RSB – ROUNDTABLE ON SUSTAINABLE BIOMATERIALS

RSB Reactive Guidance on the certification of first collectors using end-of-life plastic

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Contact details: RSB - Roundtable on Sustainable Biomaterials
Impact Hub Geneva
Rue Fendt 1
1201 Geneva
Switzerland
web: http://www.rsb.org
email: info@rsb.org

1. Objective

The objective of this document is to provide guidance to auditors, certification bodies and participating operators about requirements related to the certification of first collectors of end-of-life plastics as a feedstock in the scope of certification.

2. Relevant standard references

RSB Standard for Advanced Products (RSB-STD-02-001)

RSB Standard for Advanced Fuels (RSB-STD-01-010)

RSB Procedure for Certification Bodies and Auditors (RSB-PRO-70-001)

3. Background

The annex of RSB Standard for Advanced Fuels lists waste plastic as an end-of-life product of non-biogenic origin (annex I, category 3) that is eligible for RSB certification. The standard further defines specific criteria that apply for pathways using fossil end-of-life products as feedstock (G.4) related to the calculation of Greenhouse Gas emissions and the removal of recyclable material. The same requirements are valid for certifications against the RSB Standard for Advanced Products. Therefore, whenever the RSB Standard for Advanced Fuels is referenced, the same is valid for certifications against the RSB Standard for Advanced Products.

4. Relevant requirements

- *G.1.1 (Eligibility) Feedstocks listed in*
  - *Annex I, Category 1 (End-of-life products of biogenic origin)*
  - *Annex I Category 3 (End-of-life products of non-biogenic origin), and*
  - *Annex III (Renewable fuels of non-biological origin)*

  are eligible for certification.

  Please note: Notwithstanding the eligibility of materials, ***auditors are required to verify the material type and conduct a plausibility check of the amount****. See RSB Procedure for Certification Bodies and Auditors (RSB-PRO-70) for further information on the auditing and certification process.*

- *G.2.2 Requirements on traceability*

- *G.4.1.1 The operator shall not use on-product claims that refer to biofuels or biomaterials (for example: "RSB-Compliant Low Carbon Fuel" or "RSB-Compliant Advanced Fuel" would be allowed)*

- *G.4.1.2. The operator shall provide evidence that the fossil carbon stored in the end-of-life product or production residue-based materials would ultimately be emitted into the atmosphere as local CO_2 emissions (e.g. incineration of fossil MSW) or other greenhouse gases (e.g. methane) in the absence of the utilisation.*

- *G.1.3. The operator shall provide evidence that all practical and cost-effective efforts to remove recyclable material (see definition in F.12) have been made or that recycling would result in poor product properties or in a higher environmental impact.*

- *G.1.4. For compliance with Principle 3, the following greenhouse gas emissions are considered*

    - *If the evidence in G.4.1.2 is provided: emissions resulting from capturing or collecting the end-of-life products, or production residues, emissions resulting from the processing into fuel, emissions from transport from the point of capture/collection to fuel station/final distributor.*

    - *If the evidence in G.4.1.2 is not provided: all emissions above as well as emissions from combustion/use of the fuel.*

5. Relevant definitions

See RSB Standard for Advanced Fuels and RSB Glossary of Terms:

End-of-life product
Material with low economic value that the holder discards or intends or is required to discard and that was not primarily produced or intended for the production of advanced fuels or advanced products and has reached the end of its intended supply chain, as it has been consumed, used, spoiled etc.

First collector: Operator that receives end-of-life-products or production residues from points of origin.

Point 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

Recyclable material

Material such as glass, paper, metal, plastic, textiles and electronics that

a) can be diverted from the waste stream through regionally established recycling programmes that are available to a significant portion of the consumers or communities in the region of operation, and
b) are cost-effectively collected, processed, and returned to use in the form of raw materials and products.

(Adapted from ISO 14021 and FTC Green Guides, 260.12)

6. Auditing requirements

The auditing requirements for the certification scheme RSB Global is specified in the RSB Procedure for CBs and Auditors (RSB-PRO-70) per operator type, as follows:

- Chemical or mechanical processing: Individual audits
- First collectors: Risk-based sampling
- Points of origin: Risk-based sampling

7. Guidance for the certification of first collectors using end-of-life plastic

A. Definitions

In the context of waste plastic supply chains, points of origins may be aggregators of end-of-life plastic feedstocks, such as community (municipal) collection sites, landfill sites, sorting sites or recycling companies.

B. Requirements

According to the RSB Standard for Advanced Fuels G.2.2.3, *first collectors shall have supporting evidence back to the point of origin of the material, which shall be available for the auditors to verify.* Therefore, following the above definition, in the case of waste plastic feedstocks it is the responsibility of the first collector to ensure that **point of origin** operators (aggregators) provide verifiable evidence of the feedstock material compliance with RSB requirements.

In line with RSB Standard for Advanced Fuels the point of origin shall be contractually obliged to

- Provide the following information with each batch of material delivered
    - Name of the specific material type
    - Baseline scenario, i.e. previous fate of the feedstock (see section D)
    - Greenhouse Gas Emissions related to processing and transport (see section D)
- Ensure that the specified material does not contain any other material types;
- Ensure that the delivered material complies with the definition of end-of-life material (see above);
- Ensure that the delivered material does not contain any recyclable material (see section C and see also definition, this includes for example material that would have been mechanically recycled);
- Ensure that all applicable waste-related legislation is complied with and all applicable licenses and permits are available;
- Maintain the relevant documentation to ensure compliance with RSB requirements on traceability (i.e. both procurement management and mass balance systems for each material included in the scope of certification - see section E):
- Ensure that all of the above evidence is available for the auditors to verify and ensure that auditors have access to all sites as necessary for the audit

In addition, operators may voluntarily report displacement emissions (see section F).

A self-declaration including all of the above signed by the representative of the company may be such a contractual obligation.

C. Evidence to provide for non-recyclable material

As of the above, the point of origin has to ensure that the delivered material does not contain any recyclable material.

This is in line with RSB Standard for Advanced Fuels G.4 Pathway-specific requirements for recycled carbon fuels requiring:

> *G.4.1.3 The operator shall provide evidence that all practical and cost-effective efforts to remove recyclable material (see definition above) have been made or that recycling would result in poor product properties or in a higher environmental impact.*

Auditors will assess the relevant documentation in an audit sample of the points of origin delivering to the first collector.

Evidence may be the specification of the type of material which the end-of-life plastic material comprises, and evidence and that it is not mechanically recyclable in the local region, e.g. by evidencing the type of recycling pathways available in the region. Evidence on the type of material may be provided for example in the form of a process description for incoming material checks.

D. Evidence to provide for Greenhouse gas emissions

As of the above, the point of origin has to provide to the auditor information about the previous use of the material (i.e. the baseline scenario) as well as information about transport and processing emissions.

This is in line with RSB Standard for Advanced Fuels G.4 Pathway-specific requirements for recycled carbon fuels:

> *G.4.1.4 For compliance with Principle 3, the following greenhouse gas emissions are considered:*
>
> *Emissions resulting from capturing or collecting the end-of-life products, emissions resulting from the processing, emissions from transport from the point of capture/collection to next operator.*

And RSB Standard for Advanced Products F.2.4 Pathway-specific requirements for recycled carbon fuels:

F.2.4.2.1 Fossil end-of-life products and production residues shall be considered to have zero-life-cycle emissions up to the collection of those materials. The calculation of greenhouse gas emissions shall therefore start with the aggregation of the material at the point of origin.

F.2.4.2.3 All emissions that occur within the same site at the point of origin as side effects of the redirection of the feedstock flows have to be considered.

Example: An end-of-life material flow that was previously incinerated is now separated into two streams. One stream is used for the advanced product, while the other stream is still incinerated. Should the stream for incineration require additional energy (e.g. for sorting, separating, weighing) as an effect of the separation, those emissions have to be included in the GHG calculation of the advanced product.

F.2.4.2.4 Whenever operators who use fossil end-of-life products can demonstrate that the carbon stored in those waste or residue-based materials would ultimately be emitted into the atmosphere as local CO_2 emissions (e.g. incineration of fossil MSW) in the absence of the utilisation (i.e.in the baseline scenario), the operator may

- *calculate the GHG emissions that will be avoided compared to the baseline scenario, and*

- *deduct the avoided emissions from the GHG value of the final product.*

To simplify this calculation, the operator may also set e_{eol} at zero instead of calculating and deducting avoided emissions from the final GHG value.

Please note: Operators applying the above have to disclose that avoided emissions were considered whenever the GHG emission of the product or the GHG saving potential compared to the fossil reference product is used in Business-to-Business (B2B) or Business-to-Consumer (B2C) communication.

Auditors will assess the relevant documentation in an audit sample of the points of origin delivering to the first collector.

Evidence to be provided:

- ***Baseline scenario (i.e. previous fate of the feedstock): Evidence may be provided in the form of regional statistics on waste plastic disposal (e.g. statistics on incineration and landfilling)***
- ***Transport emissions: Emissions from the transport of the material from the collection onwards in g CO_2 / kg. Points of Origin may also provide the tkm for the First Collector to make the corresponding calculation***
- ***Processing emissions: Emissions from the collection of the material onwards (e.g. emissions resulting from energy needed for sorting, etc.) in g CO_2 / kg***

Please note: For transport and processing emissions operators shall include all emissions that are additional to the baseline scenario, i.e. emissions that already occurred in the baseline scenario do not have to be included.

E. Evidence to provide for the traceability of material

As of the above, operators have to maintain the relevant documentation to ensure compliance with RSB requirements on traceability.

This is in line with RSB Standard for Advanced Fuels G.2.2. Traceability requirements.

Auditors will assess the relevant documentation in an audit sample of the points of origin delivering to the first collector.

Evidence to be provided to the auditor:

- ***A list of all suppliers with whom the organisation is currently engaged. The list of suppliers shall be updated regularly and contain the following information:***
  - ***Legal name of the supplier;***
  - ***Physical address and phone number of supplier;***
  - ***Contact name.***
- ***Acquisition data, on a physical volume or weight basis, associated with each individual listed supplier, by quarter. This may include both purchased and otherwise collected/acquired material***
- ***A contractual requirement that all suppliers shall provide the necessary information on type of material, country of origin on a physical volume or weight basis for all consignments.***
- ***Sales data on a physical volume or weight basis for the end-of-life products and production residues for the previous 12 month period.***
- ***A procedure for demonstrating that the end-of-life products are in mass balance with end-of-life products sold, or kept in stock, every quarter, over the course of the preceding year, for all categories of material handled by the organisation.***
- ***Where the organisation aggregates or forwards end-of- life products and production residues, the nationally compliant documentation, stating the type of material and the country of origin, shall be passed on with each consignment sold.***

F. Evidence to provide for displacement emissions

As of the above operators may voluntarily report displacement emissions.

This is in line with RSB Standard for Advanced Fuels G.2 Sustainability requirements:

> *G.2.1.3. In addition (to the greenhouse gas calculation), advanced fuel producers may voluntarily report on indirect emissions that may have been created by the diversion of end-of-life-products or residual feedstocks to the eligible product.*

The reporting shall be separate from the Greenhouse Gas Calculation. The operator shall report on the estimated displacement emissions risk level by following the RSB methodology for estimating displacement emissions.

Please note: RSB aims to support pathways with significant GHG emission reduction potential. Displacement emissions may occur when a feedstock is diverted from an existing use to advanced fuel or product production and therefore must be considered. The RSB adopted a methodology for estimating displacement effects in 2018 and is currently conducting a pilot phase to better understand the practicality of the methodology and uncertainty of the results. During this pilot phase, the application of this requirement G.2.1.2.2. is voluntary. In 2021, the RSB General Assembly will decide on any necessary updates of the methodology as well as whether the displacement assessment should be obligatory or voluntary.

Evidence to be provided to the auditor:
Records and documentation in line with the RSB methodology for displacement emissions (RSB-STD-04-002)