We're already struggling to deal with an annual generation of 2.12 billion tonnes of waste around the world. How do we expect to cope with the estimated 4 billion created in 2100? Despite more and more legislation and processes provided by the world's authorities, there's a limit to their control over the situation. The main deciding factor over environmental damage comes from humanity as a whole.

We are already seeing new and innovative ways to embrace waste as having more potential than just a life at the landfill. Skip hire provider, Reconomy, has the perfect background in responsibly dealing with waste and is here to investigate the ways in which waste can be reused.

A better end for bread: Toast Ale

As a staple food, bread is the corner post of the British grocery shop, but it is also popular with our bins. Although 12 million loaves are sold on a daily basis, 44% of bread is wasted , which has presented itself as a significant contributing factor to the epidemic food waste crisis here in Britain. In a bid to end food waste, Toast Ale has partnered up with bakeries to collect unsold loaves and unused crusts from sandwich makers to craft a fine beer, while donating all profits made to environmental charities.

Beginning in 2016, Toast Ale's simple recipe quickly found popularity and spread across the UK. Once the bread has been delivered to the team, it is then sliced and dried in the oven at around 90°C for an hour. Then, it is crushed into the size of croutons.

The resulting grains are submerged in 15.7 litres of water at 67°C, before being covered and left for 60 minutes. The liquid is then drained while rinsing the grains with water at a temperature of 78°C to remove any additional sugars — this should be done until you've reached 25l. Use around 20l of water and this will remove any tannin tastes.

The grain-water needs to be boiled and, at the 90 minute mark, 5g of German Hallertau Tradition is added to give the mixture a bitter note. This can balance the caramel notes from the bread and the papaya and mango notes from the aroma that is added later. If you're interested in trying your own, the full recipe is available here — there's a whole science behind it!

Paper ride: EcoHelmet

Paper waste is a growing problem all of its own. In fact, you might be surprised to hear that the amount of paper sent to landfills each year could fill an estimated 103,000 double decker buses — but EcoHelmet is making it its mission to recycle paper and put it back into better use.

Up to 90% of cyclists forgo wearing a helmet, despite knowing the risks. Based in New York City, EcoHelmet offers cyclists an inexpensive way of riding by using a folding helmet that can be recycled at the end of a person's ride. The helmet is made from 100% waterproof recycled paper and structured in a honeycomb pattern to ensure that all blows from falls or crashes are absorbed by the helmet. The beauty of the helmet is that you can fold it flat and that one size fits all.

The EcoHelmet is nowhere near as expensive to make as a regular cycling helmet, and it doesn't come at the cost of style. The helmet can be easily disposed of unlike other helmets. For example, it takes 500 years to break down styrofoam helmets and they never truly decompose!

Wasteboards: A new trick for plastic

The only litter you'll want to see on the streets - a skateboard made from discarded plastic bottle caps, known as a Wasteboard. An estimated 20,000 plastic bottles are produced every second and a lot of this is ending up in our oceans leaving devastating impacts on marine life.

With a combination of purpose and community spirit, Wasteboards take plastic bottle caps and create amazingly unique skateboard decks. Each board is made by hand and the design doesn't shy away from what they're made from — which is part of the appeal to its main

demographic; young people who want to do their part in saving the planet.

There's a full process behind creating a wasteboard. Bottle tops are collected from popular events across the city — or sometimes fished from Amsterdam canals by a professional plastic fishing company. After that, caps are then placed in different positions within the mould to create a basis of the design.

No two wasteboards are alike, as the plastic caps melt in all different ways once baked. The special baking technique used allows the bottle tops to keep their original look and characteristics. After some time to cool off, the boards are then assembled and ready to be sold.

Sources:

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