

DESIGN AND SUSTAINABILITY



'Design' has the power to scope the whole lifecycle of a product. The design stage of packaging is where critical choices are made that affect the lifecycle of the product. Packaging has to fulfil a number of functions, from the basic shape design, through to ergonomics, brand space, product protection, economical production and multiple other functions that all will help fulfil the overall task of the product.



Incorporating sustainability has become an important aspect of the design stage and can lead to minimising the environmental impact while still satisfying the needs of the customer and consumer throughout the supply chain.

HOW CAN YOU DESIGN PACKAGING WITH SUSTAINABILITY IN MIND?

CARBON EMISSIONS

Designing the product or packaging to be lighter reduces the carbon emissions associated with resource and transportation.



RECYCLING

Designing for recycling is complex as systems vary locally. Limiting packaging to one material if possible and making sure that material is widely recycled in the locality it is sold is important.



REUSE

If you design a product to be reusable it increases its consumable life and it's less likely to be littered or landfilled.

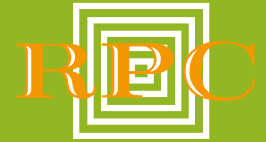


PROTECTION

Designing packaging that protects products means less food and product waste, reducing associated carbon emissions and water use.



RPC STRIVES TO USE DESIGN TO INFLUENCE SUSTAINABILITY



RPC strives to design products to enable positive environmental impacts throughout the supply chain; reducing our energy impact, reducing our water usage, preventing food or product waste and increasing the amount of products recycled and reused.

A checklist for design criteria might include:



- Can we reduce the number of materials used in the concept?
- Can we use recycled material in the product?
- Can the product be reused or repurposed?
- Are there alternative materials we could use to improve environmental impact?
- Can we integrate ideas such as portion control or resealability?
- Are the materials used widely recycled?



- What similar products are out there with sustainable design?



- Do these sustainable ideas adversely affect the quality and function of the product?

RPC recognises that sustainable design is more important than ever, and that we need to be proactive in incorporating it into our products. Designing sustainable products requires a balance between innovation, capability, ease-of-use, and an ability to be recycled.

Examples



These containers from RPC Promens Industrial feature specially designed safety tops to eliminate the need for outer cardboard packaging, and are 30% lighter than the containers they have replaced, reducing carbon emissions during transport.



This trigger pump from RPC Zeller Plastik has been designed to be made 100% from plastics, so whilst it still delivers outstanding performance it is also completely recyclable and requires less separation of materials.



The X-Hance film from RPC bpi protec has used design innovation to produce potato packaging that is completely opaque, yet breathable. This eliminates light rays in order to protect products, preserve their freshness and quality, and deliver extended shelf-life.