



Recycled Content Certification

**Standard Audit Plan
April 2024**

1.0 Background

Recycled Content certification demonstrates an organization's commitment to reuse materials in an effort to support a circular economy and reduce their reliance on virgin materials.

GreenCircle Certified, LLC's (GreenCircle's) Recycled Content Certification was developed to evaluate the source of the recycled content raw materials, determine their pre-consumer and post-consumer designations, and ultimately determine the total percent (by weight) of the recycled content materials in the product in accordance with internationally accepted definitions (as defined in ISO 14021:2016). Recycled content is comprised of pre-consumer (post-industrial, PIR) and/or post-consumer (PCR) material that is used as a feedstock/raw material in the manufacturing of a product.

GreenCircle will conduct the audit for Recycled Content Certification in accordance to the requirements and methods set forth in this audit plan and in GreenCircle's Certification Scheme; in compliance with ISO17065:2012. As part of GreenCircle's evaluation process, GreenCircle will obtain a complete understanding of each product's bill of material(s) or product recipe(s) and manufacturing operations to determine the amount of total recycled content within each product. GreenCircle will conduct a mass balance analysis of all material flows within the manufacturing or supplier facility to ensure enough recycled content raw materials were purchased and used in production to consistently meet the recycled content claims within the product recipe(s) during the certification period.

To ensure specificity and accuracy of the recycled content claims, GreenCircle certifies all recycled content claims on per product (or product family) basis. Using this methodology, GreenCircle will then provide a certified percentage of pre-consumer and post-consumer recycled content (percent by weight) within the product or raw material. This process ensures accuracy and authenticity of recycled content claims. Average recycled content on a product basis, with multiple production sites, can be calculated upon request.

Industry Specific:

- **Building Products:** GreenCircle will evaluate compliance with the LEED rating system.
- **Plastic Recyclers:** GreenCircle (an Association of Plastic Recycler endorsed auditor) will evaluate the compliance to the Association of Plastic Recyclers for certified PCR.
- **Amazon Climate Pledge Friendly Products:** GreenCircle will evaluate the eligibility for Amazon Climate Pledge Friendly for any products that meet the requirements set by Amazon.

2.0 Goal

The goal of Recycled Content Certification is to verify sources of recycled materials and distinguish recycled content by pre-consumer and post-consumer content within the supply chain based on ISO 14021:2016 definitions and the guidelines in the 2012 Federal Trade Commission (FTC) Green Guides for recycled content. GreenCircle will then certify a product's total recycled content (percent by weight) based on the methods and definitions outlined in this Audit Plan.

3.0 Company Qualifications

Companies that manufacture products or produce raw materials that contain or consist of recycled content will be eligible for recycled content product certification. During the proposal development process, GreenCircle will conduct initial meetings with the client to understand the products, operations, and recycled content materials being utilized to verify if the proposed materials and process will qualify for an audit and possible certification. It is not guaranteed that a product will be certified for recycled content until a thorough audit is completed by GreenCircle. Products must contain at least 1% recycled content to receive a recycled content certification.

Pilot Projects: GreenCircle will conduct a pilot certification, for a product that has less than six (6) months of steady state production. It is the client's responsibility to communicate to GreenCircle that the product does not have 6-12 months of data. For pilot projects with only engineering-build documentation, GreenCircle will issue a certificate that references the analysis was based on a pilot project. The maximum period for certification as a pilot product is two years, which is one year of initial certification and one year of recertification if the client is not prepared with the necessary data to remove the pilot language. GreenCircle will require at least 6 months of steady state or representative production data to remove the pilot language from the certificate. The client will be required to provide confirmation that the product recipe(s) and supplier(s) have remain unchanged; or provided updated information. The client will be required to provide updated data (per the Documentation Requirements below) no later than month ten (10) from initial certification start date to avoid expiration. GreenCircle will then complete an analysis to confirm no changes to the previous analysis; or incorporate changes to the bill of materials or supplier information has changed. At the completion of this analysis, new certificate(s) will be issued as applicable.

4.0 Documentation Requirements

To qualify for certification, a company must provide documentation that clearly describes and includes:

- Product bill of material/recipe or materials detailing the amount and type of raw materials used to manufacture the product (percent by weight basis).
- Total production of the specified product or material during the twelve-month period being examined.
- A list of current suppliers that are assumed to be supplying recycled content (or partial recycled content) materials, as well as contact information for each supplier to allow GreenCircle to conduct an audit.
- Total raw material purchased, or total recycled content raw material purchased, by supplier, for the manufacturing of the specified product, during the twelve-month period being examined.
- One sample purchase order, or equivalent, (during the evaluation period), per plant, for each recycled content material from each supplier.
- Total raw material usage, or total recycled content raw material usage, for the manufacturing of the specified product, during the twelve-month period being examined.
- An attestation from each recycled content raw material supplier of recycled content materials indicating the pre-consumer and post-consumer percentages within the raw materials supplied and description of material sources. GreenCircle will provide a form for each supplier to complete as a part of the audit process. This form must be completed and signed by a representative from the supplier's company. Equivalent documentation can be submitted for verification by GreenCircle.
 - For a material that a client receives that has already been processed from collected recycled materials, GreenCircle may request to also audit the upstream supplier(s) of material if the processor is unable to provide adequate description in the recycled content questionnaire. GreenCircle may also request to visually verify the material received by the processor.
- A company must also provide GreenCircle access for a site visit to the processing or manufacturing facility. GreenCircle will determine if this requirement will be met through an on-site visit or a virtual visit for visual verification of the incoming recycled content material and manufacturing process.

5.0 Audit and Certification Process

5.1 Data Collection

Once the proposal and certification agreement are signed by the client, GreenCircle will conduct an initial project meeting, via video or conference call, with contact(s) at each manufacturing facility to discuss the required data, GreenCircle's audit process and

project schedule. GreenCircle will gain an understanding of the material inputs and management system for the manufacturing of the recycled content product.

GreenCircle will provide a data request to be completed by the facility contact(s). The data collection process also includes GreenCircle's outreach to suppliers of recycled content materials to verify the pre-consumer and post-consumer percentages within the raw materials supplied. GreenCircle will make up to three (3) attempts to contact each supplier. See Section 4.0 Documentation Requirements for specific data that will be requested for verification of the recycled content.

5.2 Mass Balance Analysis

Upon receiving initial data, GreenCircle will conduct a mass balance analysis of all material flows within the manufacturing facility to ensure enough recycled content raw materials were purchased and used in production to consistently meet the recycled content claims within the product recipe for the certification period. If the audit includes multiple manufacturing facilities, the mass balance must be achieved at each manufacturing facility independently.

5.3 Site Audit

GreenCircle will conduct a site visit and audit of the manufacturing facility and suppliers (suppliers as deemed necessary) to audit and verify the material utilization and material flows within the manufacturing process. GreenCircle will conduct interviews with representatives at the facility as part of the audit process as well as review any additional data needed to complete the recycled content certification.

The site visit will include a walk-through of the facility to conduct a visual inspection and collect photo documentation to verify the recycled content materials being used within the process to manufacture the products. As part of the auditing and verification process GreenCircle may conduct a verification of chain of custody records of material flows observed .. GreenCircle will assess the inventory control of the raw materials and the finished product containing recycled content. For plastic recyclers, GreenCircle will validate the equipment and processing of washing the post-consumer material prior to production.

GreenCircle may allow a site visit to be conducted virtually if the material utilization and material flows can be visually verified. To be eligible for a virtual site visit a client must:

- Provide process flow and facility diagrams in advance.
- Participate in a virtual site visit planning meeting to review the capabilities of the facility to provide visual verification through virtual equipment and to review the process and facility diagrams.

GreenCircle will also take into consideration the following:

- Scope of the audit

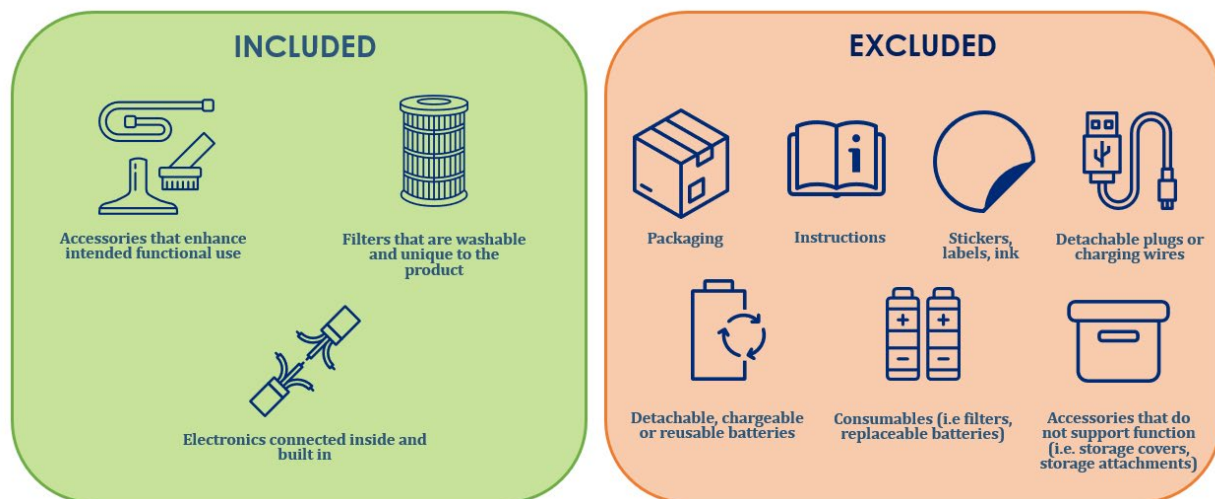
- Size of the facility
- Complexity of the product recipe
- Complexity of the processing and production methods

GreenCircle may consider the fulfillment of visual verification through pre-recorded site visits and/or supplemental photos during the audit process.

5.4 Recycled Content Calculations

GreenCircle will conduct a thorough review of the bill of material/product recipe. GreenCircle will verify the pre-consumer and post-consumer designations of the raw materials through supplier interviews, site audits, and/or the documentation collected. GreenCircle will utilize all data received as inputs to this verification and document any assumptions in the Certification Report. GreenCircle will then determine the minimum amount of post-consumer and pre-consumer recycled content (on a percent by weight basis) within each constituent of the final product.

The calculations will only include components/materials that are included within the product boundary defined below. If the recipe includes any components that are outside of the product boundary, these component weights will be excluded from the calculations.



GreenCircle will incorporate the output of the mass balance analysis, if applicable, into the recycled content calculation. This may be applicable if the mass balance analysis demonstrates insufficient recycled materials are used to meet the recycled content based on the product recipe.

The total percentage of recycled content within the product is subsequently determined by summing the total pre-consumer and post-consumer recycled content within the constituents. After completion of the GreenCircle recycled content audit process, GreenCircle will certify the minimum recycled content product claim and certify the

minimum percentage by weight of recycled content utilized to make the products or materials.

5.4.1 Multiple Facilities

GreenCircle's preferred and default approach is to audit each facility independently based on the above methods, then compare each facility's results to determine the minimum pre-consumer and post-consumer recycled content of the product achieved across all facilities. This allows the certification to represent the product, regardless of manufacturing facility, and provides maximum transparency for consumers. This also eliminates a risk to the client by avoiding multiple certificates representing a single product name.

GreenCircle will, at the request of the client, certify the minimum pre-consumer and post-consumer recycled content of the product based on the national average across a client's multiple manufacturing facilities of the same product. Certification to national average will require the use of a qualification statement as reflected on the GreenCircle Certificate. Each facility must achieve a mass balance independently, as GreenCircle does not recognize or credit the sharing of recycled content materials across facilities to achieve a recycled content percentage.

5.4.2 Exceptions

Data Requirement Exceptions

GreenCircle may accept equivalent documentation in place of the supplier questionnaire or supplier attestation if verified to be current and provided the same information required in the supplier questionnaire for the verification of recycled content. An existing recycled content certification, from another certifier, may be used in place of the supplier questionnaire or supplier attestation if verified to be current and adheres to the same definitions and verification requirements set forth in this audit plan for pre-consumer and post-consumer recycled content.

If the company's supplier list exceeds 25 suppliers, GreenCircle will conduct outreach to a representative sample of suppliers of each recycled raw material, such as plastics or scrap aluminum. GreenCircle will use this information to determine a sample size that will represent greater than 50% by weight of the same raw material(s). GreenCircle requires confirmation of 50% of the material if using the representative sample method and therefore recommends outreach to the top 70% of suppliers. During the Sales process, the client must make this determination and provide an accurate estimate of the number of suppliers that would provide 70% by weight of raw materials sourced. Additionally, if a company's list of representative suppliers includes a supplier that was audited by GreenCircle during a previous audit for the same material, GreenCircle may utilize the historical supplier questionnaire for up to three years on the same material.

GreenCircle will make up to three (3) attempts to contact each supplier regarding the material supplied to the client. If a supplier questionnaire is not received or not completed in full, GreenCircle may utilize supporting information such as visual verification from a site visit to determine the classification of pre-consumer or post-consumer if possible. If GreenCircle cannot make a determination, the material will not be classified as recycled content.

If the company repurchases scrap from a customer (ex. client sells aluminum to a manufacturer and the manufacturer sells the leftover scrap back to the client), GreenCircle may accept an attestation or equivalent documentation that the material supplied is scrap (waste material from manufacturing which is post-industrial recycled content) if the manufacturer (supplier) does not complete the supplier questionnaire.

If a product is not yet being manufactured and therefore production, raw material usage, and raw material purchase data is not available for a product or only reflected in trial runs, GreenCircle will verify as a pilot certification. GreenCircle will include a qualifying statement describing the pilot production that will appear on the product's certificate.

If a site visit was conducted at the same facility within the past three (3) years for the same or similar products GreenCircle may use the previous site visit as a proxy. GreenCircle will review site visit photos, notes and observations from previous project to verify the site visit did not identify issues or inaccuracies with data or documentation. If issues were found with the original site visit, the client would need to participate in a virtual site visit with GreenCircle.

Calculation Exceptions

GreenCircle will exclude water from the product recipe and assess the recycled content based on the dry weight of the product. GreenCircle will also exclude additives noted in the product recipe, which are used as manufacturing process aids and are not present in the final product.

GreenCircle allows the exclusion of "minor, incidental component" from the product boundary per in the guidance in the 2012 FTC Green Guides. GreenCircle will interpret minor, incidental components (not recipe additives) to be less than five percent (5%) by weight of the total product weight and able to be clearly differentiated and understood by a consumer, by which GreenCircle will describe in a qualifying statement that will appear on the product's certificate.

GreenCircle allows the certification to a lower recycled content value at the client's request. Clients may request this to mitigate future changes in raw material supply or to

reflect the presented recycled content value based on the minimum requirement in the product recipe/formulation.

GreenCircle may exclude a mass balance for assembly facilities as determined by a review and understanding of the product recipe(s)'s and manufacturing process.

GreenCircle may conduct a recycled content certification to an industry standard if requested. If the definitions or calculations deviate from GreenCircle's Recycled Content Standard Audit Plan, the qualifying language or industry standard will be evident on the certificate and GreenCircle will not list GreenCircle Recycled Content Standard Audit Plan on the certificate.

5.5 Certification Audit Deliverables

Upon verification of the recycled content claims, GreenCircle will issue GreenCircle Certified, LLC Certificates and Mark for the specified product manufactured at a specific facility. The certificate will document that an independent evaluation of the recycled content claims has been conducted on behalf of the client for the specified product(s). All certificate holders must notify GreenCircle Certified, LLC of any significant changes in products or operations that could alter any of the claims detailed in certification.

GreenCircle will prepare a written report on the audit process and findings and provide this report to the Client. GreenCircle will also list the final certificates on the GreenCircle Certified Product Database and provide GreenCircle Marks for use in marketing.

5.5.1 Certificate Description

GreenCircle may include supporting statements on the certificate for transparency regarding the certified recycled content of the product or material.

The certificate will include the minimum percentage of pre-consumer, post-consumer and total recycled content contained within the product(s) analyzed.

If GreenCircle was unable to accurately classify between pre-consumer and post-consumer recycled content GreenCircle will certify a minimum total recycled content without providing a differentiation between pre-consumer and post-consumer.

There may be instances where the pre-consumer and post-consumer values do not equal the total recycled content value due to supplier inability to differentiate or due to the evaluation of multiple manufacturing facilities. This would be reflected as: This product (or product family) has been verified to contain a minimum total recycled content of X% that includes a minimum of X% pre-

consumer recycled content and a minimum of X% post-consumer recycled content.

GreenCircle will also certify only the post-consumer recycled content (PCR) of a product at the request of a client. The same audit process dictated in this standard audit plan will be followed and pre-consumer recycled content will be excluded.

6.0 Recycling Recapture Audit

GreenCircle can review the client's tracking of recycled material received, for the last 12 months, from a specific supplier to provide verification of the processing of the material into an outgoing product.

GreenCircle will perform the requested audit by collecting documentation on the quantities received, type of material received, and processing methods of the material. This will include interviews with the client and a site visit to the processing facility(s).

Data Request may include the client's previous 12 months of data and documentation on material quantities received and recycling/processing methods through the following:

- Total monthly incoming material quantities by type for the previous 12 months
- Process flow diagram or pictorial representation of material processing
- Weights and types of contaminants from the incoming material and the end destination of those materials
- Visual evidence of the end processing of the materials
 - GreenCircle may request a virtual or in person site visit to the processing facility for further confirmation.

At a client's request, and if data is available, GreenCircle can provide a percentage of the materials processed that include a specific supplier's recycled materials.

This audit can also be customized as verification of a client's take back program.

7.0 Annual Recertification Process

All certified claims are recertified annually. It is important for GreenCircle to evaluate any changes within the product, operations, or manufacturing processes to ensure continued compliance with the established criteria, including information of supplier variability or source of recycled content material, etc. The completion of recertification ensures continued transparency and further use of the GreenCircle mark.

8.0 Complaints, Appeals, and Disputes

GreenCircle must be contacted immediately if there is a complaint, appeal, and or dispute brought against a certification that GreenCircle has verified. GreenCircle will

follow the Appeals, Complaints, and Disputes Procedure to review and resolve the issue.

9.0 Guidelines for Private Label User

The recycled content certification is for the exclusive use of the Client. Companies that produce private label products will require any private label Customers, or downstream re-sellers of the certified product(s) who desire to utilize the GreenCircle recycled content certification to enter into a separate Licensing Agreement with GreenCircle regarding the use of the GreenCircle Mark on private label product and promotional materials.

10.0 Labeling Requirements

The Client agrees to promptly cease display and use of the GreenCircle Certified, LLC mark: (1) Upon expiration of the certification period; (2) If Client is no longer in compliance with the certification requirements in this audit plan or the GreenCircle terms and conditions. Please reference the **GreenCircle Certified Mark Usage Guidelines** for further details and more information on using the mark. The Client shall take caution to ensure that the GreenCircle Certification mark is not associated with products and/or operations which do not comply with the GreenCircle Certification Scheme (GCCS). The Client will be asked to remove the GreenCircle mark immediately if it is found that they have applied the mark on a non-conforming GCCS product and/or operation. If the Client fails to remove the misused mark, an investigation will be conducted pertaining to the misuse, in which the full cost of the investigation shall be borne by the Client. The Client shall not allow the GCCS Certification mark to remain on non-conforming products offered for sale. Such action could invite prosecution under U.S. Trademark statutes or attract other penalty provisions in other U.S. or State law.

11.0 Key Terminology

Additives: Substances intentionally added to a base material to achieve a desired physical or chemical property of the final product.

Audit Plan: Specifies how GreenCircle intends to conduct a particular audit. The audit plan describes the required activities to achieve the audit objectives.

Boxed Sets: GreenCircle allows accessories sold with the certified product to be excluded from the evaluation, if they account for no more than 5% of the total mass. This allows for the certification to be applied when the base product is packaged with various accessory sets for the consumer.

Certification Period: A twelve-month period immediately following the completion of a certification during which the recycled content claims are valid. Prior to the end of the certification period, the manufacture must complete annual recertification requirements in order to maintain certification credentials.

Certified Product: In order for a product to be certified by GreenCircle, the product must complete the GreenCircle audit process and certification requirements. In order to achieve certification GreenCircle will identify a minimum percentage of recycled content that is certifiable for the product. The certification process must be completed per GreenCircle's guidelines and internal procedures.

Component: A constituent part of something (such as a system or mixture).

Evaluation Period: GreenCircle requires twelve months of consistent data to support certified claims. This period is typically the twelve-month period immediately preceding the initiation of Certification, which GreenCircle identifies at the beginning of each certification, and is called the Evaluation Period. GreenCircle will collect various documentation needed to certify the specific claim from this period. If consistent data is not available for the most recent twelve-month period, or if attributes have changed within the past twelve months, GreenCircle may allow a six-month or three-month evaluation period and will require additional information to be submitted to validate the claims.

High-density polyethylene (HDPE): A strong, lightweight, durable plastic material commonly used for rigid plastics. Coded as plastic resin #2.

Internal Loop Material, Internally Circulated Content: If an organization does not purchase or use external recycled content materials (as defined by ISO 14021 definitions of pre/post-consumer recycled content), internal material utilized within the same process that generated it will not count as recycled content materials. A commonly used term for this is 'run-around scrap', which GreenCircle does not classify as recycled content. If an organization does purchase or use external recycled content materials and also recycles internal material within the same process, the percentage of externally purchased recycled content within the internal loop material will be counted toward the total recycled content percentage of the product.

Low-density polyethylene (LDPE): A soft, flexible, lightweight plastic material commonly used for bags and wrap. Coded as plastic resin #4.

Material Inputs: All incoming materials including ingredients, collected materials or components, reclaimed or recycled materials, virgin materials and/or purchased materials.

Material Outputs: All outgoing materials or products from a manufacturing or processing facility.

Pilot Product: This is a product that is in an engineering-build phase in which the product was recently launched or soon to be launched has less than 6 (six) months of steady state production. The maximum period for certification as a pilot product is two years.

Post-Consumer Recycled Content (PCR): Material that has reached its intended end-user of the product and can no longer be used for its intended purpose. This material can be generated by households or by commercial, industrial, and institutional facilities. This includes returns of material from the distribution chain.

Pre-Consumer Recycled Content: Material diverted from the waste stream during a manufacturing process that never reached the end-user. A waste or recovered material that has been reprocessed, by another manufacturing process prior to use, can be classified as pre-consumer (also called post-industrial, PIR). Excluded is reutilization of materials such as rework, regrind, or scrap generated in a process and capable of being reclaimed with the same process that generated it without being modified.

Product: A single model or SKU represented by a unique product recipe that is manufactured or refined for sale.

Product Family: A product, that provides the same service or consumer function, which utilizes the same bill of materials with minor deviations such as color, scent, flavor or sizing.

If the deviation of weight is less than 5% due to color, scent or flavor additives then the certification results can be combined and presented as a product family; with certification to a minimum.

If the product has multiple sizes, GCC will review the deviation of raw materials proportional to total weight. If the deviations of raw materials are less than 10% due to sizing, then this is within the product family and the certification results can be combined and presented as a product family, with certification to a minimum.

If there is a higher variance in the bills of materials, a client may request a product family grouping in which GreenCircle will certify to the minimum all of all products in the group.

Recycled Content: Proportion, by mass, of recycled material in a product, material, or packaging. Only pre-consumer and post-consumer materials shall be considered as recycled content.

Recycled Material: Material that has been reprocessed from recovered (reclaimed) material by means of a manufacturing process and made into a final ingredient, raw material, or component for incorporation into a product.

Recovered (reclaimed) Material: Material that would have otherwise been disposed of as a waste or used for energy recovery but has instead been collected and recovered (reclaimed) as a material input, in lieu of new primary material, for a recycling or manufacturing process.

Recycler: An organization that performs collection and processing of materials and makes it into another usable raw material or product so the recycled materials can be reutilized in the manufacturing of new products or materials.

Reusable: Products that are designed to be, and can be, used more than once.

Recyclable: “Recyclable” is a characteristic of a product, packaging, or associated component that can be diverted from the waste stream through available processes and programs and can be collected, processed, and returned to use in the form of raw materials or products. The Federal Trade Commission’s Green Guides require that a product be able to be recycled within 60% of the current US infrastructure in order to be considered “recyclable”.

Recycling: A process that turns materials that would otherwise be waste into valuable resources.

Mechanical Recycling: The process of turning waste into secondary raw materials (or products) through mechanical processes which may include washing, grinding, separating, drying, compounding but does not change the chemical structure of the material.

Advanced Recycling: A recycling process that may change the chemical structure of the material such as dissolution, depolymerization, solvent purification or other processes where the chemical structure of a polymer is converted into a monomer. This process typically removes the additives or contaminants of the material so the primary monomer can be used as a raw material in chemical processes.

12.0 Reference Documents

16 CFR 260.13 *Federal Trade Commission – Recycled content claims*

Association of Plastic Recyclers: Post Consumer Recycled Content requirements for APR PCR Certification of PCR pellets and flakes

EN45557-2020 General method for assessing the proportion of recycled material content in energy-related products

The Federal Trade Commission's Green Guides (2012) - Guides for the Use of Environmental Marketing Claims

GreenCircle Certification Scheme, GCC-OPS-03-1, Revision 6

ISO17020: 2012 *Conformity assessment -- Requirements for the operation of various types of bodies performing inspection*, The International Standards Organization. This International Standard defines the requirements for the operation of various types of bodies performing inspection. GreenCircle adheres to these requirements in the development of the certification process and audit plans.

ISO 14021:2016 *Environmental labels and declarations -- Self-Declared environmental claims (Type II environmental labeling)*, The International Standards Organization

ISO 17065:2012 *Conformity assessment -- Requirements for bodies certifying products, processes, and services*, The International Standards Organization. This International Standard defines the requirements for bodies certifying products, processes and services. GreenCircle adheres to these requirements in the development of the certification process and audit plans.

LEED Materials and Resources (MR) credit in LEED v4 and v4.1, U.S. Green Building Council

13.0 Appendix A: Recycled Content Example Scenarios

Example 1: Internal Scrap - excluded

A company is manufacturing a product, verified to be 50% PCR, but also incorporates trim scrap from the production line into the manufacturing process.

ISO 14021:2016 definition of post-industrial recycled content, “Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.”

In alignment with the definition above, GreenCircle will not classify the trim scrap material as an additional source of pre-consumer recycled content, as regrind and rework do not count as pre-consumer recycled content if they are being used to produce the same product or component for the same product. Size reduction or

washing by the manufacturer as the only step prior to collected scrap being fed back into the manufacturing process does not classify as pre-consumer recycled content.

This trim scrap itself is not classified as pre-consumer RC, but does contain recycled content of the product, GreenCircle will work with the client to determine how this trim scrap is utilized in the product recipe. If the trim scrap is utilized consistently within the product recipe to ensure a uniform composition, GreenCircle may incorporate the trim scrap as a 50% PCR into the recipe. However, if the product recipe is determined through a variable input usage and mass balance verification, GreenCircle will assess the product recipe without the trim scrap to determine the recycled content claim achieved regardless of the use of trim scrap.

Example 2: Internal Scrap - included

A company is manufacturing a product, verified to be 40% PCR, but also collects trim scrap off the production line and incorporates back into the process.

The trim scrap requires mechanical separation, washing and pelletizing prior to utilizing as a input to the product manufacturing process. GreenCircle will classify this scrap as post-industrial/pre-consumer recycled content due to the additional reprocessing required to utilize this scrap which would have otherwise entered a waste stream. The manufacturing company is diverting waste by collecting, reprocessing, and using the scrap as a raw material.

This trim scrap will be classified as pre-consumer recycled content and evaluated as a pre-consumer raw material in the product recipe evaluation. GreenCircle will collect evidence of the client processes of this scrap, as well as the usage data for the mass balance.

Example 3: Internal Scrap – externally processed

This company manufactures a product, that includes the use of internally generated scrap. The company reprocesses the scrap outside of the primary manufacturing process through a third-party to incorporate this scrap into the same or different product at the company's manufacturing facility.

GreenCircle will classify this scrap as post-industrial/pre-consumer recycled content due to the additional reprocessing required to utilize this scrap which would have otherwise entered a waste stream. The manufacturing company is diverting waste by collecting, reprocessing, and using the scrap as a raw material. If a manufacturing company collects and sells production scrap, and the independent manufacturer completes a size reduction to utilize this scrap as a raw material to a different product, this is considered post-industrial/pre-consumer scrap.

Reprocessing means that an input (material, part, etc.) passes through a unit and/or manufacturing process prior to reuse. Examples of reprocessing may include separation, washing, melting with additives, mixing with additives, and pelletizing. A size reduction process (grinding) alone does not count as reprocessing. The output from reprocessing can be utilized by the original manufacturing company or sold to another independent manufacturer.

Example 4: Plastics

Regrinding internal scrap from the forming process and reusing in the same process is circulating material and would not be classified as recycled content.

Regrinding of plastics sources from defective products, overstock or obsolete inventories from manufacturers or distributors would be classified as pre-consumer recycled content.

Compounding of plastics will follow the standard methods in this audit plan to identify the source of the materials that may be virgin, pre-consumer or post-consumer recycled content, the analysis of this input to the product recipe and verification through a mass balance of the usage of the materials.

Example 5: Metals

Smelting and refining (melting and casting) process commonly utilizes the internal scrap generated during the process, this is classified as non-recycled content material, commonly referred to as run-around scrap.

Metal may have additional downstream processes such as rolling, forming, finishing, or fabrication. If the scrap from these processes is collected and sent as raw materials to the smelting and refinish process, this scrap would be classified as pre-consumer material.

Amendment History

Date	Issue	Summary of Amendments
1/01/2011	Rev. 0	Official issue date of document.
7/15/2014	Rev.1	Update certification boundary to include language surrounding internal regrind recycled content.
6/30/2015	Rev. 2	Update basic language and definitions.
3/18/2019	Rev. 3	Update various language and definitions per revised internal procedures.
6/9/2022	Rev. 4	Update various language and definitions per revised internal procedures.
3/14/2023	Rev. 5	Added pilot product language and definitions
12/01/2023	Rev. 6	Defined boxed sets
4/01/2024	Rev. 7	Added exceptions and examples

Certification Officer: Michelle Gorenne