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Bottled Disaster

Alex Arneson
arnesonalex@gmail.com

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Alex Arneson
arnesonalex@gmail.com

Bottled Disaster

What commodity is available to nearly everyone in the United States and is practically free, yet is sold in stores at anywhere from 500 to 5,000 times the cost? The answer is very simple, water. In the United States, tap water costs, on average, are about two cents per ten gallons; this equates to around 1,000 gallons for two dollars. And in a convenience store, bottled water costs anywhere from 99 cents to two dollars for 20 fluid ounces to one-liter of water. How is this possible?

While the price of tap water includes costs for treatment, equipment, and labor, bottled water prices are representative of manufacturing, production, and transportation though more often than not, we are really paying for convenience, coldness, and brand-labels. Many bottled water producers merely filter tap water and ship it out claiming they've done something worthy of a premium price. Other than the percentage of that goes to the retailer, the price of bottled water is largely profit for the producing company. Despite this, Americans spend over 15 billion dollars a year on bottled water.

The energy and resources it takes to produce these bottles of water is staggering. First off, for most filtration methods, the input of water is greater than the output. In some cases, three gallons of water are needed to make one single gallon of pure water. Of course, fossil fuels are used in this industry just as in practically every other. (PET) plastic is used in the production of water bottles and is typically made from natural gas and petroleum. According to the plastics

manufacturing company, around 3.4 megajoules of energy is needed to produce a one-liter plastic bottle, cap, and packaging. Considering Americans bought a total of 31.2 billion liters of water in 2006, more than 106 billion megajoules were needed just to produce the necessary bottles; that's equal to over 17 million barrels of oil (each barrel is equal to about 6,000 megajoules). What was the outcome of those millions of barrels? 900,000 tons of (PET) plastic and 2.5 million tons of CO₂ released into the atmosphere. The scariest part is that this doesn't even account for oil used in relationship with transportation of the bottles (Pacific Institute, 2006).

Consider this the next time you're looking in the glass door at all the brands and sizes of bottled water: "The Pacific Institute estimates that the total amount of energy embedded in our use of bottled water can be as high as the equivalent of filling a plastic bottle one quarter full with oil."

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