



Bruce Buchan – Founder and CEO



25
YEARS

Zero Waste – The “3C” Approach

Transitioning from the 3Rs to the 3Cs

- 25 Years' Experience
- 5000+ Installations Worldwide

00:03:16

TEST / NG457
00:07:06:10

Flashmob

Reality of Recycling

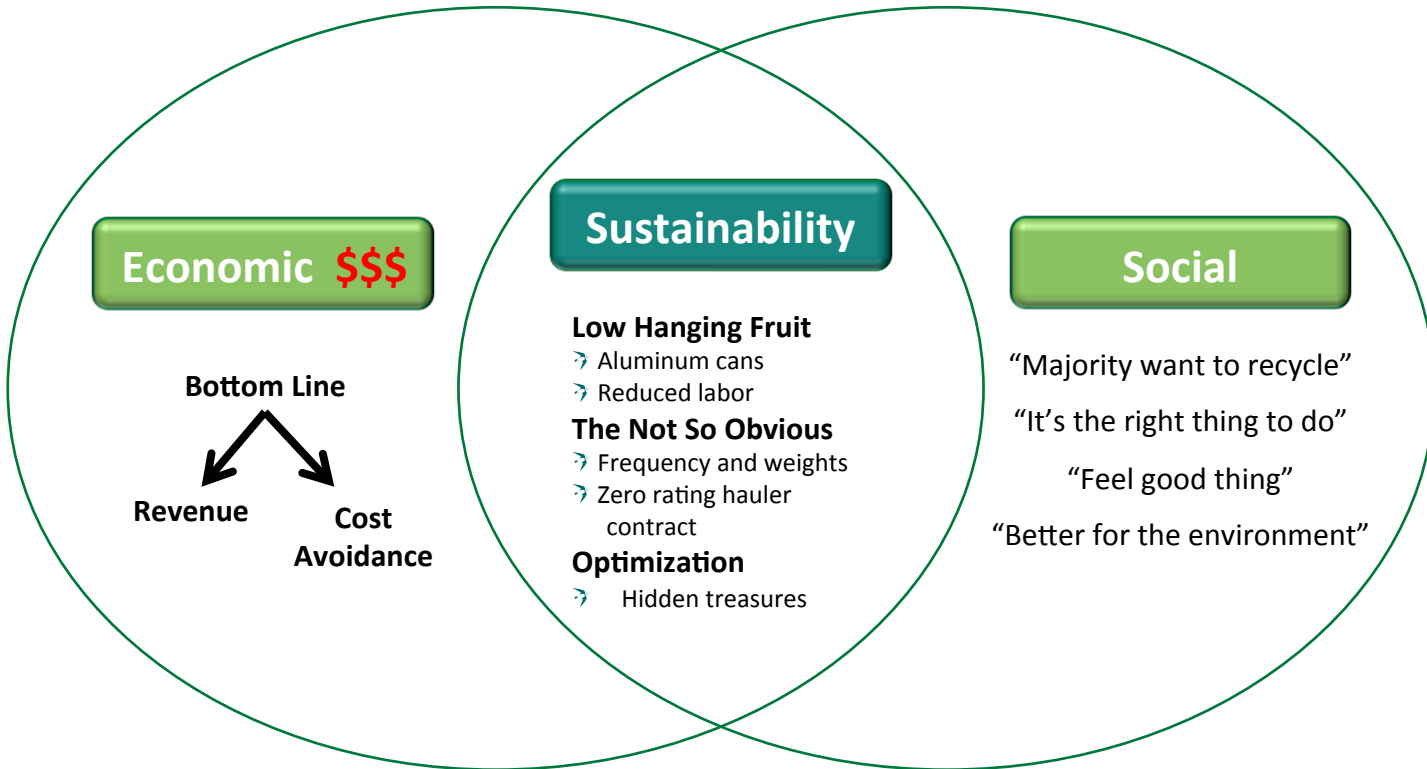
- It's the right thing to do!
- We are part of the solution!
- Everyone else is doing it!
- Customer Pressure!
- Government Pressure!
- We need to be green!
- We can make more money - Green Washing!

Reality of Recycling

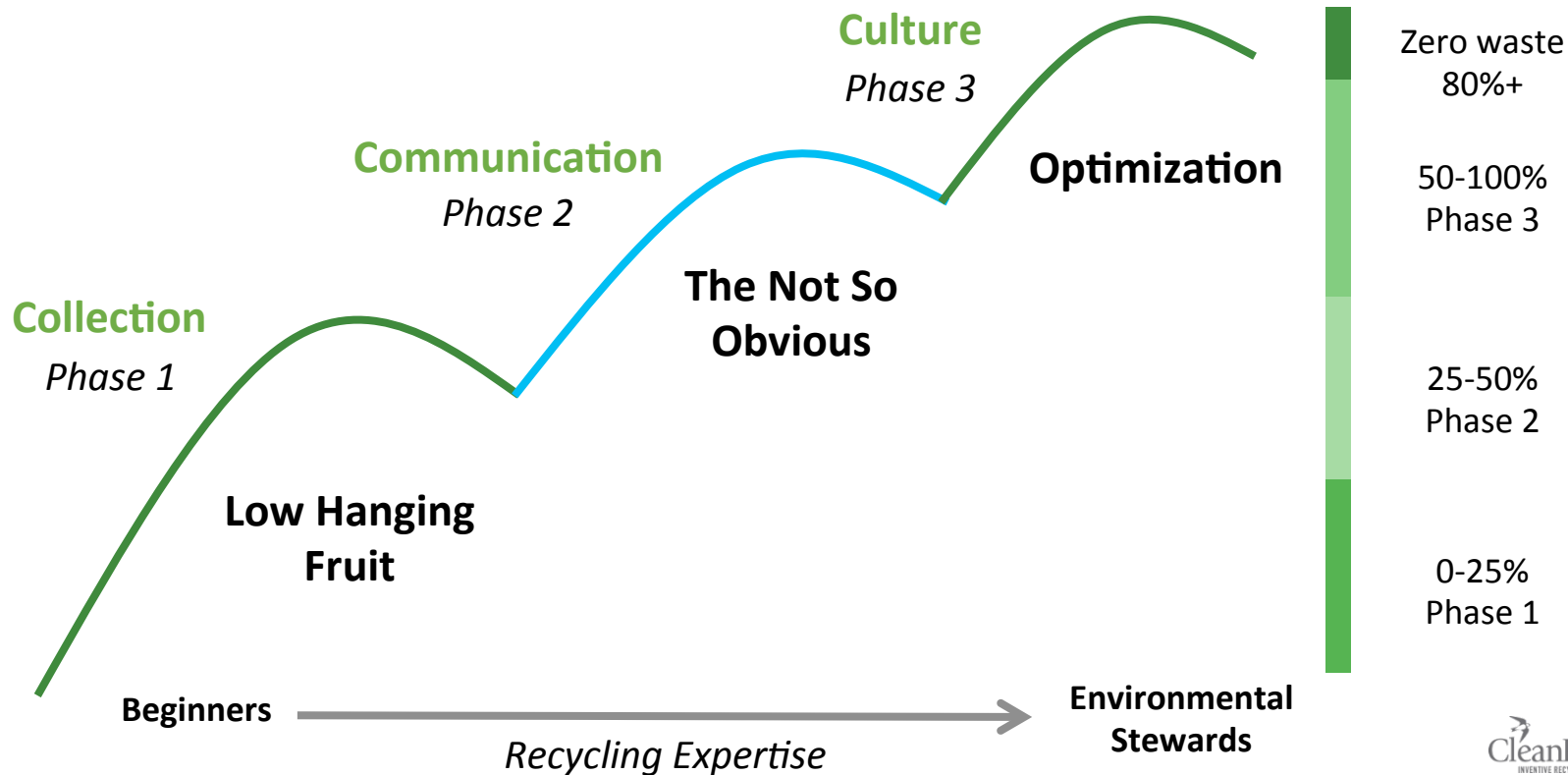


99% OF THE TIME

Where are we as a society?



Where is your organization?





How to make your waste diversion plan successful throughout your facility.

$$\text{Success} = \frac{\text{Moment of Diversion}}{(\uparrow \text{Adoption}) + (\downarrow \text{Contamination})}$$

Engage around program design.

The 3C Approach



The 3C Approach

Culture

- 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



Disruptive Culture Change

- Mini Bins introduced to Hennepin County
- Criticism and pushback



Impact

- Reduction – 12% - 2 tons/month
- Financial ROI - \$11,000/year
- Social ROI – Positive - Measured over time



The 3C Approach

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Communication

- 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

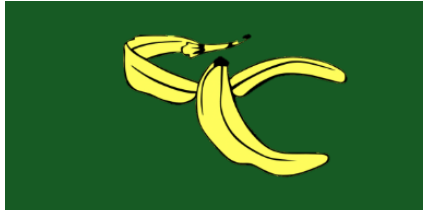


What would you do?



Importance of Graphics

Symbol



Text



Pictorial



Cluster



Custom Cluster



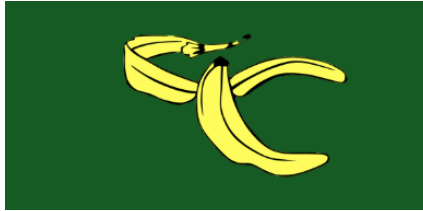
Brand Specific



Importance of Graphics

You have 2-3 seconds to decide

Symbol



Text



Pictorial



Cluster



Custom Cluster



Brand Specific



Graphics

- Information overload
- Less is more!



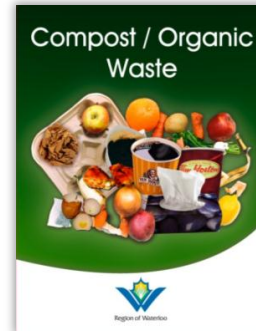
Graphics

- Unclear graphics
- Confusion leads to high contamination levels



Graphics

➤ Tailored graphics to your region and environment



Graphics

- Product specific graphics reinforces brand awareness and message



Graphics

- Educate
- Communicate
- Update



Signage to Educate & Promote Environmental & Safety Best Practices



Graphics

Back-of-the-house Communication



The 3C Approach



Culture

- ➔ Leadership “Stake in the Ground”
- ➔ Innovation
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- ➔ Engagement
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Collection

- ➔ 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-?

Future Ready Philosophy

➤ Start with waste



Future Ready Philosophy

- Same footprint
- Same capacity
- Need to right-size
- Add recycling



Future Ready Philosophy

- Same footprint
- Same capacity
- Need to right-size
- Remove waste stream
- Zero Waste system



Future Ready Philosophy

Start with Waste



Add Recycling



Add Food Waste



Same Footprint – Same Capacity

School Board Pilot Program

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 Program

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.

Program Return on Investment

- Waste as a commodity – assets not trash
- Waste hauler negotiations – savings opportunities and rebates
- Custodial contracts – savings opportunities

Program Return on Investment

Before

	SUN	MON	TUES	WED	THURS	FRI	SAT
FULL						✓	
3/4		✓		✓			
1/2							
1/4	✓						✓
EMPTY			✓		✓		

After

	SUN	MON	TUES	WED	THURS	FRI	SAT
FULL		✓				✓	
3/4				✓			
1/2							
1/4							
EMPTY							

- Average pull is \$25
- Price before \$175/Week (\$9100/Year)
- After \$75/Week (\$3900/Year)
- Savings of \$5200/ Year

SAVINGS –Building with 1800 employees

Equipment Cost \$ 48,500.00 (\$27.00/person)

Projected Savings – Annual

Custodial Savings	\$12,000.00 (Potential \$30,000 + Savings)
Waste Contract Savings	\$12,264.00 (15% minimum)
Paper Rebate (Confidential)	\$ 1,800.00
OCC	<u>\$ 2,000.00</u>
Total	\$28,064.00

Payback 1.7 years

Payback maximizing Custodial Savings Immediate.

Communication and education costs not included

Are you set up for success or failure?

Low Priority - Over Committed



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





25
YEARS

Questions and Answers