

# Companion Guide to the How2Recycle Decision Matrix



**How2Recycle**

A Project of

 **greenblue**

## Introduction

The How2Recycle Decision Matrix is a framework that consolidates the criteria, standards, and data used to evaluate the recyclability of packaging.

Its purpose is to provide clarity and transparency around our process, so members, partners, and stakeholders can better understand the basis for How2Recycle label decisions.

This summary version highlights the core categories of evaluation along with key additional considerations. While less detailed than the internal version, it offers insight into how recyclability is determined for label requests and where the key challenges lie. This public summary matrix offers a high-level look at where each material and format generally stand today in terms of collection, sortation, reprocessing, and end markets, as well as additional factors impacting recyclability, providing insight into our process and the factors influencing label assignments.

## How2Recycle Definition of Recyclability

The How2Recycle Decision Matrix is based on our definition of recyclability, which spans five core assessment categories and four additional consideration categories (shown right) to determine overall Label Eligibility.



Explore How2Recycle's Overall Recyclability Assessment for Core and Challenged Formats

## Standard for Assessing

The Standard for Assessing tables on the following pages list the standard, assessment considerations, and data sources for each of the main assessment categories (Applicable Law, Collection, Sortation, Reprocessing, End Markets), the four additional consideration categories (Consumer Experience, Material Health, Product Application/Product Residue, Consistency & Common Sense), and overall Label Eligibility. The information in these tables is an abbreviated version of the [How2Recycle Overall Recyclability Assessment for Core and Challenged Formats resource](#). The Standard for Assessing serves as the basis for understanding each assessment category within the How2Recycle Decision Matrix.

### CORE ASSESSMENT CATEGORIES



### ADDITIONAL CONSIDERATION CATEGORIES



CORE ASSESSMENT

STANDARD

ASSESSMENT CONSIDERATIONS

DATA SOURCES

Applicable Law



What does the law say about recyclability claims?

How2Recycle ensures its labels comply with all relevant laws and regulations, including the FTC’s Green Guides, Competition Bureau Canada’s standards, and emerging state and provincial policies. This helps maintain consumer trust and prevents misleading claims. This criterion assesses whether the package meets the legal requirements for recyclability claims in the regions where it is sold.

Federal Trade Commission (FTC) “Green Guides”  
State Legislation (California SB 343)  
Competition Bureau Canada Guidance, emerging Canadian regulations

Collection



What percentage of the population has access to recycle this package in their community?

Assessing a package’s acceptance to existing recycling programs involves examining the percentage of the population with access to recycling services in their communities. How2Recycle uses The Recycling Partnership’s Community Recycling Program Acceptance Data to assess recycling access for specific materials and formats in the U.S. and refers to CM Consulting’s report, “Access to Residential Recycling of Packaging and Packaging Material in Canada,” for Canada. How2Recycle will refer to new data that SPC and RRS are collecting on PE film and flexible packaging access. Additionally, as of August 2025, How2Recycle incorporates the collection data from CalRecycle’s Material Characterization Study to determine compliance with SB 343.

The Recycling Partnership’s Community Recycling Program Acceptance Data (U.S.)  
CM Consulting’s report on residential recycling of packaging materials in Canada  
SPC and RRS data on PE film and flexible packaging (2025)  
Material Characterization Study Final Findings (CalRecycle, 2025)

Sortation

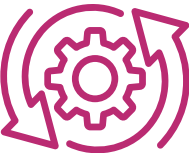


Will the package be properly and consistently sorted (dimensionality, rigidity, etc.) in a material recovery facility (MRF) or recycling center?

Sortation refers to how well the package can be identified and sorted into the correct material stream at Material Recovery Facilities (MRFs). Factors like size, shape, flexibility, and density impact whether the package is correctly sorted into the appropriate recycling stream. Poor sortation can result in contamination or disposal in landfills. Packaging that meets industry standards for dimensionality and format has a higher likelihood of successful sorting and recycling. Additional testing may be required for package formats not covered by existing protocols.

APR sortation tests (e.g., SORT-S-02 for size, SORT-S-05 for 2D/3D sorting)  
MRF sortation studies conducted by third-party experts

Reprocessing



Will the package be successfully reprocessed at paper mills, plastic reclaimers, film recyclers, etc.? Is the package technically recyclable based on current protocols and industry standards?

Technical recyclability testing assesses how well packaging materials integrate with existing recycling systems. This testing is crucial for understanding how these materials behave in recycling processes, identifying potential challenges, and confirming their compatibility with industry standards. It evaluates whether materials can be effectively reprocessed into new products, ensuring they meet technical specifications and are clean, contaminant-free, and suitable for existing recycling technologies like those used in paper mills or plastic reprocessors.

APR Design® Guide for Plastics Recyclability  
Critical Guidance Protocols for specific materials like PET, HDPE, PP, and PE films  
Fiber protocols (e.g., OCC-E, SBS-E for paper packaging) from labs like Western Michigan University

End Markets







Is there strong demand for the recycled package’s material to be used to manufacture new products?

A key factor in recycling is the existence of a viable end market for the recycled material. This criterion evaluates the demand for the recycled content that can be recovered from the package. High demand for the recycled material enhances the chances that it will be utilized in the production of new products. Conversely, if the recycled material lacks a robust market or is challenging to sell, the package may not be deemed truly recyclable, even if the material can be processed technically.

Bale specifications (ReMA, APR model specifications)  
Market trends (e.g., recycling capacity, material demand, and value trends)



ADDITIONAL CONSIDERATIONS	STANDARD	ASSESSMENT CONSIDERATIONS	DATA SOURCES
<div>Product Application/ Product Residue</div> <div></div>	How does the product impact the recyclability of the packaging? What level of product residue is acceptable?	Product application can have a significant impact on the recyclability of the package. The assessment looks at the product that is contained within each package, and how it may interact with the collection, sortation, and reprocessing of the material. Packaging containing hazardous materials or substances, or products that leave residue (e.g. wet, sticky, or oily residue on PE film, grease or food stains on paper, certain toxic products in rigid plastic container) require additional considerations that may result in a less favorable recyclability label.	Clean & Dry Protocol for PE flexibles (under development)  Internal assessment  Data submitted by member companies
<div>Consumer Experience</div> <div></div>	How do consumers interact with the package? How easy is it for consumers to recycle this package?	Evaluating the user-friendliness of a package from a recycling perspective involves examining whether consumers can easily understand the recycling instructions, the effort required to prepare the package for recycling (such as cleaning or separating components), and if the recycling process aligns with common consumer behaviors. If a package is overly complicated or inconvenient to recycle, consumers may be less likely to follow through, which can reduce its effective recyclability.	Consumer studies on recycling behaviors  Internal assessment  Feedback from How2Recycle members regarding instructions
<div>Material Health</div> <div></div>	Does the package contain intentionally added substances that are harmful or potentially harmful to the environment and/or human or nonhuman animal health?	Safety of the materials used in the package is a key consideration. The assessment looks for harmful chemicals, additives, or contaminants that could pose risks to human health, animal life, or the environment during recycling. Materials with toxic substances may require special handling or disposal, which can limit their recyclability. Packaging that is known or suspected to present health or safety risks is not suitable for recycling and, therefore, circularity.	Total Organic Fluorine (TOF) testing for PFAS  <a href="#">SPC Position Statements on Degradability and Material Additives</a>
<div>Consistency &amp; Common Sense</div> <div></div>	Is the package recyclability assessment consistent with those of similar product categories? Does the How2Recycle label provide clear and practical guidance to consumers on how to recycle?	Consistency in recyclability assessments across similar product categories and packaging types is essential. This involves evaluating whether the recycling instructions and guidelines provided to consumers are logical, practical, and straightforward. Clear and sensible labeling helps consumers easily understand how to recycle the package, reducing confusion and increasing the likelihood of proper recycling.	Comparison with assessments of similar product categories  Consumer feedback on labeling clarity
<div>Label Eligibility</div> <div></div>	Given the overall assessment, what label category is the base material and format eligible for? Are there factors (labels, adhesives, attachments, etc.) that could render the material less recyclable?	How2Recycle takes a holistic look at the data in the five main assessment categories and additional consideration factors. Given the data to support each element of recyclability, material and formats are determined to be eligible for one of four labels: Widely Recyclable, Check Locally, Not Yet Recyclable, or Store Drop-off. The ultimate label determination is based on each individual package and may receive a lesser recyclability label. Considerations listed in each assessment category may impact the final label.	



# Interpreting the Decision Matrix

This Summary Decision Matrix is designed to provide a high-level snapshot of How2Recycle’s current material and format assessments. It is a starting point for understanding recyclability determinations, not a comprehensive specification.

## Highest Possible Eligibility

The table shows the best-case outcome for each material and format category based on our current data and methodology, without incorporating testing results. While this makes the table easier to read, individual formats may still differ from the general category outcome depending on the specifications of the packaging submitted for assessment. However, packaging in some categories may be eligible for a higher designation if it successfully passes technical recyclability testing.

## Impacts of Package Design

Package design elements can significantly impact recyclability, even if the base material is generally recyclable. Design-level attributes include colorants, closures, labels, adhesives, shrink sleeves, and barrier layers. These features are fully considered in our internal Decision Matrix and influence the final label assignment, even if not shown in detail in the summary table.

## Format-Level Differences

Within a material category, different formats may have distinct outcomes. Even within those formats, there can be differences in overall recyclability. This table groups general formats together for conciseness, but internally, these differences are carefully assessed.

## Dynamic and Evolving Data

The assessments presented reflect current data but will evolve as new data sources become available, community acceptance changes, MRF technology improves, end market demand shifts, and regulations are implemented or updated. The Decision Matrix is updated regularly, and the public version will be revised as necessary to remain accurate.



# Assessment Details by Category

## Collection

As part of an ongoing joint effort between GreenBlue and The Recycling Partnership (TRP), How2Recycle’s data for acceptance is informed largely by TRP’s [U.S. Community Recycling Program Acceptance Data](#). Thanks to this partnership, How2Recycle receives detailed and timely information on the collection of specific material formats for recycling in the United States. This data helps inform the label eligibility of package formats and if those formats have a change in recyclability or need to be placed under review for a potential change. More about this collaboration, our shared methodology, and the data can be found [here](#).

Of note, How2Recycle is continuing to reference third party data outside of The Recycling Partnership’s U.S. Community Recycling Program Acceptance Data for certain packaging format categories while alignment continues. However, How2Recycle is planning to fully transition to the TRP dataset as our harmonized source for all national acceptance data in the U.S. in 2026, which may impact future label determinations. Formats impacted by third-party data adjustments are marked with a dagger (†) in the table.

Additionally, as of August 2025, How2Recycle has made the decision to integrate California eligibility into our national recyclability determinations. California SB 343 specifies that for materials to be considered recyclable in California, it must be accepted for curbside collection by jurisdictions serving at least 60% of California’s population and sorted by facilities serving at least 60% of statewide programs into streams designated for recycling. The “Category Assessment” for Collection shown in the matrix reflects the national acceptance percentage, but the “Overall Assessment” for Applicable Law reflects the inclusion of California-specific data. Affected categories are marked with an asterisk (\*) in the table. For more information on this decision, please reference the [Supplementary Member Notice: California SB 343 Impacts on Labeling Eligibility](#), published in July 2025.

## Category Assessment

The Collection “Category Assessment” is based on acceptance percentages. Assessment indicates label eligibility for each base material and/or format based on acceptance alone. Formats impacted by third-party data adjustments are marked with a dagger (†) in the table.






US		CAN	
>60%	>50%	Eligible for <i>Widely Recyclable</i>	
20-60%	20-50%	Eligible for <i>Check Locally</i>	
<20%		Eligible for <i>Not Yet Recyclable</i>	
SDO		Eligible for <i>Store Drop-Off</i>	

## Sortation

The main data used to determine sortation is industry sortation protocols. Additional testing may be required for package formats not covered by existing protocols.

### Category Assessment

The Sortation "Category Assessment" is based on general information regarding challenges with the appropriate sortation of the listed material. The indicated option is the general assessment for each material/format. Formats that are generally sorted without issue are considered green. Those with moderate sortation issues, or which may require testing are considered yellow. Material/format types that are known to have significant sortation issues are listed as red.






-  No significant sortation issues
-  Moderate sortation issues
-  Moderate sortation issues. *Testing typically required*
-  Significant sortation issues
-  Not sorted in MRF

## Reprocessing

The reprocessing assessment category is one of the most complex. There are numerous factors that can impact the quality of the reprocessed material from a package, including attachments, additives, coatings, etc. Decisions regarding specific packages are dependent on all considerations. The list of design aspects that may impact recyclability are listed in detail in the "Design Aspects Impacting Core Assessment" column.

### Category Assessment

The Reprocessing "Category Assessment" is based on general information regarding challenges with the reprocessing of the packaging. The indicated option is the general assessment for each material/format. Formats that are generally reprocessed without issue (i.e., designed for recycling) are considered green. Those with moderate reprocessing considerations are shown in yellow. Material/format types that are known to have reprocessing concerns are listed as red.





-  No significant reprocessing issues
-  Moderate reprocessing issues
-  Moderate reprocessing issues. *Testing typically required*
-  Significant reprocessing issues
-  No/limited data on reprocessing

## End Markets

The end markets assessment category is an evaluation of the strength of end markets for packaging materials. End markets have historically been challenging to assess definitively. In addition to this Decision Matrix, a new framework for an End Market Scoring System is in development. This scoring system is intended to result in composite scores to be used to assess the strength of end markets for each material/format category.

### Category Assessment

The End Markets "Category Assessment" is based on the assessed end market strength: Strong, Moderate, or None/Negligible. This determination is made via the [How2Recycle Criteria for Assessing End Markets](#). How2Recycle is currently working to refine this evaluation criteria through the development of an End Markets Scoring System. Future Decision Matrix updates will reference this new system.

-  Strong end markets
-  Moderate strength end markets
-  None or negligible end markets
-  No/limited data on end markets

## Design Aspect Impacting Core Assessment

As noted above, the Summary Decision Matrix does not capture all of the design-level nuances that can influence recyclability. The general factors impacting the core assessment are listed. These factors are fully accounted for in our internal matrix and final label assignments, even if they are not individually displayed in detail in this summary.

### Category Assessment

The "Category Assessment" for the design aspects impacting core assessments is used to note the design considerations which are taken into account in our label request form and may ultimately impact the recyclability of the material/format listed.

## Additional Considerations Categories

The additional consideration categories include: Product Application/Product Residue, Consumer Experience, Material Health, and Consistency & Common Sense.

### Category Assessment




The "Category Assessment" for the additional consideration categories is used to note the circumstances in which these additional considerations may be a concern for the recyclability of the material/format listed.

Applicable Law

Although applicable law is the basis of the How2Recycle assessment, it is the last criteria category displayed in the Decision Matrix. This is due to the current law requiring the other factors to be in place in order to legally label a package recyclable.








Category Assessment

Applicable Law "Category Assessment" is based on 2012 FTC Green Guides guidance, unless superseded by state regulations (currently only California SB 343). As noted in the above Collection section, the "Overall Assessment" for Applicable Law reflects the inclusion of California-specific data. Affected categories are marked with an asterisk (\*) in the table.

-  Packaging meets *all* category criteria
-  Packaging meets *some* criteria
-  *Does not* meet all criteria






Label Eligibility

The label eligibility listed in the Decision Matrix is the highest recyclability assignment possible for the material and/or format. The ultimate label determination is based on each individual package, and as a result packages may receive a less favorable recyclability label. Considerations listed in each assessment category may impact the final label.

UNITED STATES	CANADA
	
	
	
	



Key Takeaways

-  **This matrix reflects a “best-case” view of material eligibility.**  
The highest possible recyclability designation is shown for each material/format category. Final label assignments may differ based on design details such as color, attachments, or barriers, or additional considerations such as product application and consumer experience.
-  **Nuance and format-specific details matter.**  
Even within one material category, outcomes can vary significantly. The internal Decision Matrix considers these distinctions and applies them case by case.
-  **Data is dynamic and will continue to evolve.**  
Collection rates, sortation technology, end market demand, and regulations are all subject to change. The Decision Matrix is updated regularly to stay aligned with the most current information.
-  **Transparency is central to the Decision Matrix.**  
This public summary is designed to give members, partners, and stakeholders a clear window into how How2Recycle determines recyclability and assigns labels.
-  **Collaboration strengthens the system.**  
Member and partner input helps improve the Decision Matrix over time. This feedback loop ensures that our recyclability criteria remain credible, defensible, and useful for the industry.

Looking Forward

This summary version of the How2Recycle Decision Matrix represents an important milestone in How2Recycle’s commitment to advancing transparency and consistency in recyclability labeling. By sharing this public summary, we aim to empower members and partners with a clearer understanding of how recyclability decisions are made and encourage constructive dialogue to continue improving the system.

As recycling infrastructure, technology, and regulations evolve, the Decision Matrix will remain a living resource. We will continue to update it regularly to reflect the latest verified data and industry best practices. We invite our members, partners, and stakeholders to engage with us, share data and insights, and collaborate in building a stronger, more resilient recycling system for the future.

 [Explore the Decision Matrix](#)



How2Recycle Decision Matrix   Public Summary Version (September 2025)										
			Core Assessment Categories					Overall Assessment	Label Eligibility	
Category	Material	Example Format	Collection US   CAN	Sortation	Reprocessing	End Markets US   CAN	Applicable Law US   CAN	UNITED STATES	CANADA	
RIGID PLASTIC	PET	Bottles, Jugs & Jars	>60% >50%	✓	✓	✓	✓	Widely Recyclable		
		Thermoforms, Cups, Lids	20-60% >50%	✓	✓	✓	– ✓	Check Locally	Widely Recyclable	
		Other (e.g. Foam (EPET))	<20%	✗	✗	✗	✗	Not Yet Recyclable		
	HDPE	Bottle, Jugs, & Jars	>60% >50%	✓	✓	✓	✓	Widely Recyclable		
		Tubs	>60% >50%	✓	✓	✓	✓	Widely Recyclable		
		Trays, Cups, Lids	20-60% >50%	✓	✓	✓	– ✓	Check Locally	Widely Recyclable	
	LDPE	Bottles, Jugs & Jars	20-60%	✓	✓	–	–	Check Locally		
		Lids, Tubs, Cups	20-60%	✓	✓	–	–	Check Locally		
	PP	Bottle, Jugs & Jars	>60% >50%	✓	✓	✓	✓	Widely Recyclable		
		Tubs	>60% >50%	✓	✓	✓	✓	Widely Recyclable		
		Cups, Lids, Trays, Clamshells	20-60% >50%	✓	✓	– ✓	– ✓	Check Locally	Widely Recyclable	
		Single Use Pods	<20% 20-50%	–	✓	–	✗ –	Not Yet Recyclable	Check Locally	
		Foam	<20%	–	✓	✗	✗	Not Yet Recyclable		
	PVC	All Formats	<20%	✗	✗		✗	Not Yet Recyclable		
	PS	All Formats	<20%	✗			✗	Not Yet Recyclable		
	#7, Other plastics (i.e. PLA, ABS, acrylics, multilayer)	All Formats	<20%	✗			✗	Not Yet Recyclable		
FLEXIBLE PLASTIC	PE (HD and LD)	Wraps, Bags, Pouches & Wrappers	>60% >50%		✓	✓	✓	Store Drop-off	Widely Recyclable	
		Net, Mesh, Woven Film	20-60% >50%		✓	✗	✗	Not Yet Recyclable		
	PP	All Formats	<20%		✓	✗	✗	Not Yet Recyclable		
GLASS	Soda Lime	All Formats	>60% >50%	✓	✓	✓	✓	Widely Recyclable		
	Borosilicate	All Formats	<20%	✗			✗	Not Yet Recyclable		

			Core Assessment Categories					Overall Assessment	Label Eligibility	
Category	Material	Example Format	Collection US   CAN	Sortation	Reprocessing	End Markets	Applicable Law US   CAN	UNITED STATES	CANADA	
FIBER	Paper	Mail, Office Paper, Bags	>60% >50%	✓	✓	✓	✓	Widely Recyclable		
		Coated (1 or 2 Sides Polylaminate/Extrusion)	<20%	✓	✗	✗	✗	Not Yet Recyclable		
	Paperboard	Uncoated/Clay Coated	>60% >50%	✓	✓	✓	✓	Widely Recyclable		
		Coated (1 Side Polylaminate/Extrusion)	20-60%	✓	—	✓	—	Check Locally		
		Polycoated (2 Sides) / Wax Coated	<20%	✓	✗	—	✗	Not Yet Recyclable		
	Cardboard	Uncoated/Clay Coated Corrugated	>60% >50%	✓	✗	✗	✓	Widely Recyclable		
		Coated (1 Side Polylaminate /Extrusion) Corrugated	20-60%	✓	—	✓	—	Check Locally		
		Polycoated (2 Sides) / Wax Coated Corrugated	<20%	✓	✗	✗	✗	Not Yet Recyclable		
	Molded Fiber	Non-Food Packaging	>60% >50%	✓	✓	✓	—* ✓	Check Locally	Widely Recyclable	
		Food Packaging	<20%	✓	—	✗	✗	Not Yet Recyclable		
	Spiral Wound Containers	Metal Bottom	20-60%†	✓	✓	✓	—	Check Locally		
		All Paper	20-60%	✓	—	✓	—	Check Locally		
	Format Specific	Aseptic / Gable Top Cartons	>60%† >50%	✓	✓	✓	✓	Widely Recyclable		
		Paper Ice Cream Containers	<20%	—	✗	✗	✗	Not Yet Recyclable		
		Paper Hot Cups	<20%	—	—	—	✗	Not Yet Recyclable		
		Pizza Boxes	>60% >50%	✓	✓	✓	—* ✓	Check Locally	Widely Recyclable	
METAL	Aluminum & Steel	Beverage & Food Cans	>60% >50%	✓	✓	✓	✓	Widely Recyclable		
		Aerosol Cans	20-60% >50%	✓	✓	✓	— ✓	Check Locally	Widely Recyclable	
	Aluminum	Foil	20-60%	—	✓	✓	—	Check Locally		
		Trays	20-60%	✓	✓	✓	—	Check Locally		

† Collection percentage shown incorporates third party data outside of TRP's US Community Recycling Program Acceptance Data

\* While collection percentage is shown for the US, applicable law reflects the inclusion of California-specific data. These categories have been downgraded from Widely Recyclable to comply with CA SB 343.



## Additional Resources

The How2Recycle program is committed to transparency and clarity in how we assign labels and make recyclability decisions. Over the years, we have published a range of resources to help members, partners, and stakeholders understand our process and the data behind it. If this document does not fully answer your questions, we encourage you to explore the following resources:

- [How2Recycle Guidelines for Use](#) – Comprehensive instructions for proper use of the How2Recycle label and detailed information on the specifications required when submitting label requests.
- Supplementary Member Notices – Updates on regulatory changes, methodology refinements, and program improvements.
  - [Supplementary Member Notice: California SB 343 Impacts on Labeling Eligibility](#)
  - [Supplementary Member Notice: Member Platform Update & Post Pro Label Rollout Process](#)
- [Overall Recyclability Assessment for Core and Challenged Formats](#) – A detailed look at how we assess core and challenged formats.
- [The How2Recycle Guide to Recyclability](#) – Explains how we define recyclability and what data informs our decisions.
- [The How2Recycle Guide to Future Recyclability](#) – A forward-looking view on how recyclability criteria may evolve.
- [Updated Criteria for Assessing End Markets](#) – Announcement detailing how we evaluate end-market strength.
- [New Criteria for Assessing Material Health](#) – Announcement explaining our approach to material health in recyclability assessments.
- [Consumer Preparation Rule](#) - Announcement explaining How2Recycle's approach to determining what consumer preparation of packaging for recycling is reasonable.

For any additional questions, feedback, or requests for clarification, please reach out to us at [How2Recycle@greenblue.org](mailto:How2Recycle@greenblue.org). We welcome dialogue and collaboration to continue improving transparency and building shared understanding across the recycling system.

