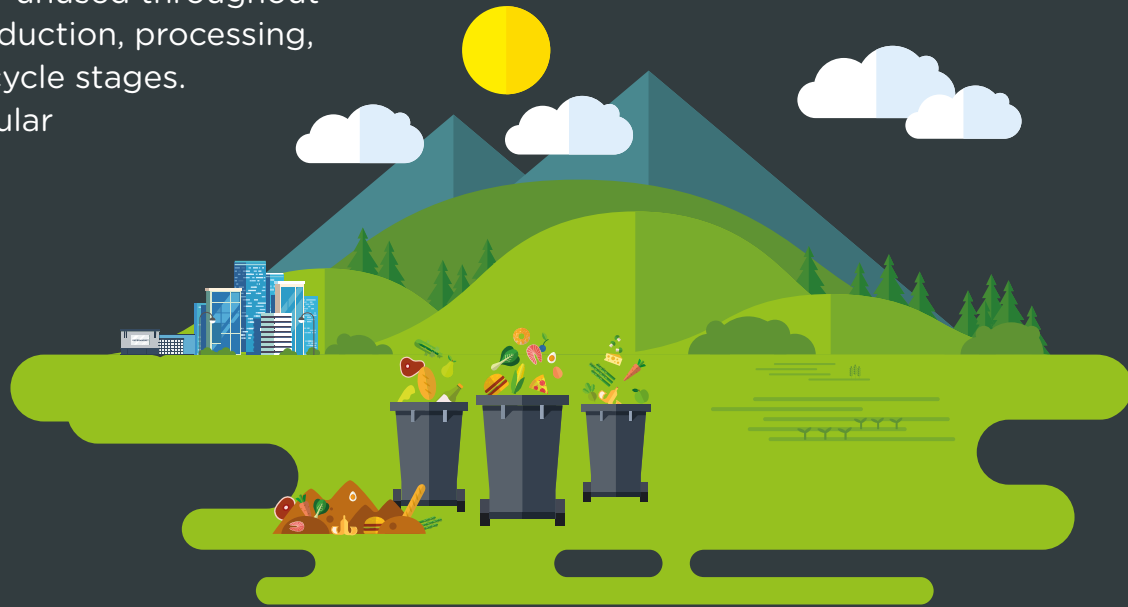


PRODUCT AND FOOD WASTE



Product waste occurs when products are discarded, damaged, or unused throughout the supply chain at production, processing, retail, or consumer lifecycle stages. Food waste is of particular global concern.



Globally 3 billion tonnes of solid waste is produced each year, and just under 1.3 billion tonnes (33%) is from food production.



Consumers in developed countries each waste around 100 kg of food a year, which is more than a person's average bodyweight!



The 4 billion tonnes of CO₂ emissions from producing food is more than the whole of Germany emits in a year!

ROLE OF PLASTIC PACKAGING

Because plastic packaging keeps food fresher for longer and protects against damage, it gives retailers more time to transport and sell the product, and consumers more time to use it, thereby reducing waste.



For example an unpackaged cucumber would be unsellable after 3 days, whereas wrapped in a plastic film packaging they will stay fresh for 14 days.

The same can be said for many more food products where packaging dramatically increases shelf-life. Packaging benefits the whole food supply chain protecting products during transportation, on shelf and in the home. Ambient packaging solutions also reduce the need for energy intensive refrigeration during transportation and in store.

WHERE DOES THE WASTE OCCUR?

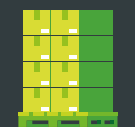
Production. Waste can occur through poor harvesting techniques, lack of equipment, strict regulations on appearance and loss during storage.



Processing. Waste can occur through contamination or fluctuations in the processing environment as well as through the loss of some materials during processing.



Retail. Waste can occur through throwing away unsold food, products damaged in transportation and products that are not as aesthetically pleasing as required.



Consumer. Waste can occur through overstocking, over preparing and incorrect cooking of food. The misuse of products can also lead to damage and disposal.



1.4 billion Km³

Land wastage. Wasted food occupies 1.4 billion km³ of land that could be better used. If this was a country, it would be the second largest on the planet!



250 Km³

Water wastage. It is estimated that 250 km³ a year (3 times the volume of Lake Geneva) is used to produce wasted food.



\$750 billion

Food Poverty. 805 million people do not have enough food to eat and yet \$750 billion of food is wasted every year, representing 1.3 billion tonnes of organic waste.

By designing innovative products that perform their function effectively, RPC is helping to minimise both product and food waste.



RPC's plastic packaging is designed, built and rigorously tested to ensure longevity and product protection throughout the supply chain. RPC's plastic packaging also supports food protection during transportation, the retail and consumer stages of the products lifecycle.



How can packaging design influence product waste?



Portion control. Portion control allows the consumer to eat one portion of the product without reducing the shelf-life of the other portions in the pack.



Accessibility. Packaging is designed so that it can be opened by as many people as possible, including the less abled and children if necessary.



Resealability. If a pack has more than one portion, it can be made resealable for increased longevity of the remaining product.



Innovation. This opaque yet breathable film developed by RPC bpi group helps protect potatoes from going green by stopping too much light reaching them.



Ergonomics and emptying. Packaging is designed to reduce product loss for products that require pouring and dispensing such as shaped sauce bottles that drain the product to the bottom when sat on the cap.



Barrier Properties. Multilayer barrier protection in packaging protects against oxygen ingress and moisture, increasing the shelf-life of the product.



Innovation. Another plastic packaging solution is Heinz Snap Pots, which incorporates handy portion control.



Reducing food waste is a key part of our business. RPC has been a part of the save food initiative www.save-food.org since 2013.



RPC also works with organisations along the food and packaging supply chain to help communication for improved innovations to reduce product waste.