-1-2023:

- Coconut shell;
- Cashew nut shell;
- Walnut shell;
- Almond shell;
- Pistachio shell;
- Sunflower seed shell;
- Corn straw pellet;
- Bengkuang seeds;
- Sugar cane stem & leaves;
- Peanut shell; and
- Cashew nut shell liquid (CNSL).

Biomass origination from palm oil plantations can only be included in GGL if this meets the criteria applicable to biomass category 4 (agricultural residues) or 5 (biogenic residues and waste flows). All biomass originating from palm oil plantations that is not classified as biomass category 4 or 5 (as per GGL Glossary) is not eligible under the GGL scheme.

Evidence shall be retained that biomass originating from a palm oil plantation has at the time of sourcing the biomass a valid palm oil certificate.

Note - definitions apply as per Japanese food statistics, although these types of biomass are inedible by-products.

B.2 Woody biomass in GGL-categories 1, 2, 3 and 5

Woody biomass can be certified under GGL for Japanese FIT / FIP regulations as either Processing residues, Other harvested trees or Forestry residues.

B.2.1 Processing residues: offcuts, sawdust, bark and other residues generated during wood processing. Evidence shall be offered by sawmills or other processing facilities.



B.2.2 Other harvested trees: Woody biomass generated from felling for the main purpose of energy use. This is woody biomass derived from final felling at an age of less than 20 years (confirmed by official notification of felling).

B.2.3 Forestry residues: low-quality wood generated from felling for the main purpose of producing wood for material use (including offcuts and branches), thinned wood, etc. In addition, trees damaged by pests and diseases or natural disasters, pruned branches, driftwood of dams, etc. generated by felling for purposes other than energy use (excluding waste). This is Woody biomass other than Processing residues, Other harvested trees or Waste.

Paragraph F of this GGL Instruction 1d lists specific requirements for the eligibility of Woody biomass under Japanese FIT / FIP regulations. For the avoidance of doubt: post-consumer wood waste from building and demolition, (municipal) collection points for discarded wood (products) is not allowed under Japanese FIT/ FIP regulations.

Note – Appendix A illustrates how different types of Woody biomass under Japanese FIT / FIP qualify under GGL-categories of biomass.



C. Applicability

C.1 Requirements for verification against this standard are described in Principle 2 of this document and replace the requirements from Principle 4 (4.11 – 4.14) of the GGL chain of custody standard (GGLS1) for biogenic residues (GGL-category 5) and to the extent these provide guidance for Raw Material statements.

For the avoidance of doubt: unless specified differently below, all other GGL standards including GGLS2 (agricultural source), GGLS4 (transaction and product certificate), GGLS5 (forest management) and GGLS6 (power company) apply as per different GGL-categories for biomass.

C.2 The sustainability principles listed below apply to biomass producers and collectors, and to traders of Woody biomass as per article B.2 of this GGL Instruction 1d. Traders of eligible biomass listed in article B.1 are exempt of these requirements.

Note – Appendix B illustrates which types of participants are and which are not subjected to GGL Instruction 1d. For avoidance of doubt: any scope limitation only refers to requirements of this document, while the remainder of all GGL normative documents continue to apply.

C.3 The supplier verification programme according to this instruction document is applicable for suppliers of biogenic residues (GGL-category 5) and in case a GGL Participant is not independently certified against this instruction document as an individual producer, nor against any of the endorsed schemes as listed in GGL Instruction 1c.

C.4 Assurance on compliance of producers against the mentioned criteria is the liability of the collector. All collectors shall comply with the criteria of the current document. For material to be accepted into a GGL supply chain, the participant needs to provide a Raw Material Statement to the buyer with all relevant information, including the certificate number, as received upon successful certification against this standard. If the source is certified against any of the endorsed schemes, as listed in GGL Instruction 1c (endorsed schemes), an additional verification to this standard is not required.

C.5 Appendix B illustrates the applicability of this GGL Instruction 1d standard and required documentations for participants within the GGL chain of custody.



D. General principles

Principle 1 General requirements

- 1.1 Emissions gathering and calculation shall be based on GGLS1 – COC criteria and follow [GGL Instruction 1f.](#) which lays down GHG calculation requirements per [Japanese FIT / FIP requirements](#).
- 1.2 The collector shall have a plan aimed at achieving and increasing sourcing of certified biomass on an annual basis. The plan shall be updated annually and at minimum include a 5-year targeted forecast including an annual increase of endorsed certified inputs (see [GGL Instruction 1c.](#) listing endorsed schemes).

Note 1. This requirement only applies where GGL has approved certification schemes for the particular biomass type; see [GGL Instruction 1c.](#) for currently endorsed schemes.

Note 2. Within the framework of this document, and [GGL Instruction 1c.](#), GGL can only endorse schemes that are also approved by the Japanese Ministry of Economy, Trade and Industry (METI) within the FIT framework.

- 1.3 All plans shall be approved at the highest management level of the collector.

Principle 2 Supplier verification programme

- 2.1 The Raw Material Statement for biomass ([GGL Instruction 1e](#)) shall be used to verify compliance against the relevant requirements from this instruction document 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. In case a GGL transaction certificate is provided by the participant, the raw material statement is not necessarily required. In any case, all relevant evidences shall be requested from suppliers if there is any doubt whether the material meets the applicable GGL criteria.
- 2.2 Verification against the requirements from this instruction document by the participant shall take place prior to selling the material as GGL certified and must meet the following requirements:

- a) Shall cover all producer Principles (3 – 10) and criteria with a verification report per producer.
- b) Shall be carried out at producer level for each producer included in the scope.
- c) Shall be reported and documented adequately with findings and evidence per criteria in order to allow its results to be reproduced by third parties.
- d) Its scope shall be clearly defined as relevant to the applicable deliveries and origin (e.g. which producer, origin of the biomass at FMU/plantation/farm level, other suppliers, etc.)
- e) Its results and evidence shall be available to the Certification Body upon request.
- f) 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.
- g) Relevant stakeholders and experts shall be consulted at least 6 weeks prior to the verification taking place.
- h) Locally adapted verifiers shall be developed for each criteria assessed. Specific evidence based on country, region or other locally specific conditions shall be included.
- i) Special care shall be taken to verify the mass balance and material accounting records of the producer in order to assess that input and output volumes are corresponding and originate from the recorded plantations. This shall be clearly included in the report.

Note. Material included under this document and sold as GGL certified shall be produced, transported and sold in a way in which it is segregated from other non-certified material. Material compliant with this document shall not be mixed with material that is not fully compliant until the last and final inventory immediately before end-use - until the moment set by FIT / FIP regulation for mandatory implementation of certification requirement for material produced, transported and sold under FIT / FIP.

- j) Must be carried out covering the full supply chain starting with the producer and any traders or processors between the producer and collector/participant.
- k) Identified non-conformities, risk mitigation and corrective actions resulting from the verifications shall be clearly recorded and documented.

Note. The producer in the context of this document refers to the first collection point of the biomass. These producers receive the biomass from its original point of origin (e.g. a plantation) and

process the biomass into the product that is ultimately traded as GGL certified. A sawmill would be the first collection point and therefore producer for sawdust. A CPO mill would be the first collection point and therefore producer for PKS etc.

- 2.3 Verification against the requirements from this instruction document shall be repeated every 12 months upon continued or repeated deliveries from the same producer.
- 2.4 Any non-conformities or well-funded complaints/allegations regarding the producer 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.
- 2.5. Suppliers and mills that supply biomass from endorsed and approved certification schemes (see GGL Instruction 1c) with corresponding evidence are excluded from the supplier verification programme.

Note. Within the framework of this document, and GGL 1c, GGL can only endorse schemes that are also approved by the Japanese Ministry of Economy, Trade and Industry (METI) within the FIT framework.

- 2.6 Suppliers and producers that have (or will be) visited and audited by the Certification Body during a 12-month period are excluded from the supplier verification programme.

E. Principles for operational requirements

Principle 3. All volumes origination from the producer shall be traceable

- 3.1 The producer shall record all incoming and outgoing volumes relevant to the biomass based on the material categories and quantities.
- 3.2 All inputs and outputs shall correspond, taking the relevant conversion factors into account:
 - Conversion factors for the biomass
 - Weight
 - Internal use
 - Electricity

*Note e.g.: a mill processing on average 30 mt of FFB (raw material) per hour, will:
- Produce ca. 12% of biomass per hour (conversion factor)*

- Use ca. 7% are used internally (internal use)
- Have ca. 5% for sale as energy production (i.e., available amount for the traders)

3.3 All necessary material shall be available including: purchase records, production records (daily and monthly records), sales and delivery documents and waybills tickets. The maximum deviation in volumes during transportation shall be between 0,3% and 1%.

Principle 4. The producer does not deliberately produce any waste or residues or expand the operation in order to produce more waste or residues.

- 4.1 Producers with big capacity shall provide on request, an official Environmental Monitoring document.
- 4.2. Producers with smaller capacity shall monitor at least the basic list of toxic compounds in ISO-17025 laboratories.

Principle 5. A management system is in place for all operations at the processing site.

- 5.1. The management of the processing unit shall define and document its commitment to the requirements laid out in this standard and overall ethical business conduct. A publicly available statement on its commitment shall be available.
- 5.2. The management system covers or references all commitments and procedures regarding compliance to this standard.
- 5.3. The management system contains the participants' commitment and policy to respecting human rights and preventing any form of discrimination.
- 5.4. The management system contains an overview of the relevant stakeholders of the operation, including, where applicable, the contact information of a representative.
- 5.5. The management system contains a section outlining the environmental ambitions and measures of the operator, including but not limited to the reduction of GHG emissions, the improvement of operating efficiency and the protection of resources, such as air and water. Additionally, for GHG, other emissions and pollution, plans shall be developed and implemented to achieve minimizing these emission and pollutions.

Principle 6. Relevant international, national, regional and local laws and regulations are complied with in all operations and transactions.

- 6.1. The operator of the processing unit holds the legal right to use the land on which it is set up.
- 6.2. The operator of the processing unit shall meet all the applicable legal requirements in order to source, produce and sell the product included in the scope of the verification.
- 6.3. The operator complies with all obligations to pay taxes and royalties.
- 6.4. All applicable anti-corruption legislation is followed. If no anti-corruption legislation exists, the operator shall take alternative anti-corruption measures proportionate to the scale and intensity of the management activities and the risk of corruption.
- 6.5. The operator has established a policy on ethical business conduct as well as a monitoring system to ensure legal and ethical business conduct.

Principle 7. Labour rights of workers and staff are safeguarded.

- 7.1. A procedure for HR processes, such as recruitment, trainings, retirement and contract termination is in place.
- 7.2. Wages shall meet or exceed minimum industry or national standards or other recognized wage agreements, such as agreed by the local community.
- 7.3. It shall be ensured that the principles and rights at work as defined in the ILO “Declaration on Fundamental Principles and Rights at Work” (1998) are maintained and complied with.

This includes:

- a) Freedom of association and the right to collective bargaining are respected for all workers of the operation;
- b) All forms of forced or compulsory labour are eliminated;
- c) All forms of child labour are eliminated; and
- d) All forms of discrimination in respect of employment and occupation are eliminated.

Principle 8. Health and Safety of workers and staff are protected.

- 8.1. The health and safety of all staff and workers shall be protected through risk identification, safety programs to mitigate risks, training and the provision of personal protection equipment.
- 8.2. The recommendations in the “Safety and Health in Agriculture Convention” (2001) and the “Working Environment (Air Pollution, Noise and Vibration) Convention” (1977) of the ILO shall be followed.

Principle 9. Transparency and a grievance mechanism are established.

- 9.1. The management commitment and all relevant documentation and procedures as required by this standard are made available to stakeholders upon request in an appropriate format and language and workers and staff are informed about labor rights and health and safety requirements.
- 9.2. A grievance mechanism for stakeholders to file complaints or requests is in place and complaints are documented and followed up.

Principle 10. Relevant documents and yearly summaries are stored for at least 5 years.

- 10.1. The operator shall keep records of the nature, quantities, dates and destinations of material sold as waste or residues, such as invoices for a minimum of 3 years.
- 10.2. Yearly summaries are created and targets for the upcoming year set and signed off by management, covering at least but not exclusively:
 - a) The total output of residues;
 - b) The changes in the number of workers and staff;
 - c) The number and kind of work-related accidents;
 - d) The amount and kind of complaints filed and their resolution;
 - e) A review of the environmental ambitions and performance as well as related incidents, and;
 - f) A review of the efficiency of the policy for ethical business conduct.

F. Cascading instructions

Introduction

There is growing recognition of the need to align bioenergy policies with the principle of the cascading use of biomass. That cascading-principle aims to achieve the resource efficiency of biomass use by prioritising, wherever possible, the material use of biomass over its energy use, thus increasing the amount of biomass available within the system. Such an alignment is intended to ensure fair access to the biomass raw material market for the development of innovative, high value-added bio-based solutions and a sustainable circular bioeconomy.

When developing support schemes for bioenergy, GGL therefore takes into consideration the available supply of sustainable biomass for energy and non-energy uses and the maintenance of the national forest carbon sinks and ecosystems, as well as the principle of the circular economy, the principle of the cascading use of biomass and the waste hierarchy, e.g., as established in Directive 2008/98/EC of the European Parliament and its Council.

In line with the principle of the cascading use of biomass, woody biomass should be used according to its highest economic and environmental added value in the following order of priorities: wood-based products, extending the service life of wood-based products, re-use, recycling, bioenergy and disposal. Where no other use for woody biomass is economically viable or environmentally appropriate, energy recovery helps to reduce energy generation from non-renewable sources.

GGL's scheme for bioenergy is therefore directed to such feedstocks for which little market competition exists with the material sectors, and whose sourcing is considered positive for both climate and biodiversity, in order to avoid negative incentives for unsustainable bioenergy pathways, as identified in the 2021 report of the Commission's Joint Research Centre, entitled 'The use of woody biomass for energy production in the EU' (<https://publications.jrc.ec.europa.eu/repository/handle/JRC122719>).

At the same time, in implementing measures ensuring the application of the principle of the cascading use of biomass, it is necessary to recognise the national specificities which guide various countries. Individual countries are allowed to derogate from that principle in duly justified circumstances, for example where required for security of energy supply purposes, such as in the case of particularly severe cold conditions. Countries are also allowed to derogate from that principle where there are no industries or processing facilities that could make higher added value use of certain feedstocks within a geographical perimeter. In such a case, transport beyond that perimeter for the purpose of such a use might not be justified from an economic or environmental point of view.

CB's should notify any such derogations to GGL. CB's should not grant GGL certification for the production of energy from saw logs, veneer logs, industrial grade roundwood, stumps and roots. Waste prevention, reuse and recycling of waste should be the priority option. CB's should avoid creating support by certification which would be counter to targets on treatment of waste and which would lead to the inefficient use of recyclable waste.

Requirements

- F.1 CB's shall not grant certification for the use of saw logs, veneer logs, industrial grade roundwood (defined below), stumps and roots to produce energy from Forest Management Units (FMU) as in GGL-category 1 (woody biomass from FMU's >500 ha), GGL-category 2 (woody biomass from FMU's <500 ha), nor GGL-category 3 (residues from nature and landscape management)
- F.2 'Industrial grade roundwood' means: saw logs, veneer logs, round or split pulpwood, as well as all other roundwood that is suitable for industrial purposes, excluding roundwood the characteristics of which, such as species, dimensions, rectitude and node density, make it unsuitable for industrial use as defined and duly justified by countries according to the relevant forest and market conditions.
- F.3 CB's may grant certification to the following categories:
- F.3.1 Forestry residues meeting following description: offcuts, top's and branches, thinned trees that do not meet requirements for industrial grade roundwood, trees damaged by pests and diseases or natural disaster (e.g., windblown / forest fire), pruned branches.
- F.3.2 Woody biomass derived from felling plantations specifically managed for the production of energy at an age of less than 20 years.
- F.3.3 Residue products from natural and landscape management (GGL-category 3) that are (branches, tops, trees) produced in the course of managing urban and rural green spaces and nature areas, other than forests designated for the preservation, restoration or enhancement of specific natural, recreational or aesthetic functions. These also include biomass residues produced during routine maintenance of public green spaces and parks.
- F.3.4 Biogenic residues and waste flows (GGL-category 5) from the agro-food and timber industry can be certified under GGL. Evidence of meeting the

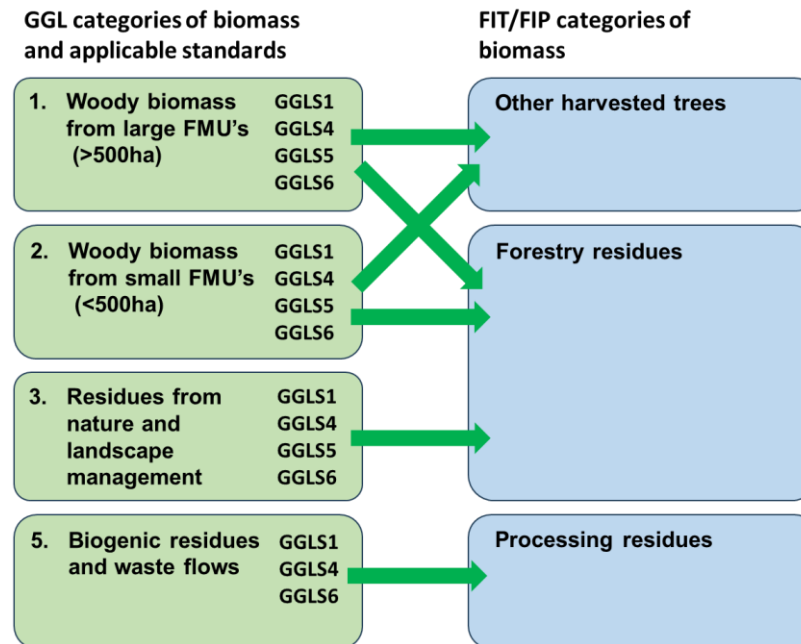


criteria and definitions of waste/residues and recycled material must be available. Any relevant previous suppliers shall also sign a statement.

- This biomass should meet the following description when having a woody origin: processing residues like offcuts, sawdust, bark and other residues generated during processing of wood in sawmills, pulp/paper mills, furniture and other wood products industries)
- **For the avoidance of doubt: post-consumer wood waste from building and demolition, (municipal) collection points for discarded wood (products) is not allowed under Japanese FIT / FIP.**



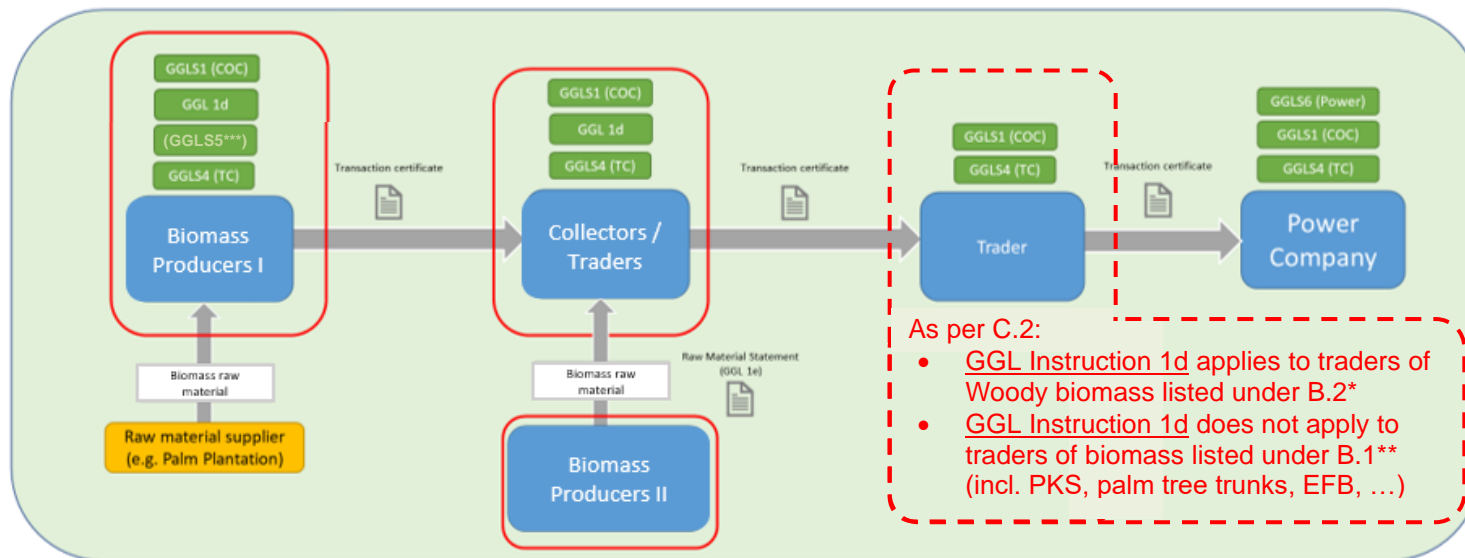
Appendix A.* Woody biomass categories per Japanese FIT / FIP and GGL with applicable GGL standards



* Definitions are provided in paragraphs A and B above in this document

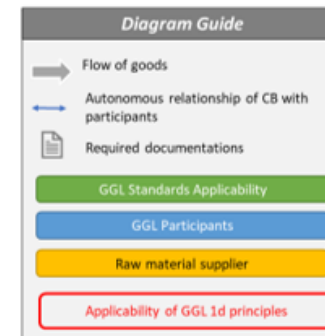


Appendix B. Applicability of GGL standards & criteria in context of GGL 1d document



Biomass Producer I: GGL-certified

Biomass Producer II: Either not certified at all, or against other METI-endorsed schemes



* B.2 lists Woody biomass from Processing residues, Other harvested trees and Forestry residues
 ** B.1 provides a positive list of Agricultural residues as eligible biomass (incl. but not limited to PKS, palm tree trunks, EFB's, ...)
 *** When applicable to the type of biomass in question, e.g., Woody biomass from Forestry residues listed under B.2