



Roundtable on  
Sustainable Biomaterials

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## **RSB – ROUNDTABLE ON SUSTAINABLE BIOMATERIALS**

### **RSB STANDARD FOR JAPAN FIT**

Version 2.0

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## A. Introduction

This standard specifies requirements for operators producing, procuring and importing biomass into Japan under *Japan's Feed in Tariff (FIT) system*.

FIT sets out a system of incentives for the production of renewable electricity in Japan which includes subsidies for the procurement of biomass which includes vegetable oils as well as various agricultural and industrial residues and end-of-life products.

Japan's Ministry for Economy, Trade and Industry (METI) originally published specific requirements for the certification of biomass under the FIT system which was finalised in April 2020. The RSB Japan FIT standard incorporates these requirements so that products certified under this standard will be eligible under Japan's FIT system. At the end of 2022, METI updated the standard to include new feedstocks within the Japan FIT scheme, as well as new GHG reduction requirements for new operators joining the scheme.

METI's requirements for residues and end-of-life products include verification against sustainability Principles and Criteria (P&Cs) for all Points of Origin as well as the use of Identify Preserved, or Segregation models for chain of custody.

For the certification of vegetable oils, the requirements of the RSB Global Standard will apply unchanged except for the limitation on the chain of custody models required by Japan (Identity Preserved, or Segregation).

For residues and end-of-life products the RSB Global Standard currently allows for a simplified certification process which includes a sample verification of Points of Origin against a reduced set of requirements as described in RSB's Advanced Fuels Standard [RSB-STD-01-010]. Under RSB Japan FIT, certification will require verification against RSB's full set of P&Cs as per Industrial Operators or Agricultural Operators in the RSB Global Standard.

For Greenhouse Gas calculations, the RSB Japan FIT Standard requires the calculation of GHG emissions along the supply chain so that each batch of RSB Japan certified material has a GHG intensity associated with it. However, as the scope of the RSB Japan FIT Standard currently does not cover the generation of electricity but only biomass production and trade, RSB does not require a specific GHG reduction for the certified biomass. Should Japan's regulations require the certification of electricity production, RSB will define a baseline and include targets based on the requirements set by METI as well as the RSB Principles & Criteria.

### Main changes from the previous version

- Inclusion of new feedstocks and a positive list for which can be included within the Japan FIT scheme.
- GHG reduction requirements for operators working within the Japan FIT scheme.

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### **C. Aim of this standard**

This standard aims to define requirements for operators along the biomass supply chain to deliver biomass for power production considered as eligible under Japan's FIT legislation.

### **D. Scope of this Standard**

This standard is globally applicable for operators producing, processing and trading biomass, including vegetable oils, residues and end-of-life products destined for use for power generation in Japan.

### **E. Status and effective date**

This version 2.0 of the standard shall be effective from 31 July 2024.

Whenever any contradiction or inconsistency exists between this version and previous versions of this standard, the latest version shall prevail.

### **F. Note on the use of this standard**

All aspects of this standard are considered to be normative, including the intent scope, standard effective date, references, terms and definitions, tables and annexes, unless otherwise stated.

Users implementing this standard shall ensure that the intent of this standard is met. To ensure that the intent of this standard is met, users shall implement all of the requirements specified in this standard, and any and all additional measures necessary to achieve the intent of this standard.

In the event of any inconsistency between this RSB Standard and the RSB Principles and Criteria [RSB-STD-01-001], or other RSB Standards, the RSB Japan FIT Standard shall prevail.

### **G. References**

Please see [RSB List of Documents](#) [RSB-DOC-10-001] for the full list of RSB Standards and references.

### **H. Terms, definitions and acronyms**

For the purposes of this standard, the terms and definitions given in the RSB Glossary of Terms [RSB-STD-01-002] shall apply. The following terms are particularly important for this standard:

- *Participating Operator*: Legal entity or natural person that had entered into a formal agreement with the RSB Association (“Participating Operator Agreement”) and that is responsible for the implementation of the requirements of all applicable RSB Standards and Procedures in all organisations listed in the scope of certification.
- *Primary Biomass Producer*: Organisation that applies for certification for a specific activity that includes the production of crops or woody material, for example farm operators or plantation owners
- *Points of Origin*: The generator, such as companies, farms, forest areas, residences, industries and commercial facilities of end-of-life-products, production residues or other waste materials
- *First Collectors*: Operator that receives end-of-life-products, by-products or residues from points of origin
- *Industrial Operators*: Organisation that applies for certification for a specific activity that includes feedstock processing and/or the *production of intermediary products, fuels or advanced products*
- *Mechanical operator*: Subgroup of industrial operators only conducting mechanical or physical processing, i.e. mixing, assembling, sorting, moulding, cutting, plastics extrusion. For further mechanical processes to be added to the list, please consult with the RSB Secretariat
- *Trader\**: Organisation that applies for certification for a specific activity that includes buying and selling of materials or products, including raw materials, intermediates and final products. Examples for traders are first collectors, blenders, wholesale and retail companies (also companies selling to end-consumers) as well as airlines or shipping companies selling transport services to their clients.
- *By-product*: By-products are non-essential components of other products, edible or inedible by human beings and/or animals, which may be isolated or removed in the course of post-harvest processing or other processing steps (Source: Kimetrica 2009).
- *Waste*: Any substance, mixture of substances, material or object which the holder discards or intends or is required to discard (Source: EN 16575:2014 Bio-based products – Vocabulary).
- *Agricultural, aquaculture, fisheries and forestry residues*: Residues that are directly generated by agriculture, aquaculture, fisheries and forestry and that do not include residues from related industries or processing.
- *Production residue*: Material that is a secondary product of a process which is inelastic in supply and that has an economic value ratio of  $\leq 5\%$  with respect to the sum of primary product(s), co-products and other by-products generated from the same production process. Please Note: Operators using production residues shall meet the requirements as defined in RSB Standard for Advanced Fuels [RSB-STD-01-010].

\*Please note that within the Japan FIT scheme electricity production facilities are designated as traders.

**The following acronyms are used:**

FIT: Japan's Feed-in Tariff legislation

GHG: Greenhouse Gases

METI: Japan's Ministry of Economy, Trade and Industry

P&C: Principles and Criteria

## J. Requirements

### 1. General Requirements

The following standards and procedures shall apply in addition to this standard:

1. 1. The full RSB Principles and Criteria [RSB-STD-01-001] shall apply to any Point of Origin, primary biomass producer and industrial operator along the supply chain.  
*Please note:* The full RSB Principles and Criteria do not apply to traders or mechanical operators, i.e. operators only conducting mechanical or physical processing (e.g. mixing, assembling, sorting, moulding, cutting, etc.)
1. 2. The RSB Chain of Custody Procedure [RSB-PRO-20-001] shall apply to any operator along the biomass supply chain with legal ownership of RSB certified material.
1. 3. The RSB Procedure for Participating Operators [RSB-PRO-30-001] shall apply to any *Participating Operator* (PO) along the biomass supply chain.  
*Please note:* POs are legal entities or natural persons that have entered into a formal agreement with the RSB Association (“Participating Operator Agreement”) and that are responsible for the implementation of the requirements of all applicable RSB Standards and Procedures in all organisations listed in the scope of certification.
1. 4. RSB Procedure for Communication & Claims [RSB-PRO-50-001] shall apply to any operator along the biomass supply chain.
1. 5. The RSB Procedure for Risk Management [RSB-PRO-60-001] shall apply to any PO along the biomass supply chain.
1. 6. The RSB Standard for Advanced Fuels [RSB-STD-01-010] shall apply to any operator along a biomass supply chain using wastes, residues or by-products.
1. 7. Only feedstocks listed in the Japan FIT positive list can be traded/used within the scheme as set out by METI. Please see Annex 2 for further information.
1. 8. For the Japan FIT scheme all Participating Operators across the supply chain from the point of origin onwards (including power plants) shall be covered within the scope of certification.

### 2. Additional Criteria for Japan FIT Eligible biomass

2. 1. Requirement related to the Greenhouse Gas emissions of biomass

The biomass producer or trader shall calculate the GHG emissions along the supply chain related to the collection, transport and processing of biomass from the Point of Origin to the point of delivery. The calculation shall follow the Japan FIT methodology laid out by METI (available at: [https://www.enecho.meti.go.jp/category/saving\\_and\\_new/saiene/kaitori/dl/fit\\_2017/legal/lifecy cleGHG.pdf](https://www.enecho.meti.go.jp/category/saving_and_new/saiene/kaitori/dl/fit_2017/legal/lifecy cleGHG.pdf)) and, to the extent no conflict exists with the Japan FIT methodology, Participating Operators may use the RSB GHG calculation Methodology [RSB-STD-01-003-01] and the RSB GHG Calculation Tool to carry out an individual calculations. Participating Operators can calculate this reduction based on the default values provided by METI (available at: [https://www.enecho.meti.go.jp/category/saving\\_and\\_new/saiene/kaitori/dl/fit\\_2017/legal/lifecy cleGHG bio.pdf](https://www.enecho.meti.go.jp/category/saving_and_new/saiene/kaitori/dl/fit_2017/legal/lifecy cleGHG bio.pdf)).

2. 2. Requirement related to Chain of Custody

2. 2. 1. The operator shall ensure that the Chain of Custody model used is recognised under the Japanese FIT system (currently, the models *Identify Preserved* and *Segregation* are recognised).

*Please note:* the RSB Chain of Custody Procedure [RSB-PRO-20-001] defines different chain of custody models, specifies requirements for those chain of custody models as well as the set of information that has to be forwarded to the next entity in the supply chain together with every batch of RSB certified material. Amongst other information items, operators must specify the chain of custody model used so that the information about the chain of custody model is tracked throughout the supply chain and verified by auditors in regular audits.

### 3. Additional criteria for Japan FIT GHG requirements

3. 1. Requirement related to the Greenhouse Gas emissions reduction

A 50% reduction in GHG emissions shall be achieved for fuels used until FY2029 and a 70% reduction shall be achieved for fuels used in FY2030 and beyond.

NOTE 1: All biomass power plants and participants in their supply chain approved under Japan FIT on and after 1 April 2022 have to conform to new sustainability requirements including GHG reduction as indicated in section 3.1 of this document. Notwithstanding, a grace period is given until 31 March 2026 which is intended to be used for certification acquisition by all Participating Operators in their supply chain including power plants. This grace period is intended to be utilized for: (1) the preparation of new criteria (incl. LCGHG reduction by certification schemes and (2) the certification acquisition on new criteria by all Participating Operators in the supply chain including power plants. Notwithstanding the grace period, if power plants start operation before 1 April 2026, the sustainability requirements including GHG reduction defined in requirement 3.1 above are applied. For clarity, this grace period is shown in Figure 1 below, in a visual manner.

3. 2. The value for the baseline for thermal power generation assuming 2030 energy mix is 180 g CO<sub>2</sub> /MJ electricity.

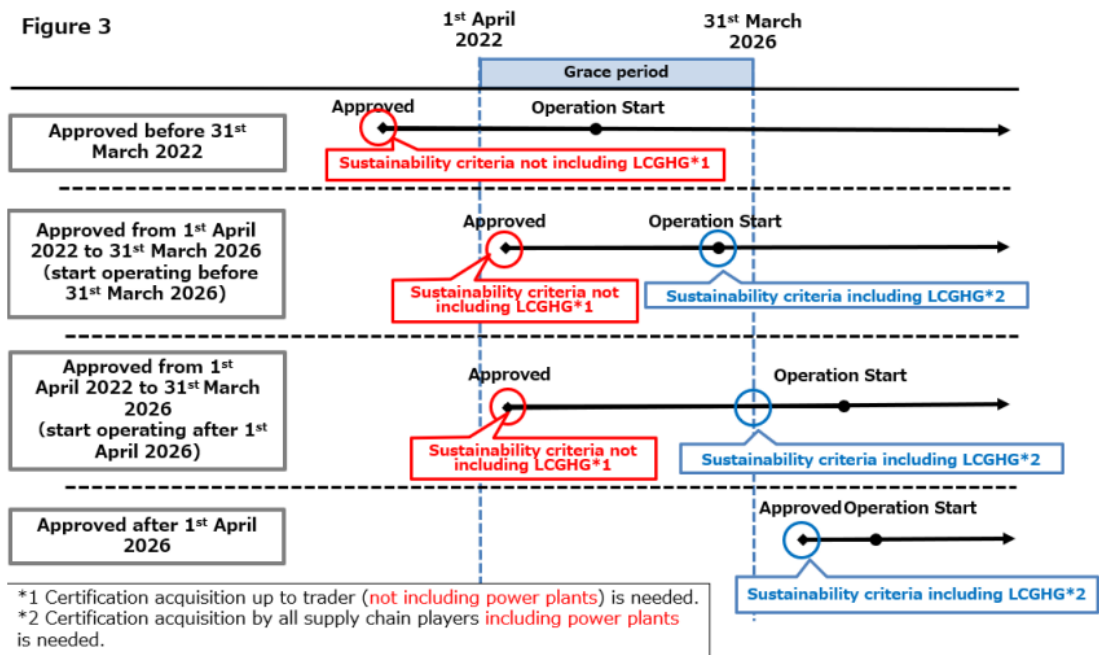
3. 3. Participating Operators shall calculate this GHG emission reduction following the Japan FIT methodology laid out by METI (available at:

[https://www.enecho.meti.go.jp/category/saving\\_and\\_new/saiene/kaitori/dl/fit\\_2017/legal/lifecycleGHG.pdf](https://www.enecho.meti.go.jp/category/saving_and_new/saiene/kaitori/dl/fit_2017/legal/lifecycleGHG.pdf)) and, to the extent no conflict exists with Japan FIT methodology, Participating Operators may use the RSB GHG calculation Methodology [RSB-STD-01-003-01]. Participating Operators can calculate this reduction based on the default values provided by METI (available at: [https://www.enecho.meti.go.jp/category/saving\\_and\\_new/saiene/kaitori/dl/fit\\_2017/legal/lifecycleGHG\\_bio.pdf](https://www.enecho.meti.go.jp/category/saving_and_new/saiene/kaitori/dl/fit_2017/legal/lifecycleGHG_bio.pdf)).

NOTE 2: In the scenarios where the default values defined by METI are the same as those defined in the RSB GHG Methodology and RSB GHG calculator (and/or where the default values needed for the calculation are not covered by Japan FIT), Participating Operators may use the RSB GHG calculator default values as reference when undertaking the calculations.



Figure 1. Grace period/ phased approach for calculating GHG emissions for the Japanese market in line with Japan's Feed in Tariff (FIT) system



**Fig. 1.** Diagram showing the Grace period/ phased approach for calculating GHG emissions for the Japanese market in line with Japan's Feed in Tariff (FIT) system. Source: Green Gold Label "[GGL 1F. Instruction document for GHG calculations for the Japanese market Version 1-1 \(January 2024\)](#)"

## Annex 1: Links to RSB Standards and Documents

RSB Principles and Criteria [RSB-STD-01-001]

<https://rsb.org/wp-content/uploads/2024/05/rsb-principles-criteria-std-01-001-v4-1.pdf>

Advanced Fuels Standard [RSB-STD-01-010]

[https://rsb.org/wp-content/uploads/2024/03/RSB-STD-01-010-RSB-Standard-for-advanced-fuels\\_v2.6-1.pdf](https://rsb.org/wp-content/uploads/2024/03/RSB-STD-01-010-RSB-Standard-for-advanced-fuels_v2.6-1.pdf)

Screening Tool [RSB-GUI-01-002-02]

[This is not currently available online except as part of the certification application process]

RSB-DOC-10-001 RSB List of documents

<https://rsb.org/wp-content/uploads/2021/05/RSB-DOC-10-001-RSB-List-of-documents.pdf>

RSB-STD-01-002 RSB Glossary of Terms

<https://rsb.org/wp-content/uploads/2020/06/RSB-STD-01-002-v.1.5-RSB-Glossary-of-Terms.pdf>

RSB Chain of Custody Procedure [RSB-PRO-20-001]

[https://rsb.org/wp-content/uploads/2020/08/RSB-PRO-20-001-RSB-Procedure-for-Traceability\\_v3.2.pdf](https://rsb.org/wp-content/uploads/2020/08/RSB-PRO-20-001-RSB-Procedure-for-Traceability_v3.2.pdf)

RSB Procedure for Participating Operators [RSB-PRO-30-001]

<https://rsb.org/wp-content/uploads/2020/06/RSB-PRO-30-001-v.3.4-RSB-Procedure-for-Participating-Operators.pdf>

RSB Procedure for Risk Management [RSB-PRO-60-001]

<https://rsb.org/wp-content/uploads/2020/06/RSB-PRO-60-001-vers-3.3-Procedure-for-Risk-Management.pdf>

RSB GHG calculation Methodology [RSB-STD-01-003-01]

<https://rsb.org/wp-content/uploads/2020/06/RSB-STD-01-003-01-RSB-GHG-Calculation-Methodology-v2.3.pdf>

RSB Procedure for Certification Bodies and Auditors [RSB-PRO-70-001]

<https://rsb.org/wp-content/uploads/2020/06/RSB-PRO-70-001-v.4.1-Procedure-CBs-and-Auditors.pdf>

## Annex 2: Positive List of Feedstocks for the Japan FIT Scheme

Feedstock Name	Feedstock Designation
Palm Kernel Shell (PKS)	Agricultural processing residues
Palm Trunk	Agricultural processing residues
Empty Fruit Bunches (EFB)	Agricultural processing residues
Coconut Shell	Agricultural processing residues
Cashew Nutshell	Agricultural processing residues
Walnut Shell	Agricultural processing residues
Almond Shell	Agricultural processing residues
Pistachio Shell	Agricultural processing residues
Sunflower Seed Shells	Agricultural processing residues
Corn Straw Pellet	Agricultural processing residues
Bengkuan Seeds	Agricultural processing residues
Sugar Cane Stems & Leaves	Residue from agriculture
Peanut Shell	Agricultural processing residues
Cashew Nut Shell Liquid (CNSL)	Agricultural processing residues

For feedstock specific requirements, please see section F.3 of the [RSB-STD-01-010-RSB-Standard-for-advanced-fuels](#).