### **NEW BELGIUM BREWING**

# **CANS VS. BOTTLES**

We are often asked which container is the most sustainable option. Drinking draft beer from a reusable cup is the choice that we tend to recommend as the most sustainable, but all three containers have their ups and downs. We want our consumers to be informed when the package choice is presented, so we made this handy decision map for you to check out, along with plenty of nerdy details below! Comprehensive, unbiased studies comparing the total environmental impact of glass bottles to that of aluminum cans do not exist, so we see a lot of guessing going on out there and many of those guesses are being stated as though they were ultimate facts.

Below are some questions we hear often along with answers based on the research we've done. Remember, though, that since a comprehensive study has never been conducted, we don't definitively know which container is ultimately environmentally superior.

Which container - bottle or can - comes closest to being sustainable?

With the data we have reviewed, no clear winner.

The beginning of the lifecycle of the aluminum can (<u>mining of bauxite</u>, <u>smelting of aluminum</u>) has a larger impact than glass. But later in their lifecycles, the glass bottle has the larger impact (heavier to transport & more difficult to recycle). At the end of the day it's possible they even out.

### The best container is the one that ends up in the recycling bin.

Both aluminum and glass can be recycled an infinite number of times and doing so has many benefits:

- Reducing impact from mining virgin material (*The mining of bauxite for aluminum is highly toxic to the land due to the chemicals used in the process. The mining of the materials needed to make glass is also destructive, but less so*).
- Reducing energy required to melt virgin material (*melting recycled material requires less heat:* Recycled aluminum uses 95% less energy and recycled glass uses 30% less energy.)
- Improving the U.S. economy (Americans landfill \$2 billion worth of aluminum every year!)
- Create more jobs (recycling offers jobs in the U.S. while mining occurs outside the U.S.)

## But I thought cans were more sustainable because they're lighter to ship?

It is true that cans, since they're lighter & they stack better, require less fuel for shipping than bottles. However, this is one small segment of the containers' lifecycle, and not enough info to make a verdict.

# But I thought glass bottles were more sustainable because the mining of bauxite to make aluminum is destructive and toxic?

The same notions apply here as to the question above. Mining of bauxite has huge ecological impacts that are arguably greater than those of mining sand for glass, but again, it's only one segment of the lifecycle.

## What can beer drinkers do to make a meaningful difference?

Recycle your cans and bottles! If you are at a bar or restaurant that does not recycle, encourage them to do so. <u>This website</u> is a good place to look for local recycling facilities, as is a meeting with your local waste hauler.

Little nerd note: Glass is difficult to pull out at a sorting facility, so throwing it in your commingled bin doesn't ensure it will be recycled. Implementing a glass-only recycling bin and locating a glass-only collection spot in your area will give the glass the best chance of being recycled.

## How can my love for drinking beer have the absolute lowest impact today?

Drink draft beer out of a reusable cup and reuse that cup at least 100 times (or 500 times if it's metal or ceramic).

## What is New Belgium Brewing doing to make a difference?

- Conducting and commissioning studies that help us to better understand the environmental impact of our beverage containers and our opportunities to improve it. A greenhouse gas (GHG) study was commissioned in 2011 comparing the GHG emissions of the two containers. KEEP IN MIND: GHG emissions are only one part of the story. Not considered in this study are toxicity, water quality and quantity, biodiversity, human health and total ecosystem health. The results of this study, while important to know, are not an absolute verdict, rather only a segment of the story. The study showed aluminum cans having fewer GHG emissions than glass bottles. However, the main contributor to this difference was the fact that factories melting glass are getting their power from fossil fuels (high GHG emissions) and factories smelting the aluminum are strategically sourcing their power from hydro (which requires reservoirs & dams, but avoids the GHG emissions from fossil fuels). Of course, hydro power looks great through the lens of GHG emissions. However, generating hydro power requires rivers to be diverted and dammed a process that has severe ecological effects not accounted for in GHG emissions studies and a process that New Belgium has actively opposed in Colorado and throughout the U.S.
- Decreasing the weight of our bottles, therefore reducing resource consumption and the impact of bottle transportation.
- Co-founding the <u>Glass Recycling Coalition</u>, bringing together businesses and organizations to enable improved glass recycling infrastructure across the U.S.
- Striving for strokes of genius that will land a revolutionary packaging idea into our laps!