The irony of "eco-friendly" products

Are we really helping the planet?

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With the growing awareness around the impact of plastic waste on our environment, many consumers have become sensitive to the environmental impact of their shopping decisions. Consequently, as people are finding ways to reduce their use of plastic, various alternatives have emerged. In this paper, we will talk about some of the most popular and widely accessible "eco-friendly products" in the market and discuss why they may not be as friendly and harmless as advertised.

Cotton Tote Bags. A 2021 news article by Grace Cook published in the New York Times raised the issue of the "Cotton Tote Crisis". She stated that cotton bags have become a means for brands, retailers and supermarkets to telegraph a planet-friendly mind-set — or, at least, to show that the companies are aware of the overuse of plastic in packaging. However, this move may have created a new problem.

According to a 2018 study by the Ministry of Environment and Food of Denmark, organic and conventional cotton totes needs to be used around 20,000 and 7,100 times, respectively, to offset their overall impact of production. This equates to daily use of just one organic tote bag for 54 years and one conventional tote bag for 19 years.

As I checked our house for tote bags our family has accumulated throughout the years, I found at least 20. This means that in order to offset the production impact of 20 totes, I have to live for around 380 to 1,080 years and religiously use one bag each day which is clearly not possible.

Stainless Steel Straws. The movement to ban plastic straws became popular after a video of a turtle who had a plastic straw stuck up its nostrils went social media viral in 2015. With people veering away from single-use plastic straws, metal straws became one of its popular substitute. Metal straws are typically made from durable stainless steel and are reusable which makes it popular for consumers.

However, according to the 2018 Humboldt State University study, one metal straw actually requires 2420 kJ of energy for its materials, transport and disposal and releases 217g of carbon dioxide. In contrast, one plastic straw only uses 27.2 kJ of energy and 1.46g of carbon dioxide. This implies that the energy used to produce a single metal straw is equivalent to the energy used to produce 90 plastic straws. Based on their carbon emissions, producing one metal straw is equivalent to producing 150 plastic straws. To break-even the embedded energy and carbon dioxide in the metal straw, it has to be reused 102 times and 149 times respectively. (Grafman & Adler, 2018)

Paper alternatives. As someone who owns many of the "eco-friendly" reusable products (i.e., tote bags, metal straws, and silicone coffee cup), I am guilty of forgetting to bring them whenever I go outside which defeats

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their purpose. And with no choice left, it is easy to reach for the go-to plastic products or opt for the disposable paper alternatives (e.g. paper bags, straws, and cups) which are widely used by many companies. Perhaps you might say that this is a no-brainer decision as paper is obviously better than plastic. Although this might be true, the notion that paper is good for the environment is debatable.

Paper products are made from trees which may seem like a good choice since they're renewable resources. However, they're also incredibly valuable as they absorb carbon dioxide emissions, and ironically, the subsequent manufacturing of paper products produces greenhouse gases.

According to Bell and Cave (2011), it takes more than four times as much energy to manufacture a paper bag than a plastic one. The majority of paper bags are made by heating wood chips under pressure at high temperatures in a chemical solution. Subsequently, the use of these toxic chemicals contributes to both air pollution, and water pollution.

GreenMatch Co UK (2015) also raised that 16 billion paper cups are used for coffee every single year, which leads to 6.5 million trees cut down, 4 billion gallons of water, and enough energy to power 54,000 homes for a year going to waste.

Seeing the adverse effects these 'greener' options have on the environment, it does seem that our pro-environmental initiatives may not be as harmless as we thought. Going eco-friendly is not as simple as it seems. How any item is being generated, manufactured, and delivered may have detrimental impacts to the planet and the benefits may not even be enough to compensate for the losses.

I find it quite ironic that "green" consumerism is telling us to 'buy more' products in order to 'reduce waste'. As consumers, perhaps it is time for us to stop and think before jumping on the bandwagon and realize that maybe the "less is more" approach is the best way to live sustainably.

Perhaps it is not the materials we use that make us eco-friendly, but rather, it's how we use them. At the end of the day, it's our sustainable behavior that counts and not how many environmentally-safe products we own. (Ong, 2018)

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