

## Highlights

- Together, reuse for onsite dining and in take-out and delivery is transforming the throw-away model to build thriving reuse economies that reduce environmental impacts and costs for business.
- Reusable food service ware beats single-use alternatives through every environmental measure
- Making the switch from single-use to reuse for on-site dining always ends up saving money - 100% of the time.
- Reuse services create infrastructure and jobs in the community that cannot be outsourced.

## Fact Sheet:

# Reuse Wins

It's better for the planet and saves money

For food businesses, making the switch from disposable foodware to reusables for on-site dining always ends up saving money. This happens 100% of the time – even when accounting for the cost of purchasing and washing reusable foodware.

In addition, take-out and delivery can be disposable-free too. Innovative businesses are offering systems that provide, collect, wash and restock reusable food-service ware.

Together, reuse for onsite dining and in take-out and delivery is transforming the throw-away model to build thriving local reuse economies that reduce both environmental impacts and costs for business.



## Today's "One-Way, Throw-Away" Economy

Nearly **1 trillion** individual pieces of disposable foodware and packaging are used by U.S. restaurants and food service businesses.

**\$24 billion** spent by restaurants and food-service businesses on disposables each year.

Nearly **9 million tons** equals the total weight of all the disposables used – equivalent to the weight of 25 Empire State buildings.

**\$6 billion** spent by businesses and city governments on solid waste management costs attributable to disposable food packaging.

Roughly **20 billion** pieces of litter are from disposable food-service packaging.

*Adapted from Upstream (2021) Reuse Wins: The environmental, economic, and business case for transitioning from single-use to reuse in food service.*

## Tomorrow's New Reuse Economy

**86% of disposables avoided** through 100% of on-site dining being disposable-free and new reuse services for take-out and delivery expanded to all US cities and urban areas.

**841 million** disposable food packaging items avoided, resulting in **7.5 million tons** of waste reduced.

**\$5 billion** saved by food service businesses from no longer procuring disposables for on-site dining.

**\$5.1 billion** saved by businesses and city governments on solid waste management costs attributable to disposable food packaging.

**17 billion** pieces of litter prevented through new reuse systems.

**193,000** local jobs created in the new reuse economy for food service.



## Key environmental take-aways



**Reusable food serviceware beats single-use alternatives through every environmental measure** (climate, water, land use, waste, pollution, etc.). Reusables always hit a break-even point where they outperform the disposables, and the benefits to the environment accrue with each additional use past that point.

The break even points range from 2-122 times. With materials like steel, glass and ceramics, they can be used thousands of times.



**Reuse protects the climate. Over their life-cycle, reusables have lower greenhouse gas emissions compared to disposable alternatives.** For example, the CO<sub>2</sub> impacts of disposable paper, plastic, and bioplastics are 3 to 10 times greater than reusable ceramic, stainless steel and glass cups.



**Water consumption for washing reusables is minimal when using commercial dishwashers that are highly efficient.** The disposables have a greater water consumption footprint due to all the upstream production impacts than reusables.

## Key take-aways for restaurants and food-service providers



**Making the switch from single-use to reuse for on-site dining always ends up saving money – 100% of the time.** And that's after accounting for any capital costs for purchasing or leasing additional dishwasher capacity and any added labor costs.



**Reusables increase customer and employee satisfaction,** generate valuable customer data, build brand loyalty and create opportunities for entrepreneurs and investors to create and scale the new reuse economy.



**Nearly all restaurants that have transitioned to reusables have done it without changing their dishwashing set-up** or increasing labor costs.

## Key take-aways for community leaders and government

### Reuse services create infrastructure and jobs in the community that cannot be outsourced.

Disposables create jobs in other locales where natural resources are mined, and products are manufactured and disposed.

### Reuse infrastructure helps to achieve zero waste and climate goals.

### Reusable foodware reduces litter and waste management costs

for local businesses and government and eliminates litter on streets and in local waterways.



## Reuse wins for the planet

### Reuse beats single-use on every environmental measure once the reusables are washed and used past the “break-even point.”

The break-even point is the number of times a reusable product needs to be used in order to exceed the environmental benefits of a comparable amount of disposables. The more a reusable product or package is washed and reused past the break-even point, the more environmental benefits accumulate.

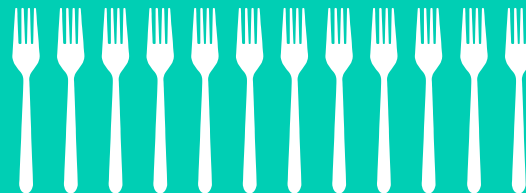
### The number of uses needed for reusables to win:

- ➔ **Cups.** Between 2 and 122 times, depending on the materials.
- ➔ **Plates and clamshells.** Between 3 and 50 uses, depending on materials.
- ➔ **Utensils.** More than 2.

After only two washes stainless steel cutlery breaks even with disposable cutlery for environmental impacts.

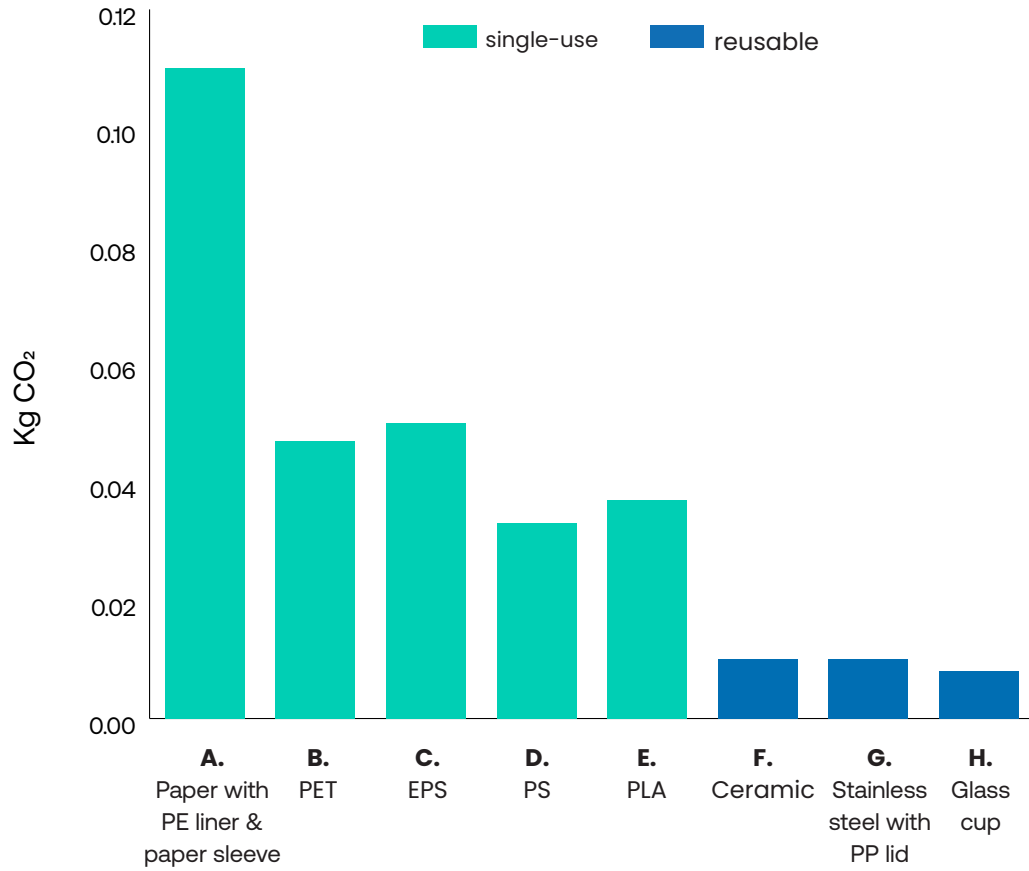


After that, every use increases the environmental benefits.



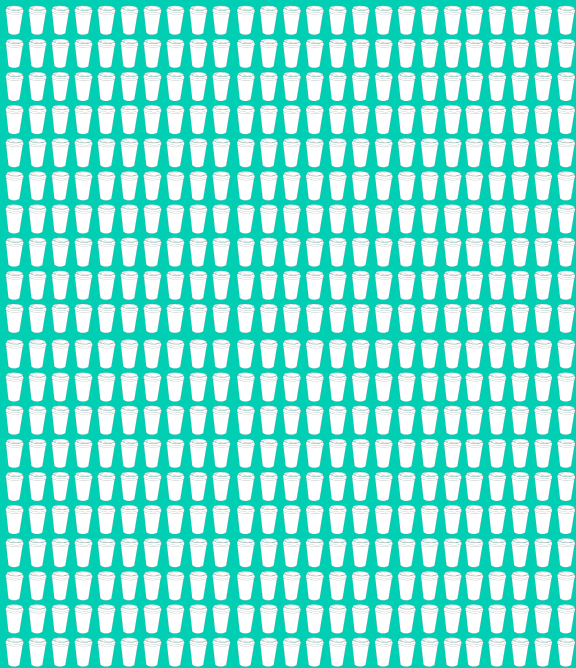
**Reuse protects the climate.** Reusables dramatically outperform all disposables in terms of climate pollution. The CO<sub>2</sub> impacts of disposables occur during extraction of resources and manufacturing, while reuse impacts are highest during usage (dishwashing). With increasing efficiency of dishwashers, reusables have become more climate friendly.

### CO<sub>2</sub> Impacts of Various Cups

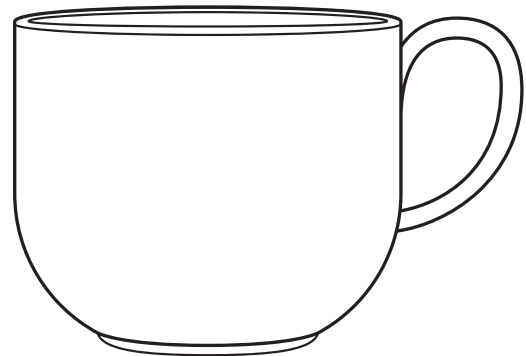


**Reuse saves water.** When comparing the water use associated with manufacturing and using disposables compared to washing reusables, reuse wins every time. Similar to GHG emissions, the largest water use occurs during resource extraction and manufacturing for disposable products and for reusables the biggest water consumption comes from washing. Single-use cups, for example, require significantly more water over their lifetime than ceramic mugs.

**Using 500 paper cups consumes nearly 370 gallons water**



**Using and washing one ceramic cup 500 times consumes only 53 gallons of water.**



## Reuse is better for business

**Savings.** In 166 cases of providing technical assistance to California food businesses, ReThink Disposable helped businesses save between \$3,000 and \$22,000 per year and eliminate 110,000 to 225,000 packaging items which eliminated 1,300-2,200 lbs. of waste per business.

### Average savings for a small business:



**\$3000 - \$22,000  
cost savings**



**110,000 to 225,000  
packaging items  
eliminated**



**1,300-2,200 lbs. of  
waste eliminated**



**Retrofits or external dishwashing services can help solve dishwashing challenges**

**Dishwashing.** Generally, concerns about added dishwashing and labor costs don't add up in practice. Numerous case studies demonstrate that most businesses can transition to reuse without increased labor or need to expand dishwashing capacity. The majority of fast casual restaurants have installed dishwashers.

Dishwashing is a serious challenge in the typical fast food restaurant, where all packaging is disposable, no commercial dishwasher is installed, and high volumes of customers are served. But retrofits or external dishwashing services can help solve the problem. Policies should be enacted to ensure that future fast food businesses are designed for reusable food service.