



# The Carton Council Success Story

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# Evergreen Packaging Products

## Fresh Food and Beverage Packaging

### North American Packaging



Broad range of highly decorated cartons



Convenient re-closable spouts



Multi-speed filling machines

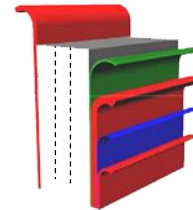
### International Packaging



### Packaging Board



Cupstock



Multi-layer liquid packaging board



Ovenable trays

## Paper and Specialty

### Printing and Advertising



Envelopes



Magazines / catalogues

### Specialties



Consumer packaging / cotton swabs



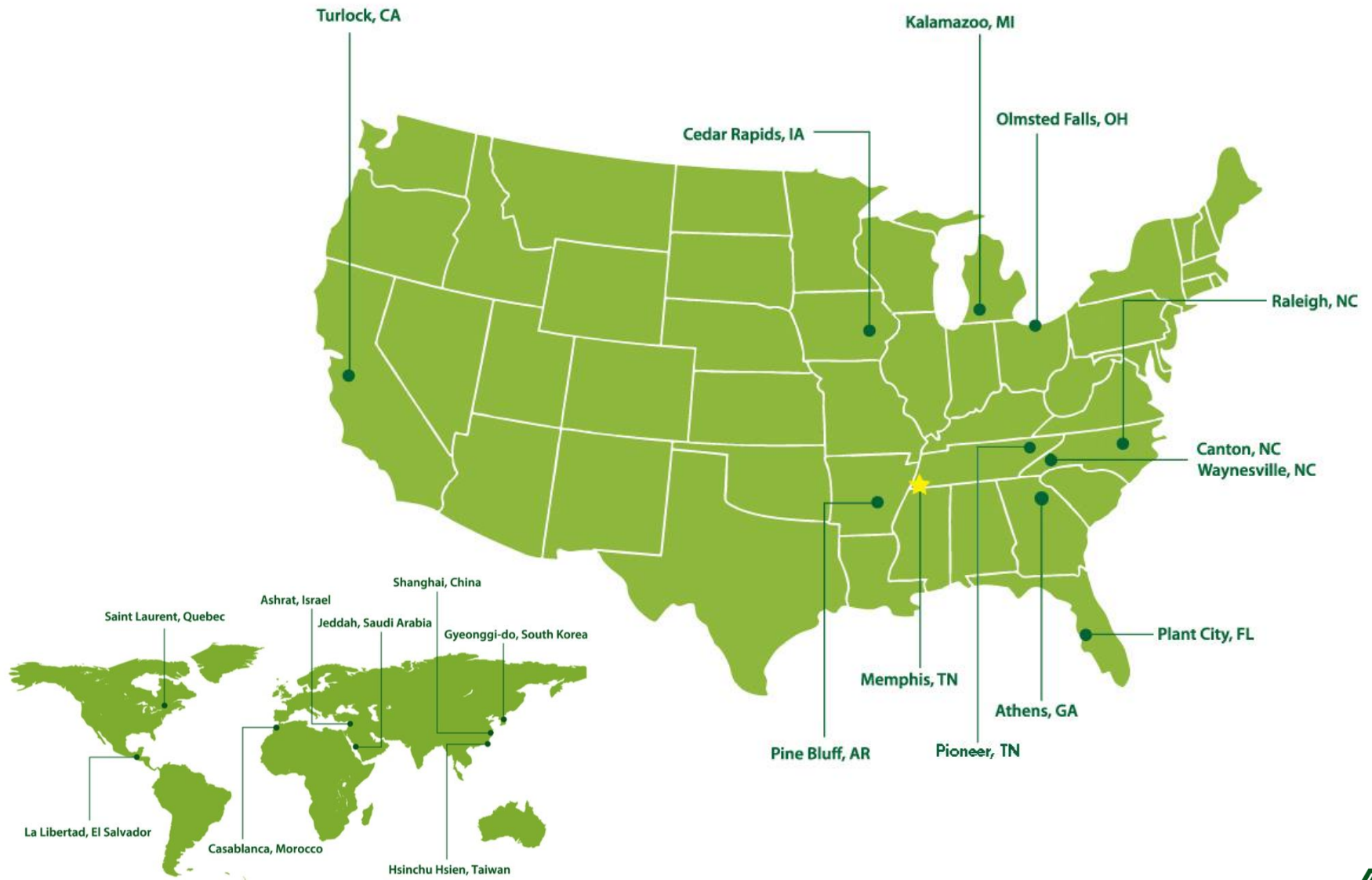
Paper bags



Platestock

Evergreen's key products include proprietary fresh carton sleeves in a broad range of sizes, specially designed re-closable spouts, multi-speed packaging machines and multi-layer packaging board with complex barrier properties

# Evergreen Packaging: Global Facilities







# Carton Recycling Success Story

*The Carton Council's  
Carton Recycling Access Campaign*



Carton Council

| [CartonOpportunities.org](http://CartonOpportunities.org)

# What are Cartons?



**CARTONS ARE**  
**LIGHTWEIGHT,**  
**SUSTAINABLE**  
packages for  
**REFRIGERATED**  
and **SHELF STABLE**  
food and beverage  
products.



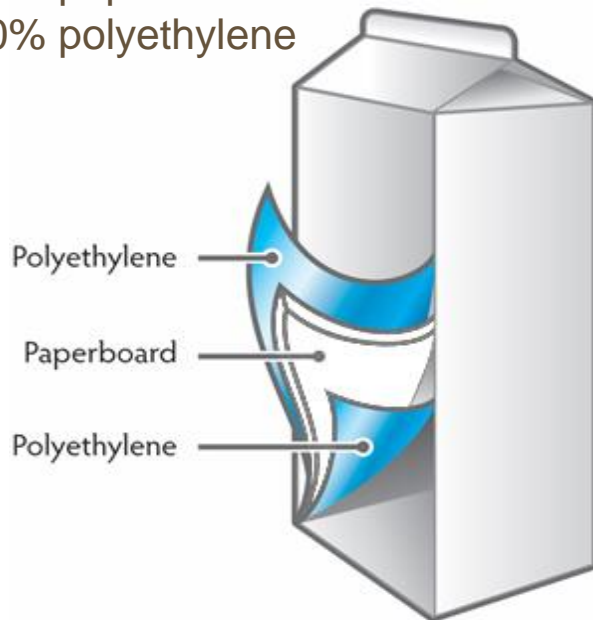
# Cartons Contain Valuable Materials



Made with 100% virgin fibers, cartons contain some of the best fiber still in the waste stream.

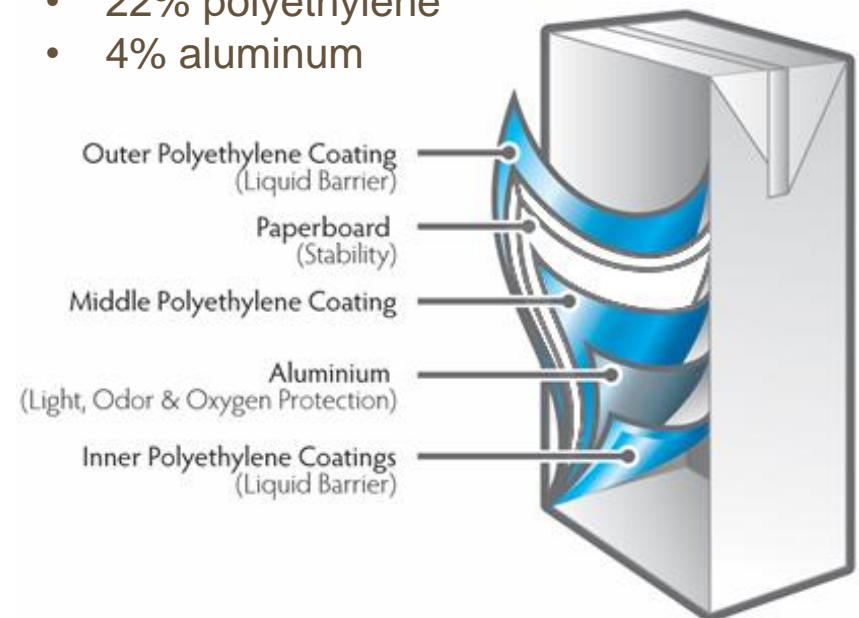
## *Refrigerated “gable top” cartons*

- 80% paper
- 20% polyethylene



## *Shelf-stable “aseptic” cartons*

- 74% paper,
- 22% polyethylene
- 4% aluminum



**Cartons are Not Wax Coated**

# Who is the Carton Council?



Carton Council

A group of carton manufacturers united to deliver long term, collaborative solutions to divert valuable cartons from the landfill.

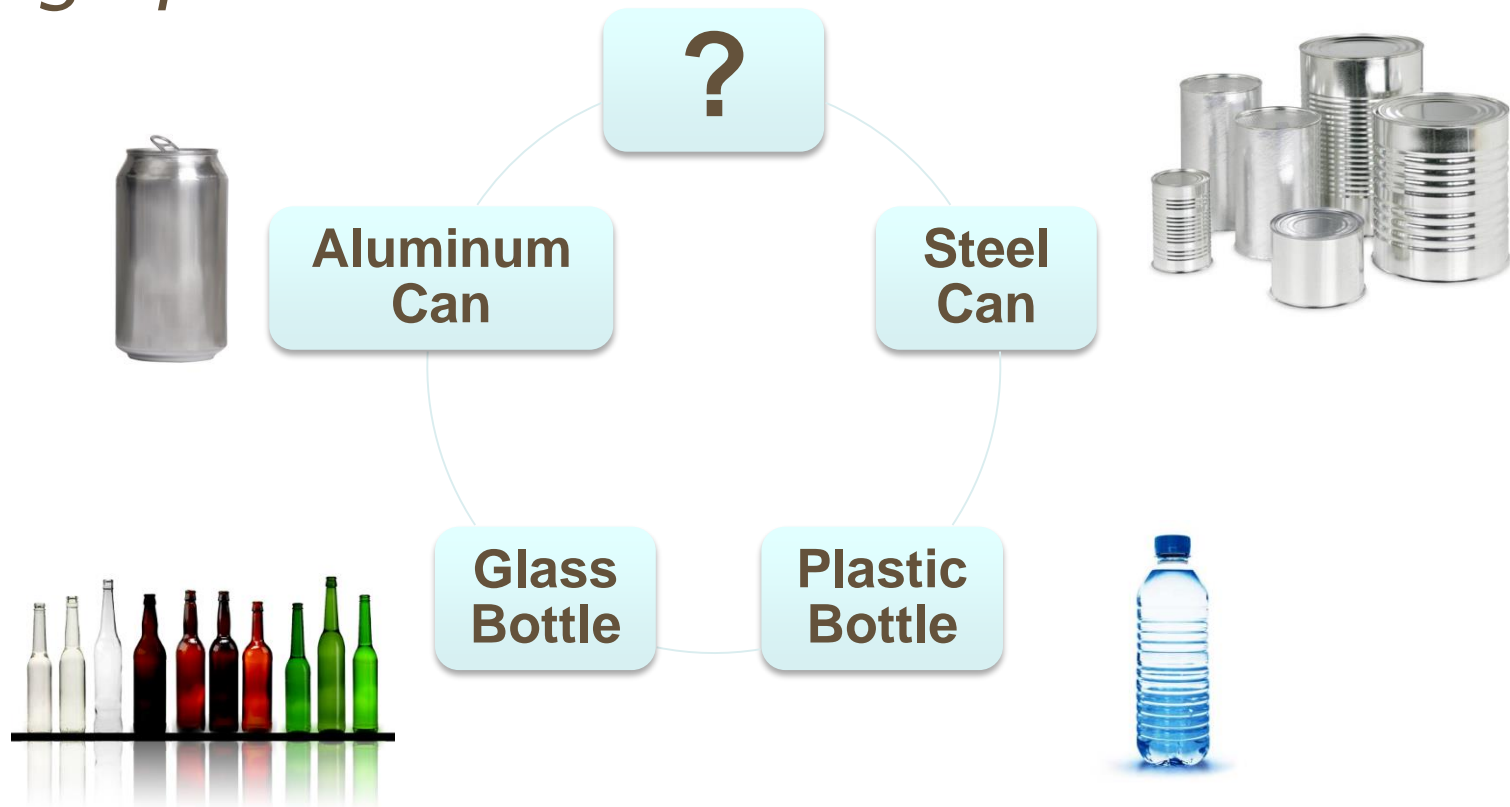


Associate Member  
**Weyerhaeuser**



# What was Needed

*To go from this...*

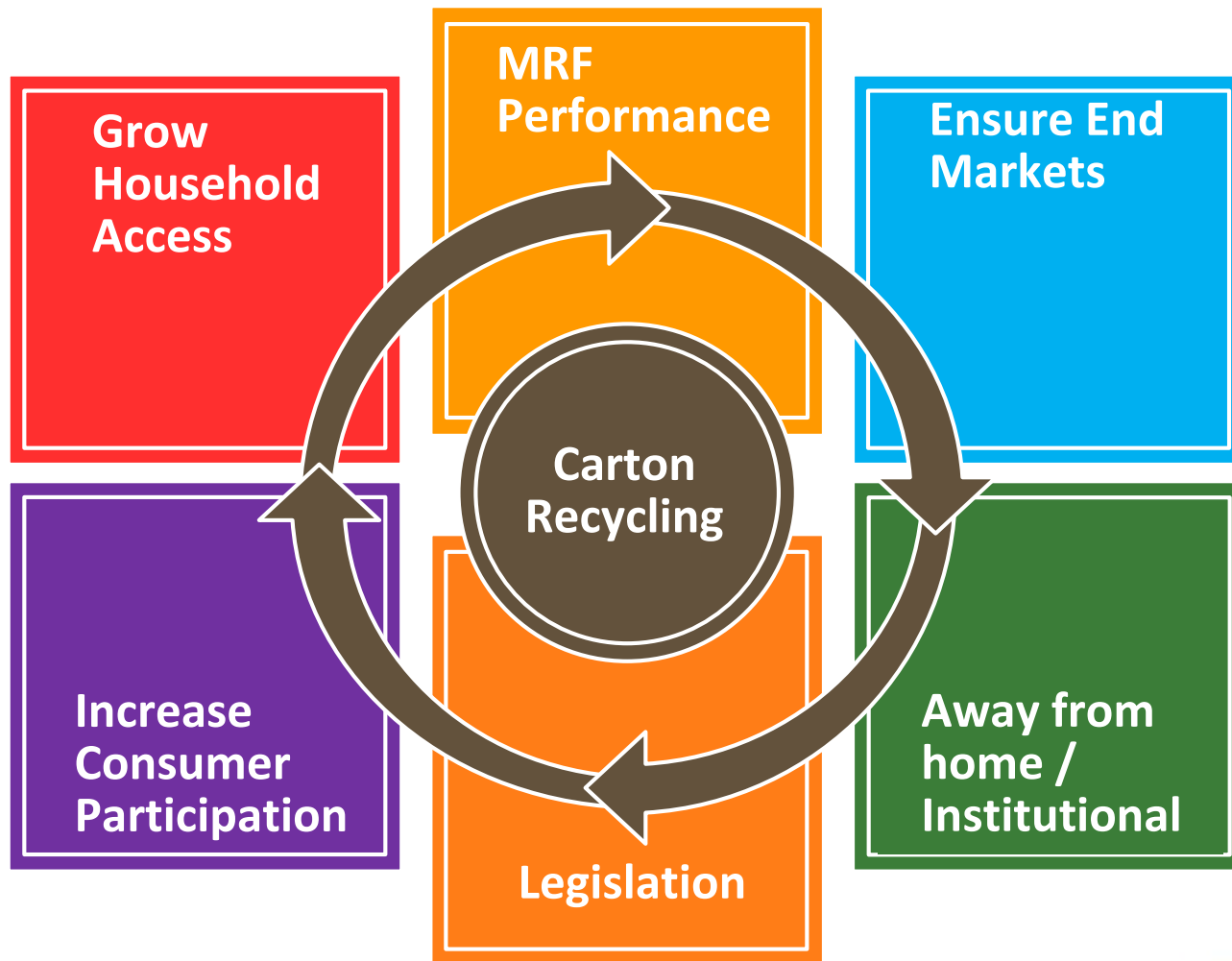




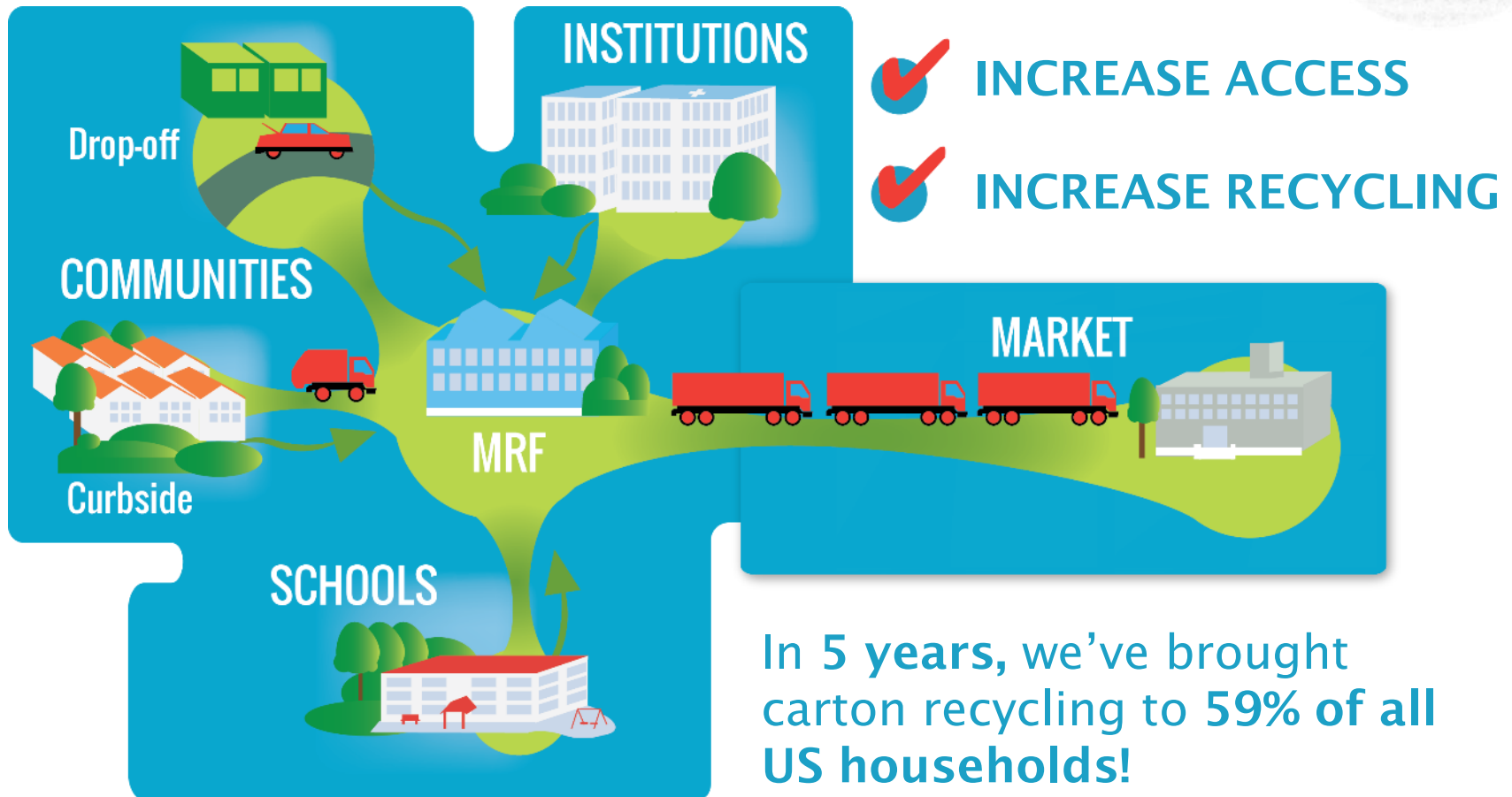
...to this:



# Comprehensive Recycling Strategy



# Our Goals & Outcomes

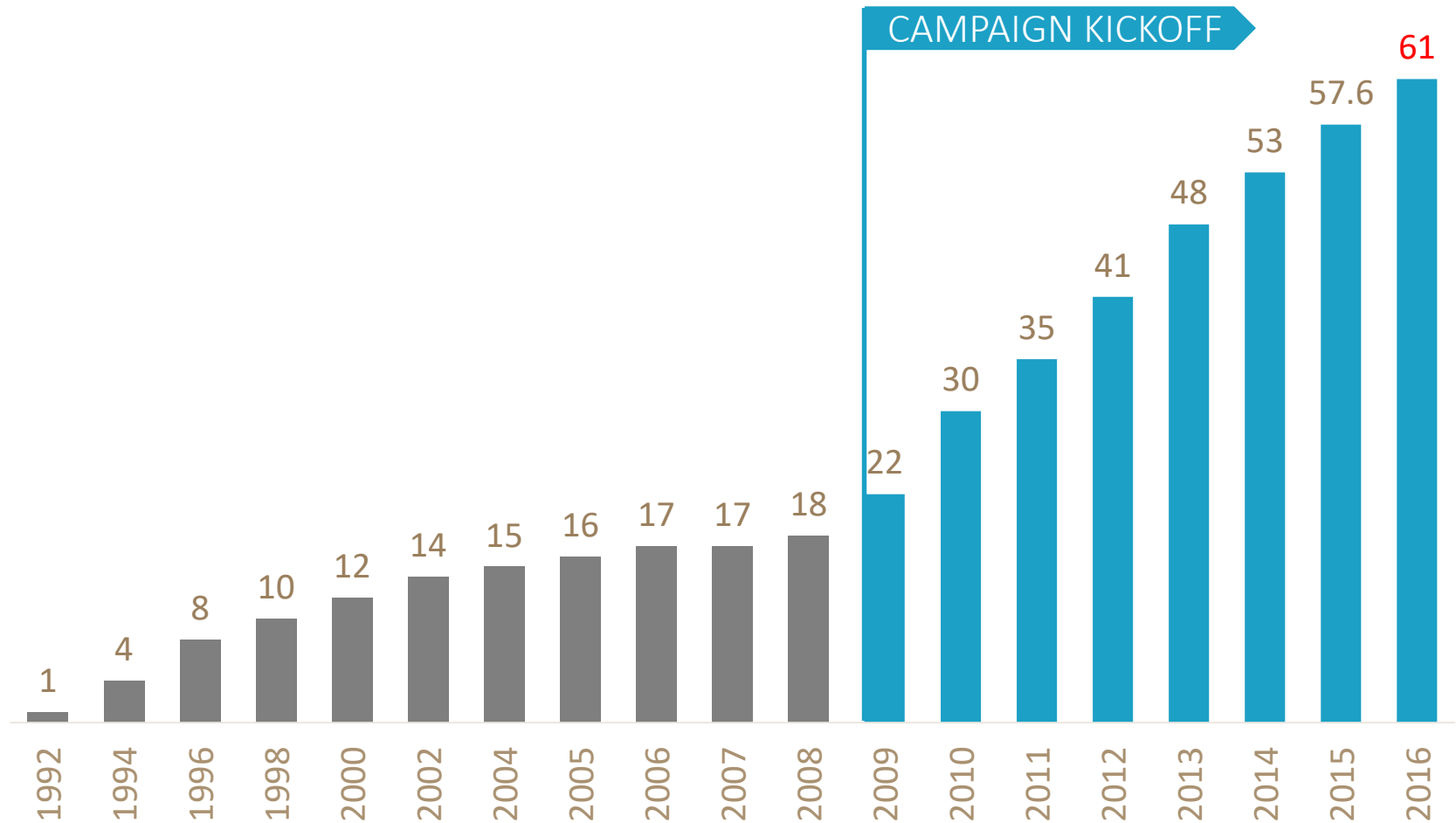


In 5 years, we've brought carton recycling to **59% of all US households!**

# Successes to Date



# Steady Progress Since 2008



# Cartons now recycled across the US



80 of the 100 largest U.S. cities have access to carton recycling.

58.6% or approximately 68 million U.S. households can now recycle cartons in their communities.

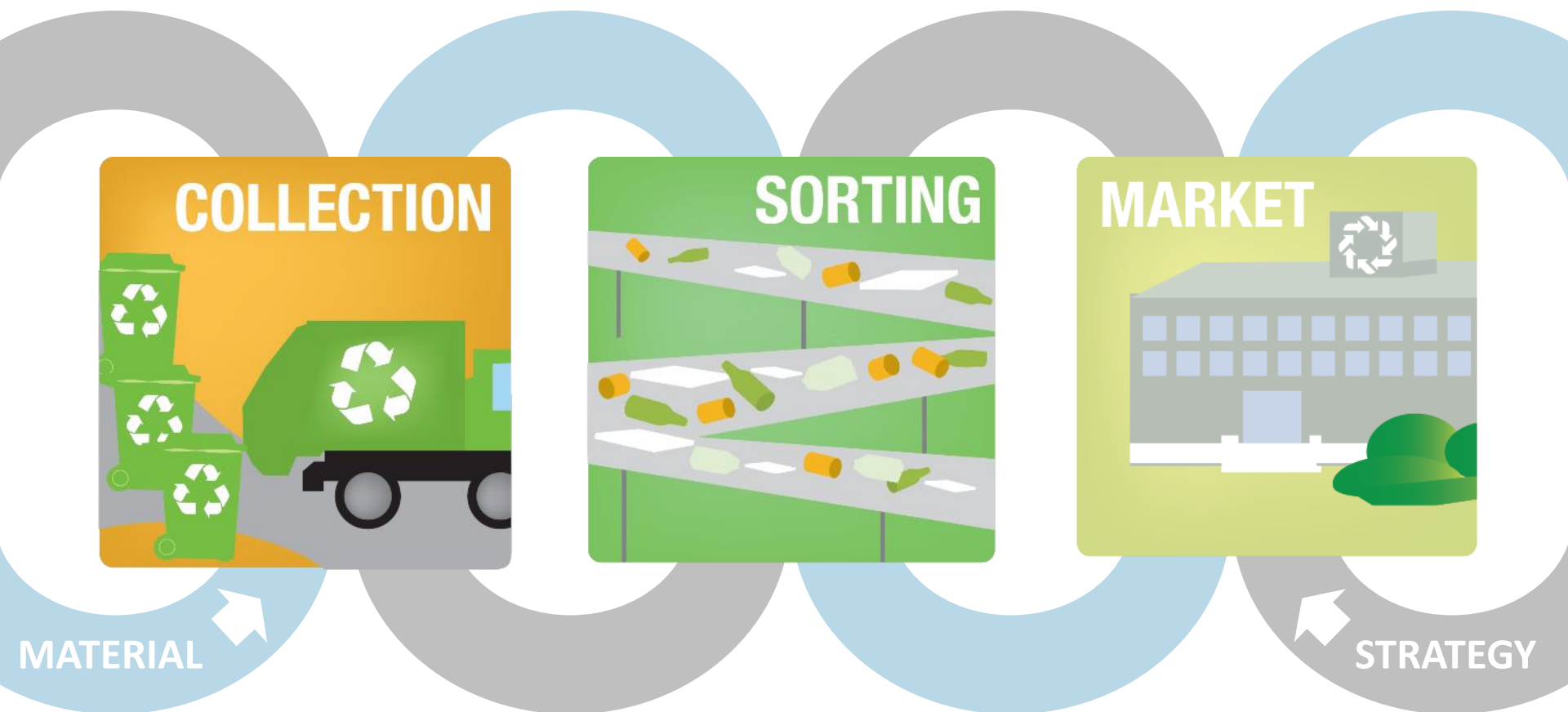
Every month, more carton recycling programs are being added in schools, cities, towns, and counties across the country.

# How Carton Council Achieves its Goals

# Target the Recycling Supply Chain



*Our goal: Build carton recovery*

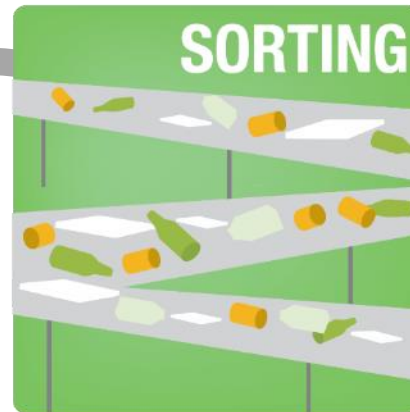




# Work Backwards from End Markets



*Build  
sustainable  
markets*



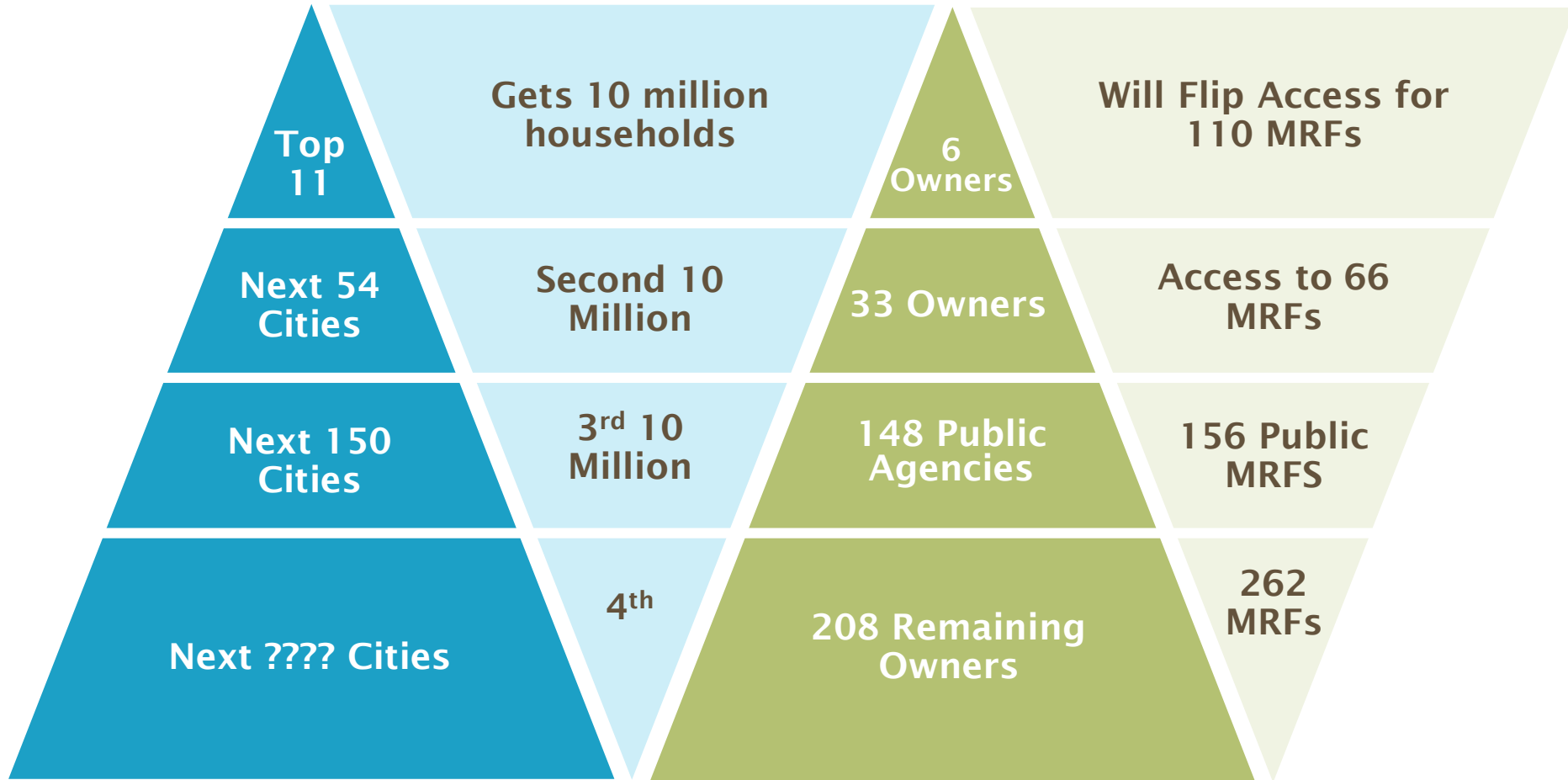
*Create  
sustainable  
infrastructure*

*Develop  
awareness and  
participation*



# Target Strategy for USA

Access: Determining Targets using the 80/20



# A Look Inside the Carton Campaign

# 1- Build Sustainable Markets



## Grade #52 officially recognized by recycling industry in April 2011

### New PSI\* Spec Grade #52 - Definition

Consists of liquid packing board containers including empty, used PE coated, printed one-side aseptic and gable-top cartons containing no less than 70% bleached chemical fiber and may contain up to 6% aluminum foil and 24% PE film.

Prohibitive materials may not exceed 2%

Total out-throws may not exceed 5%

*\*PSI = The Paper Stock Industries (PSI) Chapter is a national chapter of the Institute of Scrap Recycling Industries, Inc. (ISRI). It is dedicated to the recovered paper industry*



# 1- Build Sustainable Markets



- Carton pricing generally follows Sorted Office Paper (SOP) pricing— *varies by location of source, fiber mix, etc.*
- Export pricing varies based on shipping container weights and locations— *strong export demand— over 140 mills consuming cartons worldwide*

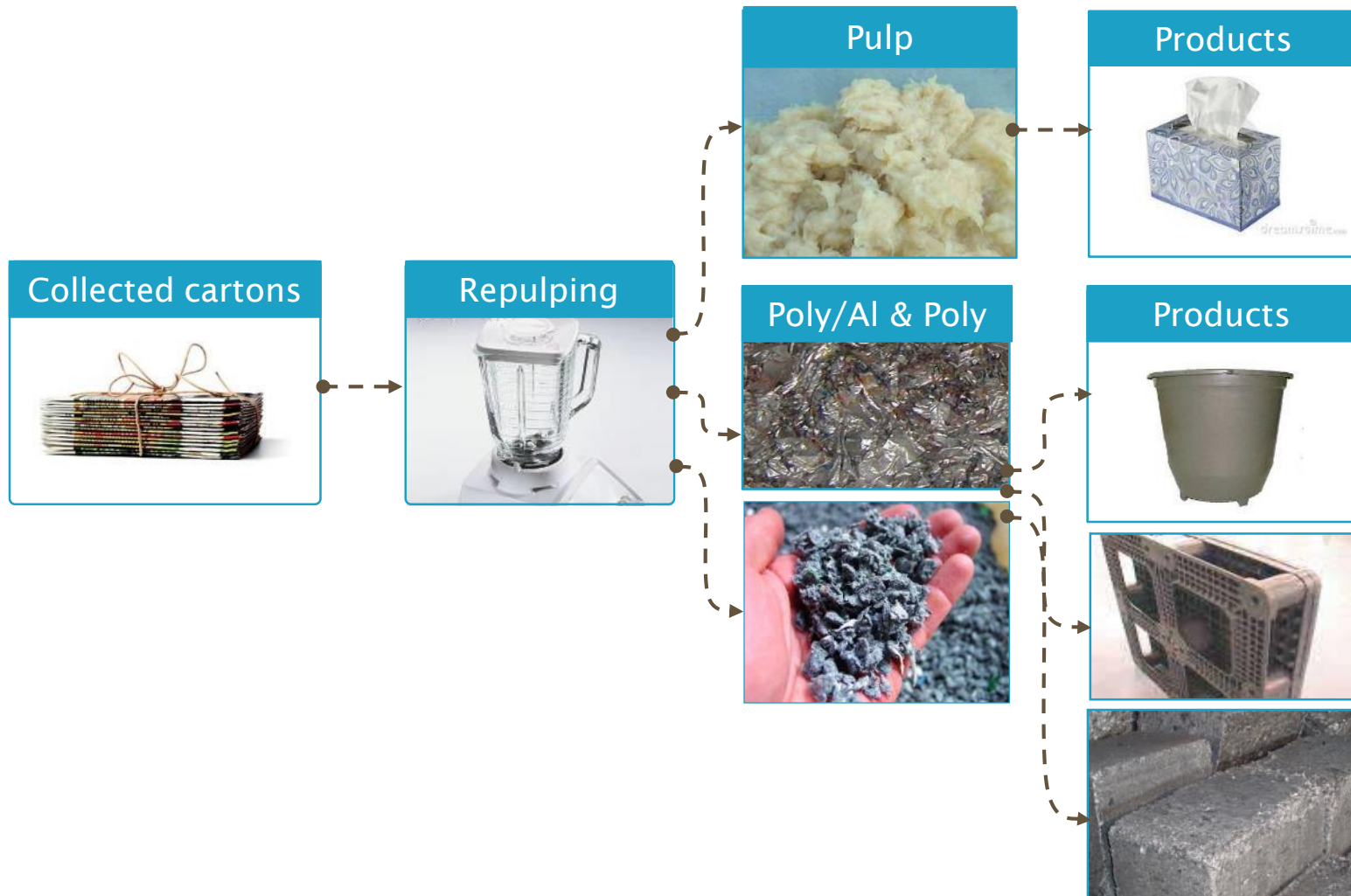
# Existing End Market Flow for US & Canadian Grade 52



- 4 mills consuming in US, some interest from Mexico, Taiwan & Thailand, but most goes export to Korea



# Effective Separation and Recycling of all Layers



# Recycling Technologies are Available for Poly and Poly/Aluminum Residual



## Recycling technologies for Polymers and Aluminium



**Agglomeration,  
Extrusion,  
Injection  
Moulding,  
Pressing**



**Pyrolysis,  
Gasification**

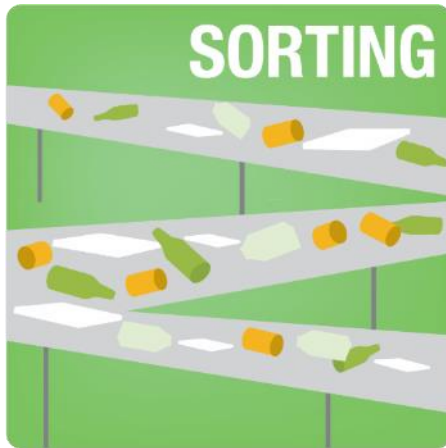


**Delamination,  
Solvent  
Separation**



**Full Carton  
Recycling**

# Step 2- Create Sustainable Infrastructure



- Work with Facilities to
  - Agree to take cartons
  - Agree to report data to Carton Council
    - Household access and tonnages
- Positive Sort of Cartons at Facilities
  - Capital equipment grants available, based on campaign's criteria

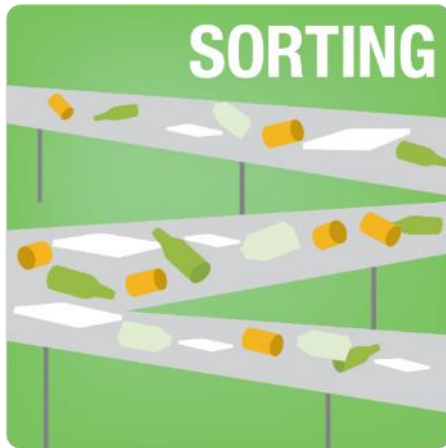


## 2- Create Sustainable Infrastructure



- Range of Solutions for MRFs
  - Manual sort with bunkers
  - Vacuum-assisted manual sort
  - Automated sorting
- Matching Right Solution to each MRF
  - Carton Council best practices drawn from experience with MRFs of all sizes
  - Working closely with equipment suppliers and MRF engineers
  - Matching equipment grant to access gains

## 2- Create Sustainable Infrastructure



- **Optional Assistance Offered**
  - Connecting MRFs with Broker Networks
  - Free promotional materials
  - Support for customer outreach

# Step 3 - Develop Consumer Awareness and Participation



- Notify users of facility that now accepts cartons
  - Collectors
  - Communities
  - Residents
- Outcomes
  - Increased visibility of carton recycling
  - Drive carton volumes to facilities

# 3 - Develop Consumer Awareness and Participation



Carton Council offers series of tools to assist with promotion and education around carton recycling

- Tool-kit with template advertisements, etc.
- Mini-grants to assist with costs, case by case basis
- Large major metropolitan area awareness campaigns





# 3 - Consumer Awareness



- Consumers rely on recycling guidance from their city, county, hauler, or MRF



# 3 - Consumer Awareness



- Step 1 is huge challenge in itself
- Carton Council campaign to date has required updates to over 2,500 individual program material guidelines and websites
- Requires staffing and one-on-one outreach – limited economies of scale

# 3 - Develop Consumer Awareness and Participation at Schools



- If you can recycle cartons at home, you can recycle cartons at school.
- Carton Council resources for school carton recycling programs:
  - Start-up Guide, Best Practices
  - Posters and other materials



# Why School Recycling?



- Schools create lots of cartons every day – Over 6 billion served annually
- Carton recovery at home - students take home the message and can help drive carton recycling at home
- Helps with recycling access:
  - A competitive advantage for MRF's that offer school recycling - creates pull
  - Schools encouraging communities to add carton recycling - creates push



# Creative Solutions



- Doesn't have to be fancy!



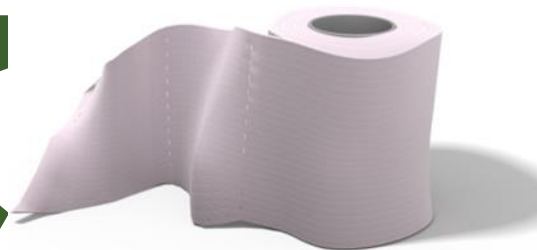
# Carton Recycling – Supporting Recycling Goals



Recycling is the 2<sup>nd</sup> piece of the puzzle – Get it in the bin and make recycled paper products!



Requires a wide activity focus  
Engaging our industry  
Engaging others  
Changing behavior





# Engage Our Industry and Change Consumer Behavior



## The Recycle Logo On Packages



Source: 2013 *Research+Data Insights* Survey's

# The Recycling Logo



More access brings a better recycling message

Pre 2010

No Message

2010 - present  
Between 30-60% access

**RECYCLABLE**



**ONLY WHERE FACILITIES EXIST**  
Visit [recyclecartons.com](http://recyclecartons.com) to  
see if recyclable in your area

Coming Soon  
Over 60% national access

**RECYCLABLE**



# MRF MATERIAL FLOW STUDY

FINAL REPORT | JULY 2015

COMMISSIONED BY



PREPARED BY



**Reclay StewardEdge**  
Product Stewardship Solutions



# Why?

- The material mix at the MRF is constantly changing
- Understanding how categories of materials flow will help the industry improve recovery

## Goals



### **Flow**

Where do packages end up?



### **Selection**

Why do packages flow to commodities?



### **Processes**

What changes to sort processes could improve recovery?

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# MRFs Opportunities



## 2D/3D Separation is Key to High Recovery

### Material preparation had a strong effect

- Minimize compaction of material by residents and collection trucks
- Keep material dry

### Avoid overloading screens past their design throughput

### Screen maintenance is key to consistent performance

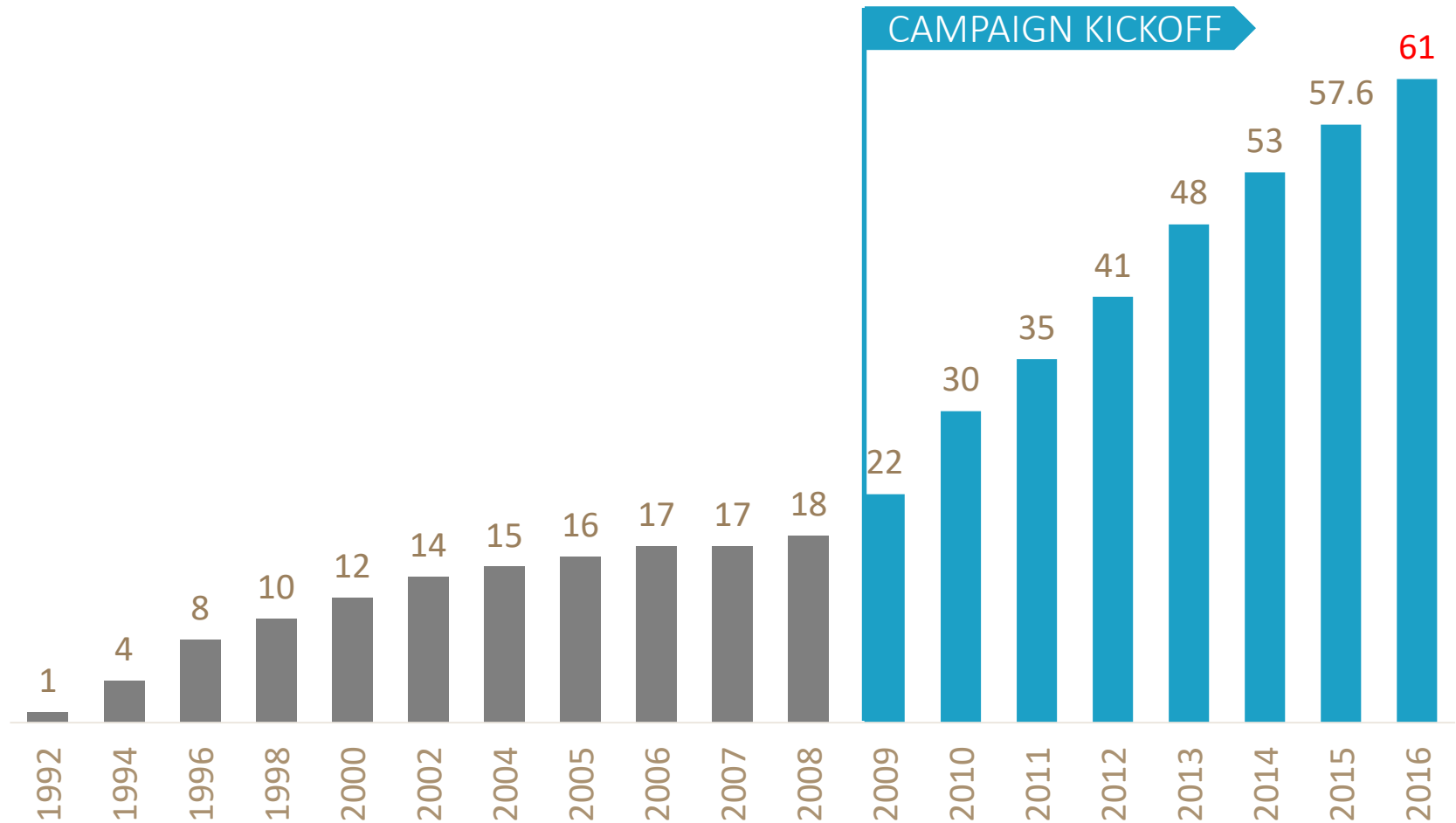
- Clean screens of material that are wrapped around the shafts
- Replace worn and damaged discs

### More screens produced better separation

- Large facilities both had 1 extra screen than medium facilities and had lower loss rates of plastics to the paper stream

**Don't flatten recyclable containers!**

# Steady Progress Since 2008





# Contact Me

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