Sustainable soft plastic coffee packaging
Best practice guide

REGROUND

Soft plastic is an excellent packaging option for maximising taste and shelf-life of coffee. It can be a sustainable and circular packaging option when the packaging and the systems surrounding it meet certain criteria.

This guide outlines and explains this criteria to promote successful and circular recovery of coffee retail bags. It also provides the specifications of a best practice bag which can be recycled by businesses or individuals, through Reground or soft plastic return schemes.

What does a best practice bag look like?

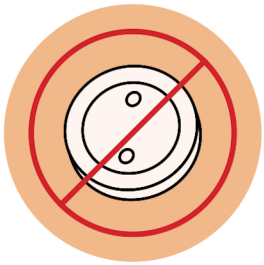
A best practice coffee retail bag meets the following criteria:

1

Bag body is composed of any combination of **PP, LDPE, HDPE, BOPP.**

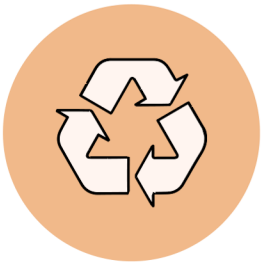
2

Closure is composed of any combination of **PP, LDPE, HDPE, BOPP.**



3

Bag has no rigid plastic valve, or a removable valve



4

Bag is composed of plastic produced using recycled plastic, or, if unavailable, produced using oil sourced from plants.

How do I choose a manufacturer?

The following table indicates which manufacturers are currently producing bags that meet each of the best practice criteria.

	PP, LDPE, HDPE, BOPP bag body	PP, LDPE, HDPE, BOPP closure	No valve	Removable valve	Recycled plastic option	BioPE or BioPP option
EcoBarista	✓	✓	✓	✓	✓	✓
Caspak	✓	✓	✓	✓	✗	✗
Bag Brokers	✗	✓	✓	✗	✗	✗
The Packaging People	✓	✓	✓	✓	✗	✗

Which materials are accepted for soft plastic recycling?

Acceptable materials

- Flexible PP
- Flexible BOPP
- Flexible LDPE
- Flexible HDPE
- Rippa Zippa closures

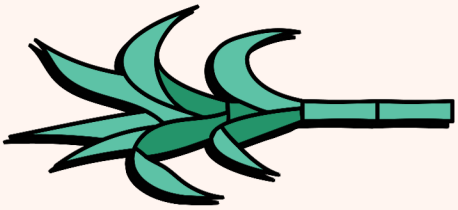
Unacceptable materials

- PET
- PVC
- PLA
- PVDC
- PS
- Nylon
- Aluminium
- Paper
- Rigid plastic valves
- Other rigid plastic elements

What are BioLDPE, BioHDPE, and BioPP, and how are they different from bioplastics like PLA?

The term bioplastic is often used to refer to two types of plastic:

1 Starch-based compostable plastics

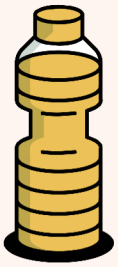


Starch-based compostable plastics include materials such as PLA. These plastics are often advertised as compostable or biodegradable. Compostable plastic coffee retail bags result in amuch shorter shelf life and can hinder the coffee's taste.

Compostable bags often only break down under extreme conditions, and home-compostable bags do not offer any nutritional value to commercial or home compost, while recycling plastic creates a reusable valuable product.

Starch-based compostable coffee retail bags are not recyclable and not considered best practice.

2 Plastic produced from plant-sourced oils



Bio-based plastics have the same properties as virgin fossil fuel-based plastics, however they are produced from oil sourced from plants instead of mining. These plastics are usually labelled as bio-based (e.g. bio-based PP, or bioPP). Bio-based plastics are a step in the right direction as they are not reliant on mining.

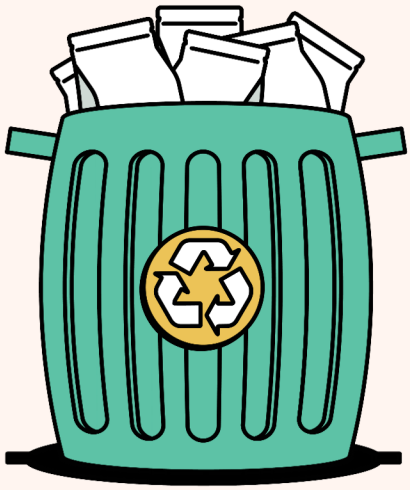
BioLDPE, BioHDPE, and BioPP are accepted for recycling and can be used to produce coffee retail bags.

REGROUND

Ethical Disposal

Best practice involves product stewardship, meaning that the producer of a product takes responsibility for its ethical and sustainable disposal

To achieve best practice disposal of coffee retail bags we advocate for customers returning bags to roasters or manufacturers for recycling through organisations like Reground. The best practice retail bag can be recycled by businesses and consumers.



Looking to the future

Soft plastic recycling is a rapidly evolving space. The industry is moving towards chemical recycling systems which will process a wider range of materials & increase the scale and range of use of recycled plastics.

So what does the future of coffee retail bags look like?

All bags being recycled into soft plastic packaging, creating a truly closed loop.

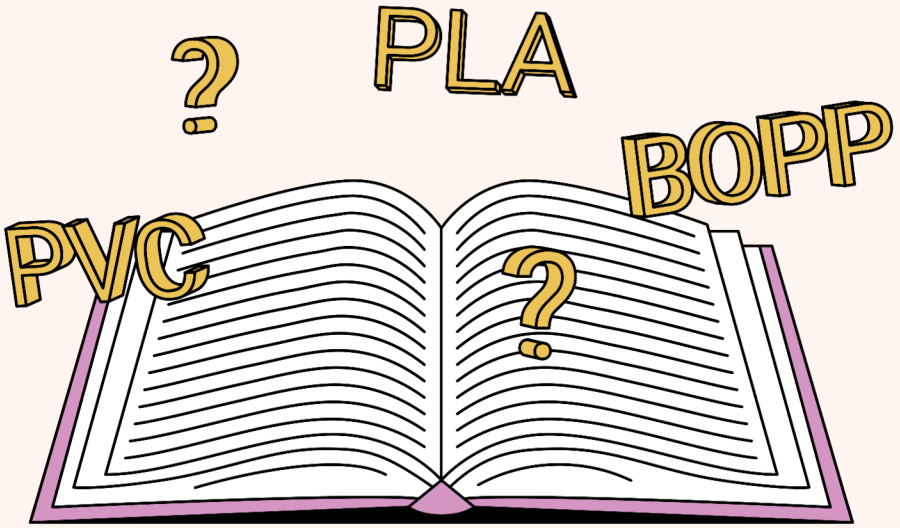
Consumers bringing their coffee bags back to roasters, demonstrating product stewardship and keeping resources within a contained system.

Coffee bags being 100% composed of recycled material.

Eradicating virgin petroleum-based plastics in exchange for recycled plastics, and, where this is not possible, plant-derived oil-based plastics.

These guidelines are accurate as of July, 2023 and have been developed in consultation with packaging manufacturers and key industry stakeholders. As the above changes come into effect, these guidelines will be updated to reflect the rising standards of a sustainable coffee retail bag.

REGROUND



Glossary

Some key terms and what they mean in a plastic recycling context.

• Closed loop - when at the end of its life, a product is used to produce the original product again, preventing loss of resources and the need for new or externally-sourced resources.

• Best practice - the highest accepted standard of a product or process, to which businesses should strive to adhere.

• Chemical recycling - chemical recycling uses chemical processes and heat to break plastics down into its most basic chemical components, in order to produce new plastics.

Polymers

• PET - polyethylene terephthalate, plastic number 1. One of the most commonly used polymers. It can be rigid or flexible.

• HDPE - high-density polyethylene, plastic number 2. This polymer is commonly used in packaging and can be rigid or flexible.

• PVC - polyvinyl chloride, plastic number 3. This polymer can be rigid or flexible.

• PVDC - polyvinylidene chloride. A polymer commonly used in packaging to strengthen oxygen barriers.

• LDPE - low-density polyethylene, plastic number 4. This polymer is commonly used in packaging and can be rigid or flexible.

• PP - polypropylene, plastic number 5. This polymer is commonly used in packaging and can be rigid or flexible. It is stronger than LDPE and HDPE.

• BOPP - biaxially-oriented polypropylene, a variant of polypropylene commonly used in packaging.

• PS - polystyrene, plastic number 6.

• PLA - polylactic acid. A polymer produced through fermentation of plants, which can degrade under high heat, such as in commercial composting facilities.

Additional Resources

For more information on plastic recycling and plastic standards outside of a coffee context, we recommend referring to these resources:

• APCO Sustainable Packaging Guidelines
• APCO Quickstart Guide - Designing for Recyclability
• CEFLEX D4ACE Guidelines

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