

# Greenwashing: What is bioplastic, compostable and biodegradable packaging anyway?

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Let us unpack the industry terms for good



With the recent implementation of the amended regulations pertaining to Extended Producer Responsibility (EPR), under the National Environmental Management: Waste Act, 2008, industry jargon is splashed all over the media. Terms such as biodegradability, compostable packaging, renewable content and bioplastics are the talk of the town, but what does this really mean? We want to encourage consumers and value chain members to trust, but verify!

#### Packaging: the benefit, the design, the impact

At least 80% of the environmental impact of a packaging item is determined during the design phase. The <u>Mpact design</u> <u>centre</u> can expertly design packaging that optimises the environmental benefit, performance and product-material ratio and fully comply with <u>sustainable design principles</u>.

There is no simple answer as to which packaging medium is the best for the environment. Truly sustainable packaging decisions are more complex than simply replacing one material with another. As an example, some materials may enjoy a smaller carbon footprint but require more water or heat to convert, thereby, affecting the cradle-to-cradle environmental impact. Being lightweight, durable and flexible, the unique nature of plastics means that it naturally reduces a variety of environmental impacts across resources such as energy, water and greenhouse emissions, compared to its alternatives.



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# Terminology: using the same lingo

Being vague about industry terms will only solve half of the challenges that we as stakeholders face! Greenwashing is the act of misleading consumers regarding environmental practices or environmental benefits pertaining to a packaging item or

# Sustainable packaging

Sustainable packaging is not simply an indication of a packs' recyclability. Sustainable packaging is packaging designed for a specific product and is fit for purpose, *consistently* efficient in resource utilisation and provides benefit throughout its entire life cycle whilst still meeting performance, cost and product-packaging ratio criteria.

# Recycling

Recycling is the mechanical or chemical process of converting waste into reusable material.

#### Closed loop recycling

Closed loop recycling refers to a process where a packaging item is recycled into its same form or similar product, of the same quality, e.g. when a food grade PET bottle is recycled and a new food grade rPET food punnet is produced from the recycled content.

#### Open loop recycling

Open loop recycling refers to a process where recycled material is converted into either new, lower-value raw material or a product that is different to its original form, for example when polypropylene closures are processed and used to produce garden furniture.

#### Recyclate

Recyclate is post-consumer waste that has been successfully processed back into usable raw material, in a recycling plant, and can be used to produce new products.

# Recycled content

Recycled content is the percentage of recovered material in a packaging item. It reduces dependence on virgin material and creates a demand for recycled plastics which stimulates investment in the collection, sorting and recycling industry.

#### Recyclable packaging

Recyclable packaging is packaging that complies with the "design for recycling" principles, can be collected post-consumer use, sorted and recycled.

#### Compostable and biodegradable packaging

- For packaging to be compostable and biodegradable it has to break down into non-toxic, natural elements such as CO2 and water.
- Compostable packaging requires microorganisms (bacteria and fungi), humidity and heat to decompose in a specified timeframe of 12 weeks.
- Biodegradable products also require microorganism to help it break down but within a non-specified timeframe.
- All compostable packaging is biodegradable either in industrial or home composting facilities but not all biodegradable plastic packaging are compostable as it won't break down in a stipulated timeframe.
- The concern with biodegradable and compostable packaging is that it may justify littering since the perception is that it will simply disappear and break down into natural elements.

# Bioplastics or renewable plastics

A packaging item can be termed as a bioplastic item when it is made from biological substances or biomass, such as plants, rather than from a fossil fuel or petroleum-based substance. Not all bio-based plastics are biodegradable or compostable and still has to follow conventional recycling methods.

#### Reusable or refillable packaging

Reusable packaging is refilled with the same product which it was originally filled with, e.g. purchasing refill packs to refill at home, refilling at an in-store dispensing system or using a drop-off point to return empty packaging for the brand owner to refill.

#### Re-purposed packaging

Re-purposed packaging is when the consumer reuses the packaging within the home environment for a new application, e.g. storing grains in a tub previously used to package ice-cream

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Clarity and education regarding industry terminology is the fuel that will not only drive us forward but also draw our efforts together!

Mpact Plastics is a leading producer of rigid plastic packaging and cling film in southern Africa. We operate out of nine production centres across the country, providing packaging from plants with relevant certifications. We service the food, beverage, personal care, home care, pharmaceutical, agricultural and retail markets. In upholding company values, and as a supporter of the circular economy, we positively contribute to industry associations, enabling various communities to participate in recycling solutions.

- \* The value of plastic waste 24 Apr 2024
- \* The relationship between packaging and food waste 26 Mar 2024
- Innovative PET packaging clinches top accolade at IPSA Gold Pack Awards 27 Nov 2023
- "Smart sustainable packaging solutions demonstrated 24 Nov 2023
- \* Shifting perceptions 17 Nov 2023

#### **Mpact**



Mpact is the largest paper and plastics packaging and recycling business in Southern Africa. Our integrated business model is uniquely focused on closing the loop in plastic and paper packaging through recycling and beneficiation of recyclables.

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