



PROBLEMATIC AND UNNECESSARY MATERIALS REPORT

FOUNDED BY:



AS PART OF:

Ellen MacArthur
Foundation's Plastics
Pact Network



ABOUT THIS REPORT

The U.S. Plastics Pact works with members to take measures to eliminate 11 problematic and unnecessary resins, components, and formats by 2025 in order to accelerate progress toward a circular economy for plastic packaging in the United States.

The **U.S. Plastics Pact**, “U.S. Pact,” brings together more than 100 businesses, not-for-profit organizations, academic and research institutions, and government agencies known as “Activators” who work together toward achieving a circular economy. U.S. Pact Activators produced 33%¹ of all plastic packaging in **scope** in the country by weight in 2020. Progress made by Activators toward elimination of plastic packaging in scope will be documented in the U.S. Pact’s annual reports.

CONTEXT

The U.S. Pact utilized the **Ellen MacArthur Foundation Global Commitment criteria** for “problematic and unnecessary” plastic packaging components, with a few adaptations. The term “problematic” means a variety of things to different stakeholders. Similarly, the U.S. Pact views the term “functional” as a more appropriate indicator of what is necessary or “unnecessary,” coinciding with a prioritization of functions (e.g., food safety versus marketing).

DEFINITION OF “PROBLEMATIC OR UNNECESSARY”

Plastic packaging items, components, or materials where consumption could be avoided through elimination, reuse or replacement and items that, post-consumption, commonly do not enter the recycling and/or composting systems, or where they do, are detrimental to the recycling or composting system due to their format, composition, or size.

EXCLUSIONS

The list applies exclusively to plastic packaging. Medical plastics used in clinical, hospital, and related laboratory and research settings are not included. This exclusion does not apply to pharmaceutical packaging, e.g., over the counter or prescription medicines packaged in plastic. **Definitions** used in the criteria derive from the **Ellen MacArthur Foundation’s global Plastics Pact Network**, which provides the framework for the U.S. Pact. Participation in the U.S. Pact is voluntary and does not necessarily signify an individual Activator’s endorsement of the list.



CRITERIA

U.S. adaptations to The Ellen MacArthur Foundation Global Commitment Criteria for identifying problematic or unnecessary plastic packaging components are provided in italics. The following list of criteria is provided to help identify problematic or unnecessary plastic packaging or plastic packaging components:

If Criterion 1 is “No”, then at least one additional criterion must be “Yes”.

CRITERION 1

It is reusable, recyclable, or compostable by 2025.² Reusable, recyclable, and compostable will be assessed in accordance with the U.S. Pact Definitions.

CRITERION 2

It contains hazardous chemicals *or creates hazardous conditions* that pose a significant risk to human health or the environment (applying the precautionary principle) during its manufacturing, *recycling (whether mechanical or chemical), or composting process.*

CRITERION 3³

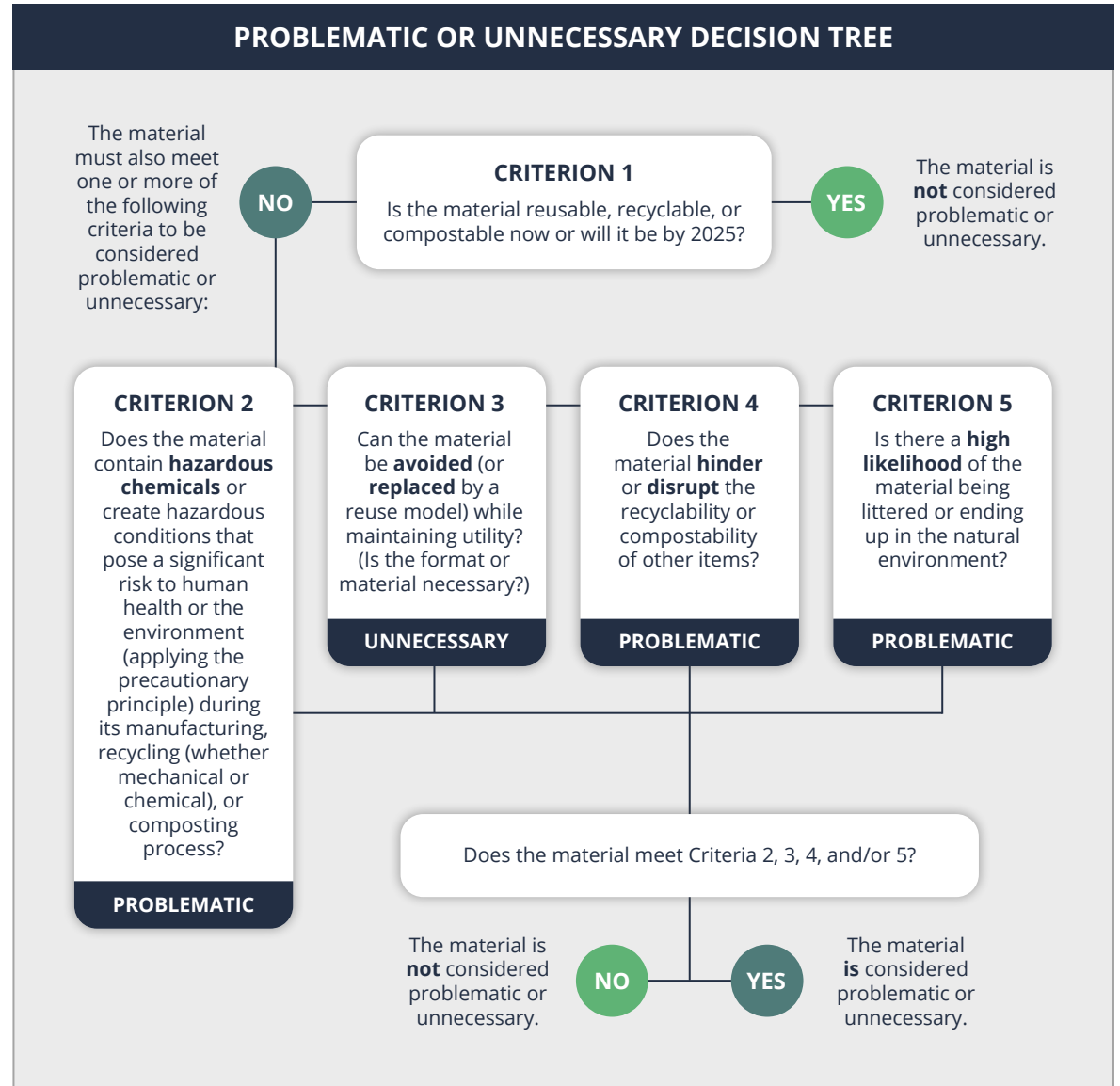
It can be avoided (or replaced by a reuse model) while maintaining utility.

CRITERION 4

It hinders or disrupts the recyclability or compostability of other items.

CRITERION 5

It has a high likelihood of being littered or ending up in the natural environment.



11 MATERIALS TO BE ELIMINATED BY 2025

The 11 items listed are not currently reusable, recyclable, or compostable with existing U.S. infrastructure at scale and are not projected to be kept in a closed loop in practice and at scale by 2025.



4 When non-reusable, non-recyclable, or non-compostable per U.S. Pact definitions and provided as an ancillary item to the primary container. For instance, a packet of plastic cutlery provided with a prepared salad, or a straw/stirrer provided with a beverage used on the go would be defined as problematic whereas cutlery, straws or stirrers sold as a product would not.

5 "Intentionally added" either in the package or in the manufacturing of that package.

6 "PFAS" or perfluoroalkyl and polyfluoroalkyl substances are defined as the class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom at or above 100 parts per million, as measured in total organic fluorine.

7 Any color other than transparent blue or green.

8 Including oxo-biodegradable additives.

9 This includes adhesives, inks, materials (e.g., PETG, PVC, PLA, paper). Avoid formats/materials/features that render a package detrimental or Non-Recyclable per the [APR Design@ Guide](#). Labels should meet APR Preferred guidance for coverage and compatibility and be tested in any areas where this is unclear.

MORE INFO

Elimination of these problematic and unnecessary materials will enable advancements in circular package design, increase opportunities for recovery, and enhance the quality of recycled content available for manufacturers. During the next two years, the U.S. Pact will continue to investigate additional items for potential elimination.

ADDRESSING MATERIAL SUBSTITUTIONS

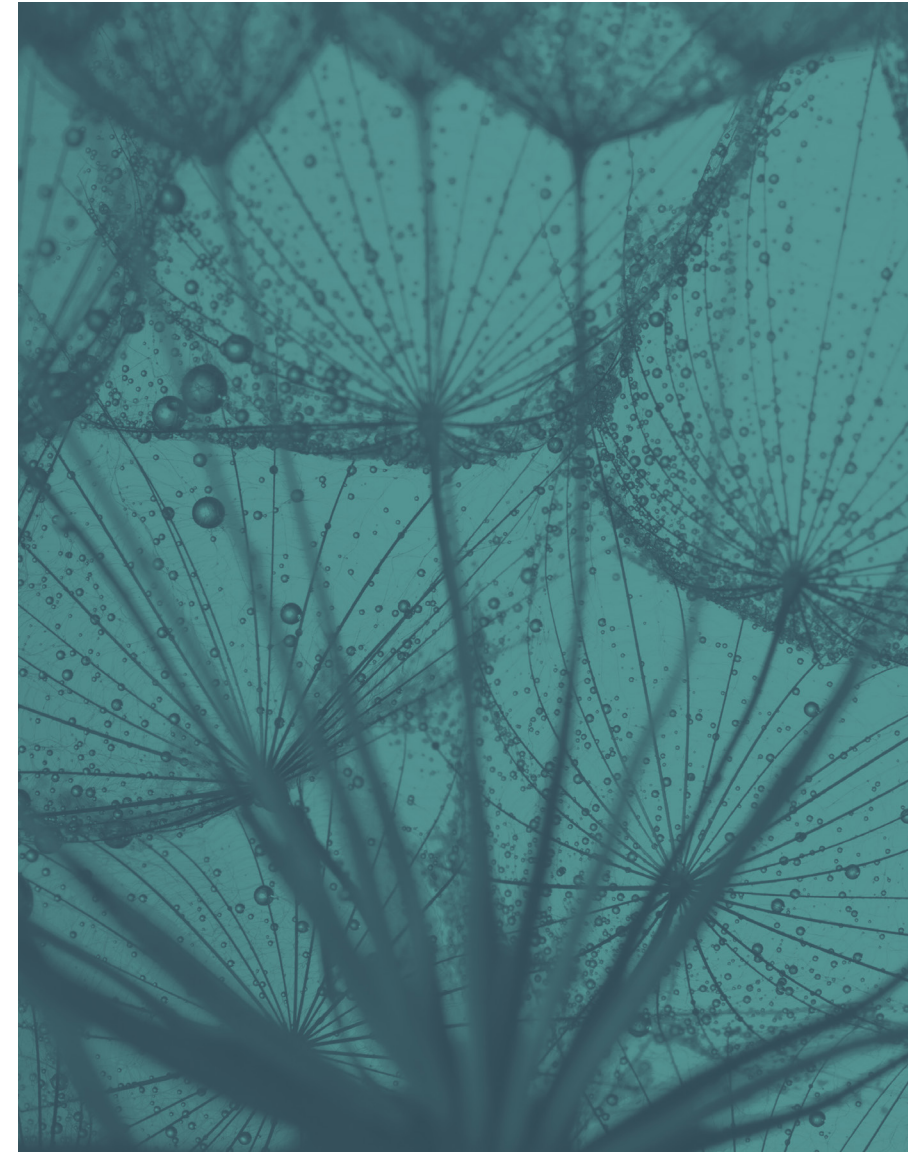
The scope of these criteria is only for plastic packaging within the [Scope of the U.S. Plastics Pact](#). Material substitutions inevitably produce trade-offs for sustainability performance.

When considering material substitution, we encourage Activators to switch to more circular (i.e., reusable, recyclable, or compostable) resins with better environmental profiles.

When an existing problematic plastic packaging is replaced by a new plastic material, Activators are encouraged to carry out assessments for emissions, water use, and the overall environmental benefits. That analysis should include the recyclability and/or compostability as criteria for comparison.

When considering substitution to a non-plastic material such as paper, glass, or metal, the packaging will be considered out of scope for the U.S. Plastics Pact and Activators should report the change as part of the annual reporting process (starting in Year 2).

We encourage Activators to carry out due diligence to ensure that the new material is not causing additional negative human health or environmental impacts.



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