

**BLOG:**

## SHOULD REFILL BE CHEAPER?

By Richard Cham



Plastics resource efficiency and recycling charity, RECOUP, raises the question ‘why should refill be cheaper?’ Whilst attending a conference recently, one of the speakers discussed innovation in reuse and refill packaging. Towards the end of the presentation, the presenter made a joke about a comment his wife had made about the cost of refills and the fact they are seldom cheaper, and in some cases, more expensive. The joke raised some chuckles from the delegates but got me thinking about the topic at hand.

RECOUP recently released their Refill Packaging Case Studies. The case studies looked holistically at the reusable packaging and refills, focusing on their suitability for purpose and end of life recyclability. As part of the study several cost analyses were conducted comparing the price per 100g of eight refill options. Of the eight products, six refill options were found to be cheaper, one was equal and only one was more expensive.

The price of many of the products investigated by RECOUP whilst researching the report is likely to have been subject to rising inflation. With that in mind the products included in the analyses were reviewed, and a further seven products were newly assessed. All the products had increased in price, though the rate of increase varied across the different product categories.

Of the original products assessed the balance did not change, of the eight products only one was more expensive to refill. The product, which was more expensive, however, had changed. Previously Kenco had been shown to be

more expensive to refill, this time Nescafe had switched places, and their refills were priced at around £3.08/100 g, while the jars were £2.52 /100 g of product on average. The remaining price balance remained the same, with one roughly equal, if you don't count a price difference of 0.04p worth shouting about. The remaining six were still cheaper. When you add in the seven new products we reviewed, all seven refill options worked out cheaper than the 'new' packaging. Across the fifteen products assessed it worked out to be around 13p cheaper per product to choose refill over buying new each time.

It might be worth mentioning that the product that was equal in price was cited as 1p per tablet online, but when you calculate based on price vs weight, the refill comes out at £12.47/100 g, and the new dispenser comes out at £16.47/100 g. With this bombshell taken care of, it means that of the fifteen products being assessed, fourteen were cheaper than buying new, with only one being more expensive to choose refill.

The price of refill is a popular topic and a recent study from the Retail Institute revealed some interesting consumer perceptions around packaging. 37% of respondents said they actively tried to avoid plastic packaging. The two most popular responses were to use less plastic at 60%, and to make packaging more recyclable at 57%. The survey also noted that consumers were rarely willing to pay more for sustainable packaging options.

It is not surprising with these statistics that many brands have been actively redesigning their packaging to reduce plastic and to appear more sustainable. In the push to appeal to consumer perceptions around sustainability and environmentally conscious design, sometimes the true reason for designing for reuse and refill is lost.

Reuse and refill is a great way to reduce single use materials. Dispensing packaging is often suitable for multiple uses, meaning that perfectly useful packaging is disposed of unnecessarily when it could have been refilled and reused. Dispensing packaging such as soap pumps and household sprays contain multiple components constructed from different polymers. These multi-polymer packages contaminate the recycling stream, by reusing the pumps and sprays, this can help to reduce unnecessary contamination in the recycling system.

Popular reuse options include pouches and fibreboard cartons, both frequently produced in the form of multi-layer, multi-material packaging. The recyclability of packaging increases in complexity as the number of layers increases. Design for Recyclability guidelines released by the Confederation of Paper Industries claim that the acceptable non-paper content of paper packaging, including plastic, should not exceed 10% , with the caveat that there needs to be clear instructions on the pack for consumers to take action to separate the components. The RECOUP opinion is that the recyclability of packaging should not place the burden of responsibility onto the consumer to make the pack recyclable. Currently paper reprocessing technology is designed to cope with 1.5% non-paper contamination, including plastics, and inks, a number far lower than the 10% stated in the guidelines.

Fibreboard cartons along with single use paper coffee cups are difficult to recycle and are not target materials for traditional paper recyclers and require specialist equipment for recycling. Currently in the UK there is only one facility in Halifax set up to handle double laminated fibreboard packaging, with the materials being reprocessed into products such as building materials and furniture.

Flexible packaging options have become more popular in recent years, with a lot of focus on switching from multilayer laminated packaging to mono-polymers as much as possible. In the UK flexible packaging is only collected by 12% of local authorities according to the UK Household Plastic Collection Survey conducted by RECOUP, meaning that very few people have access to flexible recycling at home. The only option for most people is front of store recycling, which it is unclear where or how this is sorted and recycled.

When making packaging choices for refill options it is important to remember that both the refillable packaging and the refills themselves need to have a sustainable end of life route. By designing for public perceptions of lower materials use, the brand runs the risk of increasing waste where packaging recyclability is reduced. Frequently, switching to paper packaging results in a reduction in overall paper recycle quality, which in turn reduces the price per tonne generated for materials recovery facilities dealing with the packaging.

All materials need to have an end market in order to drive demand for the recycled materials. Material recovery facilities are businesses and need to generate income from the materials they sort, by designing packaging for recyclability the value and end market options increase. Whichever format you choose to package a product has a carbon and environmental footprint and a need for resources obtained from the natural world. Whether it is oil for plastics, wood for paper, or sand for glass, all of these options require natural resources. When using these resources there is no best option, it is important to weigh up the environmental impacts throughout the life of the packaging from extraction of materials, to end of life. By designing for end of life recyclability or compostability, the simplicity of the packaging benefits the waste management process by ensuring packaging if not suitable for reuse is either recyclable or compostable without leaving any traces such as chemicals or microplastics.

Most importantly though coming back to the original question ‘should refill be cheaper?’ If you are asking that question the reasons behind refill seem to have been lost in translation. Refills are designed to reduce packaging waste and lessen our impact on the environment. The question we should be asking instead are ‘is this reusable, recyclable, or compostable?’ If the answer isn’t yes then in our attempts to be better, we may actually be making things worse by increasing our packaging waste.

RECOUP produced the Recyclability by Design and Reusability by Design guidelines which are available to download at the RECOUP website and contain guidance to help packaging designers and brands to make the most sustainable decisions when it comes to designing recyclable and reusable packaging.