



# Jaw Brew Circular Economy

Jaw Brew, based in Paisley, brews craft beer and sells it in cask, keg, bottle, can and polypin across much of Scotland and the North of England. One of the products, Hardtack is produced from unsold morning rolls provided by Aulds the Bakers. The product is a low alcohol, full flavour beer.

The Circular Economy award is for businesses whose product or service fit the principles of the circular economy and demonstrates the business and environmental benefits of a closed loop approach. The judges considered that the commitment demonstrated by Jaw Brew and the environmental benefits they had achieved were worthy of a commendation in this category.

## Highlights

Produce a low alcohol beer that uses waste bread in place of a proportion of malt.

Strong circular economy business model through use of waste (bread) and potential for re-use of by-products

Use of waste bread rolls reduces costs by 25% per batch compared to other beer

Lighter weight bottles being used which reduces material use and transport costs.

Plastic kegs are re-useable – inner ‘balloons’ are tested and reused.

**Commended for the Circular Economy Award 2017**

Sponsored by SEPA

Following a Circular Economy Summit held by Glasgow Chamber of Commerce, Aulds the Bakers approached Jaw Brew to see if a solution could be found to divert unsold morning rolls from disposal through the creation of a beer from bread. After some product development, a prototype beer named Hardtack was developed. This was sampled by accredited beer tasters (members of the Society of Independent Brewers and the Campaign for Real Ale) and was considered full bodied for a low alcohol beer.



Each batch of this beer uses 28kg of waste bread rolls replacing 50-65kg of malted grains. The spent grains that result from the mash are currently diverted to a local farm as cattle feed, while the hops are used by a gardening club as a natural weed suppressant. The heat is recovered via a heat exchanger and the hot water retained in an insulated tank for the next brew.

Jaw Brew are looking at developing their by-products to be used in high value products e.g. providing spent grain to a local bakery to produce a high fibre loaf, potential for yeast and spent grain to be used in protein bars.

Jaw Brew are also seeking to replace some of their dish bottomed fermenters with conical ones to make recovery of yeast easier so that this can be stored, cultivated and re-used rather than bought in fresh for each batch of beer. Jaw brew is also looking to improve the packaging footprint and have already signed up to the 'Have you got the Bottle?' initiative to re-use beer bottles rather than recycling.

**Mark Hazell, joint owner of Jaw Brew, said:**  
*"We are honoured to have been recognised at this year's VIBES – Scottish Environment Business Awards. Being commended in the Circular award category is a real testament to the hard work and commitment from everyone at Jaw Brew towards reducing our impact on the environment. We are proud to take our place amongst many excellent companies working hard to deliver a sustainable future and hope it inspires more organisations to make a difference."*

