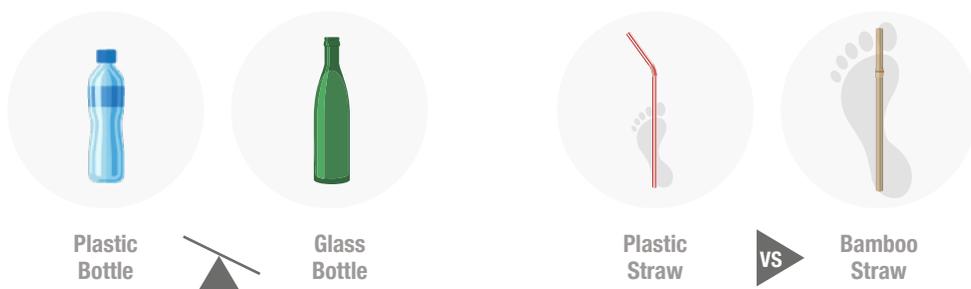


Single-Use vs. Reusable: The Truth About Sustainability

Reusable alternatives to single-use plastic products are touted for their environmental benefits, but in reality, **reusables can be more environmentally harmful**. Single-use plastic options are often **more sustainable** than reusables because they use less water, less material and less energy to produce and transport.

A [2021 study](#) comparing specific everyday single-use options to their reusable counterparts found **the only reusable option that was able to outperform single-use alternatives was a ceramic coffee cup**.

All other common single-use products, including straws, bags and wrappings, outperformed their reusable counterparts. Despite being touted as environmentally friendly, reusable options require continuous washing that waste more water over time. Comparatively, the **production of plastic items uses less water and energy, and yields products that can be reused many times**, outliving intended single-use.



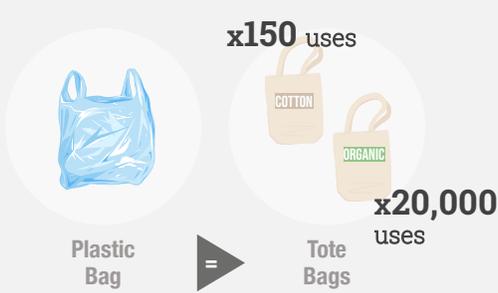
FACT:
Substituting glass for all plastic bottles in the world would create the same emissions as building **22 coal power plants**.

Plastic bottles weigh only **19 grams** compared to glass bottles' average weight range of 190 to 250 grams.

Producing bamboo straws generates such a **significant carbon footprint**, no amount of use can offset emissions compared to that of a plastic straw.

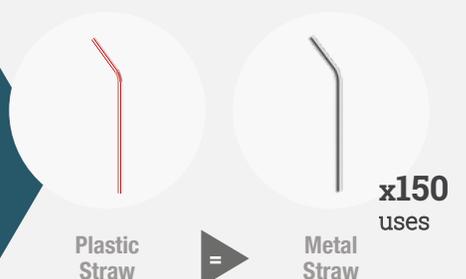
In a 2020 study, [Five Misperceptions Surrounding the Environmental Impacts of Single-Use Plastic](#), University of Michigan Professor Shelie Miller found that **the environmental impact of reusable items are often contingent on consumers reusing the item many times over a long lifespan to offset the high environmental costs of production**.

These findings are found to be true across many types of single-use plastic items like [bags](#), [straws](#) and [packaging](#).



Organic cotton totes have to be reused over **20,000 times**—that's every day for 55 years—to offset the environmental costs of production.

FACT:
Durable and flexible plastic straws are a **crucial tool** for those with disabilities, while alternatives like metal pose safety risks.

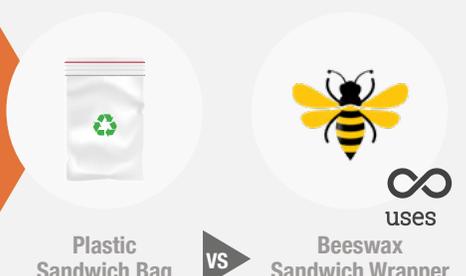


Metal straws must be used **over 150 times** to have the equivalent per-use emissions of a plastic straw that is only used once.



Paper bags have to be reused **eight times** to offset their environmental impact to equal plastics bags' because of the [paper pulp](#) used in production.

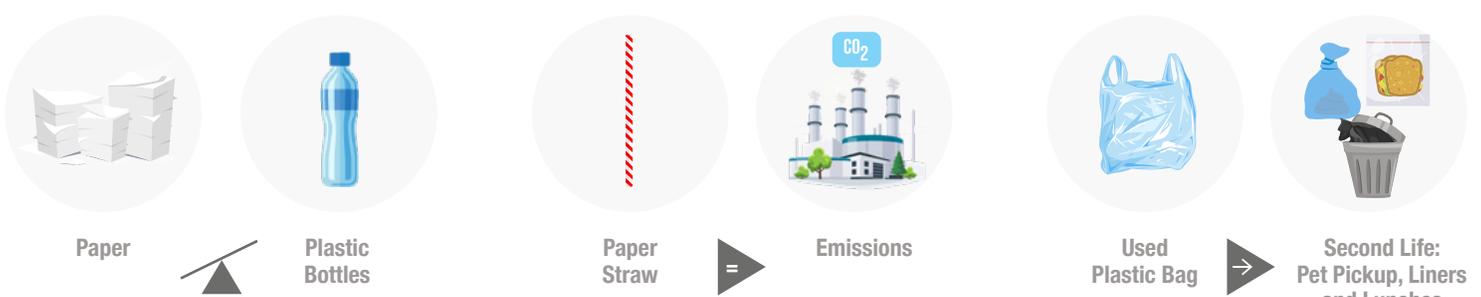
FACT:
Despite being touted as environmentally friendly, **reusable options often require continuous washing that wastes more water over time**.



Unlike [recyclable plastic containers](#), **beeswax wraps never offset their carbon footprint** due to the environmental impacts associated with repeated manual washing.

In addition to **reduced water and energy use during production**, plastic products can be reused for different purposes, outliving their intended life and lowering their carbon footprint.

Plastic products can also be recycled both mechanically and via advanced recycling methods – keeping waste out of the environment and in the circular economy.



It takes **91% less energy** to recycle one pound of plastic than it takes to recycle one pound of paper.

Paper straws cannot be recycled and have a higher global warming potential than plastics.

Despite their single-use title, plastic bags are **frequently reused** for other purposes.