Addendum to Mars Global Protocol for Sustainability Claims: Packaging Recycled Content & Recyclability (July 2022)

Both the use of **recycled content** and designing for end-of-life **recyclability** are important parts of Mars' Circular Packaging targets, which include:

- 100% of our plastic packaging to be reusable, recyclable or compostable
- 30% average recycled content in our plastic packaging
- Recycling guidance for consumers in all major markets

The Circular Packaging commitments have been made at the global corporate and segment level, so please ensure that recycled content or recyclability activities are relevant to your brand and market at the time you seek to pursue claims.

Tips for all packaging claims:

- All sustainability claims should follow the standard segment claims review and approval process.
- All claims must be clear and not misleading or deceptive to the consumer.
- Corporate review is required for <u>some</u> recycled content & recyclability claims. Further details on which claims require review are included in this document.
    - If corporate review of a claim is required, it should occur after a local review and risk assessment is completed.
- Ensure enough time is allocated for substantiation, testing, corporate review, and any graphics changes which may be required for on-pack claims.

Table of Contents: This document covers Recycled Content & Recyclability claims, for all pack types

Recycled Content Claims

Background

In Mars' Circular Packaging Plan, we have a target of an average of 30% recycled content in plastic packaging. We report progress against that target through our Sustainable in a Generation Plan (SiG Plan) and through the Ellen MacArthur Foundation (EMF) Global Commitment.

We specify "post-consumer"[1] recycled content (PCR) to support circularity, as it creates demand for a system of resource recovery. Recycled content may also be sourced from "post-industrial" waste processes ("PIR", akin to rework in our factories), but does not support a circular economy. PIR can be used to support our virgin plastic reduction target, but not for claims.

We encourage the use of PCR content in all types of packaging. It is especially critical for plastic packaging because the industry is less developed, and it:

- helps reduce the societal need for virgin plastic, a limited resource and significant emitter of CO_2;
- is incentivized by regulation in some markets (e.g., for all plastic packaging in the UK, and likely others in the future); and
- creates a demand for the output of recycling systems, thus encouraging additional investment and further scaling of those systems.

Recycled content can be produced through mechanical recycling (plastic, metal, glass or paper) and advanced recycling (plastic only). Mechanical and advanced recycling methods produce different quality and types of output materials. The recycling method (mechanical or advanced) also has implications for what claims can be made, because of traceability differences. Please see the next section and **Appendix 1** for further detail on different recycling methods and their implications for claims.

What claims can we make?

In general, we can only make claims about recycled content when it is legally allowed to be used for primary packaging in the local market. Recycled content must be post-consumer (PCR) for an on-pack claim.

Claims on traceable PCR content (on- or off-pack): *Corporate review not required*

Some recycled content in packaging is traceable, meaning that the PCR is known and documented to be physically present in the packaging at a specific amount. Most commonly, traceable PCR is produced through mechanical recycling, though some advanced recycling methods like depolymerization (e.g., PET resin) also produce traceable content.
Note: PCR sourced through mass-balance is not considered traceable and is covered in the next section.

In this case, it is appropriate to make numerical claims, if desired. If the recycled content is 30% or higher of the pack, the percentage does not need to be stated in the claim, unless locally required. If recycled content is less than 30% of the pack weight, the percentage of recycled content must be stated, to ensure consumers are not misled. There may be a future requirement in some markets (EU) of a minimum 30% threshold for recycled content to make claims.

[1] Post-consumer material refers to 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 returns of material from the distribution chain. For more information see Guidelines on Circular Packaging Targets.

Examples of supported recycled content claims for traceable PCR content:

- This pack uses/contains recycled content
- Made of / with recycled material
- X%* recycled content
- This pack contains/uses/includes X%* recycled content
  (*provide qualification info where required, e.g., percentage is required in some cases)

Substantiation Requirements:

Numerical claims can be substantiated using either:

- A 3rd party independent certification of the polymer traceability (may reduce legal risk in some cases)
  - Acceptable certifiers include Recyclass in Europe; check with Commercial for others
- Evidence that mechanical recycling processes are used and relevant for that material AND supplier documentation of the quantity of recycled content used.

Claims on non-traceable / mass balance PCR (on- or off-pack): *Corporate review required*

Other recycled content is not traceable to the package, and instead a mass-balance[2] approach is used to allocate recycled content to the pack. This is most common when PCR is produced via advanced recycling methods like pyrolysis and gasification.

Where mass balance is used in the supply chain, claims can refer to our effort to source recycled content, rather than the physical characteristics of the actual pack. Because the presence of recycled content in the package cannot be known, **only non-numerical claims are appropriate**.

Examples of Supported Mass Balance Recycled Content Claims:

- Supporting/ encouraging/ championing recycled content
- Brand sources recycled content/ contributes to the sourcing of recycled plastic feedstock
- Brand supports the production of recycled plastic
- We are/ Brand is committed to sourcing recycled content/recycled plastic
- Sourcing recycled plastic contributes to reducing the use of virgin plastic/ virgin fossil resources
- By buying this product you contribute to reducing the use of virgin plastic/ virgin fossil resources
- [Brand] contributes to/ supports the circular economy by sourcing recycled plastic

Note: the claim "Pack uses/contains recycled content" is not approved when PCR is not traceable.

Substantiation Requirements:

To make the above "general" claims, the following is required:

One of the following:

- An approved 3rd party certification regarding the use of mass balance content in the package. Usually, this certification is sought and provided to Mars by the supplier. (Recommended Certifiers are: ISCC+, alternative: REDcert)[3]

[2] "Mass balance" is a standard industry accounting approach that ensures a credible way of allocating materials when full traceability is not possible. It relies on the principle of "conservation of mass" ("mass in" must equal "mass out") and uses a chain of custody (CoC) management system to trace the flow of materials through complex value chains. This is particularly useful when tracking the flow of recycled feedstock through chemical plants. Mass balance also offers a solution for tracking the amount of recycled content in the entire value chain by auditing multiple steps in the chain and attributing its use based on verifiable bookkeeping. See Appendix 1 for more detail.

[3] Mass balance certifications for plastic recycling are new. ISCC and REDCert are used for compliance for the EU's Renewable Energy Directive 2009/28/EC and the Fuel Quality Directive 2009/30/EC (FQD). Both are CoC and do not support the less credible approach of unrestricted Book and Claim, which removes the requirement for physical traceability through the supply chain.

- OR: Another 3rd party certification for mass balance (must use chain-of-custody mass balance approach, and requires approval from the corporate Circular Packaging team)

And

Back-of-pack or brand website explanation (with link provided on pack) to provide clarity to consumers about what is meant by the claim, which will be part of the legal risk assessment.
Additional auditing of the Mars finished product/facility is only required when:

- An on-pack claim includes the certifier's name/logo (e.g., "ISCC Certified")
- AND the packaging is transformed in our facilities

Why Numerical claims for Mass-Balance recycled content are considered High Risk:

Numerical claims imply that recycled content is present in the pack. If the recycled content is supplied through **mass balance, we cannot guarantee** recycled content in the **physical pack**. (By using mass balance, we have instead contracted to produce the recycled plastic in the overall system.) Therefore, a numerical percentage claim would be misleading to the consumer and cannot be substantiated at this time.

We have engaged with several external stakeholders, such as CGF, SystemIQ and World Wildlife Fund on this point; they agree **that numerical percentage claims should not be made for mass balance recycled content.** This may evolve in the future, but currently we are intentionally conservative on this point.

Recyclability Claims

Background

The growing public focus on plastic packaging increases the need and brand desire for external communication about the recyclability of our packaging. Consumers are beginning to demand transparency around the environmental and social impacts of the products and packaging they purchase and the companies that produce them. They also expect companies to provide truthful information on how to properly dispose of packaging waste in their local context.

Mars has a corporate target of 100% of plastic packaging to be reusable, recyclable or compostable. We also have committed to **providing recycling guidance for consumers in all major markets**, **an outcome which is supported by making truthful and not misleading recyclability claims on- or off-pack**.

At the same time, there is increasing sensitivity to "greenwashing" of recyclability claims or guidance, given differing definitions[4], stakeholder expectations, and associated risks of legal challenge in some markets. And because regulation is constantly evolving, it is critical that sustainability claims are reviewed following your segment's standard process, to effectively manage risk.

What claims can we make?

There are three broad classes of recyclability claims we can make: Consumer-Directive, "Designed for Recycling" and External Reporting. **Please use the decision tree to help navigate which recyclability claims are appropriate** in which situations; additional detail for each is provided in the sections below.

Consumer-Directive: *Corporate review required in some cases*

Applicable when directly or implicitly guiding consumers on how to dispose of a pack, today.

Examples of consumer directive claims:

- **"Fully Recyclable"**: packaging is designed to fit local infrastructure and collection, sorting and recycling infrastructure is ready to accept the *entire* packaging format. Check local regulations to see whether a certain percentage of access to recycling or collection is required to make this claim. For an "entire" packaging format to be "Fully Recyclable" it must be comprised of:
  - A single (or several non-separable) packaging component(s) which will be recyclable as a unit
  - Several packaging components which will be separated in the recycling process which are each individually recyclable
- Usually "Fully Recyclable" excludes incidental components such as ink & glue, as these will not hinder or contaminate the recycling process, but please consult your segment SME where relevant to understand the case in your market.
  - "100% Recyclable" is a variation of "Fully Recyclable" but may carry more legal risk. Note that there have been recent lawsuits in some US states against companies making these claims, when components of the pack (labels, caps, etc.) are not recyclable.

[4] Commonly cited definitions include those from: ISO (International Organization for Standardization), the Ellen MacArthur Foundation (EMF), the US Federal Trade Commission (FTC), Association of Plastics Recyclers (APR), Plastic Recyclers Europe (PRE). Most definitions consider both pack design and recycling infrastructure to make a "recyclable" claim, but the details of those assessments vary. Local definitions require review of market level infrastructure; Global definitions consider common infrastructure available across markets. Note: Mars' Design for Circularity (D4C) definition is internal & out of scope for external communications.

- **"Recyclable"/ "Please recycle":** packaging format is designed to fit local infrastructure and collection; sorting and recycling infrastructure is ready to accept the packaging format. Note that a mobius loop, "chasing-arrows" recycling icon, or similar graphic also constitutes a "recyclable" claim even if the word "recyclable" is not used. Check local regulations to see whether a certain percentage of access to recycling or collection is required to make this claim. When using any logo or specific wording (e.g., "Recycle Me") be sure to check that the language or image is compliant with trademark rules.
- **"Check locally"**: packaging is designed to fit local infrastructure and collection; sorting and recycling infrastructure is ready to accept the packaging system but is not covering the whole country.
- **"Store Drop Off":** "store drop off" recyclability claim can be used only after accessible drop off infrastructure is confirmed, and packaging is conformed to given design guidelines.
- **TerraCycle/RedCycle:** qualify adjacent to the claim that the pack is recyclable with TerraCycle/ RedCycle. These privately funded take-back programs are available as an interim solution but our experience to date indicates that TerraCycle initiatives are low-scale and high-cost and offer limited traceability and transparency after collection. Therefore, they are not recommended.
- **"Not Yet Recyclable":** we can choose to communicate to the consumer that a pack is not recyclable to increase transparency.

Background & Definition:

Local/ market definitions of recyclability are applicable when communicating externally in market, such as via an on- or off-pack claim. Most countries follow ISO 14021: 2016 for recyclability claims, which requires evidence of collection, sorting, and recycling (see Appendix 1 for more detail).

Waste collection and recycling infrastructure is hyper local, not only differing from country to country, but also within a country (i.e., rural vs. urban). Determining what constitutes "recyclable" at the country level requires understanding local regulations, recycling access (can the consumer access the recycling point) and the actual recycling rates (is that material recycled in reality), not just if the market *technically allows* certain material into its recycling infrastructure. Some markets have labeling schemes which consider these aspects (e.g., OPRL, H2R, ARL noted below); where Mars is aligned with these, these schemes should be used as **first priority**. In other markets, follow the "independent claim" criteria listed below in this protocol.

Guidelines for making Consumer-Directive recyclability claims:

We can communicate recyclability on a pack in several ways – through a market-level scheme or independently. The Mars Global Protocol on Sustainability Claims defines the broad criteria for claiming packaging recyclability. This protocol should be used in the absence of government regulation, but where regulation in a market exists, that regulatory criteria should take precedence.

Consumer directive: Claim through a market level scheme: CORPORATE REVIEW NOT REQUIRED

Market-level labeling schemes exist in certain markets to help reduce the complexity of assessing recyclability and provide clearer direction to consumers. As of Q2 2022, Mars has signed up to the following market-level schemes: How2Recycle (H2R) for the US and Canada, On Pack Recycling Label (ORPL) in the UK, and Australasian Recycling Label (ARL) in Australia and New Zealand. Where these market level schemes do not exist or have not yet been centrally approved, an "independent" claim may be made when the criteria outlined below are met.

Where we have signed up to a market level scheme, we should use the assessments and labels provided by those schemes for on-pack communication, except if that scheme is not compliant with government regulation, which is evolving. Relevant schemes are listed in the "Airtable" linked in Appendix 2; more may be added as new schemes become available/approved. Please ensure adequate time for review of the logo and artwork by all accountable governance functions in your segment and the market scheme organization.

*Figure 1. **How 2 Recycle** label examples (relevant for North America)*

*Figure 2. **OPRL** label examples (relevant for UK)*

Consumer-directive: Make an independent claim: Corporate Review Required in some cases

In absence of a market-level scheme or specific regulatory requirements, we need to rely on other data sources to make a claim determination. Please see **Appendix 2**, which provides additional detail and resources to support technical substantiation of recyclability claims. Remember that all sustainability claims must follow the Segment's standard claims review and risk assessment processes.

Other watchouts for consumer-directive claims:

Multi-component packages:

If a package has multiple components, claims about recyclability or disposal directions should be specific and refer to the specific components individually. The H2R and OPRL labels above provide good examples.

Packs sent to multiple markets:

Please note that "Consumer-Directive" claims are inherently dependent on the local market's waste infrastructure where your product is sold. Therefore, if your pack is distributed in multiple markets, you may be obliged to present a different claim or logo relevant to multiple markets. Please consider the right way to execute claims in this situation. Some options are:

- Choosing one or several lead markets to display on pack and explaining that the claim is relevant only in that market(s)
- Using a QR code on pack and presenting country-specific information to consumers online
- Assessing with Legal the risk of making a claim which applies to only a majority of markets

"Designed for Recycling" Claims: *Corporate review required*

Informing consumers of packaging improvements

Example of "Designed for Recycling" Claim:

"This package is designed for recycling. See back panel to learn more."

"Designed for Recycling" "*We have designed this pack as a single-material plastic so it can be recycled as recycling infrastructure advances. See [website] to learn more."*

Background & Definition:

To deliver Mars' Circular Packaging commitments, we are working on design changes that will improve the recyclability of our packaging and make our packs recyclable when infrastructure scales. These changes can make our packaging **ready** to be recycled from a technical, design perspective. We may want to communicate about these efforts, but we cannot make a consumer-directive "recyclable" claim until the infrastructure has reached enough scale such that the package type and format are recycled *in practice*.

In this case, depending on the market, we may still be able to make a claim about designing for recyclability. Unlike "recyclable", a "Designed for Recycling" claim does not have a regulatory or de facto definition today. However, the **specific wording "Designed for Recycling"** is being tested through frameworks in some markets (e.g., through Recyclass in Europe), which may build standing for making that claim. Today, we do not suggest making "untested" claims like "Designed for the Future of Recycling" or "Compatible with Advanced Recycling" because these are difficult to substantiate, and they refer to a more limited scope of recycling infrastructure.

Guidelines for making "Designed for Recycled" claim:

This claim is appropriate to express our design changes through a press release or explain our progress in our website for any packaging format that is technically recyclable but not yet actually recycled in practice and at scale in the target market. This claim **may also be used on pack, but only if it is accompanied by back-of-pack text, connected to the claim via an asterisk or referral to back panel, where the claim is explained for the consumer**. Any time this claim is used, we must explain our design changes and our efforts in scaling infrastructure to enable recycling of the packaging in the future and be clear that the pack cannot be recycled today. Any additional disclaimers that will need to accompany an on-pack "Designed for Recycling" claim in your market based on local regulation or legal risk should be included.

Appendices 2 and 3 provide additional detail and resources to support technical substantiation of "Designed for Recycled" claims. **Whether this type of claim is allowed will vary by market**, so it is essential that local claims governance occurs to approve claim before it is used on pack, and that Corporate Food Law and Circular Packaging team review occurs prior to a decision being taken to make the claim. In some markets, particularly in Europe, local regulations requiring back-of-pack instructions for how to dispose of the pack could limit the use of a "Designed for Recycling" claim front-of-pack, as the use of both claims could create consumer confusion and/or mislead the consumer.

Recyclability claims for external reporting: *Corporate review not required*

Reporting progress towards Mars' commitments

Example of external reporting claim:

"[Business unit's] rigid plastic packaging portfolio is 50% recyclable (according to the Ellen McArthur Foundation's global recyclability definition)"

Background & Definition:

Global definitions of recyclability are applicable when reporting externally, such as to the EMF Global Commitment (GC), our Sustainable in a Generation Plan (SiGP) reporting, and to retailers – unless otherwise noted for a specific market (retailer or Plastics Pact). The EMF definition is emerging as the de facto definition for global recyclability, and this metric is assessed at the segment & corporate level.

To be considered recyclable under the EMF definition, a pack must be 1) Recyclable in practice and at scale, and 2) Designed for recycling. Unlike the local definitions outlined above, EMF defines "in practice and at scale" as 30% or higher recycling rate in three markets that total 400M people or more[5]. Because this is a global assessment designed for reporting progress, a pack being **globally recyclable under EMF** does not substantiate a brand claim of **recyclable at a local market level**. As such, only segments, and not brands, can make external reporting claims.

Guidelines for making this claim:

We will use the EMF definition for external reporting unless directed otherwise. The EMF definition also applies if we issue a press release or marketing material about our external reporting. EMF assessments are conducted annually by the Mars, Incorporated Healthy Planet / Circular Packaging team. Please review any desired EMF related claims or communications with them.

DO NOT use the EMF definition for on-pack labeling or off-pack product communication/guidance to consumers.

[5] As of Dec 2020. EMF may update this threshold over time, in consultation with its advisory board.

Appendix 1: Recycling methods and implications for Recycled Content claims

Mechanical recycling of plastic, metal, glass, or paper uses a separate recycling stream. This separate stream keeps recycled material physically separated from non-recycled material and tracked to the pack.

Unfortunately, today, the mechanical recycling of flexible plastics doesn't produce recycled content that we can use in our food-contact flexible plastic packaging. **Advanced recycling**[6] **(also known as "chemical" or "molecular" recycling)** is a means of breaking down plastic materials back to either building blocks or original raw materials (oil-like feedstocks).

There are two main categories of advanced recycling: depolymerization and pyrolysis/gasification, which apply to different types of polymers.

> In the **depolymerization process**, sorted plastic waste is broken down into monomers (basic building blocks) to feed them back into plastic production. PET is a typical example of resin that can be depolymerized. Because the PET depolymerization process uses only PET as the feedstock and only generates PET as a product, it is easier to trace the recycled content.
>
> In the **pyrolysis/gasification process**, mixed plastic waste is broken down into oil- or gas-like feedstock (raw materials) that is then used to produce chemicals including plastics. Pyrolysis is currently the main technology used to chemically recycle polyolefins (PE and PP) that can be used in both rigid and flexible applications.

Scaling advanced recycling, specifically the pyrolysis of polyolefins, is critical for us to meet our 30% recycled content goal: **it is the only technology that can provide the food-safe recycled content at the future scale** we need for our primary flexible packaging.

Figure 1. Relevant polymers and potential recycled content claims for different plastics recycling methods

Recycling Type	Processing Method	PCR Source	Format & Resins Where can be used	Traceable	Qualification Methods if Needed:	Claims	Contributes to 30% RC Target
Mechanical	Extrusion	Rigids • PET • HDPE • PP	Rigids & Flexibles • PET • HPDE • PP (scaling)	Yes	• Mars R&D qualification with supplier documentation review • 3rd party certification of polymer traceability (CoC, chain of custody) • Or both	Numerical 3RD Party certification may reduce risks	All sources can support plans to 30% segment target
	Extrusion	Rigids • HDPE	Flexibles • PE				
Advanced	Depolymerization	Rigids & Flexible • PET	Rigids & Flexible • PET				
	Pyrolysis/ gasification	Rigids & Flexibles • PE • PP	Rigids & Flexibles • PE • PP	No	• Mass balance certification CoC • If converting internally – need 3rd party CoC	General use, intent through allocation	

[6] The conversion to monomer or production of new raw materials by changing the chemical structure of plastics waste through cracking, gasification, or depolymerization, excluding energy recovery and incineration.

Implications for claims:

Tracking advanced recycled content is harder than mechanically recycled content because the oil from the pyrolysis process is practically indistinguishable from crude oil when mixed at the refinery. Moreover, the large scale of a refining plant does not allow pyrolysis oil to be tracked separately; it will be blended with crude oil feedstock to make different products, including "recycled content" packaging materials.

In practice, even where we contract with a supplier for a certain percentage of recycled content plastic, **we can't guarantee how much recycled content, if any, will be present in a package they produce for us.** This makes it impossible to make a specific recycled content claim with accuracy (e.g., made with 70% recycled content). We can, however, make more general claims and ensure there is no double counting, meaning no other manufacturer is claiming recycled content for that same output of recycled material.

To address the accounting challenges associated with the pyrolysis processes, we can use a **'mass balance'** approach[7]. In practice, this means that when Mars contracts for a certain amount of recycled-content plastic, the supplier must ensure they are producing that amount of recycled content, and not attribute it to any other customer. **In the packaging we receive, however, there may not be any recycled content,** because materials are commingled at the supplier level.

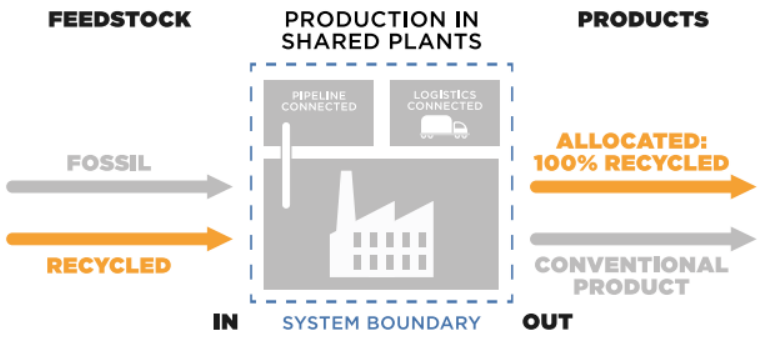


Figure 1: Mass Balance Approach courtesy of the Ellen McArthur Foundation. Recycled materials and fossil-based raw materials are used in parallel, as physically mixed feedstock in existing production assets.

[7] "Mass balance" is a standard industry accounting approach that ensures a credible way of allocating materials when full traceability is not possible. It relies on the principle of "conservation of mass" ("mass in" must equal "mass out") and uses a chain of custody (CoC) management system to trace the flow of materials through complex value chains. This is particularly useful when tracking the flow of recycled feedstock through chemical plants. Mass balance also offers a solution for tracking the amount of recycled content in the entire value chain by auditing multiple steps in the chain and attributing its use based on verifiable bookkeeping, see Appendix 1.

Appendix 2: Substantiation guidance for Recyclability Claims

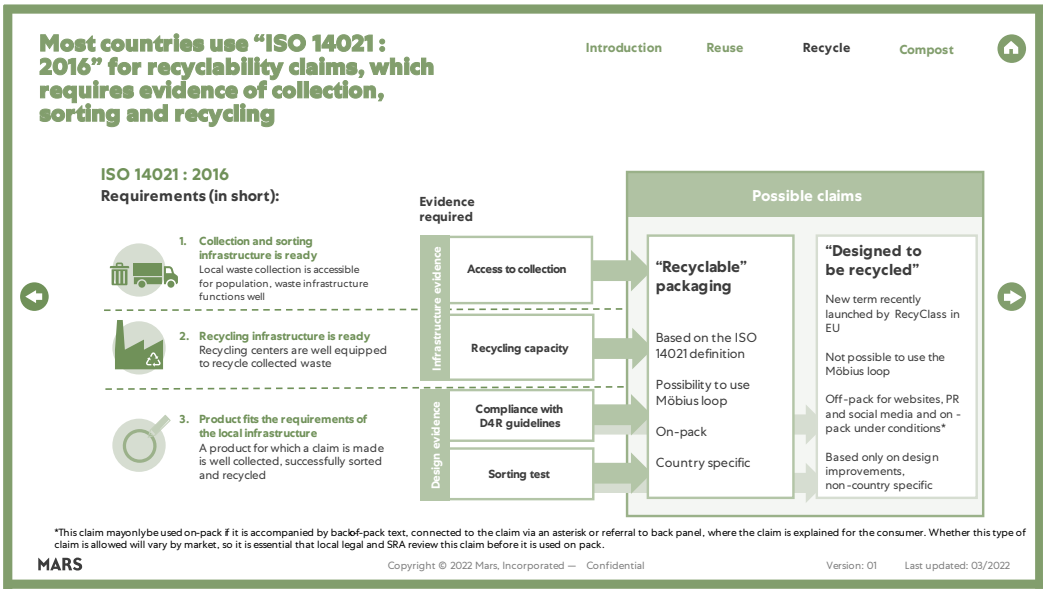
Most countries use ISO 14021: 2016 for recyclability claims, which requires four "Evidence points": evidence of collection, recycling capacity, proper design of the pack, and pack sorting capability within local infrastructure. Mars also follows these requirements (summarized in Table 1, with examples in Figure 2).

When all four Evidence Points below are met and substantiated, **local on-pack claims about recyclability may be possible**. When the two "Design" evidence points are met, but the "waste infrastructure" ones are not, **claims on "Designed for Recycling" may still be possible**. Please note that this claim is not part of the ISO standard; it is emerging as a recognized term in some markets such as Europe.

Table 1 Summary of evidence points needed for recyclability claims

RECYCLABILITY ELEMENTS	EVIDENCE POINTS (4)	SUBSTANTIATION CRITERIA
1. INFRASTRUCTURE: Waste Infrastructure is available in the local market	✓ Access to Collection	50% or higher of the country's population must have access to recycling, unless a different value is locally specified (e.g., 60% in US)
	✓ Recycling Capacity	Recycling centers must be well equipped to collect and recycle waste. No numerical threshold exists today but this may evolve.
2. DESIGN ELEMENTS: Design of pack fits local market requirements	✓ Compliance with D4C[8]- Recycling guidance	Does the design of the pack meet all relevant criteria of the Mars D4C Recycling Guidance (or other locally specified criteria, where established)
	✓ Sorting and/or Recycling Test (plastic) ✓ Or Pulpability test (paper)	Pack type is pre-assessed as sortable (air-table) – OR - Pack is demonstrated to be properly sorted via formal or informal waste collection activities via a Sorting Test with a reputable partner (e.g., Veolia). See D4C training guide.

Figure 2 Examples of potential claims which may be made when Infrastructure and/or design elements are substantiated



[8] Design for Circularity (D4C) Guidelines is a document developed by the Corporate Sustainability team in collaboration with segments. It combines local requirements of recycling and sorting organizations and serves as a guide for packaging designers.

What resources are available to support recyclability substantiation?

- Start by consulting the Recyclability Claims Substantiation Airtable[9]
  - This is a centralized overview of whether a recyclable claim is supportable in select markets based on the packaging format and infrastructure maturity.
  - The table includes assessment of access, recycling capability and sorting, to the best of our knowledge, and is based on market level assessments by a 3rd party, conducted in 2021. There are plans to continue to improve the Airtable with more markets; If your market is missing, please reach out to the corporate sustainability team for guidance.
  - Where market labeling schemes are in place, those are noted. Please engage with those schemes and then take the claim through the normal claims process.
- Follow the steps listed in Figure 3 "Next steps" below to gather the additional evidence for your claim

Airtable

Hide fields | Filter | Group | Sort

	Packaging Format	Packaging Structure	Australia	Austria
1	Paper board carton	Rigid	Refer to ARL	Recyclable
2	PP cup	Rigid	Refer to ARL	Test required
3	Glass jar	Rigid	Refer to ARL	Recyclable
4	PE bottle	Rigid	Refer to ARL	Test required
5	PET bottle	Rigid	Refer to ARL	Test required
6	Aluminium tray	Rigid	Refer to ARL	Recyclable
7	Blister	Rigid	Refer to ARL	TBC
8	PP pot	Rigid	Refer to ARL	Test required

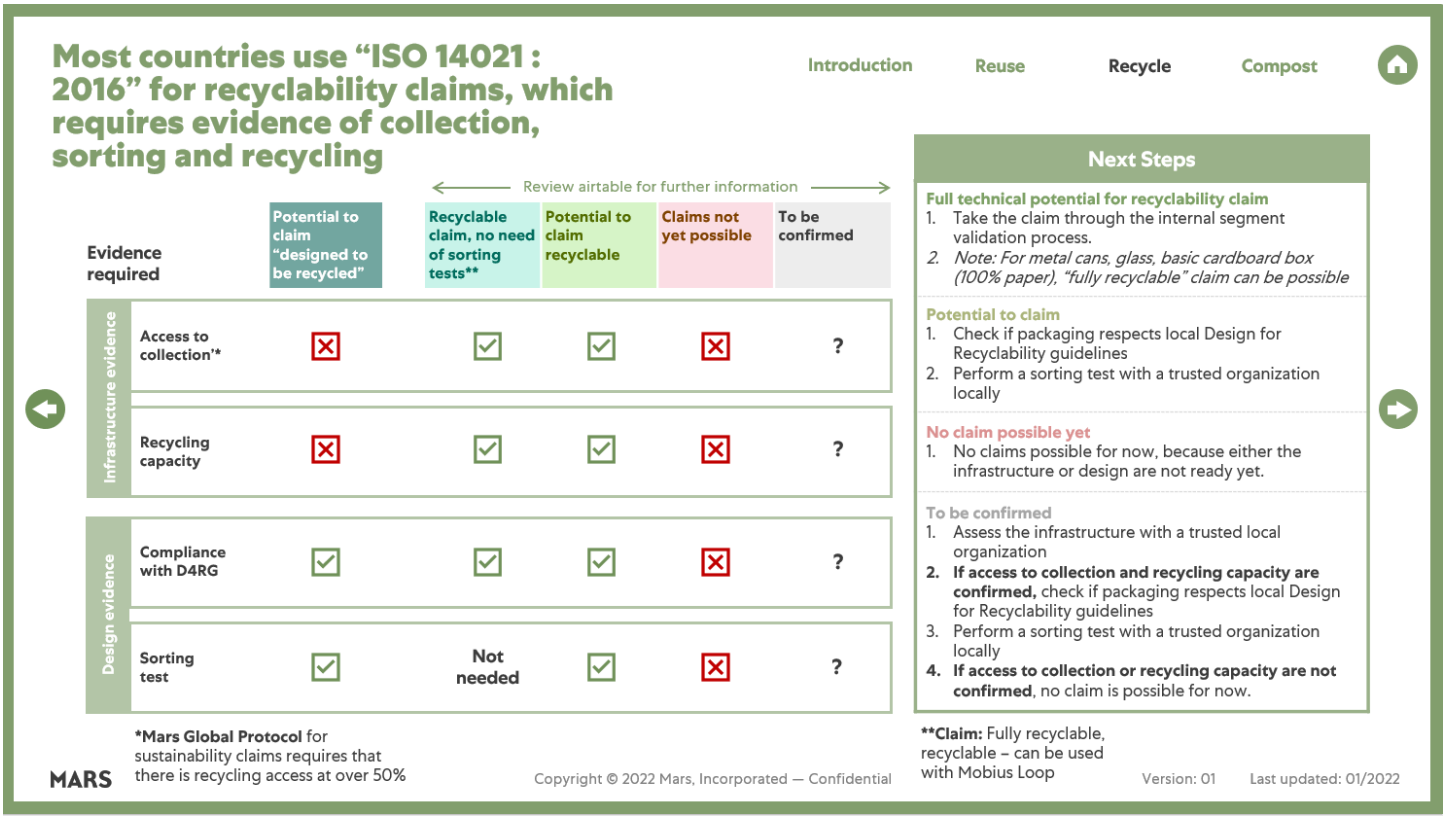
Recyclable = Recyclable claim, no need of sorting tests*
*Claim: Fully recyclable, recyclable – can be used with Mobius Loop

Test required = Potential to claim recyclable

No claims = Claims not yet possible

TBC = To be confirmed

Figure 3 Interpretation & Next steps following use of Recyclability Airtable



[9] Please note that the data in the Airtable
- Supports but does not replace the segment claims review process & will be refreshed as new information becomes available
- Is only applicable to claims related to recyclability, and does not apply to compostable and biodegradable claims

Additional examples of how to make recyclability claims are available in the internal D4C guidance, Claims section, with excerpts below:

Figure 4 Example of partners available to help substantiate ISO requirements on recyclability in the French market

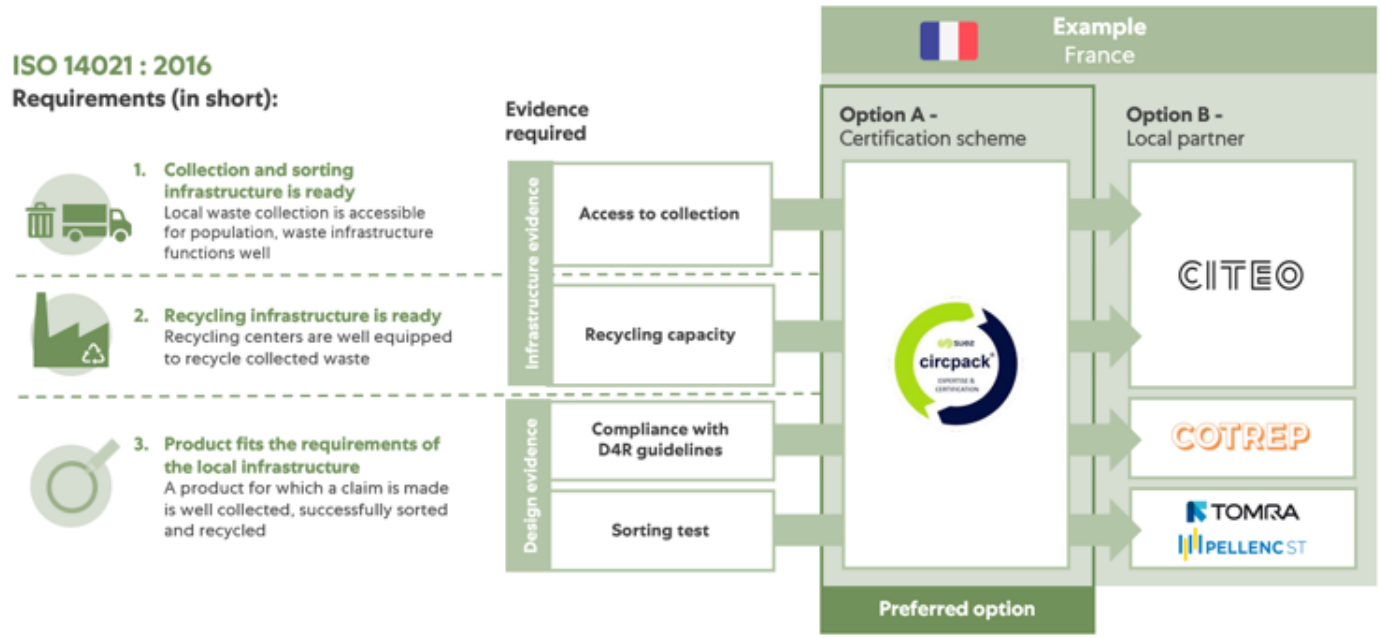
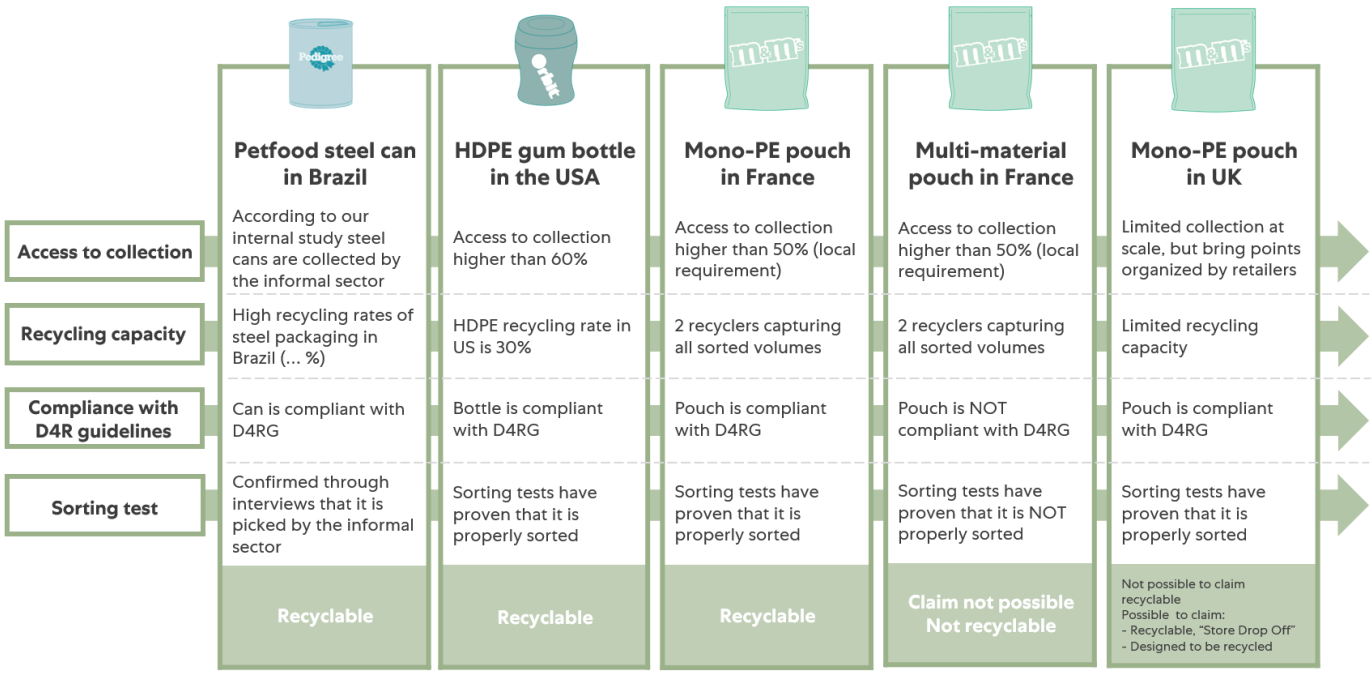


Figure 5 Examples of evidence provided to substantiate recyclability claims in different markets



Sorting Tests Protocols:

- Examples of possible sorting test approaches are listed in Figure 5. The more formal the test is, the stronger evidence it provides for substantiation.
- The Recyclass Protocol used by Veolia (formerly Suez) is well accepted in Europe and other markets
- A Recyclass classification of A, B, or C is considered to be Recyclable

- Where formal sorting tests may not be feasible (e.g., in markets where waste is collected through the informal sector), ensure there is adequate documentation of how the conclusion of "properly sorted" was reached before making a "recyclable" claim.

Note on recyclability of paper items:

The substantiation criteria described in **Appendix 2** above are relevant for all packaging materials, including paper. However, paper recyclability is also influenced by the mode of collection, specifically – whether it's collected in a single stream or in a commingled recycling bin.

Fiber-based items need to be able to be collected with paper to be recycled as paper. Therefore,

- If the market uses a **separate paper recycling bin** for collection, check local tolerance levels for the fiber percentage required for an item to be considered "paper".
    - For example, a pack must be 100%, >85% or >51% paper to be recyclable as "paper" in the Netherlands, Belgium, and Italy, respectively.
- If the market uses **commingled (single stream) recycling bins**, a common threshold is that a pack must be at least 51% paper to be recyclable in that context. (In the US, there is not a standardized definition, but industry experts cite a threshold of 50-60% fiber recovery from mixed paper bales.)
- Market-level schemes such as H2R, OPRL and ARL consider collection requirements as well as pulpability, fiber content and other tests (contaminants, residuals).
- Independent pulpability testing (e.g., PTS) is recommended; however, it does not consider collection.
- Note that even if paper-based packaging is collected and *can be* recycled, recycling may not take place. This is particularly a risk in commingled collection streams, so in this case, care should be taken regarding the wording of any claims made.

REMINDER: **Use the Airtable (link above) as a resource**; threshold considerations have been factored in for the local markets shown.

Further guidance on "paper-based" and paper recyclability claims will be outlined separately in the forthcoming second edition of the Global Protocol for Sustainability Claims.

Appendix 3: Requirements at a Glance & Supporting Text

REMINDER: Sustainability claims follow the standard segment/region claims review process.

Summary of substantiation & review requirements for Recycled Content & Recyclability Claims			
	Examples	Substantiation (Who)	Corporate Review*
Recycled Content Claims			
PCR is traceable Numerical or non-numerical claims may be allowed, depending on % PCR content.	e.g., "Pack contains 10% post-consumer recycled content" e.g., "Pack made with recycled plastic" (if content is >30%)	See Appendix 1 • Claim allowed in local market (SME, as designated per segment) • Traceable PCR content (Comm.) • Supplier documentation and/or 3rd party certification (Comm.)	None Required
PCR is not traceable Only non-numerical claims are allowed.	e.g., "[SHEBA brand] is committed to using recycled content in our packaging"	See Appendix 1 • Claim allowed in local market (SME, as designated per segment) • Mass Balance COC (ISCC+ or other approved certifier) (Comm.) • Website explanation (see ex.1) (Mkt)	Required
Recyclability Claims			
Market Scheme		Follow scheme requirements. Ensure to allow enough time for artwork review by all accountable governance functions in segment and the market scheme organization.	None Required
Independent Claim	e.g., "Recyclable" / chasing arrows symbol e.g., "Check locally"	See Appendix 2 • Claim allowed in local market; check trademarks • Four elements (design & infrastructure) required – see appendix 2 (R&D) • Testing may be needed (R&D); allow enough time	Required unless Airtable designates "Recyclable"
Designed for Recycling	e.g., "Pack is designed for recycling"	See Appendix 2 • Claim allowed in local market • Two Design elements required – see appendix 2 (R&D) • Back-of-pack explanation required if used on pack (see ex.2) (Mkt)	Required
External Reporting	e.g., "[Mars Wrigley UK] has increased recyclability of packaging by 5% since 2021"	Request or review data with Segment/Corporate Packaging sustainability team	None Required

*Corporate review of packaging claims = Assistant General Counsel, Food Law & Global Circular Packaging Director

Claim Examples: Text & Wordings

Example 1: Claim and website text example for Mass-Balance content

Example Claim: "[Mars Brand] sources recycled content. Visit [website] to learn more."

Sample Website Text:

- Our recycled content is sourced through Mass Balance: *The plastic resin we use to produce {this pack} is made with [certified] circular recycled plastic based on a mass balance approach.*
- What mass balance is: *Mass balance is a method that allows recycled plastic to be mixed with virgin feedstock, while keeping track of the amount of recycled content used.*
- Why is mass balance a good idea*: Mass balance supports a circular economy by supporting the use of more sustainable materials, like recycled plastics, even when that content can't be fully segregated in the production system. It gives more flexibility to producers and helps increase the demand for recycling infrastructure.*

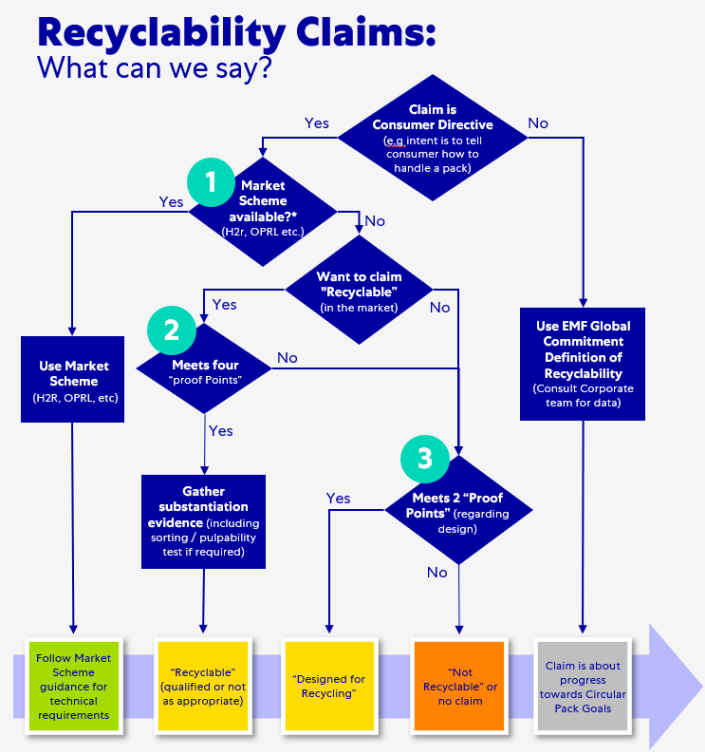
Example 2: Claim and website text example for "Designed for Recycling" Claim

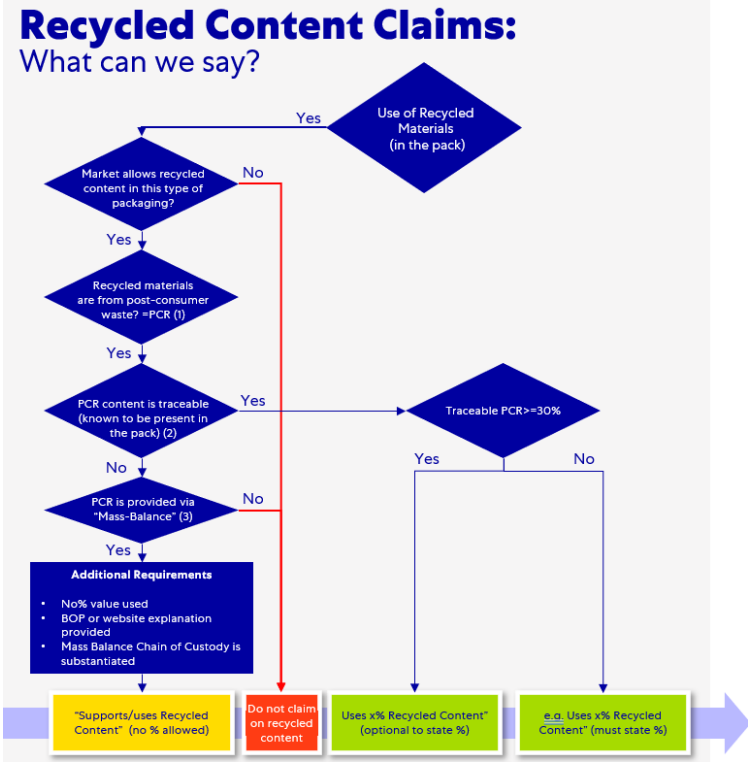
Example Claim: "This pack is designed for recycling because we've used just one type of plastic. See back panel for details." (where back panel includes a website address for more info)

Sample Website Text:

- Why is the pack not recyclable today? *Flexible food packaging is often made using multiple layers of different plastics, which help provide strength to the pack. However, those different plastics can't be separated to be recycled. In addition, curbside collection programs and local waste infrastructure in most areas can't handle flexible food packaging materials today.*
- What has been redesigned? *As part of Mars' Circular packaging commitments, [Mars Brand] in partnership with [pack supplier/other relevant party] has worked to redesign this pack. Now it uses a single plastic type, which will allow it to be recycled in advanced recycling systems.*
- What else needs to change to make this pack recyclable? *This is the first step in the journey. Even with these design changes, this pack is not yet recyclable in most areas. For that to happen, Advanced Recycling infrastructure needs to be put in place. Mars is advocating for these developments through our partnerships with [check with your segment's packaging sustainability team for relevant examples].*

Flow charts to support packaging claims assessment: Recyclability & Recycled Content





Recyclability:

1. **Use Market Scheme where relevant***
2. **If no Market Scheme, meet the "4 Evidence Points"**
   - This is required for recycling icons as well as claims text
3. **"Designed For Recycling" requires 2 "design Evidence Points"**

Corporate review is also required except when a market scheme is used

Green:
No corporate review required

Yellow:
Corporate review required

Follow your segment's sustainability claims review process to finalize all claims

[1]Post-consumer material refers to 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.

[2] Traceable PCR content most commonly applies to Metal, Glass, Paper, and PET (#1 plastic). Other plastic polymers such as PP*, PE* may be mechanically recycled, but approval for MR use in food contact packaging varies regionally (In USA it may be allowed; in EU it is currently not approved for food-contact packaging)

[3] Mass-Balance PCR content most commonly applies to PE & PP flexible food contact packaging