Nestlé Good food, Good life



The Rules of Packaging Sustainability

September 2026

Disclaimer

The information contained in this document is provided for general informational purposes only and reflects Nestlé's current aspirations and best estimates regarding the types of packaging changes under consideration.

While Nestlé is committed to improving the sustainability of its packaging, all plans outlined herein are subject to change based on evolving regulatory requirements, material availability, technological feasibility, business needs, and other external factors.

This document does not constitute a binding commitment or guarantee of specific actions, timelines, or outcomes. Any future changes to packaging will be implemented in accordance with applicable laws and standards, and may vary by product, market, or region. Nestlé reserves the right to modify, delay, or cancel any of the initiatives described in this document at its sole discretion and without prior notice.

We are guided by a vision where packaging does not end up in landfills or as litter

Less packaging

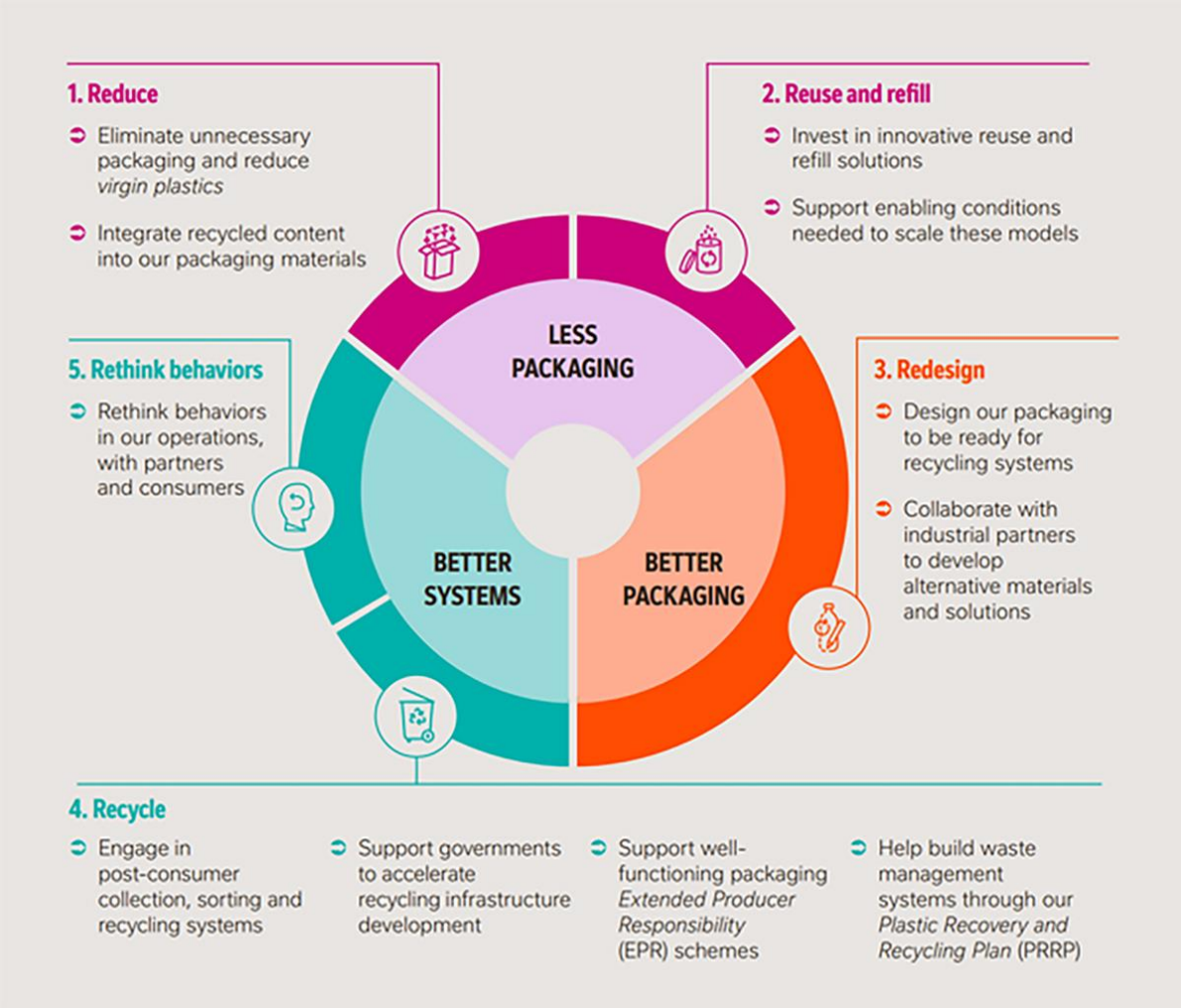
We're reducing unnecessary materials, including virgin plastic, increasing the use of recycled and renewable materials and exploring reuse and refill models.

Better packaging

We're redesigning packaging and developing solutions that are ready for recycling systems.

Better systems

We're working with partners to improve waste management systems, while supporting effective regulations like well-designed EPR's.



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Building the future today – Rules of Packaging Sustainability



- **Our Rules of Packaging Sustainability are a comprehensive set of packaging design rules, building on external and internal guidelines. They include Golden Rules and a Negative as core elements.**

1. **The Golden Rules**

Nestlé's Golden Rules guide and define the way we design packaging today and in the future to reduce the materials we use and to ensure recyclability.

2. **The Negative List**

Our Negative List a list sets out what is to be removed, the materials, additives, packaging concepts and items that are, or will become, obsolete as recycling technologies, waste-management infrastructure, and regulation evolve.

At all times, Nestlé follows all applicable local laws. Where there is inconsistency between the rules in this document and local laws, the latter shall prevail.

Voluntary Action on Packaging Design – Golden Design Rules

➢ **Nestlé's Golden Design Rules guide the way we want to design packaging to reduce the materials we use and to support recyclability.**

Design for Recycling (D4R)	**ELIMINATE** problematic packaging as per our "Negative List" or unnecessary packaging.
	FOLLOW REGIONAL/LOCAL INDUSTRY GUIDELINES for design for recycling where the product is marketed. This includes for example: 4evergreen for paper-based packaging or CEFLEX for Flexibles in Europe, or APR in the US.
	INCREASE RECYCLING VALUE for packaging types that are recycled at scale in today's recycling system or will be recycled at scale in future recycling systems.
Recyclable (S4R)	**CONSIDER LOCAL RECYCLING INFRASTRUCTURE** availability to confirm recyclability: • Is the packaging design (including size and shape) preventing sorting or recycling? • Is the packaging collected, sorted and recycled in the market where it is sold?
B2B Packaging and Intermarket Supply	**COMPLY** to the receiving markets requirements for intermarket supply.
	REDUCE ENVIRONMENTAL FOOTPRINT of B2B packaging.
Consumer Communications	**ENGAGE & IMPROVE COMMUNICATION** with consumers on how to dispose of packaging.
Packaging Optimisation	**ELIMINATE EXCESSIVE HEADSPACE** (Rigid & Flexibles). Strive to achieve the minimum technically possible headspace and select equipment to achieve it e.g working to ensure headspace 30% at the time of filling.
	MAXIMIZE RECYCLED CONTENT without compromising on product safety.
	HOLISTICALLY OPTIMISE PRIMARY, SECONDARY & TERTIARY PACKAGING to reach ≥95% area and ≥90% pallet cube utilization. Enable double stacking based on maximum pallet height, considering safety, logistics and customer restrictions. Reduce plastic overwraps.

Chapter 1: Plastics Golden Rules

1. **REDUCE VIRGIN PLASTIC** through elimination/reduction, substitution and recycled content
2. **MAXIMIZE THE BASE MATERIAL STRUCTURE** as mono-polyethylene (mono-PE) or mono-polypropylene (mono-PP), or when needed as a combination of both, called polyolefin (PO).
3. **UNCOLORED, TRANSPARENT** or lightly colored materials are preferred to maximize value of the recycling stream.
4. **ENSURE** that packaging is detectable by design in automated sorting facilities.
5. **RESIDUAL PRODUCT** must be easily removable prior to disposal of the pack.
6. **BIO-BASED CONVENTIONAL PLASTICS** (PET, PP and PE) to be sourced, where technically possible and available, from biowaste and compliant with regulations.
7. **BIODEGRADABLE/COMPOSTABLE MATERIAL** usage must be validated by the Nestlé Institute of Packaging Sciences.
8. **DO NOT USE PLASTICS WITH DEGRADATION-PROMOTING ADDITIVES** such as oxo-biodegradable plastics. If required by law, redesign the packaging to exit plastic.
9. **ELIMINATE** PVC, PVDC, PS, EPS.
10. **USE** additives (e.g. scavengers, UV filters, colors) which are proven to be compatible with local recycling streams

Chapter 1a: Flexible Plastics Golden Rules – Maximize mono-PE and mono-PP content

PRIMARY PACKAGING / SALES UNIT: STICKPACK, SACHET, DOYPACK, COLLATION BAG, WRAP…

- **USE** mono-PE or mono-PP
- Polyolefin (PO, a combination of PE and PP), **CAN BE USED** aiming at a minimum of at least 90%* of PE or PP
- Mono PET in flexibles is **NOT RECOMMENDED** unless proven to not disturb recycling
- **AVOID** more than 5%* EVOH / PVOH
- **AVOID** more than 15%* polyamide (in-line with material description in industry design guidelines)
- **INCLUDE FOOD GRADE RECYCLED CONTENT** in line with regulatory requirements, when cost competitive and can be valorized with consumers

SECONDARY AND TERTIARY PACKAGING: SHRINK WRAP, STRETCH FILM , LINER, BAG,…

- **USE** mono-PE or mono-PP
- **ELIMINATE** shrink wrap and stretch film where possible and where it makes environmental sense
- **PRIORITIZE** alternative grouping options such as self-adhesive stickers or paper wraps
- **MAXIMIZE** recycled content
- **ONLY PRINT** if required by regulations
- **AVOID LABELS ON THE FILM.** If required, use the same material as the film or minimize surface coverage in case of paper label.

* % derived from industry association guidelines

Chapter 1b: Rigid Plastics Golden Rules – Maximize mono PET, PP and PE content

RIGID PLASTIC PACKAGING: ALL PET APPLICATIONS

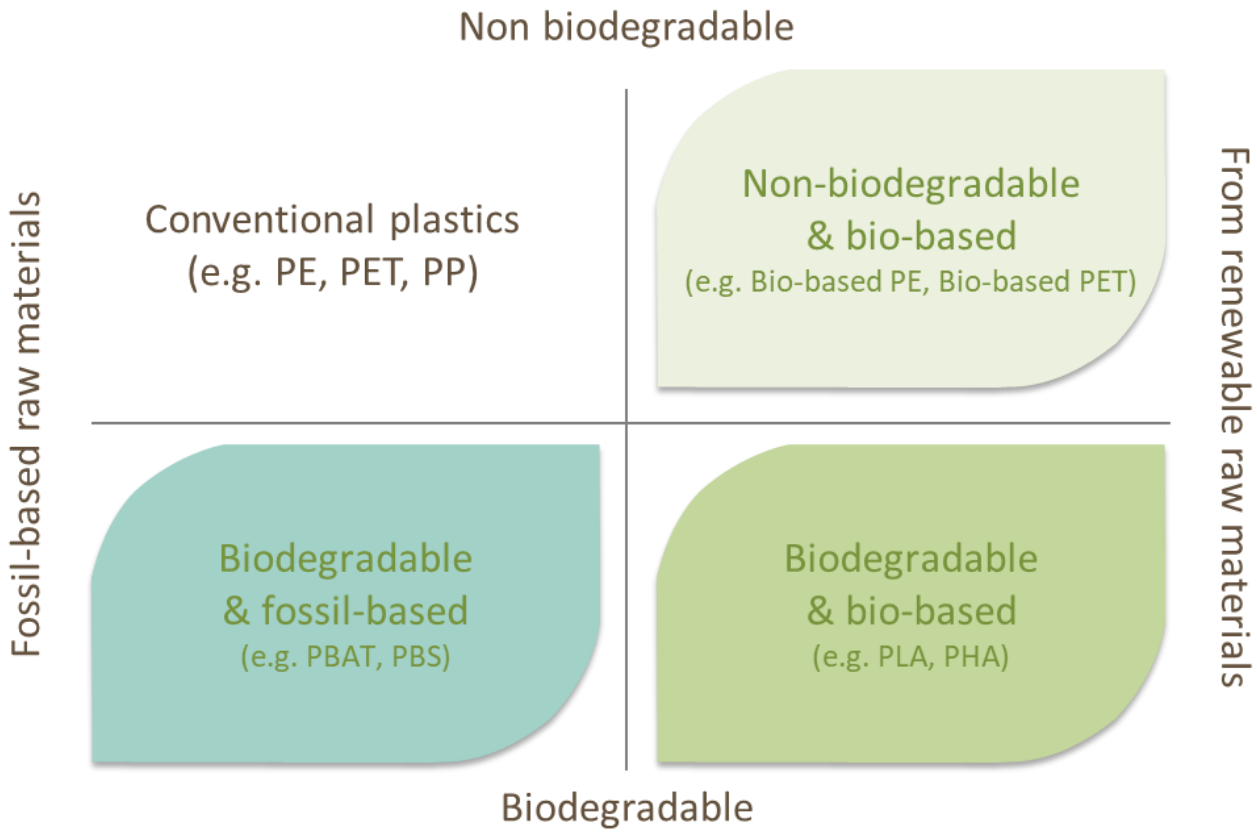
- **USE** mono material PET
- **USE** transparent and uncolored PET, or transparent blue or green as per local industry guidelines
- **INCREASE RECYCLED CONTENT** to maximum viable amount (e.g. technically, legally)
- **ELIMINATE** PET-G and expanded PET with a density <1g/cm^3
- **ENSURE** material, adhesive, ink choice and size of sleeve or label are not problematic for recycling
- **ENSURE** material and adhesive choice of lidding films, inserts or other components is not problematic for recycling

RIGID PLASTIC PACKAGING: PP & PE

- **USE** mono PP or mono PE
- **AIM** at EVOH content <6%*
- For all labels, **ENSURE** material, adhesive, ink choice and size are not problematic for recycling
- **AVOID** fillers that increase the density of the packaging to >1g/cm^3 and might impact recycle quality
- For closures, **ENSURE** material choice, liners and seals are not problematic for recycling
- **PHASE OUT** silicon in PE or PP closures
- **INCLUDE FOOD GRADE RECYCLED CONTENT** in line with regulatory requirements, when economically viable and valued by consumers

* % derived from industry association guidelines

Virgin plastic : fossil and bio-based materials



What is counted as virgin plastic:

FOSSIL-BASED RAW MATERIALS

PET, PE, PP, PS, PVC, PC, Nylon, PVOH, EVOH

BIO-BASED CONVENTIONAL PLASTICS AND BIODEGRADABLE PLASTICS

PLA, PBAT, bio-PBS, modified starch, PHA, biobased PET, PE, PP*

*In certain regions, bio-based plastics are under consideration for acceptance as a contributor towards virgin plastics reduction.

Source : www.european-bioplastics.org/bioplastics/

* Bio-based plastics do not contribute to Virgin Plastic Reduction under current regulations

Chapter 2: Paper & Paperboard Golden Rules

1. **ENSURE** material is sortable and recycling infrastructure is in place in the selling market.
2. **CONFIRM** design for recyclability with relevant industry guideline and conduct relevant recyclability evaluation only if required.
3. **ELIMINATE** food residues in the pack by optimizing the format and informing consumer to remove residues before disposal (light staining and traces of dry foods can be accepted).
4. **DO NOT USE** PFAS and chlorine-based coatings (e.g. PVDC).
5. **MAXIMIZE** paper recycling yield (recommendation >80% from recycling test) by removing non-paper elements such as labels, spouts and windows and by limiting barrier coatings or lamination to the functional minimum.
6. **LIMIT** cold/hot foil stamping on the outside of the pack to premium brands, with a maximum of 30% of the pack surface to avoid sorting or recycling issues.
7. **MAXIMIZE** recycled content for non-food contact paper-based packaging (e.g. corrugated shipping cases)

Chapter 2: Paper & Paperboard Golden Rules

DISPERSION, EXTRUSION AND LAMINATED COATED PAPER OR PAPERBOARD

- **MAXIMIZE** fiber content in packaging material, while minimizing non-fiber elements and materials
- **ENSURE** design parameters and elements do not impact recyclability (e.g. wet strength agents, double sided coatings) and quality of recycled fiber (e.g. visual impurities, sheet adhesion)
- **GUARANTEE** suitability for standard mill recycling after successful testing

MOLDED PULP CONTAINERS

- **CONFIRM** local recyclability and recycling stream, specifically if non-wood pulp is used
- Wet strength and sizing additive **CAN BE ADDED** at levels that do not affect the recyclability of the pack
- **ENSURE** that food residues can be efficiently removed and provide a clear guidance to consumer

PAPER STRAWS & WRAPS

- Paper made from virgin pulp **MUST BE USED** on all straws and wraps
- **NO PRINTING/INKS** on straws and wraps due to concerns for contamination and health
- **COMMUNICATE** that straws should be pushed back into the beverage container to ensure recycling

Chapter 3: Decoration Golden Rules (1/2)

1. **HOLISTIC END-OF-LIFE EVALUATION:** Each decoration technology, including its adhesives/inks, must be evaluated when combined with the container it decorates. Those 'decorations' must be either easily separable or fully **compatible** with the recycling stream of the main container.

2. **AVOID** PVC or conventional PET-G film substrate for sleeve/label.

3. **AVOID** PVC inks.

4. **DIRECT PRINTING**
   - **Consider using** on metal containers.
   - **Consider** for **PP, PE & PET** container, tray, lid and pot but assessment at local level must be performed and comply to food safety and Inks standards.
   - **Avoid** for PET bottles.

Chapter 3: Decoration Golden Rules (2/2)

5 **MINIMIZE** print surface and quantity of inks

USE CMYK+1 approach for artwork construction (cyan, magenta, yellow, black + 1 pantone color)

6 **PE and PP container: LABELS/STICKERS/SLEEVES** to be made from PE or PP material to ensure full recyclability. Paper labels to be phased out unless proven to not disturb recycling.

7 **PET container: LABELS/WRAP-AROUNDS/STICKERS** to be made of a material with density <1g/cm^3. Paper label to be phased out unless proven to not disturb recycling.

8 **FULL SLEEVE** should be limited to functional applications such as light barrier and proven to not disturb recycling. Sleeves for design purpose only must be phased out unless proven to not disturb recycling.

9 **SLEEVE FOR PET CONTAINER** must not prevent proper sorting/ recycling of the container. PET crystalline sleeves with APR qualified washable ink systems are allowed worldwide unless otherwise stated by local recyclability criteria like EU-27 countries which follow the EPBP rules.

10 **PHASE OUT** non-water soluble/dispersible adhesives.

Voluntary Action on Packaging Design - Negative List

- **Nestle's Negative List addresses the removal or replacement of materials that are both within our control and will have the most immediate effect in mitigating the impact relating to packaging.**

Overly complex design
Packaging that is not functionally needed

Litter-prone items
Plastic straws, cups & tamper-proof sleeves

Oxo-biodegradable plastics additives
Degradation promoting additives

Regenerated cellulose*
Twist wraps & windows

Polyvinyl chloride (PVC)
Trays, sleeves, labels & films; Liners for metal closures; printing inks & coffee capsule sealing layer

Polyvinylidene chloride (PVDC)
Coating on plastics, paper & paperboard

Polystyrene (PS)
Trays, dairy pots, ice cream lids & coffee lids

Expanded Polystyrene (ePS)
Trays, tubs, sleeves & transportation protection

Polyethylene terephthalate glycol (PET-G)
Labels & sleeves

Paper/plastic
Laminated paper with paper content <50%

Dark/opaque PET bottles
Any color that is NOT transparent clear, transparent green or transparent blue

Undetectable
Rigid plastic items not detectable by NIR sorting technology

** Except for applications designed for composting*

Glossary

- **Bio-based plastics:** Plastic material wholly or partly derived from renewable biological resources (biomass), instead of fossil-based feedstocks; it is not necessarily biodegradable.
- **Biodegradable:** Material that can be broken down by micro-organisms into natural substances such as carbon dioxide, water, and biomass, under specific environmental conditions; biodegradability depends on the conditions and time frame and does not necessarily occur in the natural environment.
- **Biodegradable plastic:** means a plastic capable of undergoing physical, biological decomposition, such that it ultimately decomposes into carbon dioxide (CO2), biomass and water, and is, in accordance with European standards for packaging, recoverable through composting and anaerobic digestion (Directive (EU) 2019/904 (SUPD)).
- **Compostable:** A material is considered compostable (whether suitable for home or industrial composting) when, through microbial activity, its biodegradable components break down to form compost as well as naturally occurring gases and water under both aerobic and anaerobic conditions.
- **Oxo-Biodegradable plastic:** means plastic materials that include additives which, through oxidation, lead to the fragmentation of the plastic material into micro-fragments or to chemical decomposition (Directive (EU) 2019/904 (SUPD))
- **Primary packaging:** Packaging conceived so as to constitute a sales unit to the final user or consumer at the point of purchase.
- **Secondary packaging:** Packaging conceived so as to constitute at the point of purchase a grouping of a certain number of sales units.
- **Tertiary packaging:** Packaging conceived so as to facilitate handling and transport of a number of sales units or grouped packaging in order to prevent physical handling and transport damage. Tertiary packaging does not include road, rail, ship and air containers.
- **Virgin plastic:** Plastic that has not been previously used or subjected to processing other than for its original production. It includes fossil and bio-based plastics.