



# HOLD the PLASTIC, PLEASE

## A RESTAURANT'S GUIDE TO REDUCING PLASTIC

July 2022

## **ACKNOWLEDGEMENTS**

Thanks to the Tortuga Charitable Foundation for their vital support for this publication.

This document draws on valuable materials and insights provided by our allies at **Upstream**, **Shedd Aquarium**, **Rethink Disposable**, the **Surfrider Foundation**, **Oceanic Global**, **Plastic Free Restaurants**, and **PlasticScore**.

Megan J. Wolff, Ph.D., MPH, is the author and researcher of this guide.

Judith Enck, Jennifer Congdon, Alexis Goldsmith, and Eve Fox contributed vital editing.

We are especially grateful to Beyond Plastics volunteer, **Rebekah Creshkoff**, whose proofreading expertise is unparalleled, and to our exceptionally talented intern, **Isabel Harper**. Thanks are due as well to **Melissa** and **Kayla Short**.

Any mistakes contained herein are, of course, our own.

Design: Kat Hughes

## TABLE of CONTENTS

INTRODUCTION	
Quick Start Suggestions	2
The Problem with Plastic — At a Glance	4
Restaurants are Leaders	5
ALL YOU CAN DO, AND WHY	6
Reducing Plastic Saves Money	7
Reducing Plastic Appeals to Customers	8
Reducing Plastic is the Future	9
A Note on COVID-19	10
WHERE TO BEGIN?	12
Step 1: Perform a Plastic Audit	13
Step 2: Involve Your Staff	15
Step 3: Involve Your Customers	18
READY, SET, MAKE THE SWITCH!	20
Best Practices: Reusable Dishware	21
In-House Serviceware	21
Back-of-House	23
Purchasing	24
Dishwashing	25
Bring Your Own	26
Takeout/To-Go	28
Second Best Practices: "Sustainable" Disposables	32
TELL THE WORLD	36
CASE STUDIES	39
La Playa Mexican Grill, Port Aransas, Texas	40
Organic Krush Lifestyle Eatery, New York, Connecticut, Virginia	42
ENDNOTES	44

## INTRODUCTION

# There isn't a place on earth untouched by plastic,

and its fingerprints are turning out to be grubbier than we imagined. From litter on land to debris that is washed into rivers and the ocean, plastic is choking our environment



and harming our world. Items such as plastic bags and lighters have turned up in the stomachs of fish, whales, camels, goats, and nearly every species of seabird on earth. Tiny fragments called microplastics and nanoplastics are present in the air, water, soil, and even human blood. The sheer quantity of plastic waste has turned what was once considered a miracle material into a nightmare scourge.

## What are we going to do?

The problem of plastic pollution needs to be addressed by every sector. **Restaurants are poised to be a unique and significant part of the solution**. Forty-four percent of plastic litter in the ocean is composed of takeout food and drink containers. Consumers who are aware of this and other impacts feel stuck using so much plastic, and want brands and businesses to do more. Already, many eateries are choosing to either become plastic-free, reduce their use of plastic, or eliminate single-use disposable items. In doing so, these restaurants have demonstrated that they can decrease costs, grow their clientele, increase revenue, and make a real and vital contribution to the health of the environment. Their actions send an important message to consumers: the future is *not* in plastics.

The potential is real, and the benefits to restaurants' bottom lines and customer satisfaction are already proven. Beyond Plastics urges all restaurants to join the growing movement to reduce the use of plastics and end plastic pollution. And we are here to help! In addition to our online resources, we have created this guide to serve as a useful handbook for how to lessen your use of plastics while improving your relationship with your customers and the earth, and sometimes even saving money.

## **Quick Start Suggestions**



## Perform a Plastic Audit

We recommend beginning your plastic-reduction initiative by conducting an audit of plastic consumption throughout the restaurant—both back and front-of-house. How much plastic does the restaurant typically use? Which items are critical and which can be easily substituted?



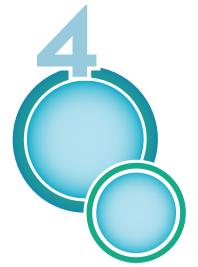
## **Involve Your Staff**

The strongest predictor of whether a restaurant's sustainability efforts will succeed is the buy-in of its staff. Educating employees and training them to communicate and carry through on the sustainability goals is key. We recommend implementing a strong staff orientation, designating a point person among the personnel, and creating an employee-led green team to give staff a sense of agency and ownership.



## **Involve Your Customers**

Letting patrons know what the business is doing, why it matters, and how they are helping themselves and others is critical to closing the loop. Create an elevator pitch describing goals and changes for staff to deliver when greeting patrons. Add signage describing the positive good you are doing by eliminating straws, etc. Use social media to spread the word about your actions and help customers do the same.



## Make the Switch Reusable Dishware

Reusables are the gold standard for reducing litter, fighting plastic pollution, and combating climate change, and we recommend them above all other options. They pay for themselves over time, and turn out to be less work than meets the eye, even accounting for the extra step of dishwashing.

In purchasing dishware, we suggest that you pick something durable—ideally not made out of plastic. The most efficient method of shopping may be to stay with the vendors you already work with. Should you decide to explore the market, several non-profit organizations devoted to reuse have developed excellent guides to help you make sound purchasing decisions. They are listed on **p. 24** of this guide.



## **Reusables for Take-Out**

If there is any single restaurant item that needs to be made reusable, it is takeout containers. Due to consumer demand, third-party vendors that supply, collect, clean, and redistribute takeout containers are becoming available all over the country. The cost of these services is competitive with using disposables, and patron satisfaction is high. You will find a list of existing services enumerated by city on **p. 30**.

Some restaurants choose to provide in-house systems by selling branded reusable containers directly to patrons in exchange for a 5-10% discount each time they are brought back. Others distribute them for a deposit of one or two dollars.



## Disposables as a Last Resort

Sometimes reuse is simply not an option, at which point it will be necessary to choose from among what can seem like a confusing array of disposables. We suggest avoiding conventional plastics, as they are made from chemicals and fossil fuels, and can be a risk to environmental and human health. When choosing other products, look for BPI certification, which confirms that items are truly compostable and contain fewer toxins. **The Biodegradable Products Institute** is a non-profit, science-driven organization that tests packaging and disposable products. It is the endorsement that most reliably describes whether a product is plastic-free, low in toxins, and capable of breaking down in the environment.



## Tell the World

Take advantage of listings, databases, seals—anything that lets restaurant-goers know that you have taken (and continue to take) steps to reduce plastic and safeguard the environment. Post signage inside your restaurant and on your menu and website. Utilize your social media accounts, alert the local media, and add yourself to the "plastic free" listings of non-profit organizations and commercial ordering apps. Now is your time to shine, so don't be shy about showing off your credentials as a green business.

## The **Problem** with **Plastic** — At a **Glance**



- Between 9 and 15 million metric tons of plastic enter the ocean every year, threatening the health and sustainability of marine ecosystems and wildlife. For restaurants that serve seafood, this is especially concerning.
- The vast majority of disposable tableware and to-go packaging is not recyclable. Plastic cutlery, cups, lids, straws, stirrers, and clamshells are not recyclable in any municipal system. Polystyrene food containers, in particular, are not recyclable.
- Even beverage containers and other items with the "chasing arrows" symbol are rarely recycled. Less than 6% of plastic is effectively recycled in the United States. The rest is landfilled, incinerated, or winds up littered in the environment.8
- Plastics are made from petrochemicals, and emissions from plastic production are fueling climate change and damaging local air quality in communities where plastics are made.

- Plastic production, use, and disposal in the US contributed 232 million tons of greenhouse gas emissions in 2020 equivalent to 116 average coal-fired power plants.9
- Plastics contain hundreds of added chemicals, many of which are toxic and may leach into food. The plasticizers, flame retardants, heat stabilizers, coatings, dyes, and other additives that give plastics their properties include more than 2,400 "substances of concern." These are associated with cancers, birth defects, and chronic conditions including diabetes, obesity, autoimmune disorders, ADHD, autism spectrum disorders, and declining fertility.<sup>10</sup>
- Plastics do not biodegrade. Instead, they fragment into tiny particles called microplastics that diffuse into all corners of the food chain. Microplastics are present in many foodstuffs, including water, beer, seafood, and even honey. Smaller particles, known as nanoplastics, are present in soil and have been observed to lower crop yields and damage microorganisms in the soil—a problem for food production. Nanoplastics can cross the human placenta into the developing fetus and have been detected in human blood.

## Restaurants are Leaders

**Food is one of the foundations of culture**. As sites where people gather, dine, and enjoy the comfort and satisfaction of food, restaurants have a strong and positive position in the public mind. People remember what occurs there, and they remember the details and contentment associated with the food. As such, **restaurants can serve as role models**. The lifestyle behaviors that they promote are warmly received, and drive a ripple effect. Diners develop new habits and come to expect new products as restaurants showcase them. They are powerful drivers of innovation and social change.

In addition, the enormous purchasing power of the food service industry stands to influence the decisions of foodware and packaging manufacturers. By ordering more sustainable products, dining establishments transmit a strong market signal that reusable and biodegradable items are the consumer preference. Suppliers change their offerings, and the market itself may shift to a more sustainable model. As some commentators have pointed out, plastic pollution is a design flaw that comes from using the wrong materials for short-lived products. The food service industry is in a powerful position to correct this flaw when individual establishments change their ordering habits.

The restaurant industry is a potent, dynamic site for leadership and change, with economic benefits for all involved. The choices of restaurateurs can go a long way in solving the plastic pollution crisis. It is a uniquely powerful sector!



## ALL YOU CAN DO, AND WHY



## **Reducing Plastic Saves Money**

This may seem counterintuitive. Plastic items are made to seem inexpensive, convenient, and durable to purchasers. Nevertheless, when costs are compared over time, switching to reusable dishware often pays for itself, frequently in as little as a few months. This is true even factoring in the expense of dishwashing.



Reuse saves money for several reasons. First, plastics manufacturers understand that the difficult margins that restaurant operators face makes them likely to choose systems that seem inexpensive and no-fuss. Plasticware is thus priced and shipped accordingly, in quantities that appear to enable simplicity and savings. But numerous studies by groups including <a href="Upstream">Upstream</a>, <a href="ReThink Disposable">ReThink Disposable</a>, <a href="Surfrider">Surfrider</a>, <a href="Oceanic Global (Blue Standard)</a>, and <a href="Plastic Free Restaurants">Plastic Free Restaurants</a> have demonstrated that this is an illusion. <a href="Reusable serviceware">Reusable serviceware</a> is inexpensive, and the longer it remains in use, the lower the cost per item becomes. <a href="Expenses that seem">Expenses that seem high at first drop precipitously over time</a>.

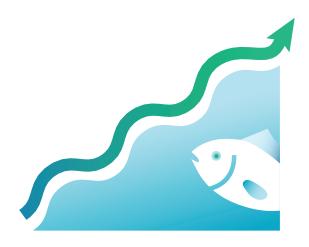
In addition, there are hidden costs associated with the use of disposable plastic that emerge in other areas of the business. Single-use items become instant trash, and add to the bulk of what haulers must be paid to cart away. Pieces that do not make it into the trash often appear in the recycling or compost bins of the restaurants who furnish them, contaminating the waste stream and requiring staff time to sort. More often, they wind up as litter in the immediate vicinity of the eatery. Litter on the premises is distasteful to customers and makes more work for the employees who must clean and dispose of it.

Reports by organizations devoted to the reduction of plastic waste have unanimously demonstrated cost savings for eateries. The public-interest non-profit group **Upstream** has worked with nearly 300 food service operators making the switch from single-use to reusable food serviceware, and reports that 100% of these businesses and institutional dining programs have saved money. Often these sums are quite high. Upstream's case studies show that savings for small businesses fall between \$3,000 and \$22,000,<sup>n</sup> and their findings are mirrored elsewhere. The data are abundant and the findings are robust: switching from disposable to reusable serviceware is a money-saving act.

Several online calculators are available for those who want to explore the potential savings for switching their dining establishment to reuse from disposables.

- Single Use to Reuse Savings Calculator by Upstream
- Foodware Calculator by ReThink Disposable

## Reducing Plastic Appeals to Customers



## Sustainability is here to stay.

Ask anyone in their teens. Social and market indicators demonstrate that consumer preference for environmentally sound options is growing, and that many customers are willing to pay more and go out of their way for "greener" choices. This includes the reduction of waste and the elimination of single-use plastics. A poll conducted in July 2021 found that three out of four people globally believe they should be banned altogether. Dining establishments that respond to this sentiment and meet this demand stand to grow their consumer base as well as their revenue.

Reducing plastic waste demonstrates a commitment to the community, which improves customer relations and boosts the loyalty of patrons. It also heightens consumer confidence. In addition to showing concern for the community and the environment, restaurants are displaying an extra level of care. Details matter. The thought required to "go green" suggests a high level of attention to consumers about the safety and quality of the food. The positive social effects are force multipliers; one begets another, and another.

Concern about the environment has become a value driver. A 2021 report in *Businesswire* noted that globally in the past five years, 85% of people have shifted their purchasing behavior towards buying more sustainable products, and that environmental integrity is rated as a deciding factor among 60% of consumers. Many of those polled were willing to pay more—up to 25% more, on average—a pattern that is especially apparent among millennials and their younger peers.<sup>13</sup>

As a result, businesses that take steps toward sustainability do better than those that don't,<sup>14</sup> a trend which analysts expect to continue. Sustainable products are poised to become the expectation rather than the exception, and when they do, restaurants that continue business as usual may have a harder time competing for customers. Those who follow the demand curve will thrive.

## **Reducing Plastics** is the **Future**

It is one thing to follow the demand curve. **Restaurants that stay ahead** of the curve stand to thrive and to protect their future earnings.

This is in part the power of reputation. As consumer demand continues to shift toward environmentally friendly options, more restaurants will implement "green" practices. Those restaurants already known for their sustainable practices will have a competitive edge over the late adopters. They will also be more nimble and better able to embrace new eco-friendly practices that emerge in market practice.

New laws that promote and require sustainable practices are on their way. Nine states

have adopted bans on disposable plastic bags in recent years, a move that has helped to motivate opposition to other items such plastic straws, stirrers, and polystyrene. California, New Jersey, Oregon, and Vermont have passed laws restricting plastic straws, as have over 110 towns and counties. Polystyrene bans are in effect in six states and dozens of localities. The city of Berkeley, California has passed an ordinance requiring reusable tableware at all dine-in restaurants, including even fast food outlets. The trickle of regulations is becoming a river, and is likely to become a national norm.

Legislation such as the Break Free From Plastic Pollution Act has been introduced in the U.S. Congress, and has over 100 prominent co-sponsors in the House and the Senate.

As of 2019, 27 countries had enacted bans on the production, import, sale, or use of various single-use plastics.<sup>17</sup>



Restaurants that make changes
now have an opportunity to set
their own timelines, and show
themselves to be industry
leaders. Those that wait may
find themselves struggling
to catch up, or even having
to pay fines. Given these
options, an ounce of plastic
pollution prevention is
worth a pound of cure.

## A Note on COVID-19

COVID-19 is highly transmissible, and is spread through exposure to respiratory droplets, but it does not survive well on surfaces and is not easily spread through contact with objects. This means that **reusable dishware that is sanitized using normal commercial processes is unlikely to be a source of transmission**. In fact, the CDC estimates that the risk of becoming infected with Covid through contact with a contaminated surface is less than 1 in 10,000. The plastics industry labored mightily to convince policy makers, health advisors, and food service workers that disposable packaging and single-use items would protect people from infection by Covid. Nevertheless, ordinary standards of commercial hygiene are sufficient to safeguard against the virus. On the contaminated surface is less than 1 in 10,000.

Naturally, other Covid precautions are still important, and for the safety and regard of diners it is critical to post and follow all health department rules. These vary from county to county, but most include the following basics:





**contamination:** Many regulations still warn against communal condiments. This is changing fast, but check with your local health department. Many regulations also advise caution against shared menus. Though laminated menus are easily sanitized (the virus is inactivated on any surface within one minute with the use of standard disinfectants<sup>21</sup>), many restaurants have switched to contactless digital menus. Touchless payment options will also reduce exposure to high-contact surfaces.



**Handwashing:** To prevent the spread of Covid, the CDC recommends washing hands with soap and water for at least 20 seconds.<sup>22</sup> According to the World Health Organization, handwashing provides more protection against Covid than disposable gloves.<sup>23</sup>



Disinfecting surfaces: Restaurants are required to follow strict health and safety guidelines for sanitizing surfaces and food service items to prevent the spread of pathogens such as salmonella. When followed properly, these standard guidelines are sufficient to eliminate the risk of transmission of Covid. Wiping down surfaces with disinfectant can physically remove coronavirus and other microbes, and it will also degrade the virus by damaging its external membrane.<sup>24</sup> For extra guidance, the Environmental Protection Agency has developed a list of approved disinfectants for Coronavirus.<sup>25</sup>



**Face Coverings:** COVID-19 is mainly spread through respiratory droplets from talking, coughing, or sneezing when people are in close proximity. Diners may not choose to wear masks, but staff who do so protect both themselves and patrons. According to the CDC, the odds of testing positive are reduced 56% with consistent use of a cloth mask, 66% with a surgical mask, and 83% with an N95 or KN95 respirator.

In sum, while a reliance on disposable serviceware has been positioned as a sensible safety measure during the pandemic, there is not, and never has been, scientific evidence to support this position. Studies of the virus demonstrated early in the pandemic that the coronavirus in fact survives longer on plastic than any other surface, <sup>26</sup> and that the level of heat required in commercial washers is more than sufficient to kill the pathogen. <sup>27</sup> Neither the CDC nor the World Health Organization ever recommended a switch from reusable to disposable dishware.

Refillable and reusable food and beverage containers are safe.



## WHERE TO BEGIN?



## Step 1: Perform a Plastic Audit

Solving a problem begins with understanding where you stand within it. We recommend beginning a plastic-reduction initiative by conducting an audit of plastic consumption throughout the restaurant—both back and front-of-house. How much plastic does your establishment use? Which items are critical and which can be easily substituted? Which items fall somewhere in between?

Online tools exist to help you do this, and they are easy to use. **The Blue Standard**, a project of **Oceanic Global**, hosts a **Plastic Checklist** on its website that will walk you through the most common single-use plastic items in the restaurant industry. Once you have identified your own usage, you will be able to better consider which items should be replaced or eliminated. If you would like help, or would prefer to have the audit done professionally, Blue Standard also offers **auditing consultations** as a part of its own verification (and listing) of environmentally sustainable businesses.

To stay on top of your plastic use, be sure to repeat the audit at least once a year. You can use the results to promote the sustainability of your business.



## A Note About Recyclables and Bio-Compostables

Although items may be marked with the iconic recycling chasing arrows or be certified as bio-based, compostable products, these designations do not ensure that they can be handled by local recyclers or compost operations.

Most towns and cities in the United States are capable of processing only items with plastic resin codes #1 and #2—and many of these items, such as plastic clamshells, are not recyclable.

Likewise, bio-compostable plastics can be difficult to process even under industrial conditions. Only 29% of full-scale food waste composting facilities in the United States are willing to accept them (see "A Word of Caution," **p. 33**)<sup>28</sup>

As part of your audit, verify that the recycling and composting facilities in your area accept your items and handle them properly.



## Step 2: Involve Your Staff

The strongest predictor of whether a restaurant's sustainability efforts will succeed is the buy-in of its staff. Engaged personnel are a restaurant's most important asset. When morale is high, operations run more smoothly, patrons receive better service, and the establishment's performance soars. In this respect, a staff that supports the mission of reducing plastic and understands the steps needed to do so is essential to the initiative's success.

Given the busy pace and high turnover of many restaurants, educating employees about sustainability goals and training them to fulfill them may seem like a tall order. But the experience of many eateries that have moved away from plastics demonstrates the opposite.

Like patrons, staff members
may already be thinking about
environmental issues and be
interested in supporting green
initiatives. They may be drawn to an
employer who shares these concerns, and
may be more likely to show dedication to
the business. Potential employees who
are not yet aware of or interested in the
issue may themselves respond strongly
to information about it. When faced with
the reality of plastic pollution, there are
very few plastic pollution deniers. More
often than not, those who learn about the
issue show an interest in taking action.<sup>29</sup>

Strong organization is the key to engaging an enthusiastic staff. Management should host a well-organized orientation on the issue of plastic pollution and clearly describe what steps the restaurant is taking to combat it. Roles should be plainly described, so that all participants are clear on what the sustainability protocols are and who is responsible for each aspect.



It is useful to have at least one primary point of contact who oversees the plastic reduction efforts and coordinates all staff and departments. For larger establishments, an internally-led employee Green Team can also be helpful. Those who join it are more likely to have a sense of ownership, and retain enthusiasm for the project. Either the point person or the Green Team can take on the project of explaining sustainability protocols to new employees as they are hired. They should also dedicate a portion of shift or staff meetings to going over the initiative. How much plastic has the restaurant reduced? What is the feedback from customers? Regularly assessing impacts can be key to maintaining momentum.

Managers find that extra signage helps keep employees engaged. Back-of-house reminder cards that prompt personnel—"Are you packing sustainably?" "Single-use items by request only"—serve as useful prods in a busy kitchen.

Lastly, equip your personnel to be ambassadors for the program. Social change, like good workflow, hinges on friendly communication as much as it does on structure. Make sure that employees are ready and willing to talk to customers about the changes that have been made, and make it easy for them to do so. Offer them scripts or language for an elevator pitch that communicates the plastic-free initiative to customers. **Shedd Aquarium**, whose **Let's Shedd Plastic** program has helped 165 restaurants grow their relationships with customers while going plastic-free, offers an online **Guide for Communicating with Customers** that contains suggestions. Samples include:

- "Our restaurant is committed to our environment and has stopped using single-use plastics to protect the world's ocean."
- "I would be happy to get you a straw. I didn't bring one sooner because we have changed to an 'only if requested' policy, in an effort to reduce our restaurant's single-use plastic consumption and to become more sustainable."

Help your staff use consistent and positive messaging that avoids shaming customers. Most servers are already old hands at this, but provide the templates, just in case.



## **Staff Orientation**

The restaurant team needs to know and understand why the business is undertaking measures to reduce plastic or go plastic-free. Thus, it is important to provide a succinct and effective orientation that leaves employees both informed and empowered. Once again, restaurants need not reinvent the wheel, as there are a great many resources that do an excellent job of conveying the message.

Several organizations have developed excellent fact sheets, which can be downloaded and distributed among team members to provide basic orientation. Here are a few that we recommend:

- https://www.beyondplastics.org/fact-sheets/plastic-straws
- https://www.beyondplastics.org/fact-sheets/polystyrene
- https://www.beyondplastics.org/fact-sheets/plasticbags

Documentaries are also powerful motivators, and tell the story in compelling terms. The PBS Frontline episode, "Plastic Wars" (53 minutes) succinctly describes the crisis and is free on YouTube. For a slightly deeper dive, try "The Story of Plastic" (1 hour, 23 minutes), an Emmy Award winning film that has galvanized people since its release in 2020. It is available on the Discovery Channel, or go to www.storyofplastic.org. For a shorter, sillier (and salty) version of the facts, check out comedian John Oliver's segment on plastic pollution, which aired in March, 2021. If time allows, show one or more of these to the restaurant staff before launching.

Round out your orientation and bring the message home by providing your staff with statistics about how much plastic the restaurant was using before you began the initiative, versus how much it is using now. If you are just getting started, show them the results of your plastic audit, or invite them to help with the process. The restaurant industry is a major generator of plastic waste. There is no better way to involve people in solving a problem than showing them what sits just in front them.

## Step 3: Involve Your Customers

Letting customers know what you are doing, why it matters, and how they are helping is critical to closing the loop. Focus on the positive impact of this new model and provide easy and immediate alternatives. This will elicit the goodwill of customers, who are at the center of your business.

If diners ask questions or want more information, consider replying with a brief narrative. "We have been noticing that there is more litter than there used to be. We looked into the restaurant industry's impact and decided to help. I'm so glad that you are interested enough to ask!" People relate to storytelling, and opening up in this way will make your patrons feel included as important allies.

Exchanges are briefer in settings that are geared toward take-out, but there are still many ways to communicate your goals. Place table tents on register counters or dining surfaces that explain what you are doing, and why there might be slight changes

in what customers are used to. Examples include:

"Ordering to-go? Let us know if you need cutlery, extra sauce packets, or straws. We are reducing our use of single-use plastics that threaten the health of our local waterways, but we will happily provide you with compostable/ paper alternatives on request."

"Missing something in your drink? We have removed plastic straws to preserve our oceans."

Messages announcing your intentions can also be clipped to the inside of the menu on cards, posted on your website, or distributed on social media. You may even choose to place them on the inside of the bathroom door. Useful examples are available free from many organizations.



## Make 'em Laugh

Messages that are posted in bathrooms are often pithier than those in more, er, formal areas of the establishment. Consider this an opportunity. If you can locate images that are amusing and convey the message to your patrons, go ahead, bring some levity. (And make sure to credit the cartoonist!)

**Everyone loves good news**. If customers requested green changes, let them know that you delivered. **Add updates to your menus, table cards, and website noting how much plastic you have reduced** and what kind of positive feedback you have received. This can be as motivating to your patrons as it is to your staff. They are part of the solution, so share the credit.

Help patrons spread the word. Diners who respond positively to these efforts may want to help out, or share their approval with friends. Help them do so! Seventy percent of the US population uses some form of social media, so you have an excellent opportunity to grow your audience by word of mouth. On table cards and menus, promote hashtags that will get the story of the restaurant's work in front of more supporters—improving its reputation in the community and attracting clientele.

Popular hashtags include:

#PlanetOrPlastic #WildlifeOverWaste #EmbraceReuse #RefuseSingleUse

#BreakFreeFromPlastic #ZeroWaste #PlasticFreeRestaurants #ReuseRevolution

#SkipTheStuff #SkipTheStraw

#HoldThePlastic #PlasticFree

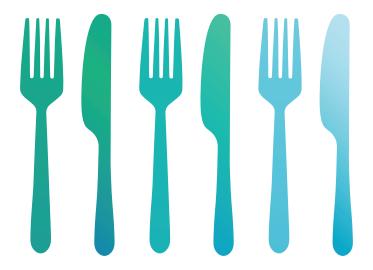
They can even tag us at:

- @PlasticsBeyond / Twitter
- @BeyondPlasticsAction / Facebook
- @BeyondPlasticsBennington / Instagram



## READY, SET, MAKE THE SWITCH

Restaurants should be ready to take action by ordering more sustainable products that don't include single-use plastic.



## But what to choose?

There are so many options, and so many assurances about what is "really" best.

What follows is a digest of options based on research conducted by Beyond Plastics to make this process simpler. We encourage you to make the most appropriate selections based on the capacities of your restaurant.



## **Best Practices: Reusable Dishware**

Reusables are the gold standard for reducing litter, fighting plastic pollution, and combating climate change. Though the upfront costs are higher, the payback period for switching to durable goods can be as short as a few months, and over their lifetimes reusables use less energy and water than single-use containers, even after dishwashing. They also result in lower greenhouse gas emissions. Moreover, reusables constitute a fraction of the waste bound for landfills or incinerators (or the environment) compared with disposables. Some may even be recycled and become a part of another product at another time.

## In-House Serviceware

If you have onsite dining, you are probably using at least some reusables, and are in a great position to begin using more. Fast casual and institutional dining services, which make up a huge part of the food service industry, often rely on a mix of disposables and reusables. Swapping just a few single-use items for reusable ones may prove to be simple, and will more than pay for itself financially and ecologically.

Even when prices are modest, the upfront costs of reusables are higher than those of disposables. But the immediate cost differential should be the beginning of the conversation, not the end. Looks are deceiving when it comes to disposable dishware, which is heavily marketed.

The lowly ceramic plate does not have the same advertising budget, or commercial lobby behind it.

But beyond the glitzy spec sheet and seductive price tag, there is plenty to say about the performance and value of these materials.

• The pay-back period for switching to reusables is remarkably brief.

For instance, a disposable 12 oz hot cup distributed with a plastic lid may cost a vendor 10 cents. A white stoneware mug of the same size can be purchased for \$1.70. A cafe that uses as few as 10 cups per hour will more than recouped the expense in 17 uses. After that,

every use of the cup represents a 10 cent savings.

- The environmental impact is even more promising. The ecological break-even point is the number of times a reusable product must be used in order to exceed the benefits of the same quantity of single-use items. Gains to the environment accumulate with every use beyond that point. According to a 2021 analysis by Upstream, reusable cups break even at between 2 and 122 uses, plates at 3 to 50 uses, and utensils as rapidly as twice.<sup>31</sup>
- Presenting food on reusable dishware increases customer satisfaction and builds brand loyalty. Washable plates elevate the culinary experience from eating to dining, which is meaningful even to those uninterested in sustainability. Business owners regularly talk about an uptick in business—and revenues—after a switch to reusables, even if the actual numbers vary.
- Help is available. If you have looked at the financials and they still seem daunting, consider reaching out for help. Plastic Free Restaurants pays restaurants and schools to eliminate petroleum-based single-use plastic by subsidizing the purchase of reusable replacements. The organization is a donor-funded non-profit and can be reached at contact@plasticfreerestaurants.org. They list the eateries they have assisted, and will include your establishment in their online database of plastic-free eateries. Grant money is also available to establishments in Washington D.C. through the District of Columbia Ditch Disposables Award Program.



## **Back-of-House**

A plastic audit will probably have revealed that **the kitchen is a site of heavy plastic usage**, often of the single-use variety. It is common practice in many places to use disposable plastic containers for mise en place and storage, along with plastic wrap and zip top storage bags. There is plenty of room to introduce new practices.

Replacing disposable containers with metal, glass, or even durable plastic ones with lids is a powerful step and won't be difficult. (To avoid toxic leaching, we strongly sugggest either metal or glass, and to consider making the switch if your current reusable containers are plastic). There are a great many vendors with affordable, purpose-built containers. Again, the upfront costs may give you pause, but the break-even point comes swiftly.

Plastic wrap and zip top storage bags may prove more challenging to reduce, but plenty of restaurants have managed it and their approaches are replicable. First, take a look at the items you are wrapping. If you are using plastic to cover or seal containers, consider switching to vessels with lids or using plates to top off metal or glass bowls. If you are wrapping food such as whole vegetables or baked goods, you may find that many do just as well in a reusable bag. Due to objections about single-use plastic, there are now a range of sealable, reusable bags that may meet your needs. Look into **Stasher Bags**, which are dishwasher safe and contain no petroleum, PVC, or latex.

New and innovative products are emerging to replace plastic wrap in kitchens. Customers



## **Purchasing**

The restaurant supply marketplace is bursting with reusable serviceware. We suggest that businesses pick something durable—ideally not made out of plastic. While polypropylene tumblers and plates are resilient, they are still derived from fossil fuels, and contain many of the same harmful chemicals that disposables do. They are also a source of microplastics, which shed readily into food. The other options—ceramic, glass, stainless steel, and other metals—are far safer and almost as robust.



The market for reusable serviceware is rapidly expanding.

Indeed, the most efficient method of shopping may be to stay

with existing vendors. Let suppliers know that you are changing to a more sustainable model, and will be making different purchases. They may be able to help find something affordable within their own inventories, or offer a deal to preserve your standing relationship. We also suggest streamlining the procurement process by making as many purchases as possible from a single supplier. This will save time and hassle and may provide another incentive for the vendor to offer discounts.<sup>32</sup>

Several non-profit organizations devoted to reuse have developed excellent guides to help restaurants make sound purchasing decisions.

- ReThink Disposable's downloadable Reusable Food Serviceware Guide is one of the best available and boasts a comprehensive list of wares, from utensils to take-out boxes, with links to their vendors and specifications. The guide includes a cost benefit analysis worksheet with a guide to interpreting results. Also available from ReThink Disposable is an online Foodware Calculator.
- The Surfrider Foundation's Ocean Friendly Foodware Guide focuses on non-toxic wares for the preservation of human and ocean health.
- Plastic Free Restaurants maintains a database of Reusable Food Service Products which is downloadable and includes information on discounts.
- For a deeper dive on the ecological impact on the whole range of serviceware (including reusables), Upstream's **Reuse Wins Report** provides well-presented research on the materials themselves.

## Dishwashing

Doing dishes requires labor and resources, which is why some eateries are lured into relying on single-use items. But restaurants that have switched to reusables tell a surprising and important story: additional dishwashing and associated labor costs turn out not to be high.



Outside financial analysis backs this up. In 2000, Starbucks commissioned a study through the Alliance for Environmental Innovation to examine the overhead associated with reusables, and found that dishwasher use and labor did not significantly increase costs. Others working with restaurants and eateries that have undertaken the switch themselves have also reported this to be the case.<sup>33</sup>

**How can this be?** Any restaurant that offers on-site dining is probably already using a mix of reusables and disposables, and all have some sort of dishwashing system in place. Most commonly this involves a three sink system or a commercial dishwasher, which may not be reaching its maximum use. A closer look at existing systems can identify unrecognized capacity. The group Upstream, which has worked with over a hundred restaurants to reduce disposable goods, found that nearly all were able to introduce reusables for onsite dining without changing their dishwashing set up or increasing labor costs.<sup>34</sup>

## Services

Do you own a taco truck? An ice cream stand? A tiny establishment with counter service but no tables? You may still be able to make a full or partial switch. Food services and restaurants that lack the capacity for additional dishwashing—or any dishwashing—can still utilize reusable foodware by contracting with outside services.

These services function much like a linen service. At daily intervals, they drop off freshly sanitized foodware and pick up the old. They use commercial-grade dishwashers and price according to individual dish quantities and changing needs. Some furnish their own ware, others utilize yours.

The availability of offsite dishwashing services is growing. Most of the existing services are on the coasts, and we have developed a list of those that are up and running. If there isn't one in your area, do a Google search for "reusable dish service" at intervals of three to six months. The field is expanding quickly.

## **Dishwashing Services in the United States**

- New York City: Re:Dish
   (for cafeterias and institutions only)
- Los Angeles: DishJoy

- Orange County, CA: DishJoy
- San Francisco: Sudbusters
- San Francisco Bay Area: DishJoy

## **Bring Your Own** (BYO)

If you can't wash additional dishes or partner with outside vendors, you can still include reusables in your business model by encouraging customers to bring their own. This simple, old-fashioned method is tried and true. It endures because it works, and it works because it's easy.

BYO was the earliest form of reusable takeout ware, and many customers adjust easily to the habit, especially when it involves simple items such as to-go mugs. **Offering** incentives helps boost participation. Offer a small discount with the use of a reusable, or a stamp on a customer loyalty card. To help clients feel good about their choices, display signage that advertises the benefits of reuse and the environmental impact of foregoing a disposable item.



"Regular use of a single reusable bag can avert the use of 170 plastic ones!"

Earn some extra revenue by stocking and selling reusables yourself—and put your logo on them. Patrons like to align themselves with businesses they support, so help them display their loyalty. When they carry those cups to the office, or classroom, or any other location, your logo will broadcast your move toward sustainability, boosting your brand.

Display your reusables prominently at the point of sale to make it easy for customers to buy them along with their food. You can also offer to serve the food in the reusable items as part of the transaction, possibly with a discount. Some businesses that offer reusables choose to charge for disposables, an alternative that might work for you.

**Don't restrict your BYO alternatives to cups.** Patrons who dislike disposables are just as frustrated with plastic cutlery, plates, and bowls as they are with carry-out drinkware. If you allow your customers to accept their ice cream, tacos, sandwiches, leftovers, etc., in containers they brought themselves, many will be grateful for the opportunity and spread the word among like-minded locals. A discount on the cost of the disposable (five cents for the saucer you didn't use) will reinforce the relationship.

## **Health Codes**

Some county health departments prohibit restaurants and other food vendors from handling or serving food in a customer's personal container. These edicts are unusual, but they do exist, and in some places were ushered in as a precaution against Covid (and have yet to be ushered out). A simple workaround developed by restaurants at the height of the pandemic was to prepare guest orders on reusable dinnerware, and allow the patrons to transfer the food into their own containers themselves.



## **BYO Businesses**

A handful of services have sprung up to support the BYO concept. In San Diego, CA, **M'Porte** sells attractive stainless steel containers that are filled for a 5-15% discount at participating restaurants.

## Takeout/To-Go

## If there is any single restaurant item that needs to be made reusable, it is takeout containers.

In the summer of 2021, more than 70% of Americans reported ordering takeout or delivery one to three times a week—a habit that ushered hundreds of billions of single-use products from the shelf to the waste stream.<sup>35</sup> The vast majority of these items were not recyclable, even if their chasing-arrow resin codes implied otherwise. Of the 5-6% of plastics that are recycled in the United States, almost none come from the mountain of take-out containers towering out of the nation's trash.





Partner with a Service

Third-party vendors that supply, collect, clean, and redistribute takeout containers are becoming available all over the country. Partnering may sound like a lot of work, and potentially very expensive, but the companies launched thus far have been masters at logistics, and savvy about the hidden costs embedded in the price of disposables. They have kept their expenses down and leveraged the willingness of consumers to spend slightly more upfront on behalf of sustainability. For participating restaurants, the cost of reusable takeout services is competitive with the cost of disposables.

How does it work? The model is old, but the materials are new. As with a linen service, restaurants partner with a company, which provides the wares and handles the logistics—including the work of making the ordering process simple and convenient. Many services host and advertise a portal (website and app) that lists the participating

restaurants, takes orders, and transmits them to the restaurant. Some also partner with outside apps such as Caviar and Grubhub, which list reusable packaging as an add-on within regular transactions.

**Each of these contact points provides additional exposure for the restaurant**. When patrons receive their food, it is packaged in the service's reusable containers, the restaurant's carry bag, and the app's ordering system. In ecological terms, the arrangement is a three-party symbiosis—four when factoring in the benefits to the environment itself!

Once in circulation, the container functions much like a library book. It is stamped with a barcode or QR for tracking, and the options for returning it are made as simple as possible. The customer may drop it off at a participating restaurant, hand it to the delivery person carrying the next order from the service, or use an app to schedule a curbside pickup. A few services maintain centralized deposit bins in high-traffic areas (imagine a mailbox or a library book drop).

Like a library book, the patron is apportioned reasonable time to make the return. Lost or unreturned containers incur a small fee (but no scolding), and the process continues. The service sanitizes the containers in commercial-grade machines and redistributes them to participating restaurants.

**Pro tip:** Because reusable containers are sturdier than disposable ones, they leak less and retain heat better, amplifying customer satisfaction.

Reusable Takeout Services in the United States

 New York, NY: <u>DeliverZero</u>; <u>Re:Dish</u> (for institutions such as cafeterias only)

Takoma Park, MD: Paradigm to Go

Durham, NC: GreenToGo

• Boulder & Denver, CO: Repeater

San Francisco & Alameda, CA:
 Dispatch Goods plastic-free!

• Portland, OR: **GoBox** 

Seattle, WA: Encora

O'ahu, HI: Full Cycle Takeout

### **Beverages Only** plastic-free!

Brooklyn, New York: Cup Zero

Boulder, CO: Vessel Works

Berkeley, CA: Vessel Works

Portland, OR: Okapi Reusables

## **Coming Soon**

- Boston, MA: <u>Usefull</u> plastic-free!; <u>Recirclable</u>
- Minneapolis-St. Paul, MN: Foreverware plastic-free!
- Southwest CO: Recovery Basin plastic-free!
- Denver, CO & Seattle, WA: <u>rWare</u>

## A Note on Economics

As with other parts of the sustainable economy, patrons are willing to pay a premium to avoid the guilt of plastic waste. Establishments may therefore be able to pass the costs along, for instance by charging a subscription fee, or partnering with an app like DoorDash to offer reusable packaging as an add-on (for \$1.99 per item), or building the cost into price adjustments for a few high-volume menu items.<sup>36</sup> A willing clientele is a reliable one. Reuse services experience a high rate of return for their containers. DeliverZero, which began operations in New York City in 2019, receives back 98% of its containers on average, the same high rate experienced by Colorado-based Repeater.







## Launch Your Own

Some restaurants choose to provide in-house systems for reusable take-out. These cut out the middle vendor and provide further opportunities for brand-building and customer loyalty. In areas where no third-party services exist, they may be received as bold and pioneering. You may find yourself winning accolades for being a trailblazer, bringing the circular economy to communities in want of it.

The system is similar in many respects to a branded BYO system, and logistics need not be overwhelming. Reusable takeout containers can be purchased from a range of suppliers and emblazoned with your business's logo, which will increase your exposure and encourage return. They may be sold directly to patrons in exchange for a 5-10% discount each time they are brought back, or distributed for a deposit of one or two dollars. Depending on area health codes and personal preference, you may choose to refill the proffered container or offer a fresh, sanitized one in its place. Restaurants with multiple outlets, high capacity, and a strong commitment to brand may choose the latter. Smaller establishments with less dishwasher and storage space may prefer the more informal refills.

### **Reusable Takeout Vendors**

- reVessel plastic-free!
- **Eco Lunchbox** plastic-free!
- Kleen Kanteen plastic-free!
- **Steely's** plastic-free!

- M'Porte plastic-free!
- Indian Tiffin plastic-free!
- Eco-Takeouts

See also Upstream's **Reusabale Food Serviceware Guide**, p15-17.

## Reusable Systems from the Grassroots

Systems for reusable takeout are so urgently needed and strongly desired that in some towns, residents are establishing arrangements themselves. In Bozeman, Montana, and New Paltz, Saugerties, and Woodstock, New York, community groups are exploring ways to purchase and distribute reusable takeout ware at wholesale rates, map, and advertise the restaurants willing to fill them. If this is happening in your area, offer to become involved. It is a superb way to engage with the community and improve your reputation as a good corporate citizen.

## Second-Best Practices: "Sustainable" Disposables

We're going to be honest: **there is no disposable option that generates less waste and has a smaller carbon footprint than reusables**. No matter how biodegradable or how cleverly developed, the lifecycle emissions from disposable paper, plastic, and bioplastic are three to ten times greater than those of stainless steel, ceramic, and glass.<sup>37</sup> This includes disposable items made from innovative bio-based materials such as seaweed, miscanthus, and bagasse. All must be cultivated, processed, shipped, and disposed of, with outputs of energy that are difficult to justify or sustain for an item that is used only once. Reuse is the gold standard, now and for the foreseeable future.

But when push comes to shove, there may not always be a way to reuse. We understand that for many establishments disposables remain a necessity—especially for small and informal eateries with tight margins. If this describes your situation, take heart. There are plenty of ways to avoid the worst and seek out the best of what is available in the market for disposables. Below are some pointers for arriving at the most sustainable and cost-effective choices among the myriad options.

## Avoid conventional plastics.

The price tag may be seductive, but **ordinary plastics are made from chemicals and fossil fuels, and are dangerous to environmental and human health**. Plastics do not biodegrade. Instead, they fragment into tiny particles called microplastics that diffuse into all corners of the food chain. This is not a recipe for healthy eating. In fact, some scientists believe that plastic should be banned from contact with human food, period.

## **Look** for **BPI certification**.

The Biodegradable Products Institute is a non-profit, science-driven organization that tests packaging and disposable products to ensure that they are truly compostable, and that they leave no toxic or plastic residues in the soil. In a world of dizzying certifications and claims, it is the endorsement that most reliably describes whether a product is plastic-free, low in toxins, and capable of breaking down in the environment. It is the most direct shorthand for sustainability.

## Stick to compostable items made from "earth digestible" materials.

There are a lot of these, including wood, paper, cardboard, bamboo, bagasse, miscanthus, seaweed, hay, and other fiber-based materials. Some are made from wastes left over from industrial processes, which makes them less expensive. Bagasse, for example, is a byproduct of the sugarcane industry. Because such items are not produced from virgin materials they may have a lower production footprint, and are therefore more sustainable.

## **A Word of Caution**

## Many fiber-based products are coated with chemical toxins.

To provide a barrier against moisture and grease, manufacturers line the interior of paper cups, fiber clamshells, plates, and other products with per- and poly-fluoroalkyl substances (PFAS).<sup>38</sup> PFAS are known as "forever chemicals" because they are among the most persistent chemicals known, and do not break down in the environment. It is understood that they migrate from packaging to food, and that their health impacts on humans include liver damage, endocrine and immune disruption, reduced fertility, and developmental delays in children.<sup>39</sup> Unless they are BPI certified, it is likely that disposable products contain these chemicals.<sup>40</sup> To find out, check the Center for Environmental Health's **Database of Single-use Food Service Ware** tested for PFAS.

## Curb your enthusiasm about bio-based plastics.

Bioplastics sound promising, but they are not all they seem; many have chemical additives and are as slow to break down as conventional ones. Some even contain petrochemical plastic, composing a hybrid of the two forms.

Some bio-based plastics are not very biodegradable. They will not break down in home compost. Even industrial facilities, which maintain the high temperatures and other necessary conditions suitable for the biodegradation of plant-based plastic, may reject them. Only 29% of full-scale food waste composting facilities in the US are willing to accept even BPI-certified compostable foodware.<sup>41</sup>

This is because "compostable" items are certified in laboratories, but conditions in the real world are not as stable, and bioplastics do not always fully break down.<sup>42</sup> The resulting product is a soil adulterated with bits of partially degraded bioplastic. Worse, bioplastics that contain PFAS or other chemicals transfer those toxins into the compost, making it unsaleable to vendors and unsuitable for use in organic fields and gardens.<sup>43</sup> Even when no toxins are present, the base materials of bioplastics add no nutritional value to the soil.<sup>44</sup> Bioplastic compost is a poor humus, undesirable to worms, plants, or gardeners.

## Bio-based? Biodegradable? Compostable? A guide to what it all means.

The certifications available for throw-are foodware are many and varied, which can be confusing. Moreover, some of the labels are more legitimate than others. Many certifications use confidence-building terms to draw attention away from environmental shortcomings. Use caution. Some of their claims can only be realized under specific conditions, some are only partially true, and some are entirely fanciful.

From the most sustainable to the most deceptive, they are as follows:



**Compostable** means that an item will disintegrate into non-toxic, natural elements at the same rate as natural organic materials, such as food scraps and yard waste. Ordinary compostables require the presence of microorganisms and a moderate quantity of humidity in order to break down. "Compostable" bioplastics bend this definition by assuming that the long period of high heat supplied by industrial composting facilities is a stand-in for "normal" conditions. In the absence of laws requiring chemical disclosure, manufacturers that mark their goods as compostable frequently fail to reveal the presence of toxic additives.



**Bio-based** plastics (bioplastics) are made from plant-based materials rather than petroleum-based ones, but many are hybrids, containing a combination of plant-based polymers and fossil fuels. Their chemical burden may be lower than that of conventional plastics, but they still contain toxins that leach into food, and the agricultural inputs needed to produce the base materials (corn or sugarcane) release considerable greenhouse gas emissions. Moreover, they may not be biodegradable.



**Biodegradable** is not a term that can reasonably be applied to any plastic product. Items that are biodegradable are capable of being decomposed by bacteria or other living organisms. Conventional plastics do not decompose but rather degenerate into microplastics and nanoplastics, which remain present in the environment. Because the term has no time frame attached to it, some plastics manufacturers will try to use it, implying that because we do not know what will become of microplastics in hundreds or thousands of years, we may assume that they have returned to nature. This reasoning is so inauthentic that "biodegradable" has been banned as a descriptor of plastic under Truth in Advertising laws in some states, including California.<sup>45</sup>



## Don't fall for the hype.

To protect yourself from greenwashing, ask vendors questions each time you hear a new commercial term. Be wary of slick packaging with words such as "biodegradable" and "decomposable," which have no industry standard. These are designed to mislead you into purchasing products that you think will safely break down, but in fact may not.

For more information, consult the Surfrider Foundation's **Bioplastics Toolkit**, and Oceanic Global's **Greenwashing Guide**.

## Now, make your choices.

Beyond Plastics recommends the following databases to help guide your decisions.

- Nearly all the products that are safe enough to consider can be found in the BPI Database of Certified Compostable Products.
- When you have chosen some attractive options, cross reference them against the listings in the Center for Environmental Health's **Single-Use Foodware Database**.
- These guides are so thorough that they can be a little daunting. For a more user-friendly interface, try the <u>Understanding Packaging (UP) Scorecard</u> or the Boomerang Alliance <u>Guide to Takeaway Containers</u>.

## TELL THE WORLD

You've gone green? Let everyone know it. Take advantage of listings, databases, seals—anything that lets restaurant-goers know that you have taken (and continue to take) steps to reduce plastic and safeguard the environment. Now is your time to shine, so don't be shy about showing off your credentials as a green business and a good corporate citizen.



#### Make it news.

The first people who will notice your changes are also those who matter most: your regular diners and loyal patrons. Equip your staff to be ambassadors who can speak with energy and enthusiasm to inquiring customers, informing them about the changes and managing expectations (see "Involve Your Staff," p. 15). Post messages announcing your initiative in visible places. Place a sign at the entrance of the restaurant, add table tents to register counters, and clip an announcement to the inside of your menu. Be sure to update your website, as well.

Your restaurant's investment in sustainability is news worthy of local reporting. Everyone likes a feel-good story, so create a news release and distribute it to local media outlets. If they do highlight your story you will have created positive buzz around your establishment and broadened your exposure.

In the age of social media, you also have an opportunity to make the news yourself. If your business has accounts on Twitter, Instagram, or Facebook, you can post announcements there and encourage your followers to repost. Utilize popular hashtags to increase your audience.



#### **Examples include:**

#PlasticPollutes #SkipTheStuff
#RefillRevolution #UseRealStuff
#MakeRealStuff #ThinkReusable
#PlasticFree #NoPlasticStraws
#BreakFreeFromPlastic

If you're pressed for time or prefer to use templates, Shedd Aquarium has developed a **database of social media posts and messaging** for partner restaurants that are "Shedding plastic."

Track your progress and share it regularly on your social channels. "After three months of using ceramic dishware, we have saved 2,100 plates and 3,214 cups from entering landfills and the environment." "We haven't seen a plastic straw in 27 weeks – and neither has this sea turtle."

**Pro tip:** a little humor paired with photos of charismatic animals (harbor seals, sea birds, etc.) will help rack up the "likes" and retweets. Cats run the internet, but dolphins do, too.

#### Make it official.

You are not alone in your efforts. A constellation of environmental groups are ready to give you a hand by promoting your work in support of environmental sustainability. Several are prepared to offer certifications, seals, and stickers to officialize your status as a "green" business or partner organization if you've satisfied a checklist of requirements. Most prerequisites are modest, and once you've stepped through the process you can display your credentials prominently in your window, your menu, your website, and any other spot likely to catch the eye. Some restaurants print third-party sustainability seals on paper bags, or bills, or establishment merchandise (aprons, t-shirts). Creativity is a force multiplier.

#### Organizations that support restaurant partnerships and provide certifications include:

- Oceanic Global Blue Standard Seals
- Surfrider Foundation Ocean Friendly Restaurants
- Shedd Aquarium Let's Shedd Plastic (Chicago area only)
- Restaurants may also be able to enroll in your city or county's green business certification program. Check local resources to find out what is nearby.



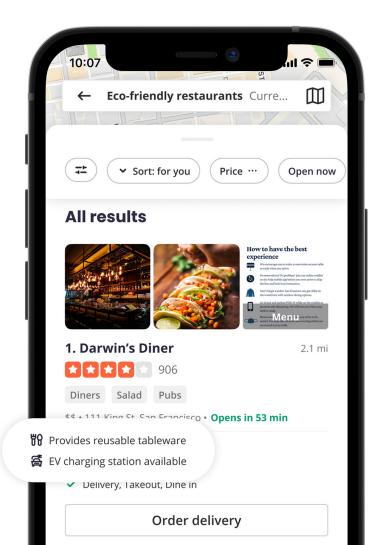


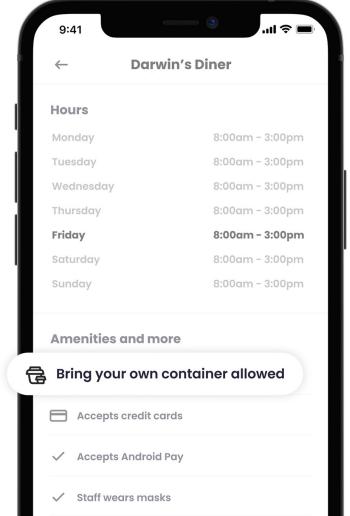


## There's an app for that.

Perhaps the most direct advertising move of all is to put your name in front of people who are actually ordering food. Numerous ordering apps have added sustainability features to the options that customers can search. In April, 2022, for instance, Yelp added eco-friendly choices to its "amenities" section, which now includes "plastic-free packaging," and "BYO container allowed" among its searchable features. Most apps allow restaurants to self-report their amenities, so once you have added reusables or switched to nontoxic compostables, you must take the initiative in order to list these changes on their platforms. If you are working with a third party reusable takeout service, you will be listed on their ordering platforms, as well. Lastly, customers may add you to Plasticscore, a crowdsourced zero waste app that offers ratings for restaurants.

Does it work? So far, so good. Yelp reports that customers are increasingly looking for eco-friendly options. Searches for "plant based" have gone up around 56% each year from 2018 to 2021. 46 Reporting data on "plastic free" user searches has not been made available yet, but the capacity of companies such as DeliverZero and Dispatch Goods to make a go of it suggests a strong consumer appetite for reusable and sustainable options. Patrons who have found restaurants by searching on an app may stick around because they like other features of the business. Diners who were attracted by the reusables may return for the ratatouille, and those who started for the sandwiches may stay for the sustainability.



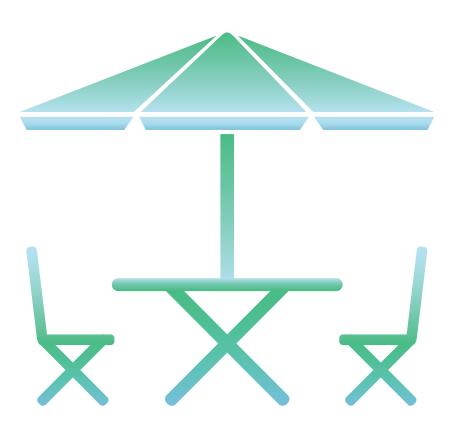


Courtesy of the Yelp blog, April 2022

## **CASE STUDIES**

La Playa Mexican Grill
Port Aransas, Texas

Organic Krush Lifestyle Eatery
New York, Connecticut, Virginia
10 locations



## Case Study 1:

## La Playa Mexican Grill, Port Aransas, Texas



This family-owned and operated restaurant has been in operation since 2003 and draws on generations of culinary experience. La Playa is situated directly on the bay in the Gulf of Mexico and serves Mexican food, with a specialty in local seafood. In addition to sit-down dining, La Playa provides takeout service and catering.

- Years of reducing plastic: 14
- Meals served per day: 250 on average, up to 400 in the summer

#### **Green Measures**

La Playa is a polystyrene-free restaurant that replaced plastic to-go bags and straws with paper and plant based ones, which are supplied upon request.

## Why

La Playa was the first restaurant in the Port Aransas area to adopt these sustainability measures, which owner Greg Villasna determined were "just the right thing to do." In a region heavily impacted by petrochemicals, he noted, "[reducing plastic] benefits everyone in the long run."

## How they selected products and vendors

The restaurant located green alternative packaging through Cisco foods.

#### **Difficulties**

The eco-friendly materials cost more, but the restauranteur indicated that he was not "particularly worried about pennies when you have to do what's right." All told, he has not seen fit to raise La Playa's prices. After an initial trial with paper straws, the restaurant switched to plant-based ones, which hold up better against moisture.

## **Reception & Impact**

Customers make positive comments about La Playa's sustainable practices, and the staff has not been impacted by an increase in work or customer management. Supplying bags and straws only on request reduced their use by 25%. The changes proved to be trend-setting, with nearby restaurants implementing a similar retreat from plastic. Mr. Villasna wishes that the area chamber of commerce would make Port Arkansas a green zone so other businesses would have to follow suit.



# Case Study 2: Organic Krush Lifestyle Eatery, New York, Connecticut, & Virginia (10 locations)



Organic Krush provides health-focused, casual dining and has been in operation since 2015. The restaurant launched in 2015 with a commitment to sustainability. Its menu is crafted around the use of organic fare, and supports a health mission centered on eliminating genetically modified ingredients, hormones, and toxins from food and foodware. Organic Krush provides catering and takeout in addition to sit-down dining.

- Years of reducing plastic: 7
- Table tops: Between 15 and 70 depending on location
- Meals served per day: 200+ per location

#### **Green Measures**

Responsible environmental practices have been central to Organic Krush's business model since the restaurant's inception. The eatery relies on reusable bamboo dining ware and compostable to-go containers. Knowledge about the acidity of juices prompted Organic Krush to bottle its cold-pressed juices in glass so as to prevent the leaching of harmful chemicals, and to preserve the taste and odor of its beverages.

## Why

Natural health and ecological stewardship sit at the center of Organic Krush's brand, and guide the co-owners' choices. "We're alarmed by the damage being done to our planet by single-use plastics," one remarked in a 2021 interview, "and we knew our business had to step up to the challenge of going plastic-free." Doing so furthered their commitment as concerned global citizens, and brought emotional and physical rewards.

## How they selected products and vendors

Choosing sustainable service ware and vendors required an intensive labor of research early on. To ensure that materials worked well and did not affect the taste of the restaurant's food, they experimented with plating, packing, and then tasting their own cuisine on sample ware. They currently purchase the eco line of products from a general supplier, and have noticed that reduced plastic alternatives have improved since their initial purchases seven years ago. Organic Krush is now a member of the Surfrider Foundation's Ocean Friendly Restaurants program, which assists restaurants in their environmental stewardship by guiding decisions surrounding packaging, recycling, ingredient sourcing, and energy efficiency.

#### **Difficulties**

Responsible products cost more. Reusable materials such as glass are not only more expensive, but they take up a lot of storage space and are fragile. The owners let their principles guide their budget, however, and carefully walk the line of what they can absorb as a business and how much of the cost to pass on to customers.

## **Reception and Impact**

The business is thriving, and has expanded from one to ten locations in its seven years, even amidst the Covid pandemic. Customers have demonstrated more interest in the restaurant's mission than its prices, and are tolerant of higher costs. Staff, too, are attracted by the business's commitment to sustainability. The co-owners hope that more restaurants will be enticed to move away from plastic serviceware, which will reduce prices for alternatives.



## **ENDNOTES**

- 1 Burunda, A. (March 18, 2019). "This young whale died with 88 pounds of plastic in its stomach," National Geographic.
- 2 Jones, A. (Dec 15, 2020). "Plastic waste forms huge, deadly masses in camel guts," Science News.
- 3 Priyanka, M., & Dey, S. (2018). <u>Ruminal impaction due to plastic materials An increasing threat to ruminants and its impact on human health in developing countries</u>, *Veterinary World*, 11(9), 1307-1315.
- **4** Parker, L. (September 2, 2015). "Nearly every seabird on earth is eating plastic," National Geographic.
- **5** Leslie, H. A., Van Velzen, M. J., Brandsma, S. H., Vethaak, A. D., Garcia-Vallejo, J. J., & Lamoree, M. H. (2022). "Discovery and quantification of plastic particle pollution in human blood," *Environment International*, 163, 107199.
- 6 Morales-Caselles, C., Viejo, J., Martí, E., González-Fernández, D., Pragnell-Raasch, H., González-Gordillo, J. I., ... & Cózar, A. (2021). "An inshore-offshore sorting system revealed from global classification of ocean litter," Nature Sustainability, 4(6), 484-493.
- 7 "Shifting to sustainability boosts business," <a href="https://www.footprintus.com/plastic-and-consumer-attitudes-study">https://www.footprintus.com/plastic-and-consumer-attitudes-study</a>. Accessed 6/16/2022.
- 8 (May 4, 2022). "The real truth about the US Plastics Recycling Rate," The Last Beach Cleanup & Beyond Plastics.
- 9 Vallette, J. (October, 2021). "The New Coal: Plastics and Climate," Beyond Plastics.
- Wiesinger, H., Wang, Z., & Hellweg, S. (2021). "<u>Deep dive into plastic monomers, additives, and processing aids.</u>" *Environmental Science & Technology*, 55(13), 9339-9351.
- 11 https://upstreamsolutions.org/reuse-in-food-service. Accessed 6/11/22.

- 12 (February 22, 2022) Report: Attitudes Toward Single Use Plastic, Ipsos.
- 13 (October 14, 2021) "Recent Study Reveals More Than a Third of Global Consumers

  Are Willing to Pay More for Sustainability as Demand Grows for EnvironmentallyFriendly Alternatives," Businesswire.
- 14 Clark, G. L. (2014) "From the Stockholder to the Stakeholder: How Sustainability Can <u>Drive Financial Performance</u>." Oxford University Smith School of Enterprise and the Environment.
- 15 The Surfrider Foundation's U.S. Plastics Policy Map, accessed 6/8/2022.
- 16 Berkeley, CA Municipal Code, Chapter 11.64
- 17 Gordon, M. (June, 2021) "Reuse Wins: The environmental, economic, and business case for transitioning from single-use to reusable in food service," Upstream.
- Wilson, A. M., Weir, M. H., Bloomfield, S. F., Scott, E. A., & Reynolds, K. A. (2021). "Modeling COVID-19 infection risks for a single hand-to-fomite scenario and potential risk reductions offered by surface disinfection," American Journal of Infection Control, 49(6), 846-848; A. P. Harvey, E. R. Fuhrmeister, M. E. Cantrell, A. K. Pitol, S. J. M, J. E. Powers, M. L. Nadimpalli, T. R. Julian and A. J. Pickering, "Longitudinal monitoring of SARS-CoV-2 RNA on high-touch surfaces in a community setting," Environmental Science & Technology Letters, pp. 168-175, 2020; A. K. Pitol and T. R. Julian, "Community transmission of SARS-CoV-2 by fomites: Risks and risk reduction strategies," Environmental Science and Technology Letters, 2020.
- 19 Kaufman, L. (June 8, 2020) "Plastic Is the Hero of Coronavirus, Says the Plastics Industry," Bloomberg News. Accessed 6/12/22.
- Health Expert Statement Addressing Safety of Reusables and COVID-19. Accessed 6/11/22.
- 21 Chin, A. W., Chu, J. T., Perera, M. R., Hui, K. P., Yen, H. L., Chan, M. C., ... & Poon, L. L. (2020). "Stability of SARS-CoV-2 in different environmental conditions," The Lancet Microbe, 1(1), e10.
- 22 https://www.cdc.gov/handwashing/when-how-handwashing.html. Accessed 6/10/22.
- 23 World Health Organization. (August 25, 2020). "COVID-19 management in hotels and other entities of the accommodation sector: interim guidance," (No. WHO/2019-nCoV/Hotels/2020.3). World Health Organization.

- 24 National Center for Immunization (2021). "Science Brief: SARS-CoV-2 and Surface (Fomite) Transmission for Indoor Community Environments," In CDC COVID-19 Science Briefs [Internet]. Centers for Disease Control and Prevention (US).
- 25 <a href="https://cfpub.epa.gov/wizards/disinfectants/">https://cfpub.epa.gov/wizards/disinfectants/</a> Accessed 6/9/22.
- 26 Van Doremalen, N., Bushmaker, T., Morris, D. H., Holbrook, M. G., Gamble, A., Williamson, B. N., ... & Munster, V. J. (2020). "Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1," New England Journal of Medicine, 382(16), 1564-1567.
- 27 Coronaviruses are susceptible at 158 degrees Fahrenheit, ten degrees lower than a single temperature dish washer and 22 degrees below a high rinse temperature. Federica Carraturo, Carmela Del Giudice, Michela Morelli, Valeria Cerullo, Giovanni Libralato, Emilia Galdiero, Marco Guida, (2020) "Persistence of SARS-CoV-2 in the environment and COVID-19 transmission risk from environmental matrices and surfaces," Environmental Pollution, Volume 265, Part B.
- **28** Goldstein (2019). "Quantifying Existing Food Waste Composting Infrastructure in the U.S," BioCycle.
- **29** Valliant, M. (Feb 10, 2022). "8 in 10 American Voters Support a National Policy Reducing Single-Use Plastic," Oceana.
- **30** Gordon, M. (2021). Reuse Wins.
- **31** *Ibid.*
- **32** (2019). "The Oceanic Standard: Plastic Free Solutions for the Hospitality Industry," US Edition. *The Oceanic Global*. Accessed 6/11/22.
- **33** Alliance for Environmental Innovation (2000). Report of the Starbucks Coffee Company/Alliance for Environmental Innovation Joint Task Force.
- 34 https://upstreamsolutions.org/reuse-in-food-service. Accessed 6/10/22.
- 35 Black, M. (Sept 13, 2021). "Thirty-five years of international coastal cleanup data demonstrate a recyclabilty crisis," Ocean Conservancy Newsroom.
- **36** Vann, K. (Jan 6, 2021). "Rise in takeout waste presents new opportunity for reusable containers," Waste Dive.

- **37** Gordon, M. (2021). Reuse Wins.
- **38** Center for Environmental Health, (2018). "Take-out Toxics: PFAS Chemicals in food serviceware," Accessed June 12, 2022.
- 39 "Per- and Polyfluorinated Substances (PFAS) Factsheet," CDC National Biomonitoring Program. Last reviewed May 2, 2022; Cadore, A, Chou, C.-H, Selene J. et al, (2009). <u>Toxicological Profile for Perfluoroalkyls</u>, United States, Agency for Toxic Substances and Disease Registry. Syracuse Research Corporation.
- 40 Items that have BPI certification are now required to be PFAS free.
- 41 Goldstein (2019). "Quantifying Existing Food Waste Composting Infrastructure in the U.S," BioCycle.
- **42** Sheehan, B. (2017). "Literature Review and Inventory: Greenhouse Gas Impacts of Disposable vs Reusable Foodservice Products (Rep.)," Clean Water Action/Clean Water Fund.
- 43 Choi Y.L., Lazcano R.K., Yousefi P., Trim H., Lee L.S., (2019). "Perfluoroalkyl Acid Characterization in U.S. Municipal Organic Solid Waste Composts," Environ. Sci. Technol. Lett. 2019, 6, 6, 372-377.
- **44** Florian (May 16, 2022). "<u>Biodegradable vs. Compostable Differences, Similarities & Examples," Citizen Sustainable.</u>
- **45** (2021). <u>Truth in Advertising</u>, Federal Trade Commission. Accessed 6/11/22.
- **46** (April 13, 2022). "Yelp adds 'plastic-free packaging' and more eco-friendly business attributes," Plastic Pollution Coalition Blog.
- **47** Precious, R. (March 12, 2021), "<u>Healthy People, Healthy Planet: Organic Krush commits to sustainability," Edible Nutmeg.</u>