



Making Reuse an Everyday Reality

Insights and Impact from the Petaluma Reusable Cup Project

Reusable Cup Return

returnmycup.com

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CLOSED LOOP partners' CENTER FOR THE CIRCULAR ECONOMY



PETALUMA REUSABLE CUP PROJECT

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What does it take to make reuse an everyday reality in America?

This is the driving question behind the Petaluma Reusable Cup Project. But as reusable to-go packaging programs and pilots have proliferated in recent years, many innovators have found themselves restricted by two overlapping challenges: an **inclusivity dilemma** and an **accessibility dilemma.**

Inclusivity dilemma

Asking consumers to pay for deposits or sign up to a penalty system can increase return rates by incentivizing the most motivated consumers.

BUT these approaches can reduce adoption rates by excluding people who might not have the time, disposable income, or motivation to participate in a high-barrier program.

C d ir a c n c w e

Accessibility dilemma

Focusing reuse programs on small or closed geographies such as cultural venues, festivals, stadiums and employer sites is a critical strategy to concentrate consumer education and achieve high return and recovery levels by keeping to-go items in a tightly-defined space.

BUT these approaches won't always work for everyday consumers, who often need togo packaging to travel as far as they do. A e o a F 3 n v **e** p r t





Our ambitious goal was to tackle these dilemmas directly by designing a **system that included all consumers** and was **accessible across an open, citywide geography**. In

creating an open system for everyone, we needed to design an easy and delightful consumer experience to drive return motivation while engineering the lightest possible environmental footprint to offset the cups that may leave the system.

Major milestone

After more than a year of thoughtful stakeholder engagement, community meetings and detailed operational planning, the NextGen Consortium activated the first phase of the Petaluma Reusable Cup Project for 12 weeks with over 30 businesses participating. This first-in-thenation program achieved a major milestone with **returns of the reusable purple cups that exceeded the environmental break-even point** — meaning that enough of the program's purple cups were successfully returned for the reusable system to be better for the environment than the single-use alternative.

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For innovators working on reuse, the Petaluma Reusable Cup Project proves three points



A world with widespread reuse is possible

The Petaluma Reusable Cup Project activated more than 30 local and global businesses as well as the City of Petaluma, CA. It showed what's possible when an entire community shifts to reuse as the default option for hot and cold to-go beverages. There is still work ahead to increase return rates, given variability across participating businesses, as well as enhance the cup experience and reduce costs through scaled efficiencies — but we're inspired by the fact that over half of the project's purple cups were successfully returned in an open system that opted everyone in across an entire city.

People can learn new behaviors quickly

A common perception in reuse innovation is that behavior change is hard and slow to enact. However, the residents of Petaluma demonstrated that this doesn't have to be the case as they quickly learned and embraced new reuse behaviors. By shifting process complexity to the back end and designing the consumer-facing front end to be radically simple, we saw widespread understanding and adoption of the system within days of launching.





Consumers want more than one solution

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Consumers seeking to reduce waste aren't looking for a one-size-fitsall solution. While a reusable and returnable cup may perfectly suit one individual, it might not work for them every time, such as while traveling. Meanwhile, the next person may prefer to opt out of a collective reuse system and bring their own cup instead. The NextGen Consortium is designing, testing and scaling a suite of solutions to unlock consumer delight, brand loyalty and better financial and environmental outcomes.

About us

The Center for The Circular Economy

The <u>Center for the Circular Economy</u>, the managing partner of the NextGen Consortium, is the innovation arm of <u>Closed Loop</u>. <u>Partners</u>, a firm at the forefront of building the circular economy. Entrusted by the world's most influential organizations to solve their most sticky material challenges, the Center's expertise spans circularity across the full life cycle of materials, connecting upstream innovation to downstream recovery infrastructure and end markets. We partner with organizations at every stage of their journey to realize their circularity goals, innovating, testing and scaling solutions to address systems challenges and advance a circular economy.

The NextGen Consortium

The <u>NextGen Consortium</u>, managed by Closed Loop Partners' Center for the Circular Economy, is a multi-year consortium that addresses singleuse foodservice packaging waste by advancing the design, commercialization and recovery of sustainable foodservice packaging alternatives. The Consortium brings leading brands, industry experts and innovators together to reimagine foodservice packaging, increase access to recycling and accelerate sustainable and circular solutions to reduce waste.



CLOSED LOOP partners' CENTER FOR THE CONSORTIUM



Sip_g Retur Repea

Hello to reducing goodbye to dispose

Project Design

Summary of the Petaluma Reusable Cup Project, its purpose and how we built the program



An unprecedented partnership that inspired a city to reuse

In August of 2024, more than 30 restaurants in the City of Petaluma, CA, swapped their single-use cups for to-go reusable cups for all customers at no cost. Led by the Center's NextGen Consortium, The Petaluma Reusable Cup Project is an unprecedented collaboration to drive reuse and displace hundreds of thousands of single-use cups.

The project was launched at a critical time of regulatory, economic and climate pressures, and a renewed call for local, resilient supply chains has emerged. Reuse models have a key role to play by strengthening local economies and keeping materials in circulation locally.



First-in-the-nation

This system was the first of its kind to make reusable to-go cups the default in multiple restaurants across a U.S. city.

Inclusive

With no deposits to participate or penalties for non-compliance, the Project created an experience that was inclusive of all customers.





Accessible

Participating businesses served hot and cold to-go beverages in reusable cups that could be returned anywhere in Petaluma via a network of over 60 return bins.

Multi-brand & sector

The Project was supported by a broad range of global and local businesses who formed a public-private partnership with the city, NGOs and community groups.

Taking on a multi-faceted challenge

Building on over five years of work in reuse, the NextGen Consortium developed ambitious innovation goals to address challenges that have often prevented reuse systems from delivering scalable results.

REUSE SYSTEMS STRUGGLE WITH:		SO OUR GOAL WAS TO DELIVER:	
Low consumer awareness	→	Unmissable activation with touch-points across the consumer journey	→
Selective consumer participation	→	Universal participation , leading to high returns	→
Steep consumer learning curves	→	Instruction that would be understood in less than ten seconds	→
Excessive labor burden on store staff	→	Turnkey operation suitable for global brands and local businesses alike	→





WHICH MEANT THE PROJECT HAD TO:

Disrupt the standard consumer journey without adding unwanted friction

Engage everyone, not just environmentally-minded consumers

Develop an iconic but **simple call-to-action** that could carry a bigger story

Build an agile **reverse logistics system** for collection, sorting, washing, sanitization, inspection, repacking and delivery

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PETALUMA REUSABLE CUP PROJECT

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Disruptive by design

We designed the program around a cup and bin that would disrupt the consumer experience enough to build awareness, understanding and motivation — without causing unnecessary friction.

Purple helped disrupt the consumer journey because it's not widely used in branding or other waste streams, making it easier to notice in store and in the community.

"Return" repeated many times on each cup, bin and communication, focusing consumers on the action to be taken.

Memorable tagline

embedded the call-to-action playfully and memorably rather than sounding too green or serious.



Cup silhouette opening

and built trust that other people are complying.

"Reusable cup return"

communicated the benefit of reuse and the call-to-action of return.

Cup icon featured a

counterclockwise arrow, invoking a return to the beginning rather than transformation of recycled material into another product.

CLOSED LOOP partn



signaled this bin is not for trash



City-wide reusable cups

Over 20 global and local brands built awareness of the Project almost overnight by switching out their regular single-use cups for reusable cups in unison and displaying Project signage in-store and at point of sale.

Purple cup

Most restaurants and coffee shops in the Project used multi-brand purple cups, offered in 12 and 16 ounce sizes for hot and cold beverages as well as a 22 ounce cup for fountain drinks.



Single-brand cups

Starbucks activated special branded cups with purple elements and program communications on reusable tall, grande and venti cups.



In-store signage

Every participating business displayed signage in the Projectsignature purple to disrupt the consumer journey and communicate key information.







Global & local brands

More than 30 restaurants participated and launched the Project together across Petaluma.



Unmissable return bins

The network of over 60 bins across the city provided convenient return options for consumers even when they had left purchase locations. Bold, universal branding also helped reinforce the citywide nature of the Project.

Outdoor return bins

In partnership with the City of Petaluma, we placed purple return bins in public spaces like sidewalks and parks for easy access and high visibility.

Indoor return bins

Participating establishments hosted purple return bins on premises, both inside the buildings and on patios and in on-street seating areas.











Drive-thru return bins

To offer convenient cup returns for consumers on the move, we made drive-thru return bins available at select locations.



Multichannel activation

We activated a multichannel marketing campaign to build awareness and foster local pride.

Paid media

To increase awareness and reinforce the critical "return" call-to-action, we executed a 360-marketing campaign including digital, TV, Spotify and out-of-home.

Digital hub

The Project website allowed consumers to find their nearest bin in one click.











Local & national coverage

Organic and earned media amplified the intent of the Project and highlighted enthusiasm among local residents.

Seamless back end

To ensure the Project would not increase labor burden for store staff, we designed the back-end system that moved timeintensive tasks like sorting and washing to a centralized location.

Turnkey logistics

With our operational partners, we designed a reverse logistics system that any business using single-use cups could integrate with.

Daily pickup & processing

Service providers regularly collected, washed, sanitized, inspected, repacked then delivered ready-touse cups to businesses.











Materials recovery

Partnership with a regional materials recovery facility (MRF) allowed for the identification and material recovery of cups that had been misplaced in recycling streams.

How the system worked

The system prioritized consumer convenience by asking for just one action — return the cup. Together with our service provider, <u>Muuse</u>, we built a reverse logistics system with brands and service partners to ensure returned cups moved swiftly through the process and participating locations were stocked with clean, ready-to-use inventory.

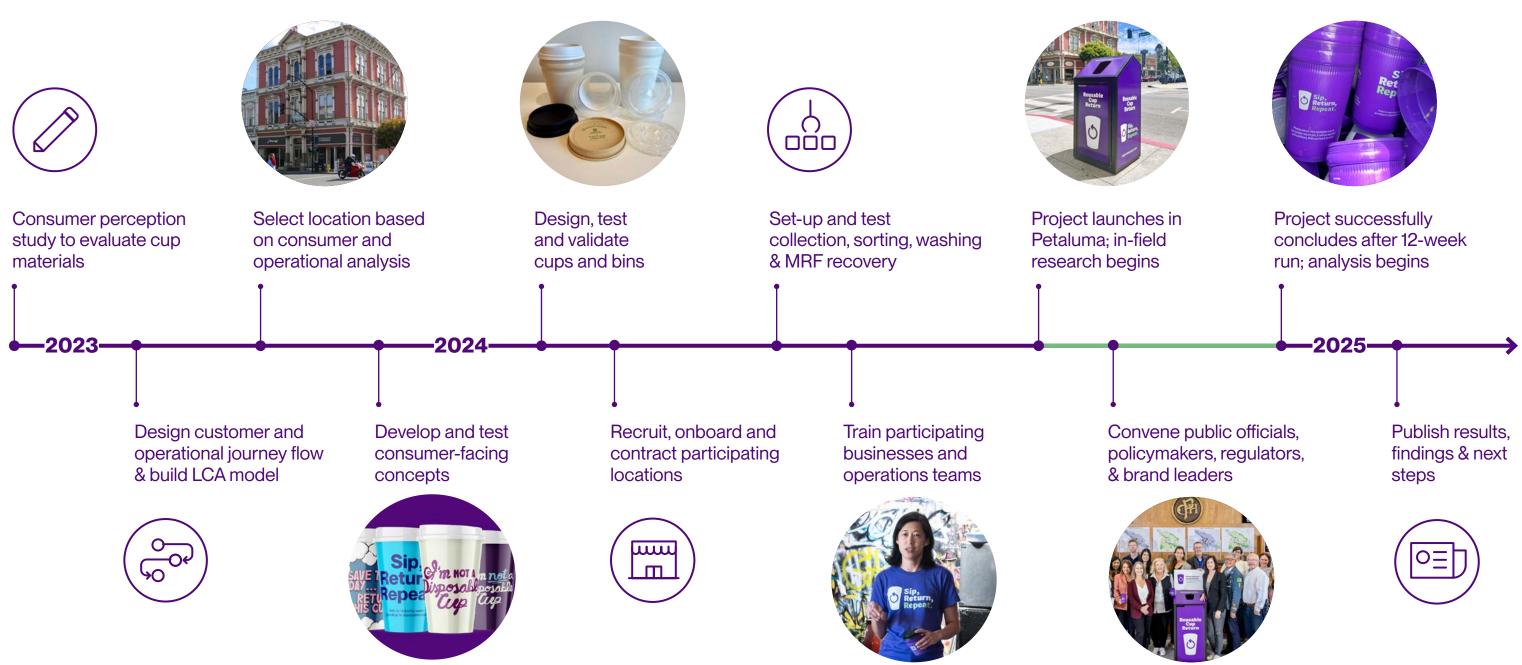






Innovation journey

To achieve the greatest environmental impact and best experience for all stakeholders, we executed a rigorous and collaborative journey from concept development to results and analysis.







How we measured impact

To determine the results of the Project, we measured awareness, sentiment and action with input from over 1,000 people.

BEFORE the project \longrightarrow **DURING the project** \longrightarrow

Pre-project public polling Public opinion measured with Petaluma residents	Consumer intercepts Surveys with consumers carrying program cups in Petaluma	Staff check-ins With managers, supervisors and baristas
	Accompanied shops Interviews with consumers discovering the program	Scanned return data Incoming and outgoing cups scanned to manage and track returns
	Focus groups With frequent returners, occasional returners and non-returners	







Post-project public polling Public opinion measured with Petaluma residents

Scanned return data Return rate analysis by cup, geography, bin type and business

"I recently had the chance to experience your reusable cup project and I was thrilled! I've been hoping to see something like this come to life for years, and I'm so impressed that you've made it happen — bravo!"

INBOUND EMAIL FROM CONSUMER





LUMA REUSABLE CUP PROJECT

Top-Line Results

Project outcomes focused on consumer awareness, sentiment and action



CONSUMER AWARENESS

How aware of the **Project was the** community?



Very high consumer awareness

82% of consumers were aware their cup was intended to be reused.*

Highly visible network of bins

30 participating businesses and over 60 return bins placed across Petaluma.







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Habit

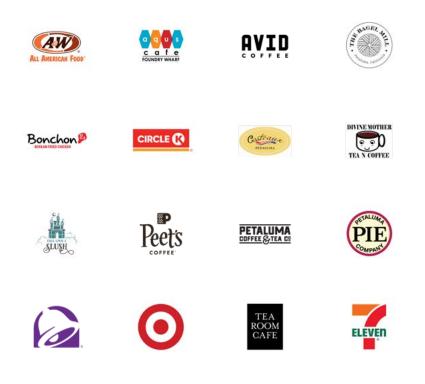
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*Survey intercepting consumers carrying program cups; n=613 [†] Post-project opinion poll of Petaluma residents; n=251

Very high public awareness

83% of Petaluma residents were aware of the program.[†]



CONSUMER SENTIMENT What did people think, feel or say?

Very low confusion

88% of customers said they knew how to return the cup.*





*Survey intercepting consumers carrying program cups; n=613

Solid grasp of a new concept

77% of consumers said they understood what happened to returned cups.*

Good unprompted understanding

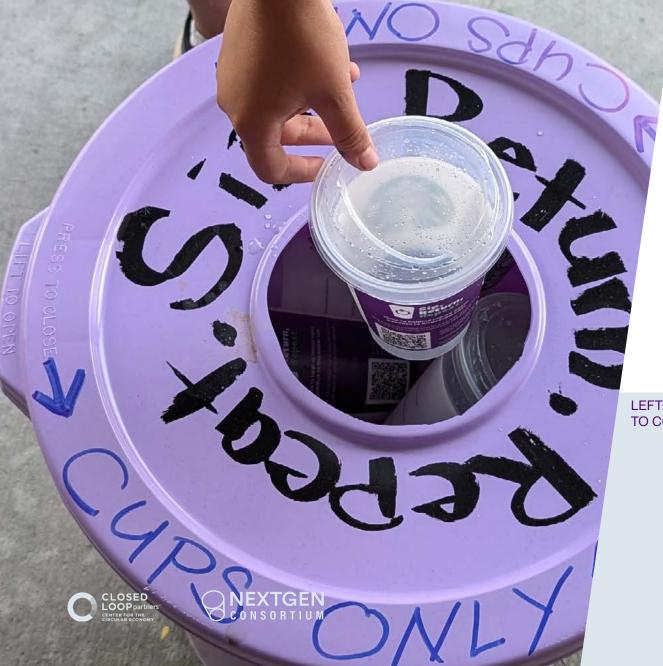
Consumers describing the program in their own words focused on the benefits of reuse in reducing waste.*



CONSUMER SENTIMENT What did people think, feel or say?

Popular with consumers

80% of participants would like the project to continue in Petaluma.*



Widespread local pride

85% of customers said they were proud of Petaluma for trying the Project.[†]

LEFT: STUDENT-MADE BIN AT SCHOOL TO COLLECT MORE CUPS

> [†] Survey intercepting consumers carrying program cups; n=613 * Post-project opinion poll of Petaluma residents; n=251

Organic demand to expand

One-quarter of inbound emails to

the project were from people asking for regional or national expansion.



ABOVE: HALLOWEEN COSTUME

ACTION

How did people participate?



Better for the environment

51% of purple cups were returned — surpassing the environmental break-even point, meaning the reusable cups were better for the environment than single-use cups.*

Reduced citywide plastic waste

Over 220,000 reusable cups successfully returned during 12 weeks, with minimal bin contamination.

High participation

81% of local residents who were given a reusable cup reported returning at least one (45% of adult population).[†]

* System breakeven point for returns was 40-50%, based on varying splits of hot and cold cup types. Material extraction, production, transportation, collection, washing, redistribution, recycling, landfilling footprints were among the variables considered in the analysis.
[†] Post-project opinion poll of Petaluma residents; n=251

Successful downtown return rates

57% of purple cups purchased in Petaluma's walkable downtown area were successfully returned.

Highly engaged online

Over 32,000 visits to the Project website.

Unreturned cups often recycled or reused

Non-returners often placed cups in the recycling; 24,000 cups were recovered by the local recycler. In focus groups, many also admitted to keeping cups for reuse at home.

"I absolutely loved the purple cup program. It genuinely made me happy to see everyone walking around with their purple cups, stopping to return them to the bins, etc."

INBOUND EMAIL FROM CONSUMER

NEXTGEN





eat.

e cup at e washed to ^{work}

Challenges We Had To Solve

How we designed for community-wide participation



The vast majority of beverages are consumed and disposed of away from the point of purchase.







- than 15% for fountain soda.[†]
- bad" options.

*National study by Center for the Circular Economy, 2021; n=2,500 [†] National study by Center for the Circular Economy, 2022; n=2,500

 To-go cups are, by definition, very mobile: fewer than 10% of consumers drink their coffee/tea in the location where they purchased it*; fewer

- Consumers often seek to dispose of the cup far from point of purchase.

• When time is of the essence, consumers will often look for whatever disposal method is nearest, sometimes choosing between "least

The vast majority of beverages are consumed and disposed of away from the point of purchase.



HOW WE ADDRESSED IT

Return bin saturation

Network of global brands and local businesses covered walkable downtown, busy suburbs, drive-to shopping plazas, etc.

Multi-brand collaboration drove interest

80% of Petaluma residents said they would be more likely to participate if the project was active across numerous businesses.*

Network designed for mobility

79% of cups were returned to a different location from where they were purchased.



"There are so many places to return. You see the bins on different corners and I like that it's inside and outside of places."

- IN-DEPTH INTERVIEW RESPONDENT

The multi-brand, multi-location system offered a wide net for participation and cup recovery.





Reusable cups only.

Thank you!

24/7 public access to return bins

More than half of bins were located in the downtown area, with many bins placed outside businesses or in public areas.

WHAT MATTERED MOST

PETALUMA REUSABLE CUP PROJEC

Not everyone feels included in sustainability initiatives, even if they agree with the intent.







- gaps in waste reduction.

*Pre-project opinion poll of Petaluma residents; n=251

• Sustainability initiatives are often designed around and targeted at those most motivated to participate — but "deep green" messaging and visuals can set a high bar that leaves people feeling excluded.

 Sustainability is sometimes perceived as a premium benefit with a higher price point, creating inequity in who feels they can participate.

Prior pilots and consumer studies highlight consistent intention-action

• In Petaluma, two-thirds of residents are "very concerned about climate change" and two-thirds "strongly agree" that single-use cups are wasteful* — yet most people order their beverage in a disposable cup.

Not everyone feels included in sustainability initiatives, even if they agree with the intent.



HOW WE ADDRESSED IT

Designed for the "movable middle"

We dialed back the language and color of sustainability and dialed up an approachable, purple, playful program identity to speak to everyone, not just the environmentally-minded.



Framed the payoff closer to home

We framed the benefit as reducing waste locally, rather than telling a more complicated story of carbon, climate, or planetary health.

Normalized participation for all

Automatic opt-in and no fee meant everyone could feel involved without having to self-identify with a movement.

WHAT MATTERED MOST

Inclusive participation without deposits or penalties made it accessible for everyone to be part of the Project in a low-stakes way.



"This is easy peasy... you just plop it right in"

- IN-DEPTH INTERVIEW RESPONDENT

Doing something for the first time can feel briefly overwhelming.



- are focused on the priorities in front of them.
- to participate.
- may skip the action if it requires too much thinking.





- Consumers are typically in autopilot mode when ordering, drinking and disposing of their beverage; they're often moving through their day and

 Introducing a new task — especially one with multiple components can cause unwanted cognitive overload, which reduces the propensity

 Increased cognitive load has also been shown to reduce sociallyminded behavior¹ — so even consumers who want to do the right thing

Doing something for the first time can feel briefly overwhelming.



HOW WE ADDRESSED IT

Iconic purple cup, all over town

The purple cup silhouette repeated throughout the consumer journey, from the on-cup graphics to the return bin hole cutout.



Singular, repetitive call-to-action

Focused call-to-action on "return" instead of "reuse" and repeated the word widely — including six times on purple cups.

"This goes with that."

- ACCOMPANIED SHOP RESPONDENT, **DESCRIBING THE PURPLE CUP MATCHING** THE PURPLE RETURN BIN

No sorting necessary

Designed back-end to process ancillary waste (lids, sleeves, straws) so consumer had just one simple job to do: drop the cup in a return bin





"I like the purple everything. It's holding people's hand."

- ACCOMPANIED SHOP RESPONDENT

WHAT MATTERED MOST

We lowered the cognitive load of participating in a new behavior.

Single-use is so ubiquitous that many people are desensitized to daily packaging waste.



*National study by Center for the Circular Economy, 2021; n=2,500





U.S. residents create about a pound of plastic waste every single day.²

- Half of U.S. tea/coffee consumers purchase at least one cup per day.*

 Consumers often interact with single-use items for minutes or even seconds, making the waste easy to forget and the problem easy to overlook.

CHALLENGES WE HAD TO SOLVE

CHALLENGE NO.4

Single-use is so ubiquitous that many people are desensitized to daily packaging waste.



HOW WE ADDRESSED IT

Collection created visible impact

Highly visible collection of cups helped community members understand the volume being prevented from landfill waste.

Point of sale reminder

Reusable cups served at each purchase prompted consumers to consider how the journey ends.

Stacks reinforced intention to return

Stacks of cups built up in vehicle cup holders, car trunks and kitchen counters — creating daily reminders of individual and household waste



"It raises your consciousness of not wasting. It makes you think about it."

- FOCUS GROUP RESPONDENT





"I keep the cups by my kitchen sink. They're waiting for me to bring them back."

- FOCUS GROUP RESPONDENT

WHAT MATTERED MOST

The purple cup acted as a physical reminder of packaging waste — and helped build motivation for a better outcome.

A beautiful reusable product is too nice to return but a boring one is not worth returning.



- that were too aesthetically desirable.





- Concept testing highlighted the risk that consumers would keep cups

- But design concepts that were too plain or evoked single-use cups led to low perceived value and higher intent to throw cups in trash.

CHALLENGES WE HAD TO SOLVE

CHALLENGE NO.5

A beautiful reusable product is too nice to return but a boring one is not worth returning.



HOW WE ADDRESSED IT

Used consumer feedback to design optimum desirability

We explored concepts with varying levels of consumer desire to optimize return intention.





LOW DESIRE Higher intention to throw cups in trash

OPTIMUM DESIRE Higher intention to return cups

HIGH DESIRE Higher intention to keep cups

Intentional design yielded high return intent

Only 5% of participants said they intended to keep the purple cup; 75% said they intended to put it in a return bin.*





*Survey intercepting consumers carrying program cups; n=613

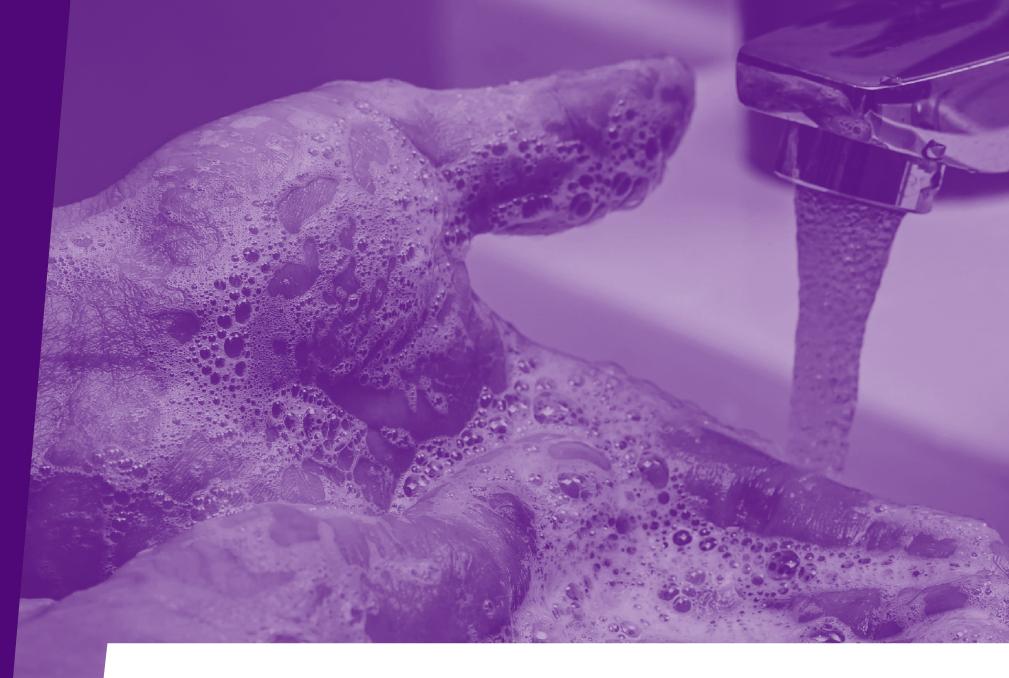


WHAT MATTERED MOST

We designed a cup with just enough perceived value to be returned.

PETALUMA REUSABLE CUP PROJECT

Communitywide sharing is a new behavior for consumers that comes with cleanliness concerns.



- with their own possessions (water bottles, bags, etc.).
- When consumers are introduced to collective reuse outside of questions often turn to cleanliness.
- Consumers describe a heightened awareness of cleanliness following the pandemic experience.





• In the U.S., reuse has often been framed as something consumers do

restaurants — where it's normalized and mostly trusted — their first

Community-wide sharing is a new behavior for consumers that comes with cleanliness concerns.



HOW WE ADDRESSED IT

Communicated cleaning with the "Rule of 3"

Washed, sanitized and inspected: describing the cleaning process in three steps helped people visualize and trust the system.

"The cups get inspected? That makes me feel much better."

- FOCUS GROUP RESPONDENT

Offered more detail for the determined

The Project website offered greater detail on the cleaning process for people who wanted to know more.





Answering the "who, how and where?" questions about sanitization helped consumers move past their initial concerns.





"I am curious about the back end process for how you all centralize the cleaning of cups and then re-distribute."

- INBOUND EMAIL FROM CONSUMER

WHAT MATTERED MOST

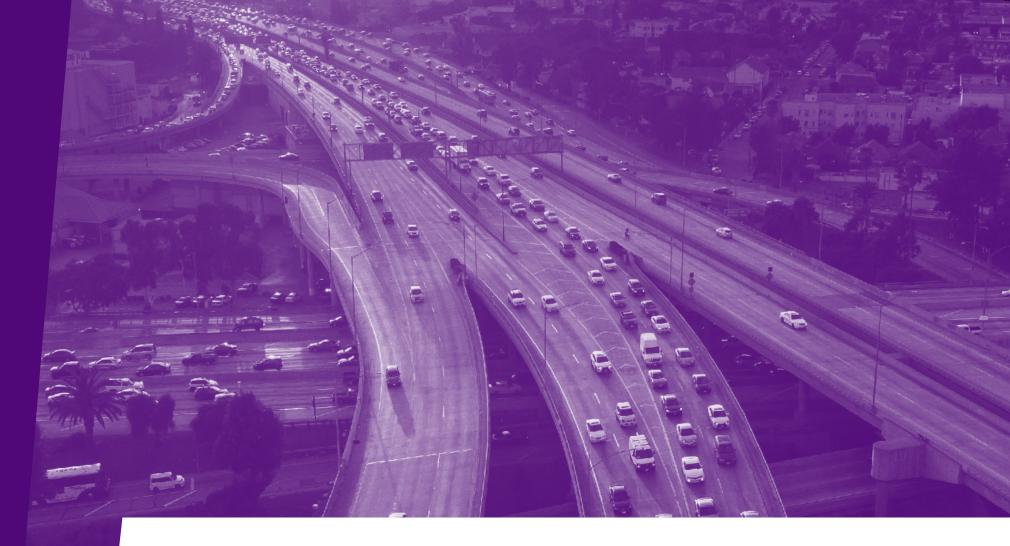
ETALUMA REUSABLE CUP PROJECT 36

CHALLENGE NO.7

Even for the most motivated consumers, it might not be possible to return every cup, every time.







- a return isn't feasible especially those just passing through experiencing mobility challenges.
- lightest possible footprint of each cup.
- would rather drop cups in recycling than in the trash.*

*National study by Center for the Circular Economy, 2021; n=2,500

 Even motivated consumers described reasonable scenarios where the Project area, people leaving town for a length of time or those

 Knowing that an open system that automatically opted everyone in would experience some cup losses, it was critical to engineer the

• We know from prior research that, when given the choice, consumers

CHALLENGE NO.7

Even for the most motivated consumers, it might not be possible to return every cup, every time.



HOW WE ADDRESSED IT

Lightweighting the hot cup

Cups selected for the system were made with expanded polypropylene to provide insulation and strength without increasing material volume.

Recovery via materials recovery facility

We partnered with Recology to identify cups sent to recycling. This recovered over 24,000 cups, improving the environmental results of the Project.

Local partners diverted waste

We engaged local partners including a hotel, food delivery service and street cleaning team — to divert cups from waste to return bins and recycling streams.





WHAT MATTERED MOST

Designing the system around the lightest viable environmental footprint allowed the purple cups to reach environmental breakeven in an automatically opted-in system.





Design for recovery beyond the Project

We worked with MRFs to test and validate that the cup would be recoverable, and chose recyclable materials in case cups left the Project area.

Sip, Return, Repeat.

Helio to reducing waste, goodbye to disposable cups. "The program got the conversation about waste started. And people who didn't want one of the cups started bringing their own, that was a win."

— PETALUMA COFFEE SHOP MANAGER



NEXTGEN



Sip, etur epea

Hello to reducing was oodbye to disposable (

Next Steps for the Project

Open challenges to be solved and next steps for the NextGen Consortium



How to build awareness of why reuse is better



Many consumers believe paper cups are made exclusively of paper — which leaves them questioning the value of reuse.

- This misperception leads people to believe that paper cups are widely recycled and/or break down naturally.
- More than a quarter of hot beverage consumers place their cup in recycling after use,* even when paper cups are not recycled in their area.
- Exposure to single-use packaging with compostable claims may increase confusion.³

"Paper is a consumable — it breaks down. It doesn't hurt the landfill, it should be good for the environment."

— IN-DEPTH INTERVIEW RESPONDENT

WHY IT'S WORTH SOLVING

When consumers are better informed about the benefit of alternatives to single-use, they're more motivated to explore options like reusable systems and bring-your-own.





"I think the regular recyclable cups worked well. I'm for more use of paper and less plastic."

- INTERCEPT RESPONDENT

How to balance the material tradeoffs



The lower comparative cost and greenhouse gas emissions of plastic cups offered the best pathway to financial and environmental viability for this reuse system. But plastic formats come with tradeoffs.

- Materials used are FDA-approved and BPA-free but many consumers worried about micro-plastics, particularly when the cups were exposed to hot beverages in polypropylene cups.
- Consumers also raised questions about the durability and safety of these plastic cups in industrial-grade dishwashers that use high heat for sanitation.
- These concerns were often more pronounced among consumers who mistakenly believe their single-use paper cups contain no plastic.

"I don't like it. I have concerns about the boiling hot beverage in this plastic cup."

- IN-DEPTH INTERVIEW RESPONDENT

WHY IT'S WORTH SOLVING

Innovation and R&D into alternative materials to solve business, environmental, and consumer challenges can help unlock widespread adoption.









"I try to not drink anything in plastic anymore. They say that balls of plastic are already in us right now."

- INTERCEPT RESPONDENT

How to design for the right level of opt-out



Consumers shared fair reasons why returning cups wasn't always feasible.

- Some consumers expressed frustration with automatically receiving the purple cup while they were on their way out of the Project zone.
- In focus groups, we heard that many people returned the cup sometimes or most of the time — very few people considered their participation 100% in or out.
- In-app purchases and drive-thru were often referenced as transactions when people might be traveling quickly through town to another destination and therefore less likely to return with the purple cup.

"We are now here, 180 miles away and stuck with a plastic purple cup."

- YELP REVIEW

WHY IT'S WORTH SOLVING

Balancing reuse as the primary behavior with easy opt-outs for those who need it offers the potential for even higher return rates.





"Mine mostly pile up in my car, because I live in Petaluma but I work in Santa Rosa, so I pop in to get a coffee on the way to work and then there's no bin in Santa Rosa."

— FOCUS GROUP RESPONDENT

How to sustainably fund the business model



Reuse is still considerably more expensive for businesses than single-use cups. Key opportunities to lower costs of reuse, which the Consortium is pursuing, include:

- Continued pre-competitive collaboration to generate economies of scale in reverse logistics operations;
- Closing reuse intention-action gaps with consumers to reduce costs associated with cup loss;
- Working with washing operators to optimize washing processes through innovation and catalytic investments;
- Exploring how advertising opportunities could reduce costs of physical assets like bins and cups;
- Sharing insights with policymakers and regulators to develop legislation that accelerate cost-effective reuse systems.

"I love the program and want to continue, but I can't afford paying more than what I spend on disposables today."

- LOCAL PARTICIPATING BUSINESS OWNER

WHY IT'S WORTH SOLVING

Building cost-neutral pathways to reuse is a key way to tap the unmet demand for less





environmentally harmful ways of doing business.

PETALUMA REDSABLE CUP PROJECT

How to elevate the reusable cup experience



Many consumers were happy to see the project in their community but wanted to see improvements to the cups.

Suggestions to improve the cup included:

- White cup interiors to better present the color of each beverage (and make the back-end cleanliness inspection easier);
- Reduce space from top of beverage to lip for better presentation and experience of hot beverages;
- Tighter-fitting lids to avoid spill risks;
- Despite these suggestions, consumers noted additional benefits of reusable cups: two-thirds said the cup was stronger than the single-use cup they typically use.*

"If you have a lot of space at the top of the cup, you get liquid first before you get the foam."

— FOCUS GROUP RESPONDENT

WHY IT'S WORTH SOLVING

Improving reusable cup design offers consumers an incentive to reuse above and beyond the environmental impact: an even better drinking experience than they have with single-use cups.





*Survey intercepting consumers carrying program cups; n=613

"Normally, you get the white cup with a little design — It's a whole experience. So when they brought out one that wasn't full to the top, I was not super excited about it."

— IN-DEPTH INTERVIEW RESPONDENT

Next steps: Moving to scale

In the face of growing regulatory, consumer and climate pressures on single-use packaging waste, continuing to advance reuse is an urgent priority of the NextGen Consortium. The Petaluma Reusable Cup Project demonstrated an ambitious. innovative vision of reuse as an everyday reality, paving the way for how we scale reuse in California and other markets.

Next, the Consortium is building upon the insight from Petaluma to implement long-term, citywide reuse programs that are better for businesses, people and the planet. Together, we will accelerate the strategies that have been proven to work and solve the open challenges identified in this Project.



Accelerate proven strategies

- Multi-brand and public-private partnerships to widen accessibility of reuse
- Financially inclusive reuse programs that include everyone
- Frictionless user journeys that are easy to understand, remember and repeat
- Communications that call attention to waste and inspire everyday change
- Reusable packaging that consumers value enough to return, but not to keep
- Storytelling that builds confidence in the cleanliness of public reuse
- Lightweighted reusable packaging that helps offset product loss in open systems

- Balance the material tradeoffs
- Design the right level of opt-out
- Elevate the reusable cup experience







Solve open challenges

Build awareness of why reuse is better

Sustainably fund the business model

Join us

A call for collaborators seeking to build the future of reuse.



We're inviting brands, retailers, cities and innovators from all sectors to join our upcoming reuse activations in cities across the U.S. Led by the Center for the Circular Economy's NextGen Consortium and its foodservice brands, these activations will begin in 2026 in strategic markets, focusing on reducing the operational costs of reuse, and priming communities for reuse as a norm.

The Center's Reuse Activation Partners gain hands-on experience and insights in making reuse work — from design to washing and logistics. Brands from multiple sectors will have the opportunity to identify synergies with their industries and leverage a primed community and shared recovery infrastructure, such as washing facilities, to scale reuse in their diverse packaging categories.





Get in touch

nextgen@closedlooppartners.com

Sip, Return, Repeat.

Helio to reducing waste, goodbye to diaposable cups

"I think this project is important, and impactful work. Please spread it throughout the country! Big change needs big action."

- INBOUND EMAIL FROM CONSUMER







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Acknowledgments

Thank you to all those who played an integral role in bringing this unprecedented collaboration to life.

Participating businesses

Thank you to all NextGen Consortium brands for their leadership and commitment to shape the strategy of this project and implement this historic reuse initiative.

Thank you to all the Petaluma businesses — from small shops to national brands — who embraced the Project with open arms and made it a reality.

Operations partners

Thank you to Muuse (our service provider) and Dispatch Goods (our washing partner), both prominent reuse companies, for their tireless efforts to seamlessly collect, process, track, wash and inspect over 220,000 returns, making it easy for consumers to return cups for reuse.

Local partners

Thank you to the City of Petaluma and Zero Waste Sonoma for their vital support for this initiative, for bringing together local businesses and community organizations that were critical to the success of the program and for helping amplify Project communications.

Thank you to <u>Recology</u>, the local recycling operator in Petaluma, for partnering to inform local businesses and residents about the Project, for helping us test reusable cups for recyclability and for recovering, counting and recycling cups that made their way to the recycling bin, instead of the purple return bins.

Thank you to the Downtown Streets Team, Hotel Petaluma, and the Petaluma Food Taxi for supporting the project and ensuring that purple cups were properly returned or recovered.

Petaluma community

Thank you to the people of Petaluma for embracing a bold, new idea and returning over 220,000 cups.

Marketing partners

Closed Loop Foundation

References

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²OECD, <u>www.oecd.org/en/about/news/press-</u> releases/2022/02/plastic-pollution-is-growing-relentlesslyas-waste-management-and-recycling-fall-short.html





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³Closed Loop Partners' Composting Consortium and the Biodegradable Products Institute (BPI), Unpacking Labeling and Design: U.S. Consumer Perception of Compostable Packaging, www.closedlooppartners.com/research/usconsumer-perception-of-compostable-packaging/

Learn more

To learn more about the NextGen Consortium, please visit closedlooppartners.com/nextgen







