

# Fighting Food Waste in Food Service

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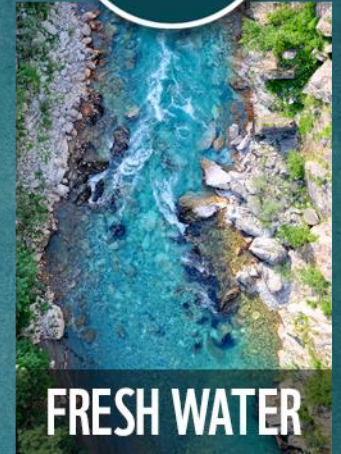


# Our Mission

## WWF PROTECTS THE FUTURE OF NATURE

- ✓ We are a global science-based organization
- ✓ We work with companies and communities
- ✓ We strive to meet the needs of both people and nature

# We Focus on Protecting



- 
- 1.** Sustainable Production
  - 2.** Eliminate Waste
  - 3.** Sustainable Consumption

# **Food production**

is the biggest threat to the planet



By 2030, the global middle class will hit 5 billion, increasing the demand for resources.

**70%** of biodiversity loss is  
due to food production



# Food and Agriculture...





# Freeze

the footprint of food



We must produce  
**more with less**





# Food Loss/Waste Strategy

1



**HOSPITALITY  
TOURISM**

2



**RESTAURANTS  
FOOD SERVICE**

3



**RETAIL  
GROCERY**

4



**FARMS**

5



**SCHOOLS  
UNIVERSITIES**



**LESSON PLAN  
GRADES 5-12**

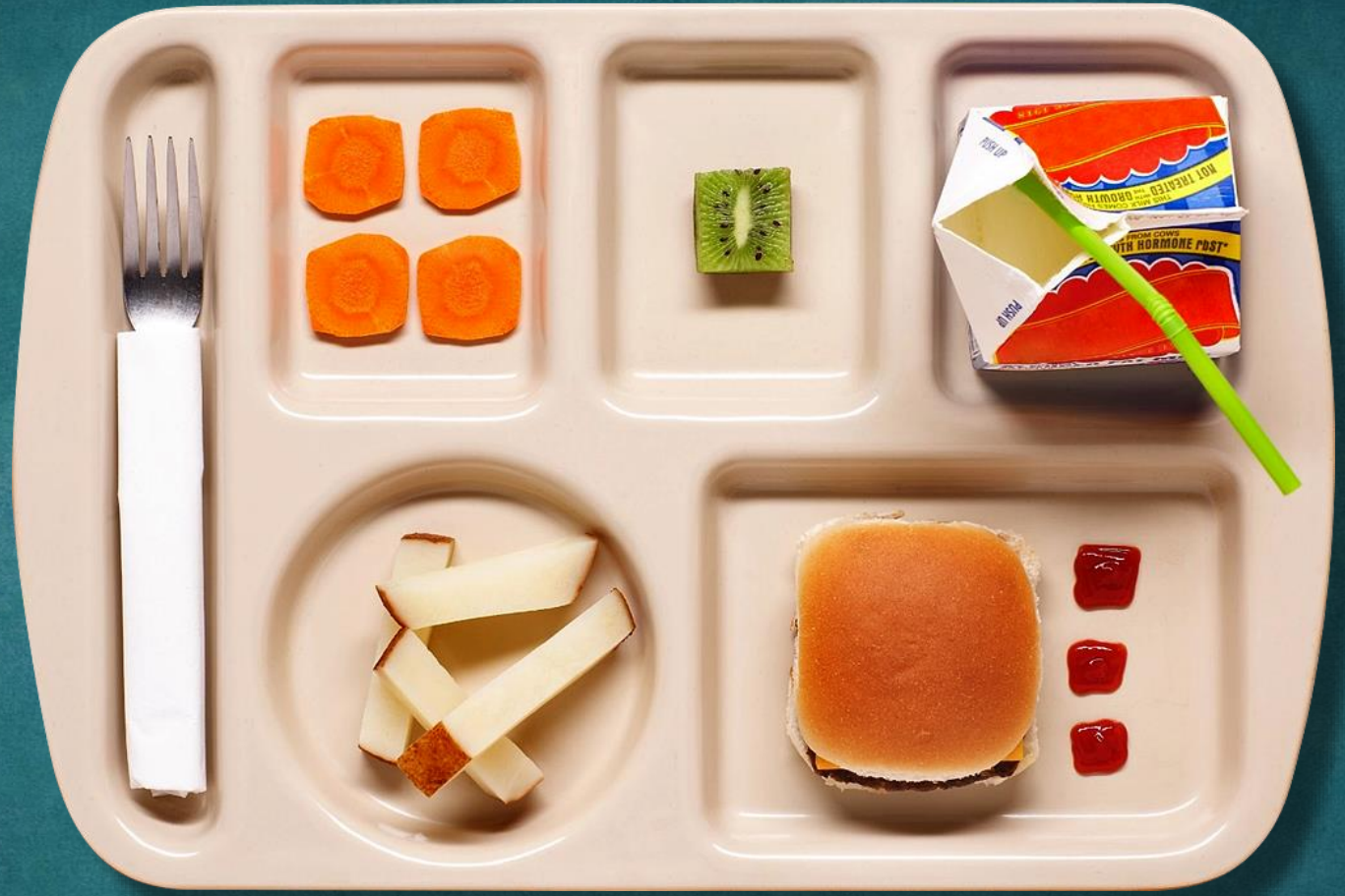
**THE WWF FOOD CONSERVATION CHALLENGE**  
Making the connection between food waste, our planet, and the wildlife we love



**5**

**SCHOOLS / UNIVERSITIES**

**Action:**  
Measure  
wasted  
food at  
your school.



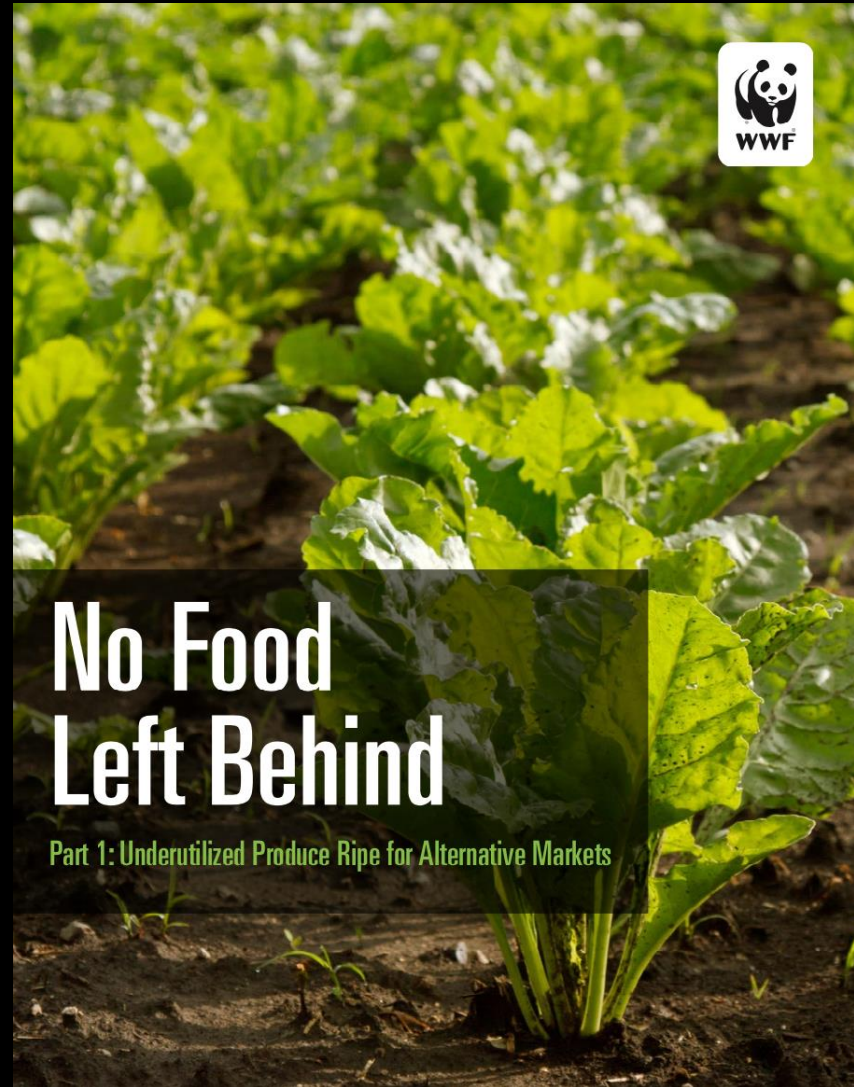
5

SCHOOLS / UNIVERSITIES



4

FARMS



# No Food Left Behind

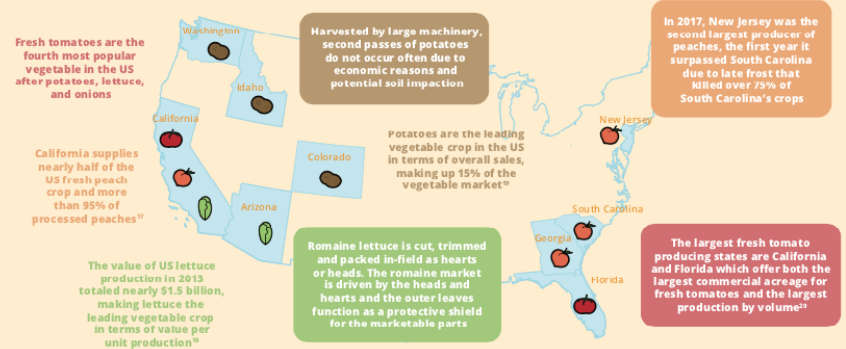
Part 1: Underutilized Produce Ripe for Alternative Markets

## BACKGROUND ON

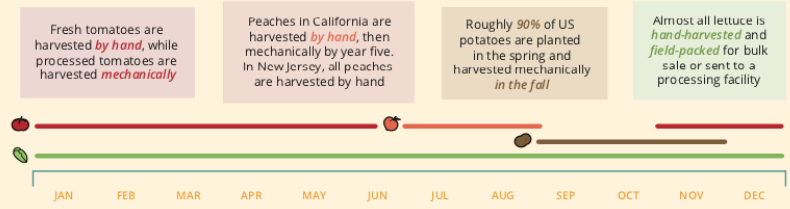
# Fruits & Vegetables Studied

The four crops included in this study have varying production volumes, methods, locations, and end markets. The information below highlights some of these key differences, which were some of the major drivers behind choosing the crops for this study as WWF aimed to gather data on loss rates across a variety of crop types.

### Who are the leading producers?



### How and when are they harvested?



### Where do they go?

- About **90%** of the domestic tomato market is sent for **processing** into tomato sauce, paste, and other value added products while the remaining **10%** is eaten fresh at **home** (70% of market) and at restaurants and other food service outlets (30%).<sup>21</sup>
- About **50%** of domestic peach production enters **fresh market** while the remaining **50%** is sent for canning (75% of market), freezing (21%), or dehydration (<5%).<sup>22</sup>
- Nearly 60%** of potato sales are to **processors** for French fries, chips, dehydrated potatoes and other potato products.
- All lettuce is marketed as a **fresh product**.



<sup>17</sup> <https://www.agmrc.org/commodities-products/fruits/peaches/>  
<sup>18</sup> <https://www.agmrc.org/commodities-products/vegetables/lettuce>  
<sup>19</sup> <https://www.ers.usda.gov/topics/crops/vegetables-pulses/potatoes.aspx>  
<sup>20</sup> <https://www.ers.usda.gov/topics/crops/vegetables-pulses/tomatoes.aspx>  
<sup>21</sup> <https://www.ers.usda.gov/topics/crops/vegetables-pulses/tomatoes.aspx>  
<sup>22</sup> <https://www.ers.usda.gov/topics/crops/vegetables-pulses/potatoes.aspx>



# Action:

Zero Waste Shopping

3

RETAIL / GROCERY

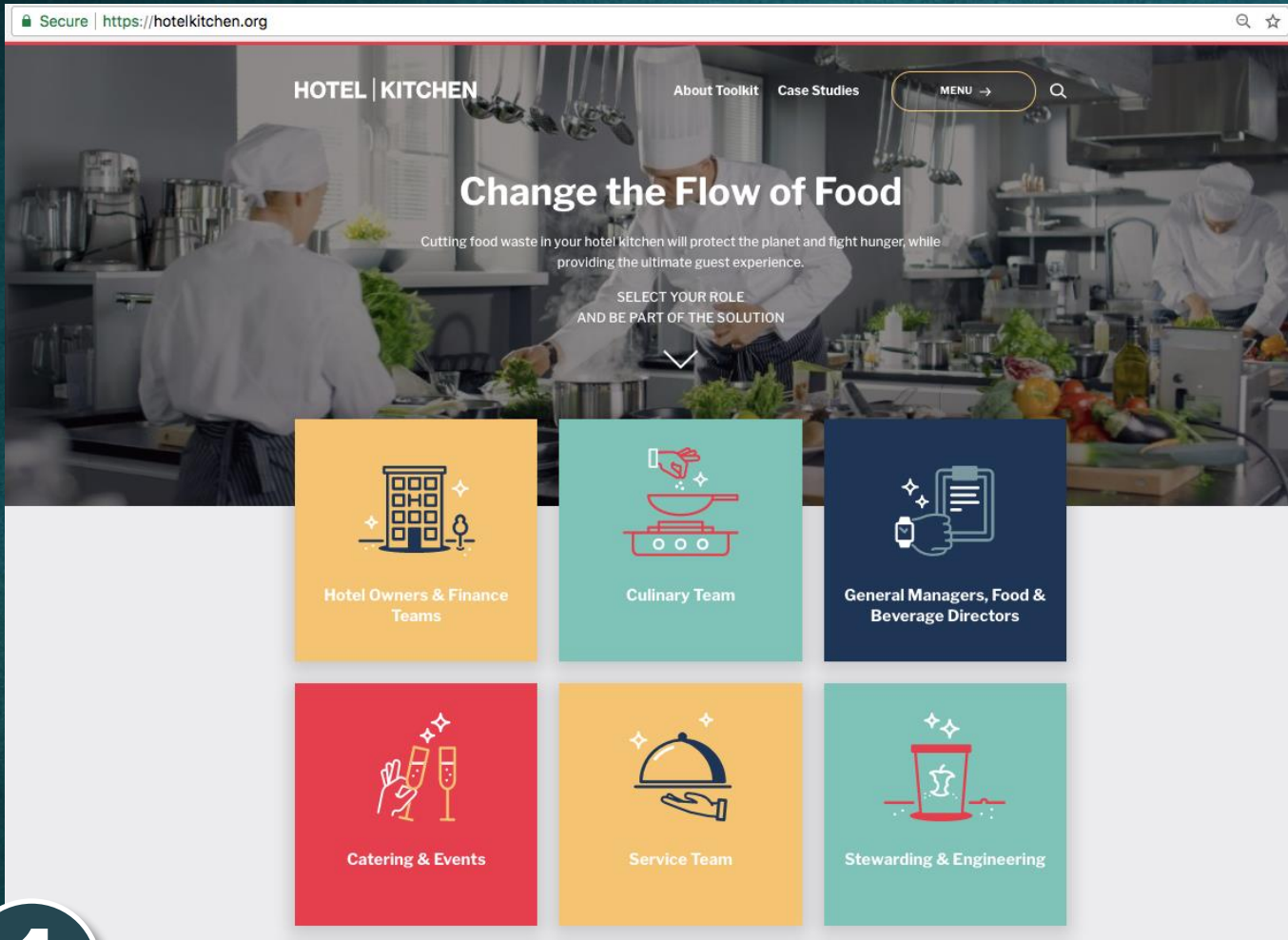
# Action:

Buffet 2.0

2

RESTAURANTS / FOOD SERVICE





1

HOSPITALITY / TOURISM



# HOTEL | KITCHEN



[www.hotelkitchen.org](http://www.hotelkitchen.org)

[#hotelkitchen](https://twitter.com/hotelkitchen)



1

HOSPITALITY / TOURISM

# Project Design



# Research

- No plans to address food waste
- No standard for separation & measurement
- No current tools exist to help
- No culture around food waste prevention present



www.prnewswire.com/news-releases/world-wildlife-fund-american-hotel--lodging-association-and-the-rockefeller-foundation-bring-hotel-bran...  
PRNewswire a CISION company News Solutions Resources Search  
News in Focus Business & Money Science & Tech Lifestyle & Health Policy & Public Interest People & Culture  
World Wildlife Fund, American Hotel & Lodging Association and The Rockefeller Foundation Bring Hotel Brands Together to Prevent Hotel Food Waste  
Hotel properties kick-off 12-week pilot programs to reduce food waste in hotels  
NEWS PROVIDED BY The Rockefeller Foundation → Mar 21, 2017, 09:00 ET  
SHARE THIS ARTICLE [Social media icons]  
WASHINGTON, March 21, 2017 /PRNewswire/ -- World Wildlife Fund (WWF), with support from The Rockefeller Foundation, and the American Hotel & Lodging Association (AHLA), today launched a series of pilot projects aimed at further reducing food waste in the hotel industry. WWF and AHLA developed the projects in conjunction with a working group from AHLA's Food & Beverage Committee and Sustainability Committee. Hotel brands participating in the projects include Hilton, Hyatt, IHG (InterContinental Hotels Group) and Marriott International, as well as Hershey Entertainment & Resorts, Sage Hospitality and Terranea Resort. The pilots were also developed with the support of The Rockefeller Foundation's YieldWise Initiative, which aims to reduce post-harvest food loss and halve the world's food waste by 2030.

# Demonstration Process

1 SURVEY STAFF

2 SEPARATION & TRACKING

3 IMPLEMENT INTERVENTION

4 SURVEY STAFF & EVALUATE



How many bins?

# Hospitality Food Waste Strategy



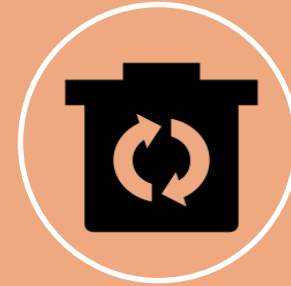
## Prevent

Priority #1 is  
reduction



## Donate

what is not  
preventable



## Divert

everything  
that remains

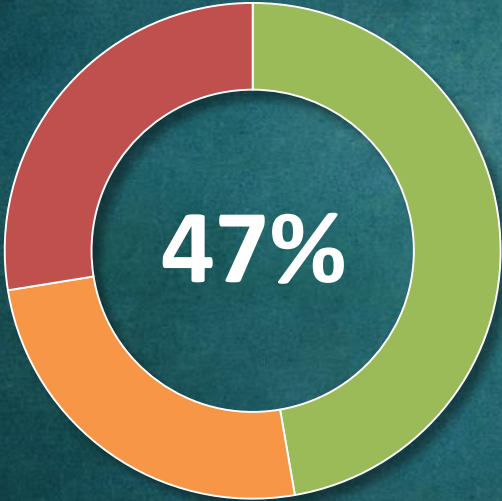
← **SEPARATION & MEASUREMENT** →





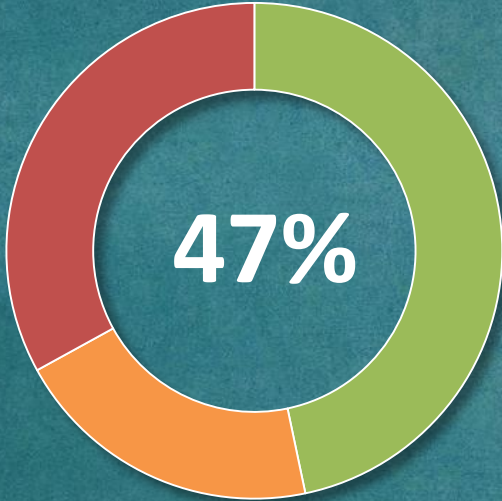
# Survey: Pre-Pilot

Agree  
*Effective Prevention Strategies*  
are in place



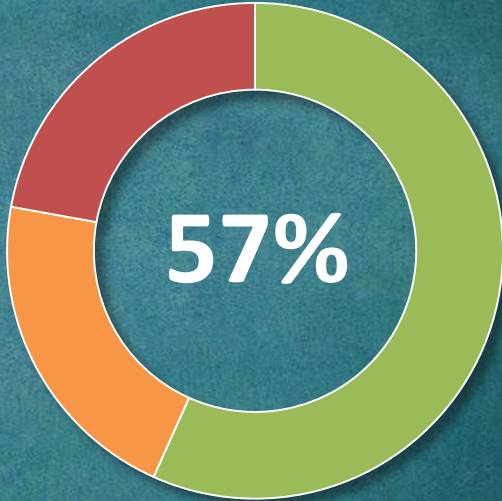
■ Agree ■ Neutral ■ Disagree

Have clearly defined  
Food Waste Management  
*Roles & Responsibilities*



■ Agree ■ Neutral ■ Disagree

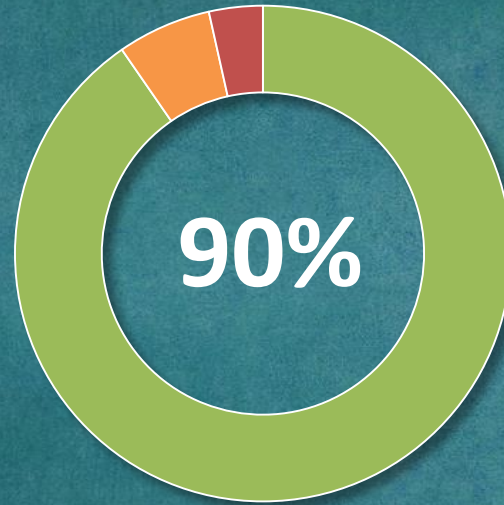
Are aware of  
*Waste Prevention Activities*



■ Agree ■ Neutral ■ Disagree

# Survey: Pre-Pilot

Willingness to help  
*reduce/prevent food waste*



■ Agree ■ Neutral ■ Disagree

***Staff want to engage more, they just need the tools – opportunity to deploy Lobster Ink training and empower staff in their functions!***

# Separate & Track/Measure

## 2-stream separation

- Pre-Service and Post-Service



## Weekly bin count data entry

- EPA Food Waste volume-to-weight conversion





# FREE Training Videos



Introduction



Building a task force



Separation and measurement

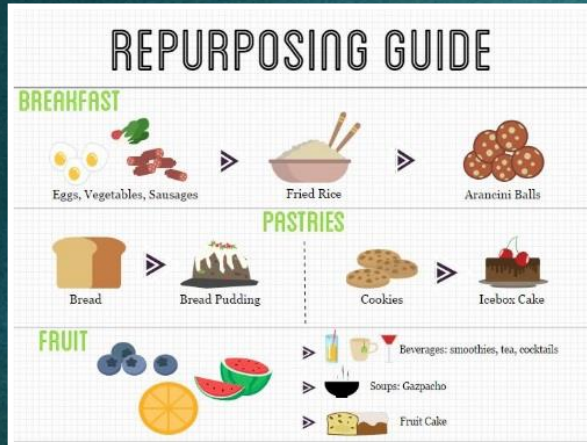


Prevention before service



Recovery and conclusion

# Intervention: Menu Redesign



Ingredient Repurposing Guide



Ingredient Yield Heat Map



Meeting Planner One-Pager

## Additional Materials:

- Seasonal low-waste menus
- Script for sales staff to discuss menu with clients

# Intervention: Prototyping

## A La Minute displays

Concept Sketch:



Existing Displays:



Serve your self

Concept Prototype:



By order only

## Food Kit 2.0

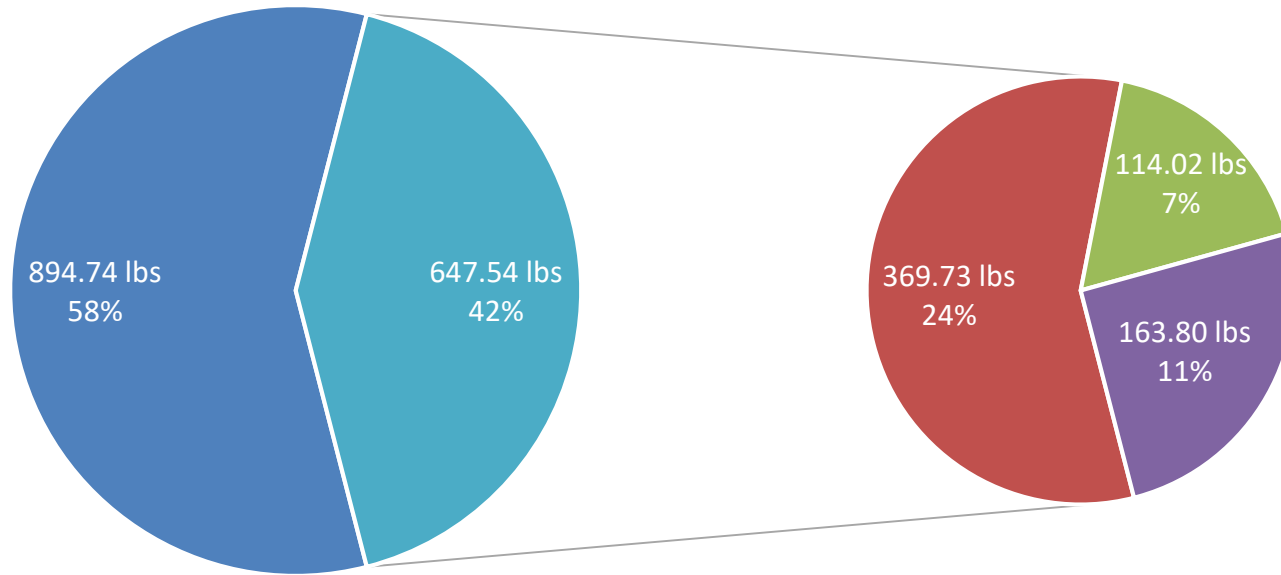
Concept Sketch:



# 750 Person Lunch Event

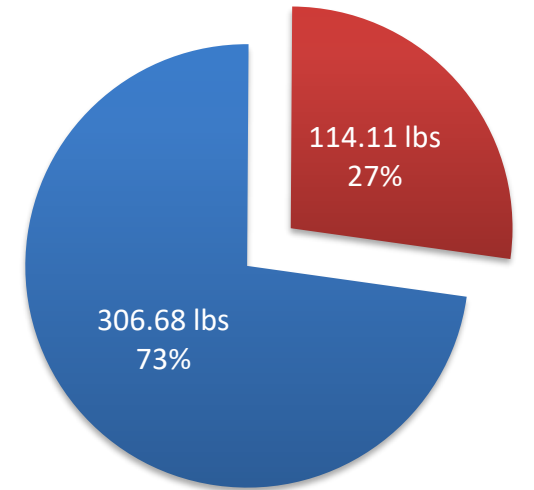
## 58% of food fired for the event was consumed

Eaten vs. Uneaten Food



■ Eaten ■ Recoverable ■ Unrecoverable ■ Plate

Total Overproduction - Lunch



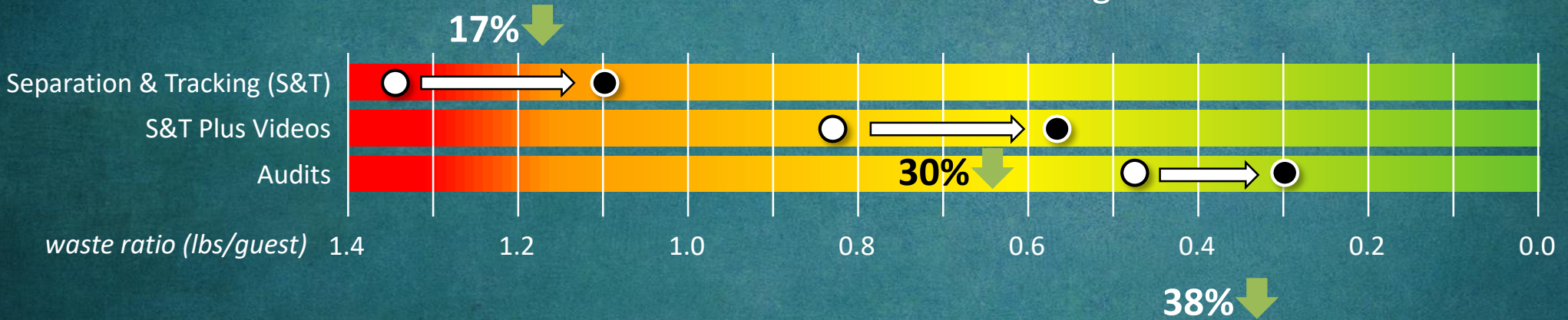
■ Portion Sizing ■ No Show



# Did the interventions prevent food waste?

Yes! Food waste per guest did decrease.

How did waste change?



# CHEFS TO END HUNGER



Pack aluminum pans with food and label.



Pack boxes with aluminum pans and label.



Give packed boxes to your LA & SF Specialty driver and receive a donation receipt.



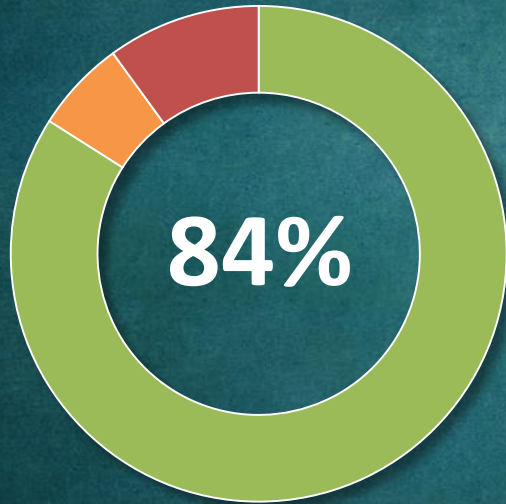
1

HOSPITALITY / TOURISM

# Survey: Post-Pilot

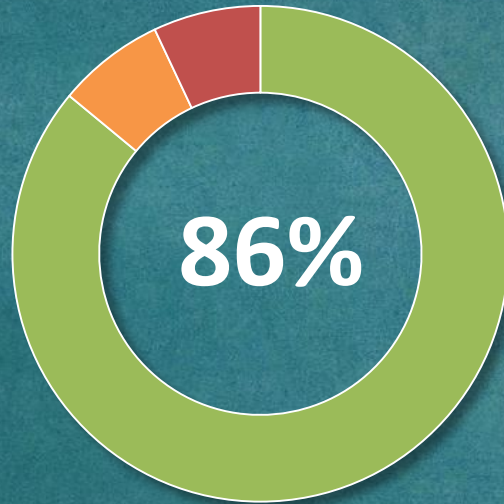
Staff awareness improved

Agree  
*Effective Prevention Strategies*  
are in place



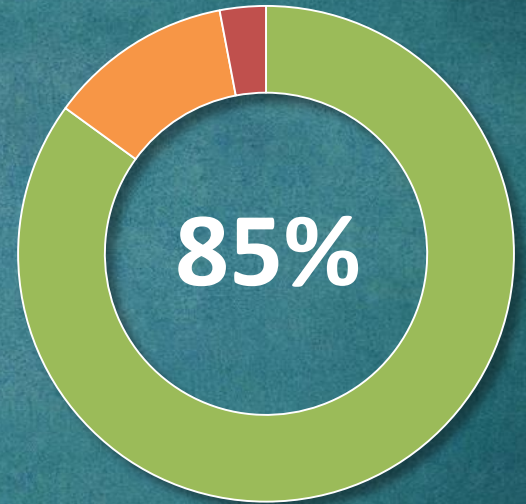
Agree Neutral Disagree

Have clearly defined  
Food Waste Management  
*Roles & Responsibilities*



Agree Neutral Disagree

Are aware of  
*Waste Prevention Activities*



Agree Neutral Disagree

HOTEL | KITCHEN

# Fighting Food Waste in Hotels



# New Tools!

HOTEL | KITCHEN

[About Toolkit](#) [Case Studies](#)

MENU →



## Get Started



Use this toolkit to help your property better manage food and reduce waste.

Next Step

→ [KICK OFF TASK FORCE MEETINGS](#)

Food management and waste reduction takes ideas, collaboration and commitment across all teams. And it needs a champion to lead the effort, provide a mandate, and select additional members of the team. No matter what department you work with, YOU could be your hotel's food waste champion.

## Build a Food Waste Task Force

To develop an effective program and change the way food is planned, handled, and served at your property, you must establish an internal **Green Team** or **Food Waste Task Force** that includes **key leaders** and **staff across the organization**.



**Hotel Owners & Finance  
Teams**



**Culinary Team**



**General Managers, Food &  
Beverage Directors**



**Catering & Events**



**Service Team**



**Stewarding & Engineering**



**PR & Marketing**

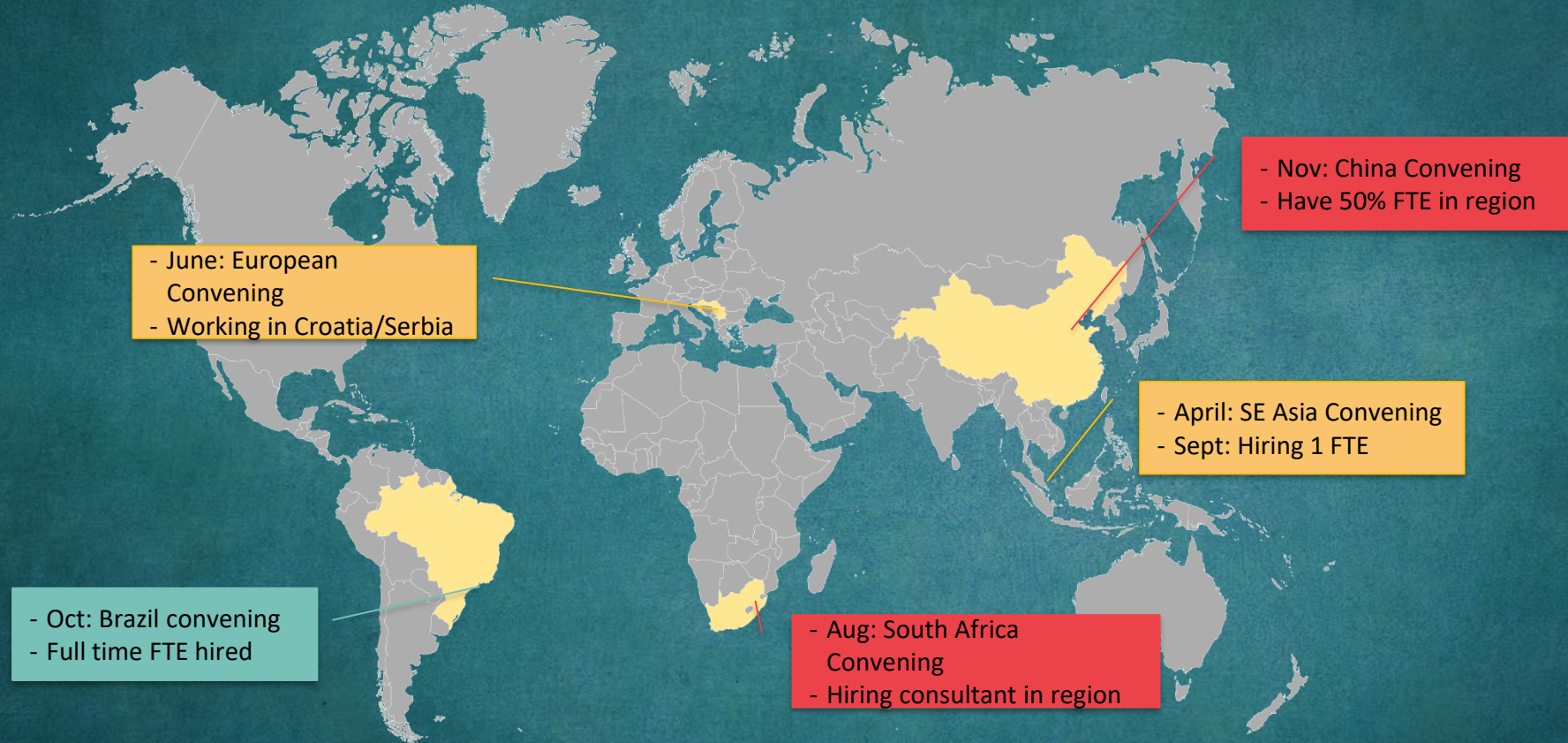


**Purchasing & Receiving**



**Human Resources**

# Hotel Kitchen Global Expansion





### A unique program: Costa leads

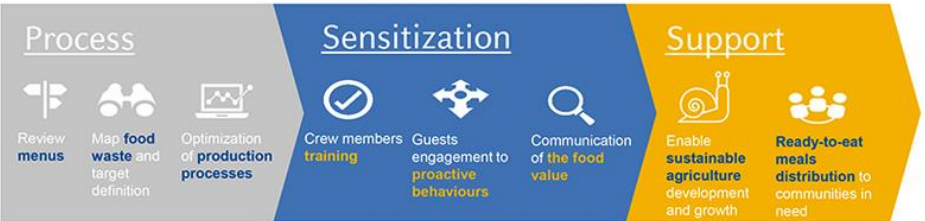
Very well received from all stakeholders mainly Institutions, NGOs, opinion leaders, media and guests.

Strong recognition with direct impact on company reputation for challenging reduction target and significant measurable results.

Consistent 360° approach with direct social and environmental impact and uniqueness within the industry are considered as key differentiators.



### From food waste reduction to ready-to-eat meals distribution



2

1. Every day, about one third of all the food that's harvested or produced around the world is lost or thrown away. That's about 1.3 billion tonnes of food wasted per year.<sup>1</sup>

4. The data collected through the smart scale system enables our co-workers in the stores to identify ways to cut food waste at IKEA.

2. Our ambitious goal: IKEA wants to halve its food waste by 50% by the end of August 2020.

5. Around 50% of IKEA Food co-workers state that they waste less food at home since working with the scale.<sup>2</sup>

3. A touch screen connected to a floor scale that carries a waste bin builds the smart scale system to measure food waste.

6. Around 75% of IKEA Food co-workers state that using smart scale makes them more aware of the environmental impact of our food waste.<sup>2</sup>

We measure & report our progress on:

- Number of IKEA stores participating
- Weight reduction in kg
- Saved money in €
- Amount of meals saved<sup>3</sup>
- CO<sub>2</sub> emission prevented<sup>4</sup>

FOOD IS  
PRECIOUS

If we, the 18000 food-co-workers at IKEA, in the almost 400 stores worldwide, and the annual 650 million food guests, could work on reducing food waste together, imagine what that could mean...

<sup>1</sup> Source: Food and Agriculture Organization of the United Nations (FAO)  
<sup>2</sup> Source: IKEA co-worker survey  
<sup>3</sup> One meal equivalent to 450 gr. Kg waste weight converted to number of meals.  
<sup>4</sup> 1 kg equivalent to 4,3 kg CO<sub>2</sub> emission

© Inter IKEA Systems B.V., 2017



2

RESTAURANTS / FOOD SERVICE



# Simple 3 Steps



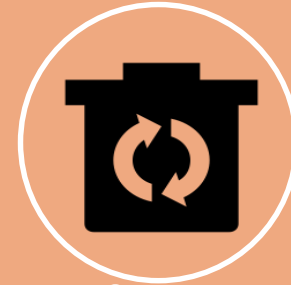
## Prevent

Is your hotel  
measuring &  
reducing?



## Donate

Does your  
hotel  
donate?



## Divert

Are you  
sending to  
landfill?



Thank you.