

Waste prevention project example

Reusable beer bottle system for breweries

Bayern Brewing in Missoula, Montana, has found a way to resurrect a pre-1930s reusable bottle-filling system to keep glass bottles out of the waste stream.



Bayern purchased a German industrial bottle-washing machine and launched their bottle reuse program “Eco League.” As a part of this program, they formed a cooperative to collect bottles with six of the state’s largest brewers that use glass bottles compatible with the washing system. Breweries can team up with other breweries and share a bottle-washer like Bayern did or individual breweries can opt to have their own washers.

They developed a sturdy waxed cardboard 24-pack case called an “Eco Pack” for customers to collect empty 12-ounce craft beer bottles. Consumers pay a \$3 deposit for the “Eco Pack” and fill the box with the qualifying bottles (12 ounces, no embossing, sticker label or twist-off top). Once the box is full, they exchange it for an empty Eco Pack box at a participating brewery. Bayern returns 5 cents per bottle and 10 cents per six-pack cardboard carrier.

When participating breweries have collected a load of used bottles, a designated hauler, or the breweries themselves, bring the bottles to the host site of the bottle washer to be washed and redistributed for use. As a result, the brewers minimize the cost of purchasing new bottles and save bottles from ending up in the waste stream. According to a study published by Inform Inc., a New York City-based environmental research firm, 10 trips with a refillable 1-liter glass bottle generates less pollution than a one-way bottle used once. Even the bottle-washing process requires 47 to 82 percent less water than is needed to manufacture new one-way bottles of the same size.

Implementing this process can be a major change for your operation, but it has the potential to significantly decrease costs and waste associated with one-way bottling. It can also set you apart from others because it shows innovation and commitment to the environment.

Setting this up at your business

Implementing a reusable bottle wash and refill system will involve a few steps and possible coordination with other breweries to make the process economically viable. To start a refillable bottle system, breweries must:

1. Gauge interest from consumers and decide the scale of the operation;
2. Establish partnership(s) with other local breweries to expand infrastructure (the [MN Craft Brewers Guild](#) may be a great place to start);
3. Devise a collection and deposit system (i.e., consumers pay a price for bottles upfront, then receive a portion or all of the deposit back when the bottles are returned);
4. Purchase a bottle washer;
5. Train staff to utilize the bottle-washing equipment;
6. Promote the program through established communication channels.

Costs to consider

- Large-operation or small-operation bottle washers, such as:
 - [Bottle washer for hygienically clean bottles](#)
 - [Bottle washers](#)
- Compatible reusable bottles
- Durable deposit boxes, such as waxed cardboard packs or reusable plastic beverage crates

Examples of similar projects in the news

- How Craft Beer Brewers Brought Bottle Recycling to Montana: yesmagazine.org/environment/2015/08/28/montana-glass-bottle-recycling-craft-brewers
- Craft Bottle Reuse: Bayern Brewing: consciouscontainer.com/blog/craft-bottle-reuse-bayern-brewing
- Jurgen and Knoller & Bayern Brewing Inc. on Vimeo: vimeo.com/114748781
- Refillable Bottles & Sustainability at Double Mountain Brewery: doublemountainbrewery.com/refillables

Waste prevention grants available

Hennepin County has a grant program to fund projects that prevent waste in the business sector. Areas of focus include replacing disposables with reusables, food waste prevention and innovative projects around research and development (to prevent waste). Learn more and apply at: hennepin.us/businesswasteprevention

Contact

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