

U.S. Plastics Pact PCR Certification Principles

Introduction

The U.S. Plastics Pact (U.S. Pact) strives to build a circular economy for plastics in the United States. Keeping plastic in the value chain instead of the landfill or environment is a primary component of a circular economy for plastics. For that reason, Target 4 of the <u>U.S. Pact Roadmap</u> requires U.S. Pact Activators to commit to using postconsumer recycled (PCR) content in their packaging. PCR content in packaging keeps quality plastic in the value chain, reducing the need for virgin plastic production. In order to increase transparency around the use of PCR, the U.S. Pact recommends that Activators procure packaging (business-to-business, as well as business-to-consumer packaging) made with certified PCR.

Below are guidelines that Activators should use when evaluating PCR standards and certification options in order to maximize PCR's positive impact. The U.S. Pact recommends that these principles also be considered when choosing a pre-consumer recycled or recycled content certification program.

These certification principles are intended to be used for reporting purposes, such as annual reporting to the U.S. Plastics Pact or corporate sustainability reports. They are not intended to serve as a guide for on-pack labeling decisions unless otherwise noted as such.

Guidelines for Effective PCR Certifications

1. Supports Ellen MacArthur Foundation's Global Commitment

Be consistent with, and support, the Ellen MacArthur Foundation (EMF) Global Commitment. A certification program should support the EMF Global Commitment for a New Plastics Economy by following its vision for a circular economy of plastics where plastic packaging is 100% reused, recycled, or composted, and PCR is increased while virgin plastic use is decreased.

2. Compliance

Require compliance with relevant national and international laws and conventions. PCR certifications should comply with all regional, national, and international laws that they operate in, including indigenous community laws.



3. Definitions

Standards should be consistent with ISO definitions for recycled materials: ISO 14021:2016 (E)

- Postconsumer material is material generated by households or by commercial, industrial, and institutional facilities in their role as end users of the product which can no longer be used for its intended purpose. This includes the return of materials from the distribution chain such as obsolete materials or damaged goods.
- Pre-consumer material (also referred to as post-industrial) is material diverted from the waste stream during a manufacturing process that cannot be reclaimed within the same process that generated it. 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.

4. Transparent Goals/Claims

"Recycled content" goals and claims should provide detail on the amount that is postconsumer and the amount that is pre-consumer. A sustained increase in demand for postconsumer materials is critical for facilitating the necessary investments in infrastructure to process postconsumer recycled materials. While this detail may not be feasible for on-pack claims, companies should be transparent in their corporate goals and corporate reports about the breakdown between postconsumer and pre-consumer sources. Any on-pack claims should only refer to postconsumer materials.

5. Science-Based

Standards should be developed and revised based on a scientific approach, taking into account the most recent scientific findings related to plastics recycling and the use of recycled materials.

6. Adaptable

Be adaptable to national/regional conditions and needs. Each PCR standard should take into account the operation's unique cultural, political, legal, technical, and geographic conditions in each region/nation.

7. Consider Diverse Impacts

Focus on minimizing or eliminating important environmental and/or social negative impacts while creating environmental, economic, and positive impacts. For example, products and packaging made with postconsumer recycled materials should be widely available to all consumers and the



process of recycling should not negatively impact marginalized communities. Recycling processes should not increase greenhouse gas emissions (as compared to virgin plastic production) and toxic by-products should not be released into the environment.

8. Equitable

Require meaningful and equitable stakeholder participation considering social and environmental interest groups and provide means to have smaller and vulnerable groups engaged in the process. Procedures and decisions should be made by a diverse group of stakeholders, including relevant environmental and social groups. Matters should be decided by consensus or by balanced decision making. The PCR certifications should be consistent with the U.S. Plastics Pact environmental justice definition and values.

9. Transparency

Provide transparency in decision making and public reporting on its certification. Certification programs must have structured operations guidelines and procedures that are publicly available. All documentation should be easily accessible through a public website.

10. Third-party Independent Certification and Accreditation

Require third-party independent certification and accreditation. Companies providing certification status must be independently verified by an appropriately accredited certification body. The certification program should have several certification bodies accredited to avoid perceived or real conflicts of interest.

11. Conflict Resolution

Certification bodies should have accessible complaint and appeal mechanisms. There should be comprehensive measures to gather complaints and resolve conflicts at all levels of the certification program.

12. Continuous Improvement

Be committed to continuous improvement. The certification standards must have periodic review assessments (at least every five years) that reflect lessons learned, recent scientific findings, and current legislation in the region/nation.

¹ The decision-making process should balance economic, social and environmental considerations equitably in order to have a balanced interest from stakeholders — including the convening of stakeholders in both formal and informal manners.



13. Chain of Custody

Any certification scheme should provide a chain-of-custody certification, as defined by the ISO 22095 standard. The certification process should start with the reclaimer, who must have good record keeping of all incoming materials. Custody of the PCR may pass across certification schemes as long as the certification schemes use consistent definitions and accounting practices. The U.S. Pact prefers identity-preserved, segregated, and controlled blending models, as they provide more transparency and traceability of the actual PCR in the final product. However, mass balance and book-and-claim models are also accepted. Chain-of-custody guidelines are in effect through 2025 reporting and will be reviewed again in late 2024 for post-2025 reporting.

14. Mass Balance

The U.S. Pact recognizes and accepts the mass balance accounting model for PCR certification for both mechanically and chemically recycled plastic with the following conditions through the 2025 reporting cycle:

- The mass balance model may only be used when supported by a chain of custody certification scheme and compliant with the ISO 22095 standard, so that no two parties can claim ownership of PCR at any given time.
- Any mass balance certification must be specific to plastic commodities (e.g., resin types) and chemical precursors.
- Mass balance accounting must not use the free allocation accounting method, as waste to fuel does not meet the U.S. Pact definition of material recycling. Mass balance accounting methods for PCR certification must consider fuel outputs as yield loss in the recycling process. The U.S. Pact recommends proportional allocation or polymers-only accounting methods for mass balance accounting but also accepts free allocation with a fuel exemption. These accounting methods treat fuel as a yield loss in the recycling process and ensure that recycled material inputs are not disproportionally allocated to feedstock outputs. Companies should clearly state which accounting method is used in mass balance certification claims, as well as whether the process was mechanical or chemical recycling.



- Mass balance calculations must reflect actual yield losses in the reclaiming, recycling, and manufacturing processes. Quantities of PCR should reflect the amount (by weight) of actual feedstock that is created.
- Mass balance accounting must clearly differentiate pre-consumer recycled material from postconsumer recycled material, and reporting should reflect this accordingly.
- Accounting methods must be consistent with historical accounting methods. A separate accounting system that favorably skews values should not be used.
- Reconciliation must be done on a quarterly basis or more frequently.
- The balance of credits in a mass balance accounting system should never intentionally go below zero. If this occurs, supply issues should be rectified as soon as possible. A balance below zero in two consecutive reconciliation periods should not be allowed.
- Mass balance calculations should be independently verified by a third party.

15. Book and Claim (also called Environmental Commodities or Plastic Credits)

Building markets for PCR is a foundational part of implementing a circular economy, and companies must work to overcome design challenges and incorporate PCR into new products. Collection and recycling infrastructure is less mature for some materials than others, and some applications face a limited supply of PCR that meet required parameters (e.g., food-grade film). A book and claim system is an opportunity to invest in recycling infrastructure so that plastic packaging can be recycled into something other than the packaging used by the manufacturer. Book and claim systems should not be viewed as an offset to a company's plastic footprint but as an opportunity to build interim markets as a step to ultimately being able to recover and recycle the materials into their original format. As such, the U.S. Pact will track plastic credits funded by Activators separately from the quantitative percentage of actual PCR used in the portfolio when reporting progress on Target 4.



A book and claim model should only be used until collection, sortation, and recycling infrastructure are in place at scale, as defined by EMF. In keeping with the timeline laid out in the United Nations Sustainable Development Goals, the U.S. Pact anticipates accepting plastic credits for annual reporting through 2025 for rigid plastics and 2030 for flexible plastics.

Certification programs using a book and claim model should adhere to the following:

- Companies issuing credits must prove additionality and be able to demonstrate that the material used to support the credit was recycled and sold to a downstream customer (or used by the company issuing the credit). Credits will only be accepted for U.S. Pact annual reporting if they result in products actually being recycled into feedstock for new materials.
 - While environmental clean-up efforts are important and necessary to protect people and wildlife, collection credits are not accepted for U.S. Pact Target 4 reporting as they do not meet the definition of material recycling.
 - Examples of additionality include (but are not limited to) the following: a new facility to recycle plastic, new equipment to increase efficiency, new equipment to improve the quality of the recycled plastic to meet food grade standards, or a project to sell capacity that has been unused for over 12 months.
- Credits must also show that the recycling activity would not have happened without this financial incentive.
- Credits must account for yield loss and reflect the quantity and value of the PCR that is actually produced.
- Credits should expire after 1 year. The certification scheme must have clear guidelines about how credits are retired, including an electronic tracking system to ensure transparency. Credits must be retired within 90 days of being claimed or reported.

Companies using a book and claim system should also commit to the following principles:

 Approach a book and claim model as a strategy to build infrastructure and markets to collect and process the packaging they are using with



- the long-term goal of recycling plastic packaging into its original format. Offsetting is not a solution to achieving a circular economy.
- Strive to incorporate PCR into products over using a book and claim model. Companies should first seek to reduce virgin plastic usage (in a manner that does not hinder circularity or increase a product's carbon footprint), then implement reuse models whenever possible, then design PCR into their products through controlled blending or the use of mass balance, and lastly use the book and claim model when the other options are not feasible.
- Credits should only be purchased for the resin type and format of packaging material the company is putting into the market. For example, a company making products packaged in multimaterial film should not be purchasing plastic credits for PET bottles.
- Credits should originate in the same geographic region(s) where the packaging is being sold to facilitate future infrastructure and end markets for the packaging put into those geographic regions.
 - The U.S. Pact annual reporting is specific to packaging sold in the United States. Because collected plastic and recycled plastic are frequently sold across borders, the U.S. Pact will accept only plastic credits originating in North America.
- Plastic credits should always be reported separately from actual physical content of recycled materials used in packaging.
- It is critical to make the necessary design changes and technology improvements to be able to incorporate PCR back into the type of packaging it originated from. Companies using PCR should only use a book and claim model for up to:
 - o 25% of its rigid plastic PCR target²
 - o 75% of its flexible plastic PCR target²
- Companies not producing or using packaging are encouraged to purchase and retire as many credits as they desire to support building end markets and infrastructure to recycle plastic.

² Target 4 for the U.S. Plastics Pact is to incorporate 30% PCR or responsibly sourced bio-based plastic by 2025.