Recyclability Assessment Methodology

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Section 1: Background Information

1.1 About this publication

This Recyclability Assessment Methodology (RAM) is published by PackUK, the Scheme Administrator for Extended Producer Responsibility for packaging (pEPR). This version of the RAM is for use in assessing packaging material reported as having been supplied in 2025. PackUK will update this guidance annually in the Autumn in readiness for the following year's reporting.

From 1 January 2025, liable producers who supply household packaging must assess the recyclability of that packaging and report the results of the assessment to regulators (Environment Agency, the Scottish Environment Protection Agency, Natural Resources Wales or the Northern Ireland Environment Agency, as appropriate).

This is RAM version 1.1 (April 2025) which is a simplified version 1.0 published on 23 December 2024, following feedback from the packaging value chain. Any significant changes made have been highlighted at the end of each section, any minor changes have been made within the body of the text.

Find out about Extended Producer Responsibility (EPR) for packaging. This collection of guidance includes information on who is affected, what data to collect and how to report it.

To do this, you will need to assess packaging you supply using the recyclability assessment methodology (RAM).

Different kinds of packaging receive different ratings - **RED**, **AMBER** or **GREEN**. This rating affects the disposal fee that will be charged for that packaging. This is sometimes called 'fee modulation'.

1.2 Scope

Who has to do this

Only large producers must collect and report their recyclability assessment data. Find out about small and large producers.

Packaging requiring assessment

You only need to collect and report recyclability assessment data if you supply packaging that falls into this category:

- household packaging

Categories of material

There are 8 categories for materials. Throughout the RAM, these are referred to as ‘specified materials’.

(a) Aluminium;
(b) Fibre-based composite materials;
(c) Glass;
(d) Paper or Board;
(e) Plastic;
(f) Steel;
(g) Wood; or
(h) Other materials

Each unit of packaging or component should be assessed under one of these categories.

The guidance below tells you how to apply the following steps to each category of material. Use that guidance to assess whether your packaging unit or component is **RED**, **AMBER** or **GREEN**.

Outputs: the RED, AMBER, GREEN scale

In addition to the material category, packaging will fall into one of 3 sub-categories:

- **RED** packaging has specifications that make it difficult to recycle at scale
- **AMBER** packaging may experience challenges during collection and sortation, requires specialist infrastructure for reprocessing, the efficiency and output quality of reprocessing is affected, or there is some secondary material loss
- **GREEN** packaging is widely recyclable in the current UK infrastructure

How this will affect what you pay (‘modulation’)

Full details of how fees will be modulated will be published in 2025.

What you must report in 2025

You need to submit recyclability assessment data about all household packaging which you supply.

Find out what packaging data you have to collect for EPR for packaging.

You must enter the results of your assessment on the packaging data file that you submit to the Environment Agency, the Scottish Environment Protection Agency, Natural Resources Wales or the Northern Ireland Environment Agency, as appropriate) through the Report Packaging Data (RPD) service. There are more details on how to do this in the guidance that explains how to create your file for EPR.

If you need help assessing your packaging

If you do not know what the packaging you supply is made of or are missing other technical details that you need to complete the assessment, contact the packaging manufacturer.

You can also contact a third-party provider for advice on your EPR packaging obligations including making and reporting the results of your recyclability assessments. Third party providers will likely charge a fee for this.

Updates to the RAM

The RAM will be reviewed and updated where appropriate annually, in line with reporting periods for EPR for packaging. The updated RAM will be published prior to 1st October for the following reporting year. This is to allow for innovation, evolving market conditions and regulatory changes.

Who decides these ratings

There will be a RAM Technical Advisory Committee (TAC) which will advise PackUK on the annual review of the RAM. The TAC is an advisory body made up a broad cross section of the packaging value chain. It will support PackUK to assess any planned changes to the RAM.

Where requirements have been removed from this RAM Version 1.1 for 2025 assessment, these requirements may be reviewed by the TAC for inclusion in future RAM versions.

Materials that are exempt from requiring RAM assessment

Some packaging is exempt from the requirement of a recycling assessment:

- reused packaging, unless it has been imported into the United Kingdom
- any packaging exported from the United Kingdom by the producer (please see <insert link> for more information)
- Drinks containers made of polyethylene terephthalate (PET) plastic, steel or aluminium

- Drinks containers for which a deposit is payable and is within scope of a DRS which is in operation
- Non-household packaging

Automatic reds ('problematic packaging')

Some packaging and components of packaging always count as **RED** on the scale.
Items of packaging or components must be classified as **RED** if they contain any of the following

- integrated electrical components or batteries that would be classed as Electrical and Electronic Equipment (EEE) - for example, boxes that include LED lights.
- any of the substances of very high concern (SVHC) under UK REACH included in the packaging contents.
- inks that are not manufactured in compliance with the EuPIA Exclusion Policy for Printing Inks and Related products.
- Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) where they have been intentionally added. This does not apply to packaging with the predominant material of aluminium, steel or glass.
- Any household packaging within scope of the RAM requirement which has not been assessed or where the detail required to undertake an assessment isn't available.

1.3 Definitions

Definitions are aligned to the Producer Responsibility Obligations (Packaging and Packaging Waste) Regulations 2024.

Alternative natural fibres: For the purposes of this assessment this term refers to alternatives to cellulosic wood-based fibres such as bagasse, sugar cane, palm, fibre, rice straw, wheat straw, barley straw, oat straw, grass straw, flax, hemp, and bamboo[1].

Board / Paperboard: A generic term applied to certain types of paper frequently characterised by their relative high rigidity. The primary distinction between paper and board is normally based upon thickness or grammage, though in some instances the distinction will be based on the characteristics and/or end-use.

Component: The different parts of a whole packaging unit that are separable by hand.

[1] CPI Design for Recyclability Guidelines 4th Edition

Drink Container: means a bottle or can which—

(a) contains or used to contain drink;

(b) is made wholly or mainly from polyethylene terephthalate (PET) plastic, glass, steel or aluminium;

(c) has a capacity of at least 150 millilitres but no more than three litres of liquid;

(d) is designed or intended to be sealed in an airtight and watertight state at the point of supply to a consumer in the United Kingdom; and

(e) is not conceived, designed or marketed to be refilled or reused in any other way by any person.

Fibre-based composite packaging: means packaging material which—

(i) is made of paperboard or paper fibres, with one or more layers of plastic, and which may also have layers of other materials, to form a single unit that cannot be separated by hand; and

(ii) is not in the paper or board packaging category;

Paper or Board: includes packaging material which is within the description in sub-paragraph (i) of the definition of fibre-based composite material, if the producer who supplies the packaging can provide evidence that its plastic content is not more than 5% of the packaging material by mass.

Liable producer: “liable producer” in relation to an assessment year, means a producer who is liable under regulation 60 of the Producer Responsibility Obligations (Packaging and Packaging Waste) Regulations 2024, to pay a disposal fee and an administration fee to the scheme administrator for that assessment year.

Non-paper content: The sum of all non-separable components of a fibre-based packaging product that are not defined as paper content expressed in percentage of total component weight. This means that all films, foils, coatings (except coatings mentioned in Paper Content definition), inks, varnishes would be excluded from the paper content.

Packaging Materials: Materials used in the manufacture of packaging and includes raw materials and processed materials prior to their conversion into packaging.

Paper: Paper consists mainly of natural cellulosic fibres and may contain other ingredients such as filling material, starch, clay or colour coatings including binder, as well as additives typically used in the paper industry such as wet-strength agents, sizing agents, dyes and bound water.

Paper Content: The sum of all non-separable components of a fibre-based packaging product that are defined as paper content expressed in percentage of total component weight. The paper content includes natural cellulosic wood fibres, paper making additives (e.g. wet strength, sizing agents, fillers and dyes), water content and clay coatings or colour coatings.

Plastics (Films / Flexibles)**:** Plastics classified as "flexible" refer to packaging structures which flex easily, and which can be made of both single and multiple layers of materials. Common examples of flexible plastic packaging include bread bags, snack wrappers, netted produce bags, zipper-lock pouches, lidding film and sachets.

Plastics (Rigids): Plastics classified as "rigid" in packaging refer to items that maintain a defined shape and structural integrity under normal conditions of use. These materials are typically stiff and durable, offering protection and support for a wide range of products. Common examples of rigid plastics in packaging include bottles, pots, tubs, trays, tubes, caps, and closures.

Predominant Material: Where a whole unit of packaging or a packaging component is comprised of two or more materials, the predominant material is the one that is greatest by weight.

Primary Packaging: Packaging conceived so as to constitute a sales unit to the final user or consumer at the point of purchase.

Printing Inks:

Printing inks: printing inks are

a. Mixtures of colourants with other substances which are applied on materials to form a graphic or decorative design together with or without

b. other coloured or uncoloured overprint varnishes/ coatings or primers which are normally applied in combination with a) in order to enable the printed design to achieve specific functions such as ink adhesion, rub resistance, gloss, slip/friction, durability, etc.

Printing inks do not include coatings which are applied with the prime objective of enabling the material or article to achieve a technical function such as heat sealing, barrier, corrosion resistance etc., as opposed to a graphic effect, even though they may be coloured.[2]

Recycling: Has the meaning given in Article 3(17) of the Waste Framework Directive: *"Any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations."*[3]

Regulator: has the meaning given to 'appropriate agency' in the Producer Responsibility Obligations (Packaging and Packaging Waste) Regulations 2024:

(a) in England this is the Environment Agency;

(b) in Wales this is the Natural Resources Body for Wales (NRW);

(c) in Scotland this is the Scottish Environment Protection Agency (SEPA); or

(d) in Northern Ireland this is the Department of Agriculture, Environment and Rural Affairs for Northern Ireland (DAERA).

Re-use: Any operation by which products or components that are not waste are used again for the same purpose for which they were conceived.

Secondary Packaging: secondary packaging, which is packaging that—

(i) is conceived so as to constitute at the point of purchase a grouping of a certain number of sales units, whether that grouping is supplied as such to the final user or consumer or whether it serves only as a means to replenish the shelves at the point of sale; and

(ii) can be removed from the product without affecting the product's characteristics.

Shipment Packaging: Refers to tertiary packaging on, or that is used to contain, items which are supplied or are intended to be supplied to a consumer.

Tertiary Packaging: Is conceived so as to facilitate the handling and transport of one or more sales units, or secondary packaging, for example by preventing damage from physical handling and transport damage; and is not a road, rail, ship or air container

[2] 2023-05-18_EuPIA-Guideline-on-Printing-Inks-applied-to-Food-Contact-Materials.pdf
[3] Article 3(17) of the Waste Directive

Unit: A whole unit of packaging can be made up of one or multiple components that are combined together to create the complete item of packaging.

Section 2: Methodology

This version of the RAM has been developed collaboratively with representatives of the industry from across every stage of the packaging value chain. The RAM is based on requirements defined in the Regulations, as well as definitions, thresholds and principles that are, wherever possible, aligned to existing best practice and therefore are considered appropriate at the time of publishing.

2.1 Stages of Recyclability

This methodology is focused on evaluating recyclability, encompassing the full range of requirements across the packaging end-of-life stages. It assesses whether packaging can be recycled and transformed into new product applications i.e. replacing virgin materials. By considering factors such as collection, sortation, and reprocessing capabilities, the methodology aims to support a circular packaging economy, where materials are recaptured and recycled rather than disposed of, while also addressing the practical challenges faced across the value chain.

The end-of-life stages providing the foundational structure for the methodology are:

1) **Classification** which defines how to assess whole packaging units and components against the Recyclability Assessment Methodology.

   Multi-material packaging can be constructed of assembled components of different materials. Where these components can be easily separated by hand, each component is to be assessed separately. Packaging items that are separated during product use, and are not able to be reassembled, must also be assessed separately (for example tear off strip, wine bottle cork).

   Multi-material packaging of assembled components of different materials which cannot be easily separated by hand or where one component is made of combination of materials should be assessed under the predominant material by weight. But each material must be reported according to the Regulations, using the RED / AMBER / GREEN output assigned to the combined unit. If the different materials are of equal weight, then the materials must be assessed separately under the relevant material categories.

   Where the material or a whole unit of packaging is not able to be defined as one of the material categories, that component is to be assessed within the ‘Other materials’ packaging category.

Example: *For a jar of jam comprising a glass jar, a paper label, a steel lid, and a hessian lid cover and tie should be assessed and reported as:*

	Jar	*Label*	*Lid*	*Tie*	*Hessian Lid*
Material category assessed in RAM	*Glass* *(based on predominant material)*		*Steel*	*Other* *(assumed textile)*	*Other* *(assumed textile)*
RAM Output *(illustrative only)*	*GREEN*		*GREEN*	*RED*	*RED*
Reported as on RPD	*Glass - GREEN*	*Paper and board - GREEN*	*Steel - GREEN*	*Other - RED*	*Other - RED*

Where the label and jar are not easily separable by hand they are assessed collectively in the RAM applying the predominant material rule to determine the material category for evaluation. However, each material must be reported in accordance with the Regulations along with the assigned RAM output (e.g. Red, Amber or Green). This would mean that the label and jar are reported separately in the RPD, but with a common Green RAM output.

Example: *A pack of four batteries in packaging made from a clear moulded plastic cover that is glued to a cardboard backing, where the plastic can be separated from the card by hand must be assessed and reported separately as:*

	Cover	*Backing*
Material category assessed in RAM	*Plastic - Rigid*	*Paper and board*
RAM Output *(illustrative only)*	*AMBER*	*GREEN*
Reported as on RPD	*Plastic - AMBER*	*Paper and Board - GREEN*

Example: *A detergent bottle made from a clear plastic PET bottle, PP cap and PE label:*

is to be assessed as a whole unit made of the same material as the predominant component

	Detergent bottle	*Lid*	*Label*
Material category assessed in RAM	*Plastic - Rigid(based on predominant material and cap is undersized to be sorted individually, please see section 3.4 for further detail)*		
RAM Output *(illustrative only)*	*GREEN*		
Reported as on RPD	*Plastic – GREEN - rigid*	*Plastic – GREEN - rigid*	*Plastic – GREEN - flexible*

Where the cap is an undersized item not meeting the dimension threshold for sortation it can be attached to another component – bottle – and should be considered as one component to continue the assessment, for further detail on undersized items and rigid plastics please refer to section 3.4. However, each material must be reported in accordance with the Regulations along with the assigned RAM output (e.g. Red, Amber or Green). This would mean that the bottle, label and lid are reported separately in RPD, but with a common Green RAM output.

Example: *A liquid drink carton (not meeting the definition of Drink Container) with the carton made of a Fibre Based Composite material with a plastic cap:*

	Liquid drink Carton	*Cap*
Material category assessed in RAM	*Fibre-based composite* *(based on predominant material and cap is undersized to be sorted individually, please see section 3.2 for further details)*	
RAM Output *(illustrative only)*	*AMBER*	
Reported as on RPD	*Fiber-based Composite - AMBER*	*Plastic – AMBER - rigid*

Where the cap is an undersized item not meeting the dimension threshold for sortation it can be attached to another component – beverage carton – and should be considered as one component to continue the assessment, for further detail on undersized items and fibre-based composite liquid drinks cartons please refer to section 3.2. However, each material must be

reported in accordance with the Regulations along with the assigned RAM output (e.g. Red, Amber or Green). This would mean that the carton and lid are reported separately.

2) **Collection** is the main route to recycling for a given product and refers to one of the three options below. More detail of what is and is not accepted for each material type is included within the guidance in Section 3. There are three main routes to recyclability:
   (i) **Widely collected (via kerbside):** Item of packaging or component must be collected at kerbside by at least 75% of Local Authorities (LAs) across the UK, as determined by WRAP's Local Authority data.
   (ii) **Limited Collection (via kerbside):** Some items of packaging and components are collected by a substantial number of local authorities across the UK but fall short of meeting the 75% threshold for widely accessible collection at kerbside. These items may proceed via the limited collection route if collected at kerbside by at least 50% of Local Authorities (LAs) across the UK, as determined by WRAP's Local Authority data.
   (iii) **Take-back schemes**: Dedicated take-back schemes offer a way to recapture materials and packaging types that are not included in kerbside collections. Obligated producers must confirm their chosen scheme meets the following criteria:
      - accessible to at least 75% of the UK population
      - does not conflict with Local Authority kerbside collections
      - is not restricted to one brand or product
      - does not require a purchase to be made before an item can be deposited of
      - have full transparency that the collected material is recycled

   A full description of these factors is included in Appendix 4.2.

3) **Sortation** refers to the process of capturing and diverting packaging waste into appropriate waste streams for further reprocessing. In some local authorities, this separation occurs more extensively at the kerbside by consumers (e.g. source separated versus comingled collection systems). However, for the purposes of this methodology, the focus is on the ability to sort waste at scale within Materials Facilities (MFs). Packaging specifications and design choices, such as material shape, size, density, and colour, play a key role in ensuring Materials Facilities can efficiently identify and sort packaging waste. While some packaging items may technically be sortable, various factors can hinder their effective separation in sortation facilities. Future iterations of the RAM will seek to leverage MF sampling data to provide a more accurate assessment of the sortation capabilities and efficiencies for each packaging material and format.

4) **Reprocessing** is the technical process of creating recyclate from each of the packaging waste streams. Each material type requires specific reprocessing technologies, and contaminants can disrupt the process or lower the quality of the recycled materials. The tolerance for contaminants varies by material and process, with different items and substances prohibited in each reprocessing method.
5) **Application** refers to factors which may affect the quality of recyclate produced or cause unnecessary secondary material loss in the recycling process. Recycling is defined in the Regulations as any recovery operation by which waste materials are reprocessed into products, materials, or substances, whether for their original or other purpose. It does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

Section 3: Material Guidance

Paper and Board: Classification

Common examples of paper / board in packaging could include:

- cardboard boxes and sleeves
- corrugated cardboard, for example shipping packaging
- paperboard, for example cereal boxes and tissues boxes
- flexible paper packaging, for example wrappers and pouches
- moulded fibre, for example egg boxes

Paper and Board components should consist mainly of natural fibres. They can include filling material, starch, clay or colour coatings including binder, as well as additives typically used in the paper industry such as wet-strength agents, sizing agents, dyes and bound water.

The paper and board waste stream may include fibre-based composites. Fibre-based composite packaging with plastic content less than or equal to 5% by weight should be assessed through Paper and Board material guidance.

Fibre-based composite packaging with plastic content more than 5% by weight should be assessed through Fibre-Based Composite Materials guidance.

Paper content can be determined by:

$$\text{Paper Content (w\%)} = \frac{(\text{Fibre} + \text{Filler} + \text{Water} + \text{Additive} + \text{Colour coating})(\text{gsm})}{Total\ mass\ (gsm)}$$

Where:

- Fibre: is wood-based cellulose fibres
- Filler: is mineral typical used in the industry, for example CaCO3 or kaolin
- Additive: chemicals used for the paper making process, for example sizing agents, dry or wet strength agents, retention aids, defoamers, dyes, and pigments
- Colour coating: mineralised coating layer used to enhance the brightness and printability of the paper
- Total mass: total mass of the packaging product excluding separatable components which should be evaluated as an individual component

If the packaging unit or component uses alternatives to cellulosic wood derived fibres you must provide evidence that they are appropriate for use in papermaking and can be reprocessed without causing challenges in the processes or affecting other packaging waste materials. Industry standard testing methodologies may be used to supply this evidence.

Paper and Board: Collection

Paper and board is widely collected by 100% of local authorities and therefore meets the widely collected at kerbside criteria.

However, none of these variants of paper and board are widely collected at kerbside:

- fibre-based composite which has layers of plastic on both sides (double-sided lamination)
- paper and board to which glitter has been adhered
- greaseproof, siliconised or waxed paper
- parchment paper, for example baking paper
- padded polyethylene lined envelopes (unless easily separated by hand)

The items of packaging and components listed above should be classified as **RED** unless there are dedicated take-back schemes available that meet the specified criteria of the take-back protocol. Items of packaging and components collected through a take-back scheme may qualify for AMBER, provided they continue to meet the conditions for subsequent recyclability stages.

Paper and Board: Sortation

The item of packaging or component must be at least 40mm in at least two dimensions to pass the sortation stage of the assessment, if it is less than 40mm in at least two dimensions it is classed as **RED** unless requirements in the following paragraph can be met.

Items of packaging and components smaller than 40mm in at least two dimensions can progress to the next stage of assessment if one of the following apply:

(a) The undersized component can be attached to another component within the packaging unit by the consumer, whereby the resulting combined components meet the size threshold outlined and continue the assessment as one component. OR-

(b) There are take-back schemes available for undersized items that meet the criteria outlined in the take-back protocol. Undersized items collected through a take-back scheme may

qualify for AMBER, provided they continue to meet the conditions for subsequent recyclability stages.

Paper and Board: Reprocessing

The paper and board reprocessing can be significantly impacted by some contaminating items.

If the item of packaging or component contains any of the following materials, it is **RED:**

- Non-paper content greater than 15% by weight and not classified as a fibre-based composite.

If the item of packaging or component contains any of the following fillers, additives, or agents, intentionally added it is **RED:**

- Urea/Formaldehyde
- Urea/melamine

Unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If the item of packaging or component contains any of the following fibres intentionally added, it is **RED:**

- Glass or carbon fibres

If the item of packaging or component contains any of the following laminations or coatings, it is **RED:**

- Two-sided wax coating, for example molten wax dip coated, but does not apply to waxes used in printing inks

If the item of packaging or component contains any of the following other contaminants, it is **RED:**

- Siliconising agents, for example used in papers for labels

The following requirement has been removed from the RAM for 2025 assessment:

- If the item of packaging or component contains any retained product residue that cannot be removed by hand, it is **RED.** A common example would be 3D food baked on and attached to the paper or board. Surface staining such as small oil marks that do not fully soak the paper, or crumbs can be tolerated.

Paper and Board: Application

The quality of reprocessing output (‘recyclate’) can be affected in standard paper milling facilities by some contaminating items.

If the item of packaging or component contains any of the following materials, it is **AMBER:**

- Non-paper content greater than 10% by weight and not classified as a fibre-based composite.
- Non-wood-based fibres, for example bagasse, palm, fibre, rice straw, wheat straw, barley straw, oat straw, grass straw, flax, hemp, and bamboo, unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If the item of packaging or component contains any of the following adhesives, it is **AMBER:**

- Adhesive lamination (inside of pack) of PET, mPET, PET/PE, unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If the item of packaging or component contains any of the following laminations or coatings, it is **AMBER:**

- PVDC / PVC polymer dispersion coatings, unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.
- Lamination with Aluminium foil where the coating thickness is greater than or equal to 6 micron (µm)
- Wax dispersion, including microcrystalline waxes but does not apply to waxes used in printing inks

If the item of packaging or component contains any of the following barrier metallisation, it is **AMBER:**

- Direct metallisation, including primer, aluminium nanoscale, or protective coating,
- Transfer metallisation, including adhesive and transfer metallisation

Unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If a packaging item or component does not contain any of the above and passed through the previous stages it is classed as **GREEN**.

The following requirement has been removed from the RAM for 2025 assessment:

If the item of packaging or component contains any of the following additives, it is **AMBER:**

Polyamid epichlorohydrin (PAE), unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If the item of packaging or component contains any of the following inks and varnishes, it is **AMBER:**

- Ultra Violet (UV) cured varnish greater than 4g/m^2 with 100% coverage, unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.
- Inks containing mineral oils where they have been intentionally added

3.2 Fibre-based Composite Materials

Fibre-based Composite Materials: Classification

Common examples of fibre-based composite materials in packaging could include:

- Liquid food and drink cartons
- Sandwich skillets
- Food boxes and trays
- Cardboard boxes and sleeves
- Flexible paper packaging, for example wrappers and pouches

Fibre-based composite packaging with plastic content less than or equal to 5% by weight should be assessed through Paper and Board material guidance.

Fibre-based composite packaging with plastic content greater than 5% by weight should be assessed through Fibre-Based Composite Materials guidance.

Paper content can be determined by:

$$\text{Paper content (w\%)} = \frac{(\text{Fibre} + \text{Filler} + \text{Water} + \text{Additive} + \text{Colour coating})(\text{gsm})}{Total\ mass\ (gsm)}$$

Where:

- Fibre: is wood-based cellulose fibres
- Filler: is mineral typical used in the industry, for example $CaCO_3$ or kaolin
- Additive: chemicals used for the paper making process, for example sizing agents, dry or wet strength agents, retention aids, defoamers, dyes, and pigments
- Colour coating: mineralised coating layer used to enhance the brightness and printability of the paper
- Total mass: total mass of the packaging product excluding separatable components which should be evaluated as an individual component

If the packaging unit or component uses alternatives to cellulosic wood derived fibres you must provide evidence that they are appropriate for use in papermaking and can be reprocessed without causing challenges in the processes or affecting other packaging waste materials. Industry standard testing methodologies may be used to supply this evidence.

If your fibre-based composite packaging item is a liquid carton, refer to the guidance directly below for fibre-based composite materials (liquid cartons). For fibre-based composite packaging items that do not fall into this category, proceed to the section on fibre-based composite materials (non-liquid cartons).

Fibre-based Composite Materials (liquid cartons): Collection

To meet the widely collected at kerbside criteria, an item of packaging or component must be collected by 75% of Local Authorities. Items of packaging and components may progress via the Limited Collections route if collected by at least 50% of Local Authorities but are capped at **AMBER**, unless otherwise specified.

For fibre-based composites this includes:

- Liquid food and drink cartons (fibre-based composite) are collected by 66% of Local Authorities

Fibre-based composite (liquid cartons) packaging not meeting the description above should be classified as **RED** unless there are dedicated take-back schemes available that meet the specified criteria of the take-back protocol. Items of packaging and components collected through a take-back scheme may qualify for **AMBER**, provided they continue to meet the conditions for subsequent recyclability stages.

Fibre-based Composite Materials (liquid cartons): Sortation

The item of packaging or component must be at least 40mm in at least two dimensions to pass the sortation stage of the assessment, if it is less than 40mm in at least two dimensions it is classed as **RED** unless requirements in the following paragraph can be met.

Items of packaging and components smaller than 40mm in at least two dimensions can progress to the next stage of assessment if one of the following apply:

(a) The undersized component can be attached to another component within the packaging unit by the consumer, whereby the resulting combined components meet the size threshold outlined and continue the assessment as one component. OR-

(b) There are take-back schemes available for undersized items that meet the criteria outlined in the take-back protocol. Undersized items collected through a take-back scheme may qualify for an AMBER, provided they continue to meet the conditions for subsequent recyclability stages.

Fibre-based composite packaging collected through dedicated take-back schemes and separated at source will pass the sortation stage of the assessment. These items may qualify for an **AMBER** classification, provided they continue to meet the requirements for subsequent stages.

Liquid food and drink cartons with any outer layer, other than PE or paper, should be classed as **RED** unless evidence and testing demonstrate that they can be reliably identified by Near Infrared (NIR) sensor-based sortation systems.

Fibre-based Composite Materials (liquid cartons): Reprocessing

The reprocessing of fibre-based composites will occur at specialist mills equipped to handle a mixture of materials, including paper, aluminium, and polyethylene (PE).

If the item of packaging or component contains any of the following materials, it is **RED:**

- Polyethylene (PE) with less than 80% by weight of polymer content
- Polypropylene (PP) exceeding 20% by weight by polymer content
- Polyethylene terephthalate (PET) exceeding 5% by weight of polymer content
- Biodegradable polymers in any proportion of polymer content

The following requirement has been removed from the RAM for 2025 assessment:

Packaging that is likely to retain product residue that a consumer cannot remove by hand is **RED**. A common example would be food attached to fibre-based composite packaging.

Fibre-based Composite Materials (liquid cartons): Application

The quality of reprocessing output (‘recyclate’) can be affected by some contaminating items.

If the item of packaging or component contains any of the following materials, it is **AMBER:**

- Polyethylene (PE) between 80% and 90% by weight of polymer content
- Polypropylene (PP) between 10% and 20% by weight by polymer content
- Polyethylene terephthalate (PET) with less than 5% by weight of polymer content

If the item of packaging or component contains any of the following coatings, it is **AMBER:**

- Wax Coatings, including wax emulsions and dispersions, but does not apply to waxes used in printing inks

If the item of packaging or component contains any of the following fillers, additives or agents intentionally added, it is **RED:**

- Urea/Formaldehyde

  Unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If an item of packaging or component does not contain any of the above and has met the conditions outlined in prior stages it is classed as **AMBER** due to the current collection constraints.

If your fibre-based composite packaging item is not a liquid food and drink carton, refer to the guidance directly below for fibre-based composite materials (non-liquid cartons).

The following requirement has been removed from the RAM for 2025 assessment:

If the item of packaging or component contains any of the following fillers, additives or agents intentionally added, it is **AMBER:**

- Polyamid epicholorohydrin (PAE)

Fibre-based Composite Materials (non-liquid cartons): Collection

Fibre-based composite packaging, which are not considered liquid food and drink cartons, are widely collected by 100% of local authorities and therefore meets the widely collected at kerbside criteria.

However, none of these variants of paper and board are widely collected at kerbside:

- fibre-based composite packaging with more than 15% non-paper content by weight
- fibre-based composite which has layers of plastic on both sides (double-sided lamination)
- paper and board to which glitter has been adhered
- greaseproof, siliconised or waxed paper
- parchment paper, for example baking paper
- padded polyethylene lined envelopes (unless easily separated by hand)

The items of packaging and components listed above should be classified as **RED** unless there are dedicated take-back schemes available that meet the specified criteria of the take-back

protocol. Items of packaging and components collected through a take-back scheme may qualify for AMBER, provided they continue to meet the conditions for subsequent recyclability stages.

Fibre-based Composite Materials (non-liquid cartons): Sortation

The item of packaging or component must be at least 40mm in at least two dimensions to pass the sortation stage of the assessment.

Items of packaging and components smaller than 40mm in at least two dimensions can progress if one of the following apply:

(a) The undersized component can be attached to another component within the packaging unit by the consumer, whereby the resulting combined components meet the size threshold outlined and continue the assessment as one component. OR-

(b) There are take-back schemes available for undersized items that meet the criteria outlined in the take-back protocol. Undersized items collected through a take-back scheme may qualify for AMBER, provided they continue to meet the conditions for reprocessing and application.

Fibre-based Composite Materials (non-liquid cartons): Reprocessing

The fibre-based composite reprocessing can be significantly impacted by some contaminating items.

If the item of packaging or component contains any of the following fillers, additives, or agents, intentionally added it is **RED:**

- Urea/Formaldehyde
- Urea/melamine

Unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If the item of packaging or component contains any of the following fibres intentionally added, it is **RED:**

- Glass or carbon fibres

If the item of packaging or component contains any of the following laminations or coatings, it is **RED:**

- Two-sided lamination, for example PE/Paper/PE, PP/Paper/PP, PET/Paper/PET, unless there is clear consumer guidance for peeling off the lamination
- Two-sided wax coating, for example molten wax dip coated, but does not apply to waxes used in printing inks

If the item of packaging or component contains any of the following other contaminants, it is **RED:**

- Siliconising agents, for example used in papers for labels

The following requirement has been removed from the RAM for 2025 assessment:

If the item of packaging or component contains any retained product residue that cannot be removed by hand, it is **RED.** A common example would be 3D food baked on and attached to the paper or board. Surface staining such as small oil marks that do not fully soak the paper, or crumbs can be tolerated.

Fibre-based Composite Materials (non-liquid cartons): Application

The quality reprocessing output (‘recyclate’) can be affected in standard paper milling facilities by some contaminating items.

If the item of packaging or component contains any of the following materials, it is **AMBER:**

- Non-paper content greater than 10% by weight
- Non-wood-based fibres, for example bagasse, palm, fibre, rice straw, wheat straw, barley straw, oat straw, grass straw, flax, hemp, and bamboo, unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If the item of packaging or component contains any of the following adhesives, it is **AMBER:**

- Adhesive lamination (inside of pack) of PET, mPET, PET/PE, unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If the item of packaging or component contains any of the following laminations or coatings, it is **AMBER:**

- PVDC / PVC polymer dispersion coatings, unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

- Lamination with Aluminium foil where the coating thickness is greater than or equal to 6 micron (µm)
- Wax dispersion, including microcrystalline waxes but does not apply to waxes used in printing inks

If the item of packaging or component contains any of the following barrier metallisation, it is **AMBER:**

- Direct metallisation, including primer, aluminium nanoscale, or protective coating,
- Transfer metallisation, including adhesive and transfer metallisation

Unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If a packaging item or component does not contain any of the above and passed through the previous stages it is classed as **GREEN**.

The following requirement has been removed from the RAM for 2025 assessment:

If the item of packaging or component contains any of the following additives, it is **AMBER:**

- Polyamid-epichlorohydrin (PAE), unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.

If the item of packaging or component contains any of the following inks and varnishes, it is **AMBER:**

- Ultra Violet (UV) cured varnish greater than 4g/m^2 with 100% coverage, unless test results are provided to confirm that it can be reprocessed without causing disruptions to the processes or affecting other packaging waste materials.
- Inks containing mineral oils where they have been intentionally added

3.3 Plastic (Flexibles)

Plastic (Flexibles): Classification

Plastics classified as "flexible" refer to items that change shape when filled. Common examples of flexible plastic packaging could include:

- bags
- pouches
- sachets
- sleeves
- wrappers
- lidding film or liners
- crisp packets
- fruit nets

Plastic films can be made from various types of plastic polymers, including polyolefins (PO), polyethylene (PE), polypropylene (PP), and polyvinyl chloride (PVC) and also includes metallised films.

Plastic (Flexibles): Collection

To meet the widely collected at kerbside criteria, an item of packaging or component must be collected by 75% of Local Authorities. At present, no plastic (flexibles) exceeds a 14% collection rate and therefore fail to meet this criterion, or the criteria for the Limited Collection route.

Flexible plastic packaging types may progress via the Take Back route if a valid scheme is available but are capped at **AMBER**. It is the responsibility of the producer to prove they meet the criteria set out in the Take Back Protocol. If you are not certain that you meet these criteria, contact your take back scheme provider.

If neither the kerbside collection or the take back protocol apply, then the item of packaging or component is classified as **RED**.

Plastic (Flexibles): Sortation

If the item of packaging or component contains any of the following pigments, it is **RED:**

- Carbon black pigment within the masterbatch (this does not apply to inks or labels).

If the item of packaging or component contains any of the following materials, it is **RED:**

- Aluminium foil layers

The following requirement has been removed from the RAM for 2025 assessment:

- Carbon black pigment in inks and labels covering more than 50% of the total surface area.

Plastic (Flexibles): Reprocessing

Polyolefin-based plastic film packaging and plastic bags which contain a minimum of 80% by weight of polyethylene, polypropylene, or a combination of both that still equates to at least 80% of the total composition by weight, can be considered for reprocessing. Any item of packaging or component below this threshold is classified as **RED**.

Plastic (flexibles) reprocessing can be significantly impacted by some contaminating items.

If the item of packaging or component contains any of the following materials, it is **RED:**

- PET
- PVC
- PVDC
- Non-PE and non-PP foamed polymer layers
- Oxo-degradable, bio-degradable plastic, or compostable plastic
- Paper
- Aluminium foil. *This does not include metalised films.*
- Ethylene-vinyl alcohol (EVOH) as barriers or coatings exceeding 10% of the total weight

If the item of packaging or component contains any of the following additives or fillers, it is **RED:**

- Oxo-degradability additives
- Foamed thermoplastic non-polyolefin elastomers

If the item of packaging or component's density is greater than 1g/cm^3, it is **RED.**

If the item of packaging or component uses lacquers and inks containing PVC binders, it is **RED.**

Plastic (Flexibles): Application

While technically capable of being recycled, an item of packaging or component containing anything listed below are more complex to reprocess, can reduce the quality of recyclate

produced, or cause unnecessary secondary material loss and are therefore classified as **AMBER**.

- Attached labels or sleeves of a different material type

An item of packaging or component is also classified as **AMBER** if any of the following apply:

- Adhesives such as polyurethane exceeding 3% of the total component weight when applied to PE
- Adhesives such as polyurethane exceeding 5% of the total component weight when applied to PP
- Adhesives such as acrylic or natural rubber latex adhesives, as well as non-PE or non-PP based tie layers exceeding 5% of the total component weight

If an item of packaging or component meets the conditions above and has met the conditions outlined in prior stages it is classed as **AMBER** due to the current collection constraints.

3.4 Plastic (Rigids)

Plastic (Rigids): Classification

Plastics classified as "rigid" in packaging refer to items that maintain a defined shape and structural integrity under normal conditions of use. Common examples of rigid plastic packaging could include:

- Bottles
- Pots
- Tubs
- Trays
- Tubes
- Caps and closures

Plastic (Rigids): Collection

To meet the widely collected at kerbside criteria, an item of packaging or component must be collected by 75% of Local Authorities. For plastic (rigids) this includes:

- Plastic Bottles collected by 100% of local authorities
- Rigid mixed plastics (pots, tubs and trays) collected by 88% of local authorities

Plastic rigid items of packaging and components, not listed above, may progress via the Limited Collections route if collected by at least 50% of Local Authorities but are capped at **AMBER**.

Items of packaging and components that do not meet the wide or limited collection criteria, may progress via the Take Back route if a valid scheme is available but are capped at an **AMBER** rating. It is the responsibility of the producer to prove they meet the criteria set out in the Take Back Protocol. If you are not certain that you meet these criteria, contact your take back scheme provider.

If neither the kerbside collection or the take back protocol apply, then the item of packaging or component is classified as **RED**.

Plastic (Rigids): Sortation

If the item of packaging or component uses a masterbatch containing carbon black pigment, it is **RED**.

The item of packaging or component must also be at least 40mm in at least 2 dimensions to pass the sortation stage of the assessment. Components smaller than this can progress if one of the following apply:

(a) The undersized component can be attached to another component within the packaging unit by the consumer, whereby the resulting combined components meet the size threshold outlined and continue the assessment as one component. OR-

(b) There are take-back schemes available that meet the criteria outlined in the take-back protocol. Packaging units and components collected through a take-back scheme may qualify for **AMBER**, provided they continue to meet the conditions for subsequent stages.

The following requirement has been removed from the RAM for 2025 assessment:

If the item of packaging or component has an attached label or sleeve of a different material or polymer type covering more than the relevant threshold outlined below, it is **RED.**

- for bottles an attached label or sleeve should not exceed 40% of the total surface area
- for pots, tubs, and trays an attached label or sleeve should not exceed 60% of the total surface

Carbon black pigment in inks and labels covering more than 50% of the total surface area.

Plastic (Rigids): Reprocessing

Plastic (rigids) reprocessing can be significantly impacted by some contaminating items therefore if an item of packaging or component contains any of the following it is classified as **RED**:

- PVC (including non-PVC with PVC components)
- Polystyrene (including but not limited to HIPS, expanded & extruded)
- Oxo-degradable, biodegradable or compostable plastics
- Non-polyolefin foamed plastics e.g. non-PP and non-PE

Different polymers require distinct reprocessing techniques and therefore specific contaminants in addition to those above are listed below.

Polyethylene terephthalate (PET) bottle items of packaging and components are classified as **RED** if they contain:

- Ethylene-vinyl alcohol (EVOH) as a barrier or coating exceeding 10% of the total weight
- Caps or seals comprised of steel or aluminium with a density greater than or equal to 1g/cm^3
- Caps, seals or valves comprised of silicone
- Attached labels or sleeves that are PVC, Metalised, or PS with a density greater than 1g/cm^3

Polyethylene terephthalate (PET) tray items of packaging and components are classified as **RED** if they contain:

- EVOH as a barrier or coating exceeding 10% of the total weight
- Attached labels or sleeves that are PET, PVC, or Metalised or PS with a density greater than 1g/cm^3

High-density polyethylene (HDPE) items of packaging and components are classified as **RED** if they contain:

- PVDC barriers or coatings
- Caps comprised of steel, aluminium, PS, PVC, or Thermoset plastics
- Liners comprised of PS, PVC, or EVA with aluminium
- Seals comprised of PVC or silicone
- Attached labels or sleeves comprised of PVC, aluminium, metallised PET, or metallised PS

Polypropylene (PP) items of packaging and components are classified as **RED** if they contain:

- PVDC barriers or coatings
- Caps comprised of steel, aluminium, PS, PVC, or thermoset plastics
- Attached labels or sleeves comprised of PVC or metallised PET
- Inserts comprised of PVC, PS, Polyurethane (PU), PA (Nylon), PET (heavy), Polycarbonate (PC), Acrylic (PMMA), thermoset plastics, or metallics

The following requirement has been removed from the RAM for 2025 assessment:

- Attached label adhesives which are not removable in an 80°C hot wash

Polyethylene terephthalate (PET) bottle items of packaging and components are classified as **RED** if they contain:

- Nanocomposite additives

Polyethylene terephthalate (PET) tray items of packaging and components are classified as **RED** if they contain:

- PE seal layers

High-density polyethylene (HDPE) items of packaging and components are classified as **RED** if they contain:

- Additives that increase the density of HDPE above 0.995 g/cm^3 including Talc, $CaCO_3$ and other fillers. *This applies to the plastic itself and does not apply to any inks used.*

Plastic (Rigids): Application

While technically capable of being recycled, items of packaging and components containing anything listed below are more complex to reprocess, can reduce the quality of recyclate produced, or cause unnecessary secondary material loss and are therefore classified as **AMBER**:

- Use of foil
- Ethylene-vinyl alcohol (EVOH) exceeding 5% of the total weight

Different polymers require distinct reprocessing techniques and therefore specific contaminants in addition to those above are listed below.

Polyethylene terephthalate (PET) bottle items of packaging and components are classified as **AMBER** if they contain:

- Any of the following colours: dark blue, dark green or brown. *This applies to the plastic itself and does not apply to any inks used.*
- External coatings or PA-3 layers
- Any of the following additives: UV stabilisers or AA blockers

Polyethylene terephthalate (PET) tray items of packaging and components are classified as **AMBER** if they contain:

- Any of the following additives: O_2 scavengers, UV stabilisers and AA blockers Inserts comprised of HDPE, LDPE, PP, PET, or paper

High-density polyethylene (HDPE) items of packaging and components are classified as **AMBER** if they contain:

- Any of the following colours: light blue, green, light tints or opaque colours. *This applies to the plastic itself and does not apply to any inks used.*
- Polyamide (PA) including MXD6 as barriers or coatings
- Seals comprised of aluminium

Polypropylene (PP) items of packaging and components are classified as **AMBER** if they contain:

- Opaque colours, excluding white. *This applies to the plastic itself and does not apply to any inks used.*
- Polyamide (PA) including MXD6 as barriers or coatings
- Inserts comprised of HDPE, LDPE, Paper, or PET

If an item of packaging or component does not contain any of the above and has met the conditions outlined in prior stages it is classed as **GREEN**.

The following requirement has been removed from the RAM for 2025 assessment:

While technically capable of being recycled, items of packaging and components containing anything listed below are more complex to reprocess, can reduce the quality of recyclate produced, or cause unnecessary secondary material loss and are therefore classified as **AMBER**:

- Attached labels or sleeves comprised of paper

Polyethylene terephthalate (PET) bottle items of packaging and components are classified as **AMBER** if they contain:

- Any of the following colours: heavy colours

Polypropylene (PP) items of packaging and components are classified as **AMBER** if they contain:

- Heavy colours
- Clarifier additives
- Attached labels or sleeves comprised of paper

- Inserts comprised of PET (light)

Polypropylene (PP) items of packaging and components are classified as **AMBER** if they contain:

- Attached labels or sleeves comprised of paper

3.5 Steel

Steel: Classification

Common examples of steel in packaging could include:

- Food tins
- Aerosols
- Decorative cans
- Lids from glass bottles or jars
- Rigid steel containers
- Closures

Steel: Collection

To meet the widely collected at kerbside criteria, an item of packaging or component must be collected by 75% of Local Authorities. For steel this includes:

- Aerosols collected by 94% of local authorities
- Food cans / tins collected by 100% of local authorities
- Metal lids on glass jars collected with glass bottles and jars by 89% of local authorities
- Foil and foil trays collected by 84% of local authorities

Items of packaging and component types, not listed above, may progress via the Limited Collections route if collected by at least 50% of Local Authorities but are capped at **AMBER**, unless otherwise specified.

Items of packaging and components that do not meet the wide or limited collection criteria, may progress via the Take Back route if a valid scheme is available but are capped at an AMBER rating. It is the responsibility of the producer to prove they meet the criteria set out in the Take Back Protocol. If you are not certain that you meet these criteria, contact your take back scheme provider.

If neither the kerbside collection or the take back protocol apply, then the item of packaging or component is classified as **RED**.

Steel: Sortation

In order to pass this stage of the assessment, the item of packaging or component must not exceed 300mm in height, width or length. If above this threshold a component will be classified as **RED** unless one of the following apply:

(a) The oversized component can be dismantled or folded by the consumer, whereby the resulting broken down or folded components meet the size threshold outlined. OR-

(b) There are take-back schemes available that meet the criteria outlined in the take-back protocol. Packaging units and components collected through a take-back scheme may qualify for an **AMBER**, provided they continue to meet the conditions for subsequent stages.

Steel: Reprocessing

The steel reprocessing infrastructure in the UK is equipped to handle contaminants that can reasonably be expected to appear in an item of packaging, therefore if an item of packaging or component has made it to this stage of the assessment it should proceed to application.

Steel: Application

While technically capable of being recycled, an item of packaging or component containing more than 30% non-steel content by weight is classified as **AMBER** as this causes unnecessary secondary material loss.

If the item of packaging or component contains less than 30% non-steel content by weight, it is classified as **GREEN**.

3.6 Aluminium

Aluminium: Classification

Common examples of aluminium packaging could include:

- Food containers/tins
- Lids from glass bottles or jars
- Aluminium tubes
- Bottles
- Rigid containers
- Closures
- Aerosols
- Foil trays
- Laminated foils

Films metalised via vacuum deposition, including those used in crisp packets, should be assessed under the predominant material by weight.

Aluminium: Collection

To meet the widely collected at kerbside criteria, an item of packaging or component must be collected by 75% of Local Authorities. For aluminium this includes:

- Aerosols collected by 94% of local authorities
- Cans / Tins / Bottles collected by 100% of local authorities
- Metal lids and closures on glass bottles and jars collected by 89% of local authorities *with glass bottles and jars*
- Foil and foil trays collected by 84% of local authorities

Packaging types, not listed above, may progress via the Limited Collections route if collected by at least 50% of Local Authorities but are capped at **AMBER**, unless otherwise specified.

Item of packaging or components that do not meet the wide or limited collection criteria, may progress via the Take Back route if a valid scheme is available but are capped at an **AMBER** rating. It is the responsibility of the producer to prove they meet the criteria set out in the Take Back Protocol. If you are not certain that you meet these criteria, contact your take back scheme provider.

If neither the kerbside collection or the take back protocol apply, then the item of packaging or component is classified as **RED**.

Aluminium: Sortation

In order to pass this stage of the assessment, the item of packaging or component must not exceed 300mm in height, width or length. If above this threshold a component will be classified as **RED** unless one of the following apply:

(a) The oversized component can be dismantled or folded by the consumer, whereby the resulting broken down or folded components meet the size threshold outlined. OR-

(b) There are take-back schemes available that meet the criteria outlined in the take-back protocol. Packaging units and components collected through a take-back scheme may qualify for an **AMBER**, provided they continue to meet the conditions for subsequent stages.

Aluminium: Reprocessing

The aluminium reprocessing infrastructure in the UK is well equipped to handle contaminants that can reasonably be expected to appear in an item of packaging, therefore if a component has made it to this stage of the assessment it should proceed to application.

Aluminium: Application

While technically capable of being recycled, items of packaging and components containing more than 30% non-aluminium content by weight is classified as **AMBER** as this causes unnecessary secondary material loss.

If the item of packaging or component contains less than 30% non-aluminium content by weight, it is classified as **GREEN**.

3.7 Glass

Glass: Classification

Common examples of glass packaging could include:

- Bottles
- Jars

Glass: Collection

Glass packaging is collected by 89% of local authorities and therefore meets the widely collected at kerbside criteria. However, none of these variants of glass are widely collected at kerbside:

- Mirrored glass
- Heat-resistant or lead glass
- Decorative glass
- Glass with designed in contamination *(meaning if product residue cannot be easily removed by the consumer such as nail polish bottles or concealer)*

Items of packaging and components that do not meet the kerbside collection criteria may progress via the Take Back route if a valid scheme is available but are capped at an **AMBER** rating. It is the responsibility of the producer to prove they meet the criteria set out in the Take Back Protocol. If you are not certain that you meet these criteria, contact your take back scheme provider.

If neither the kerbside collection or the take back protocol apply, then the item of packaging or component is classified as **RED**.

Glass: Sortation

Due to the nature of glass reprocessing, no sortation specifications are defined and therefore any item of packaging or component that has made it to this stage of the assessment should progress to reprocessing.

Glass: Reprocessing

The glass reprocessing infrastructure in the UK is well equipped to handle contaminants that can reasonably be expected to appear in an item of packaging, therefore if an item of packaging or component has made it to this stage of the assessment it should proceed to application.

Glass: Application

While technically capable of being recycled, packaging containing anything listed below are more complex to reprocess, can reduce the quality of recyclate produced, or cause unnecessary secondary material loss and are therefore classified as **AMBER**.

- Ceramic swing stoppers
- Attached label covering more than 60% of the total surface area
- Non-glass attachments or inserts that cannot be separated by hand, other than attached labels *(such as pumps or dispensers)*, (this does not apply to metal attachments e.g. screw top skirts/collars)
- Any colour other than clear (flint), green, blue, or amber (brown). *This applies to the glass itself and does not apply to any inks used.*

The following requirement has been removed from the RAM for 2025 assessment:

While technically capable of being recycled, packaging containing anything listed below are more complex to reprocess, can reduce the quality of recyclate produced, or cause unnecessary secondary material loss and are therefore classified as **AMBER**.

- Attached label covering more than 60% of the total surface area

If none of the above apply, the item of packaging or component is classified as **GREEN**.

3.8 Wood

Wood: Classification

Wood has limited applications in household packaging, but some examples could include:

- Decorative and novel components
- Food trays where there is another material, such as fibre / paper sleeve for food contact
- Wooden batons
- Wooden pallets

Wood: Collection

To meet the widely collected at kerbside criteria, an item of packaging or component must be collected by 75% of Local Authorities. At present, no wood packaging exceeds a 0% collection rate and therefore fail to meet this criterion, or the criteria for the Limited Collection route.

Wood packaging types may progress via the Take Back route if a valid scheme is available but are capped at an **AMBER** rating. It is the responsibility of the producer to prove they meet the criteria set out in the Take Back Protocol. If you are not certain that you meet these criteria, contact your take back scheme provider.

If neither the kerbside collection or the take back protocol apply, then the item of packaging or component is classified as **RED**.

Wood: Sortation

Given wood packaging is not eligible for household collection, there is subsequently no sufficiently scaled process for the sortation of wood packaging components and therefore all wood is classified as **RED**.

Wood: Reprocessing

While wood is technically capable of being reprocessed, it is not practically reprocessed at scale within the household packaging recycling infrastructure as a result of it not being collected and / or sorted at a sufficient scale. Therefore, all wood is classified as **RED**.

Wood: Application

At present, no item of wood packaging is expected to meet this stage of the assessment and therefore no criteria for appropriate applications are defined and all wood is classified as **RED**.

3.9 Other

Classification

If a producer is unable to ascertain which of the material categories their packaging falls into, or the packaging does not fall within the categories outlined, the packaging should be classified as ‘Other’. Examples of other materials could include:

- Cork
- Bamboo
- Ceramic
- Copper
- Hemp
- Rubber

  Silicone

Where the category is known but the technical specifications required for this assessment are not, the packaging should be categorised as **RED** under the predominant material by weight.

Collection

To meet the widely collected at kerbside criteria, an item of packaging or component must be collected by 75% of Local Authorities. At present, no packaging known to be classified as ‘other’ exceeds a 0% collection rate and therefore fail to meet this criterion, or the criteria for the Limited Collection route.

‘Other’ packaging types may progress via the Take Back route if a valid scheme is available but are capped at an **AMBER** rating. It is the responsibility of the producer to prove they meet the criteria set out in the Take Back Protocol. If you are not certain that you meet these criteria, contact your take back scheme provider.

If neither the kerbside collection or the take back protocol apply, then the item of packaging or component is classified as **RED**.

Sortation

Given ‘other’ packaging is not eligible for household collection, there is subsequently no sufficiently scaled process for the sortation of ‘other’ packaging components and therefore all ‘other’ materials are classified as **RED**.

Reprocessing

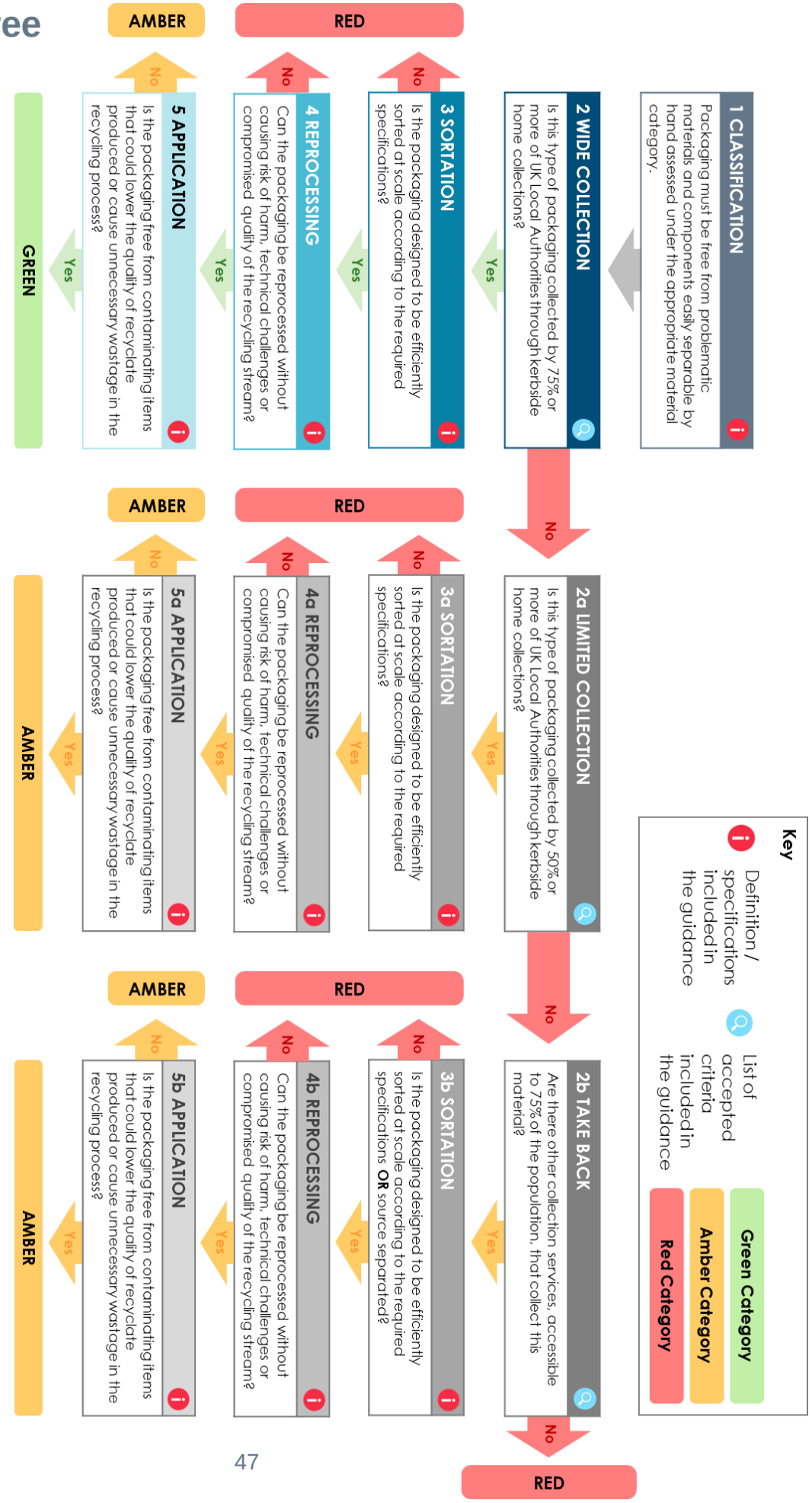
While ‘other’ packaging may be technically capable of being reprocessed, it is not practically reprocessed at scale within the household packaging recycling infrastructure as a result of it not being collected and / or sorted at a sufficient scale. Therefore all ‘other’ is classified as **RED**.

Application

At present, no item of ‘other’ packaging is expected to meet this stage of the recyclability assessment and therefore no criteria for appropriate applications are defined and all ‘other’ is classified as **RED**.

Section 4: Appendix

4.1 Decision Tree



4.2 Take-Back Protocol

This protocol is aligned to the OPRL Takeback Protocol to ensure consistency with existing industry labelling standards and practices.

Accessibility: Collection points must be available to at least 75% of the population. This must be proven by a robust methodology that accounts for travel distance and the range of transport options available, for example ‘drive time’ to the collection point. Collection points must also be clearly signposted and inclusive of those with disabilities. They should be accessible throughout normal business hours and within a maximum 5 mile radius for 75% or more of the UK population.

To avoid double counting populations in overlapping geographic areas, it’s important to implement a deduplication method for the catchment areas surrounding each collection point. If a geographic area falls within the drivetime catchments of multiple collection points, the most frequently used collection point should be selected to prevent population overlap.

No conflict with kerbside collections: Collection schemes should not actively compete with kerbside collections or encourage consumers to use their system in place of kerbside collections.

No brand restrictions: Schemes must accept packaging from other brands that have a similar format.

No purchase necessary: Customers cannot be required to provide proof of purchase to use the service.

Traceability: The scheme must provide a defined end market for the reprocessed material and evidence must be made available upon request that confirms the tons of material reprocessed. Contaminating materials must also be included in this data request.