

## Packaging Frequently Asked Questions 2019

### Introduction

PETCO is the national industry body responsible for managing the PET industry's extended producer responsibility (EPR) in South Africa. Our mission is to grow the collection and recycling of PET bottles after consumer use. We have done this for 15 years and are funded by a voluntary Extended Producer Responsibility levy paid by industry.

**Packaging prevents food waste – which saves resources and reduces CO<sub>2</sub> emissions.**

This document seeks to answer some of the questions we are frequently asked about packaging in general.

### Why do we need packaging? What role does it play?

Packaging allows us to consume products in ways that would be difficult – if not impossible – without it. Specifically, packaging:

- Protects vulnerable products from damage while in transit and from contamination or damage by moisture, humidity, gases, microorganisms, insects and light;
- Allows the product to be transported over great distances, used, and stored by consumers;
- Saves space through stacking objects, making transport more efficient;
- Maintains quality and food safety by preventing tampering or spoiling;
- Displays important information about the product, such as nutritional content, allergy advice and manufacturer details.

The product contained within packaging often has a higher carbon footprint than the package itself, and thus it is vitally important to protect the contents to prevent wasting resources and reduce CO<sub>2</sub> emissions.

Without packaging, we would not be able to purchase liquids, gels, powders or out-of-season fruit. We would have significant problems with food safety and hygiene. Food wastage would increase, with negative environmental impacts.

Increased urbanization, living standards, lifestyle changes and increased mobility all place greater requirements on our food and product systems to be durable and affordable.

## But there is too much packaging, isn't there?

The amount of material used has decreased: between 2004 and 2014, the average plastic packaging weight fell by 28%<sup>1</sup>.

The amount of packaging we consume today reflects our lifestyles and the desire for convenience.

## Why do we need plastic packaging?

Plastic packaging is an important enabler of the modern economy. The range of plastic packaging has extremely useful properties which make them well suited to their purpose.

Calls to ban plastic packaging are often made in response to the environmental problems associated with poorly managed waste streams, but do not consider the many environmental benefits that plastic packaging has.

Some of these benefits of plastic packaging include:

- **Light weight:** Plastic packaging is lightweight, which means lighter loads for planes and trucks, which saves energy and carbon emission associated with transporting products.
- **Resource efficient:** Plastic packaging saves packaging mass, energy and CO2 emissions. Without it, we would use 2 – 3 times more resources<sup>2</sup>.
- **Reduced material use:** The amount of plastic needed for packaging decreases as manufactures continually innovate to reduce the material needed for manufacture packaging.
- **Safe and hygienic:** Plastics are hygienic, shatterproof, and safe – even for rough handling. Plastics keep products free from contamination (particularly useful for medical packaging e.g. sterile syringes). Plastic can be sealed shut or moulded into a safety mechanism e.g. child proof locks on medication.
- **Versatile:** Plastics can be transformed in many different ways – blown, injected or thermomoulded – which means it can be used to package sauces and pastes.
- **Recyclable:** There are subsets of plastic packaging that can be recycled many times to create new products.

In addition to this, there are some products that are more convenient to use in plastic packaging whether that be for pouring, handling, or storing.

Packaging, and plastic packaging, offer so many benefits that it will not be practical to do without it.

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<sup>1</sup> The excellence of the plastics supply chain in relaunching manufacturing in Italy and Europe: Executive summary.

<sup>2</sup> The impact of plastic packaging on life cycle energy consumption and greenhouse gas emissions in Europe: Executive Summary July 2011, Bernd Brandt and Harald Pilz.

## What about single-use packaging?

Single use packaging has an important role to play in modern life, especially where safety and hygiene are concerned.

Single use packaging is much thinner and lighter than re-usable packaging. This reduces the amount of material needed for the package, making it more affordable for consumers and saving in transport costs.

It also has another benefit in that it doesn't require the packaging to be returned to the point of purchase and then onto the point of manufacture, for it to be re-used. This reverse logistics chain incurs a large financial and environmental cost. Of course, this needs to be considered given the economic and environmental costs of single-use waste streams, but the assumption is that a re-usable packaging will automatically be returned at greater rates than the what recycling rates of single-use packaging can achieve.

The challenge with single-use plastics is not inherently that they are single-use, but that there is poor management when they enter the waste stream, and thus they end up in the environment with large associated environmental costs.

### **Shifting from single-use to reusable plastics will not automatically mean that poor management of waste streams will improve.**

Some waste streams, such as PET bottles, are managed well and improving year-on-year.

## Should we ban packaging that isn't recyclable?

No, and this must be carefully considered. Packaging fulfils many functions and one should consider the lifecycle of the packaging before judging it on only one aspect e.g. recyclability.

Some packaging can't be recycled, but it uses so little material compared to recyclable alternatives that the net weight of material going to landfill is far less than what even a high recycling rate alternative could achieve.

Other packaging isn't recyclable, or currently recycled, but does make use of recycled content. This is an important driver for other recycling chains to exist and lowers the total amount of new raw materials and resources that are required for manufacture.

### **Plastic packaging is not bad for the environment.**

Plastic packaging provides many environmental benefits. Studies have shown that, if there was no plastic packaging available, the overall packaging consumption of packaging mass, energy and CO<sub>2</sub> would increase<sup>3</sup>.

**Good environmental practice requires us to use the least material to do the job required, then to reuse or recycle by recovering material or energy from products we use at the end of their life.**

## What can I recycle, and where?

To learn about what you can recycle, look for the recycling information on the package. More brand owners and retailers are adding these to their packs.

You can also find more information on which types of packaging are recyclable by visiting the National Recycling Forum website at [www.recycling.co.za/](http://www.recycling.co.za/).

Formal kerbside recycling schemes are not accessible to most households in South Africa, but there are several other ways to take part in recycling:

- Conduct internet searches for recycling in your area. There are many private collection and recycling services available.
- Visit [www.MyWaste.co.za](http://www.MyWaste.co.za). It lists all the drop-off points near you and you can search by suburb.
- If you have informal collectors / street wastepickers in your area, put your recyclables in a separate, clear bag (a so-called 'rich bag') and place on top of the other non-recyclables in your bin on collection day. By doing this, it becomes easier for waste collectors to identify the recyclables without needing to dig through your rubbish, which reduces health risks as well as the possibility of littering.

## How can we improve recycling rates?

Improving recycling rates needs to be done on multiple fronts. From a consumer and citizenry perspective, actions include:

- Demanding packaging containing recycled content from brand owners and retailers. Demand for recycled material is the enabling mechanism for recycling to occur in the first place and ultimately increase.
- Purchasing products that are recyclable, and pressuring brand owners and retailers to indicate on the product whether packaging is recyclable.
- Lobbying for separation-at-source schemes to be implemented and taking part in and encouraging others to take part where these are in place. Success of these schemes depends largely on household participation.

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<sup>3</sup> The impact of plastic packaging on life cycle energy consumption and greenhouse gas emissions in Europe: Executive Summary July 2011, Bernd Brandt and Harald Pilz.

Showing your support for organizations and companies who are making recycling happen will further encourage others do to the same.

## **Can't we make all plastics biodegradable?**

This would harm the environment further. Plastics with bio-degradable additives do not fully biodegrade under normal atmospheric or oceanic conditions, and result in plastics fragmenting, making it even harder and less viable to collect them. Currently, no materials have been proven to adequately biodegrade in the open marine environment. Furthermore, they pose a high contamination risk to recycling streams. If compostable or biodegradable materials get into the recycling stream, this can render the recycle unusable.

**Did you know? Biodegradable material is different to bio-based material. Plants can also be used to make non-biodegradable plastic<sup>4</sup> that is fully recyclable.**

Using these materials may actually increase littering, as consumers would assume that because these materials would break down over time it is acceptable to litter them and not put them in the bin.

## **Where does plastic in the ocean come from?**

Most plastic waste makes its way from litter and poorly managed dumpsites, into rivers and streams and then from there to the ocean. Therefore, inland collection and waste management is such a critical aspect to get right.

As litter travels to water ways, it is essential that we:

- Use the bin – not the gutter, not the river, not the pavement.
- If you see some litter and you are near a bin – pick it up.
- If the bin is full, find another one or take your litter home.
- Join a local beach or neighbourhood clean-up.

## **What is the industry doing about plastics in the environment?**

The plastics industry has taken many initiatives to combat plastics in the environment.

PETCO ([www.petco.co.za](http://www.petco.co.za)) was incorporated in 2004 to minimize the environmental impact of plastic bottles in the environment, and has been steadily increasing recycling rates from just 16% in 2005, to 63% in 2018. We are currently on track to meet our target of 70% by 2022.

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<sup>4</sup> UNEP (2015). Biodegradable Plastics and Marine Litter. Misconceptions, concerns and impacts on marine environments. United Nations Environment Programme (UNEP), Nairobi.

Plastics SA ([www.plasticsinfo.co.za](http://www.plasticsinfo.co.za)) run many programmes over many years, including numerous beach and river clean-ups. The latest industry-focused programme is called Operation Clean Sweep which deals with the off-runs of plastic production factories to eliminate small plastic pellets entering waste water systems.

The African Marine Waste Network ([africanwastenetwork.org.za](http://africanwastenetwork.org.za)) was established as a pan-African platform to co-ordinate efforts and drive action regarding marine waste specifically. Although broader than just plastic waste, Plastics SA is a key champion of this network.

Organisations such as POLYCO ([www.polyco.co.za](http://www.polyco.co.za)), the Polystyrene Association of South Africa (<http://www.polystyrenerecyclingnetwork.com/>) and the SA Vinyl Association ([www.savinyls.co.za](http://www.savinyls.co.za)) were established by their represented plastic manufacturers to fulfil functions such as product stewardship and reducing environmental impacts of their sectors.

### **June 2019**

[www.petco.co.za](http://www.petco.co.za)

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