



1700 Diagonal Road, Suite 650
Alexandria, VA 22314
T: 703-647-4609
jdoss@bottledwater.org
www.bottledwater.org

May 14, 2021

Joyce Bautista Ferrari, Managing Editor
jferrari@forbes.com

Avik Roy, Policy Editor
aroy@forbes.com

Ike Brannon, Contributor
ike@capitalpolicyanalytics.com

Dear Ms. Ferrari, Mr. Roy, and Mr. Brannon:

In "[Tetra Pak Recycling: The Complicated Economics of Drink Containers](#)," a recent online article contributed to Forbes by Mr. Brannon and published on May 10, 2021, you attempted to educate your readers about the environmental impact of various beverage packaging materials, and, for that, we commend you. However, the International Bottled Water Association (IBWA) is concerned that this article contains false and misleading information—and the result is that Forbes' readers are not getting the facts about this important issue.

Primarily, we are concerned that Mr. Brannon misinforms readers about the environmental impact and recyclability of plastic containers, a common packaging material for bottled water beverages. Below, please find corrections that we kindly request you review and use to update Mr. Brannon's May 10 article; this will help ensure that Forbes provides its readers with more balanced and accurate coverage on the issue.

Forbes: *The environmental drawbacks of plastic bottles are well known....*

IBWA: We suggest that the benefits of using plastic as a beverage packaging material, especially for bottled water, have not been acknowledged and are often completely ignored, as your article does. Here are the facts:

- For decades, the plastic used for beverage packaging has been a popular packaging option for consumers and beverage bottlers for many reasons. It is shatterproof, hygienic, and safe; releases less CO₂ than other packaging options; uses less water and energy to manufacture; and, very importantly, is 100 percent recyclable—even the caps. Plastic used for beverage containers is also lightweight, so it uses less fuel to transport. And, thanks to modern technology, plastic can be recycled again and again to create new products. As the National Association of PET Container Resources (NAPCOR) notes on its [website](#), "A PET bottle can be recycled over and over again. It's true that there's some change in

the recycled PET that occurs with repeated recycling heat histories, but these can be addressed during the recycling process.” For more information, visit napcor.com/frequently-asked-questions.

- Lately, more and more research shows that the use of other packaging options in place of plastic would be significantly worse for the environment.
- Results from a 2021 life cycle assessment of various beverage packaging containers—PET water bottles, PET soda bottles, glass bottles, composite beverage cartons, and aluminum cans—performed for IBWA by Trayak, LLC, concluded that PET water bottles have the lowest environmental impact of all packaged drinks. As the infographic attached to this email details, PET water bottles produce the lowest environmental impact across several indicators, including greenhouse gas emissions, fossil fuel use, and water use. While your article promotes aluminum cans as a preferred beverage packaging option over beverage cartons, cans do not triumph over PET water bottles. In all categories, bottled water PET containers have less of an environmental impact. In addition, weighing on average just 8.3 grams, PET water bottles are the lightest packaging option (even lighter than aluminum cans at 19.7 grams), which cuts down on transportation costs.
- An American Chemistry Council (ACC) report ([Life Cycle Impacts of Plastic Packaging Compared to Substitutes in the United States and Canada](#)) looked at the entire life cycle of plastic packaging versus the alternatives of aluminum cans, cartons, and glass—and concluded that PET plastic containers have the least environmental impact compared to those other packaging materials. The report’s most significant finding was the nearly doubling of greenhouse gas emissions—a major contributor to global warming—that would occur using non-plastic containers (i.e., aluminum cans, cartons, and glass). In fact, the use of those alternative packaging materials produces about 60 percent more greenhouse gas emissions than plastic beverage containers.
- Bottled water’s small water use is further substantiated in the results from a [2018 Water and Energy Use Study](#), conducted by the Antea Group for IBWA. Antea’s research showed that the amount of water and energy used to produce bottled water products in North America is less than all other types of packaged beverages. On average, only 1.39 liters of water (including the 1 liter of water consumed) and 0.21 mega joules of energy are used to produce 1 liter of finished bottled water.

Forbes: *...there are limited options for the use of recycled plastic material...*

IBWA: This statement is simply not true. Recycled material is in high demand throughout the United States. Most bottled water is packaged in 100 percent recyclable polyethylene terephthalate (PET) plastic (#1) and high-density polyethylene (HDPE) plastic (#2), and the reality is that many industries—including the beverage, fiber,

thermoform packaging, and strapping industries—have existing contracts with recyclers to obtain that recycled content.

Among all the items that get placed in recycle bins or taken to drop-off centers, an estimated 99 percent of all PET plastic bottles get recycled. Post-consumer PET and HDPE plastics are in huge demand by industries because they want to use that recycled plastic to make more products. Many bottled water companies use recycled PET (rPET) and recycled HDPE (rHDPE) plastic to make new bottles, which reduces the need for virgin plastic.

If anything, there is a shortage of recycled content available to meet the demand, especially for PET, due to enacted recycled content mandates and goals voluntarily established by bottled water producers and other companies. That's why more consumer education is necessary to help increase recycling rates for plastic. Below are more plastic recycling facts:

- PET and HDPE plastics are the plastics most recognized by consumers as being recyclable, and they are the most recycled plastics in the world. Interestingly, bottled water drinkers using curbside recycling programs recycle their containers at a higher rate than people consuming other drinks. Of all PET containers recycled through curbside collection systems, bottled water containers make up approximately 55 percent. That compares to soda containers, which are 15 percent (source: NAPCOR).
- For many years, bottled water companies have been increasing the amount of rPET in their containers. Even before recycled content mandates were put in place, many bottled water companies embraced using rPET packaging, offering their products in containers that are made of 50, 75, or even 100 percent rPET. Beverage Marketing Corporation reports that, for those bottled water companies that use rPET, the average rPET content went from 3.3 to 18.2 percent between 2008 and 2017—a 452 percent increase.
- It is also noteworthy to mention that, between 2000 and 2014, the average weight of a 16.9 ounce single-serve PET bottled water container reduced by 51 percent, according to the Beverage Marketing Corporation. Those lightweighting efforts by the bottled water industry saved 6.2 billion pounds of PET resin during that time period. Research published in 2021 on the environmental impact of beverage containers of various packaging materials (PET plastic, aluminum cans, paper cartons, and glass bottles), reports that the average weight of a PET bottled water container is now even lower: 8.3 grams (with PET soda bottles weighing, on average, 22.2 grams). Soft drinks and other sugary beverages need thicker plastic containers due to their carbonation and/or bottling processes.

The economics of drink containers is complicated. Thus, it's imperative that reputable media organizations such as Forbes, with its huge readership, present clear, accurate, and factual information to readers—information that encourages, not discourages, consumers from recycling. While Mr. Brannon notes that the shelf-stable carton, with its

three different packaging materials (paper, plastic, and aluminum), is difficult to recycle, he neither notes how easy it is to recycle plastic beverage containers nor comments on the No.1 issue identified by recycling facilities: contamination.

Reducing contamination of recycled materials is essential to making any program valuable to everyone within the recycling stream. IBWA recommends focusing on the critical importance of providing consumer education on recycling, which can help the public learn how to identify what packaging can be recycled and provide information about the proper disposal of packaging to help ensure that all recyclable materials are recycled and reused. An increase in consumer access to, and participation in, convenient recycling options will help improve U.S. recycling rates.

In addition, misleading consumers about the recyclability of plastic containers, especially plastic bottled water containers, and falsely stating that plastic recycled content is not in demand could deter consumers from drinking the healthiest packaged beverage on the shelf: bottled water. In 2020, for the fifth year in a row, bottled water outsold carbonated soft drinks (by volume) and retained its title as America's favorite packaged beverage. Americans are making great efforts to live a better lifestyle by choosing healthier foods and beverages, and drinking water—tap, bottled, or filtered—should be encouraged. With the high rates of obesity, diabetes, and heart disease in our on-the-go society, bottled water provides a safe, healthy, convenient beverage choice. Discouraging people from choosing this healthy drink option—while also discouraging them from recycling—is not in the public interest.

Sincerely,

A handwritten signature in black ink that reads "Joe Doss". The signature is written in a cursive style with a large, looping initial "J".

Joseph K. Doss
President and CEO
International Bottled Water Association