

Highlights

- 100% of the businesses that shift from single-use to reuse for onsite dining save money.
- Any cost incurred to individual restaurants by the necessity of additional labor or washing machinery is offset by the savings on foodware, as well as the reduced waste disposal cost.
- Even businesses that do invest in increased dishwashing capacity achieve significant savings.



Fact Sheet: Reuse saves restaurants money

Benefits of reusables outweigh the costs

American food service establishments spend \$24 billion each year purchasing nearly one trillion pieces of disposable foodware. This generates nearly 9 million tons of waste, which costs businesses and local governments \$6 billion per year to manage.

Switching to reusables for onsite dining everywhere and to reusables for take-out in urban areas can reduce disposables by 86% and would result in \$5 billion in cost savings each year for food service operators. An additional \$5.1 billion would be saved by businesses and local governments in avoided waste management costs.¹

ReThink Disposable demonstrates that a small business can save an average of \$3,000 to \$22,000 annually by incorporating some reusable serviceware into operations.² These savings are accompanied by a reduction in greenhouse gas emissions, water use, pollution, and waste throughout the life-cycle of products. Reusable food products and packaging produce up to 85% less carbon than single-use foodware.³

Today's "one-way throw-away" food service model



Tomorrow's new reuse economy for food service



Cost comparison of reusable and disposable food serviceware products

The price of a single reusable product is compared to the number of disposable products that are eliminated by the reusable product.

 Reusable	Disposable	
1 ceramic plate, white, 9 in. \$1.39	1,000 plates Paper with plastic Paper Compostable Styrofoam	\$12.74 \$21.97 \$77.90 \$36.86
1 metal fork \$0.12 1 metal knife \$0.29 1 metal spoon \$0.10	1,000 flatware Plastic fork Plastic knife Plastic spoon Set of 3	\$6.29 \$6.29 \$6.29 \$32.98
1 ceramic mug, 12 oz. \$2.95	500 hot cups Paper with plastic Compostable	\$26.65 \$38.48
1 glass cup, 12 oz. \$1.54	1,000 cold cups Plastic Compostable	\$47.70 \$96.94
1 plastic basket, red \$0.27	100 baskets Clay-coated paper	\$1.21

Source: webstaurant.com

Number of uses for reusable products

Life-cycle analyses were used to determine the number of uses and wash cycles for reusable products.



		Cost of one meal's foodware		
	Order	Reusable	Disposable	
	Coffee Shop cup and plate	<\$0.01	\$0.06	
	Fast Food plate, basket, fork, knife, cold cup	<\$0.01	\$0.06	
	Diner Meal fork, knife, spoon, plate, cold cup, hot cup, basket	\$0.01	\$0.14	

Dishwashing and Labor Requirements to Transition to Reuse

The city of Alameda, California worked with Clean Water Fund's *ReThink Disposable* program to convert 80 of their restaurants to reusable foodware. Most businesses made the switch without adding dishwashing equipment or staff. Only three of these businesses needed to expand their dishwashing capacity. They rented dishwashers and added additional staff. **Using reusable products saved Alameda businesses over \$130,000 per year and reduced annual waste by 64,000 lbs.**

Hang Ten Boiler

Used Existing Dishwashing Capacity, Added Labor

The Hang Ten Boiler, a Hawaiian seafood restaurant in Alameda, CA, converted their serviceware to reusable products for their 50 seats of on-site dining. There was a one-time cost of \$2,000 to buy the reusable plates, bowls, cups, and utensils and an average \$12,000 to wash and replace broken or lost serviceware. They use their mechanized dishwasher and hired a part-time dishwasher who works 20 hours a week. Despite these costs, the Hang Ten Boiler nets an annual \$4,000 in savings from reduced costs of waste management and purchasing of single-use serviceware.⁸





Crispian Bakery

Added Dishwashing Capacity, No Labor Added

Crispian Bakery serves coffee and pastry for up to ten on-site diners. The cafe switched to using reusable serviceware for their on-site customers and instituted a discount for those who brought their own mugs for takeout. They now rent a dishwasher for \$75 a month, after an installation cost of \$500. Their water bill only increased by an average \$30 a month. By switching to reusable plates, cups, and silverware, the Crispian Bakery saves a net \$1,700 annually.

University of San Francisco's Market Cafe

Existing Dishwashing Capacity, No Labor Added

This university dining hall serves three meals a day with a daily average of 5,000 transactions. Before switching to reusable products, they spent over \$340,000 annually on disposable foodware. There was an initial cost of \$5,000 to buy the necessary products, and an annual cost of \$27,000 in upkeep. They already had dishwashing capabilities, and the cost of upkeep covers additional washing supplies and replacing foodware when necessary. The Market Cafe achieved a net annual savings of over \$150,000 by using reusable products.⁹





Endnotes

1 Upstream (June 2021), <u>Reuse Wins: The environmental, economic and business case for transitioning from single-use</u> to reuse in food service.

2 www.rethinkdisposable.org

3 Zero Waste Europe (December 2020) <u>ReLoop Report: Reusable vs Single-use Packaging: A Review of Environmental Impact</u>.

4 Sheehan, B. (2017) Literature Review and Inventory: Greenhouse Gas Impacts of Disposable vs. Reusable Foodservice Products, Clean Water Fund. <u>www.rethinkdisposable.org</u>

5 Pro.mo/Unionplast (2015) Comparative Life Cycle Assessment Study of Tableware for Alimentary Use, Milan, Italy

6 Woods, L., & Bakshi, B. R. (2014). Reusable vs. disposable cups revisited guidance in life cycle comparisons addressing scenario, model, and parameter uncertainties for the U.S. consumer. Int J Life Cycle Assess 19(4), 931-940.

7 Pro.mo/Unionplast (2015) Comparative Life Cycle Assessment Study of Tableware for Alimentary Use, Milan, Italy

8 "Case Studies, Download Resources." <u>Resources | ReThink Disposable</u>.9 ibid.