ZERO WASTE – THE "3C" APPROACH

Transitioning from the 3R's to the 3C's

- 23 years experience
- 5000+ installations worldwide

Bruce Buchan

Founder and CEO





- It's the right thing to do!
- We are part of the solution!
- Everyone else is doing it!
- Customer Pressure!
- Government Pressure!
- We need to be green!
- We can make more money Green Washing!

"REALITY OF RECYCLING"

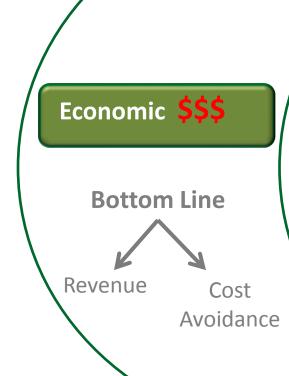




99% OF THE TIME



Where are we as a society?



Sustainability

Low Hanging Fruit

- Aluminum cans
- Reduced labor

The Not So Obvious

- Frequency and weights
- Zero rating hauler contract

Optimization

Hidden treasures

Social

"majority want to recycle"

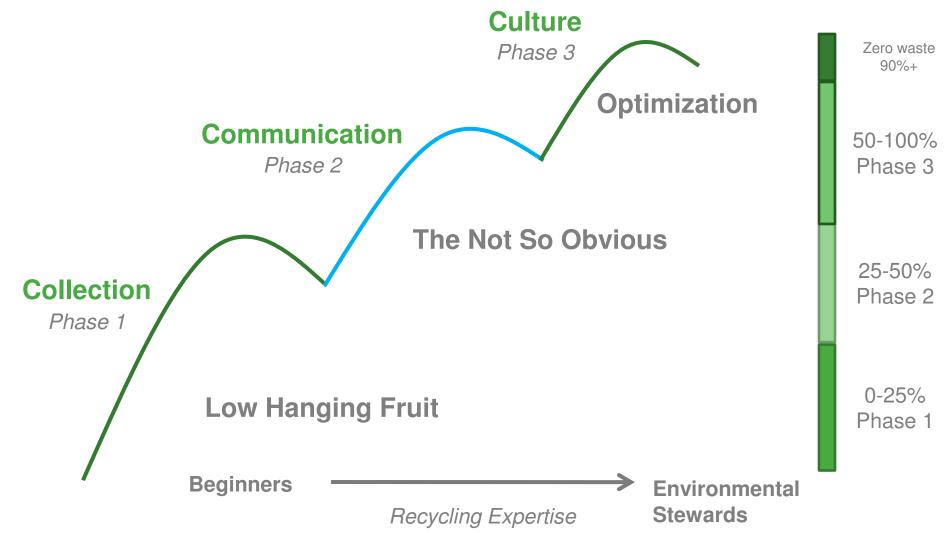
"it's the right thing to do"

"feel good thing"

"better for the environment"



Where is your organization?





The 3C approach







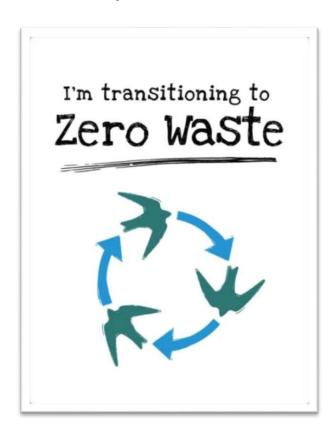
Culture Communication Collection

- Leadership "Stake in the Ground"
- Innovation
- Transparency
- Engagement
- EPP Extended Producer Policy
- F.O.T.M. (Flavor of the month)
- C.A.V.E (Citizens Against Virtually Everything)
- How is your culture



Cultural shift

FOTM (Flavor of the Month)



Cultural Statement







Culture	Communication	Collection
 Leadership "Stake in the Ground" Innovation Transparency Engagement EPP – Extended Producer Policy F.O.T.M. (Flavor of the month) C.A.V.E (Citizens Against Virtually Everything) How is your culture 	 Green Team implementation Senior management goals Metrics and KPI's Collection stream accuracy What message does your equipment convey Fresh and relevant updates Sharing best practices Education & training 	



What would you do?

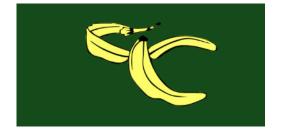






Importance of graphics

Symbol



Text



Pictorial



Cluster



Custom Cluster



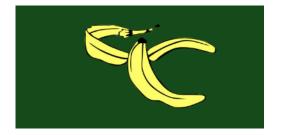
Brand Specific





Importance of graphics You have 2-3 seconds to decide

Symbol



Text



Pictorial



Cluster



Custom Cluster



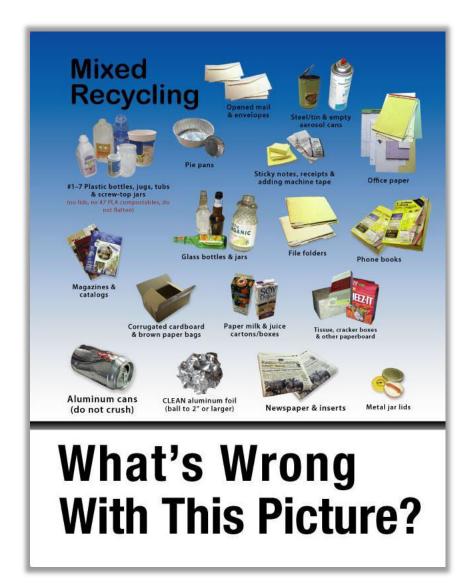
Brand Specific





Information overload

Less is more!





Unclear graphics

Confusion leads to high contamination levels







Clear, concise graphics reduces contamination







Tailored graphics to your region and environment











Product specific graphics reinforces brand awareness and message









Educate

Communicate

Update









Signage to Educate & Promote Environmental & Safety Best Practices





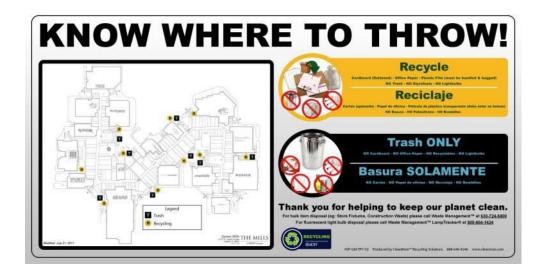








Back-of-the-house Communication













Culture	Communication	Collection
 Leadership "Stake in the Ground" Innovation Transparency Engagement EPP – Extended Producer Policy F.O.T.M. (Flavor of the month) C.A.V.E (Citizens Against Virtually Everything) How is your culture 	 Green Team implementation Senior management goals Metrics and KPI's Collection stream accuracy What message does your equipment convey Fresh and relevant updates Sharing best practices Education & training 	 Flow FOH to BOH Hauler contract review Volumes and frequency Esthetic vs. practical Financial restraints (lipstick on a pig) Color-coordination Servicing of equipment (time and labor) Future-ready equipment



The bolt-on approach to recycling





Minimal Design & Esthetics

Minimal Communication & Maximum Contamination



9-8-7-6-5-4-3-2-3-4-?



Start with waste





Same Foot Print
Same Capacity
Need to right size
Add Recycling





Same Foot Print
Same Capacity
Need to right size
Add Food Waste





Same Foot Print
Same Capacity
Need to right size
Add Paper – High
Value





Same Foot Print
Same Capacity
Need to right size
Remove waste stream
Zero Waste system





CleanRiver's Value Equation

How to make your waste diversion plan successful in the front of the house.

Engage around program design.



School Board Pilot

Purpose: Will the combination of culture, communication, and collection make an impact?

School #1

- Successful existing program including recycling and organics collection
- Green Team support
- Senior level buy-in
- School received right-sized containers with proper labeling and branding, and 1 month pre-launch communication blitz

School #2

- Struggling program random containers and no communication support
- School received right-sized containers with proper labeling and branding
- Containers were changed out on a weekend with zero advance communication

CleanRiver® incurred all costs associated with this pilot project – containers, graphics, posters, transportation, labor, miscellaneous costs associated with audits, etc.



School Board Pilot

Pilot School #1 – Before and After

Population: Approx. 1,250 students





Stream	Pre-Pilot Contamination	Post-Pilot Contamination	% Improvement
Organics	8.1%	4.4%	46%
Recyclables	22.4%	7.1%	68.4%
Waste	83.7%	21.7%	74.1%

Pilot School #2 – Before and After

Population: Approx. 1,000 students





Stream	Pre-Pilot Contamination	Post-Pilot Contamination	% Improvement
Recyclables	35.7%	9.8%	72.5%
*Waste	25.4%	11.4%	55.1%

Note: Organics was included in waste.



Are you set up for success or failure?

Low Priority - Over Committed

Financial **Hauler Contracts Poor Planning** Restrictions Wrong Poor Design Confusion Equipment High Rogues & Custodial Contamination **Orphans**



Rogue & orphan containers

Standalone, single-stream containers that exist apart from other streams in the program.

- Rogue Design is off-program
- Orphan Design may be on-program but acts as a catch-all



Smarter recycling solutions

Future Ready

Engagement









Questions and Answers

