



Food and Beverage Carton Recycling

A Presentation to the
Meramec Regional Planning Commission
October 4, 2017



The Carton Council

- A group of carton manufacturers united to deliver long-term collaborative solutions in order to **divert** valuable food and beverage **cartons** from **landfills**.



Associate Member



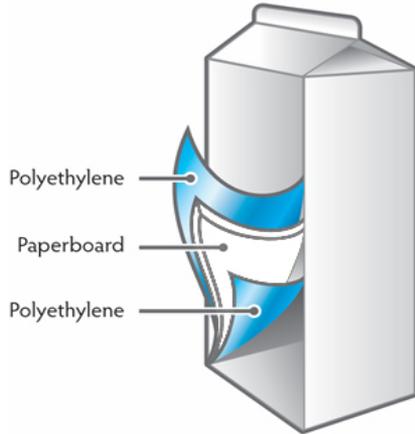
Recycled Cartons: A Valuable Source of Materials

With 100% virgin fiber, contain some of the best fiber in the waste stream

Refrigerated “gable top” cartons

On average the makeup is:

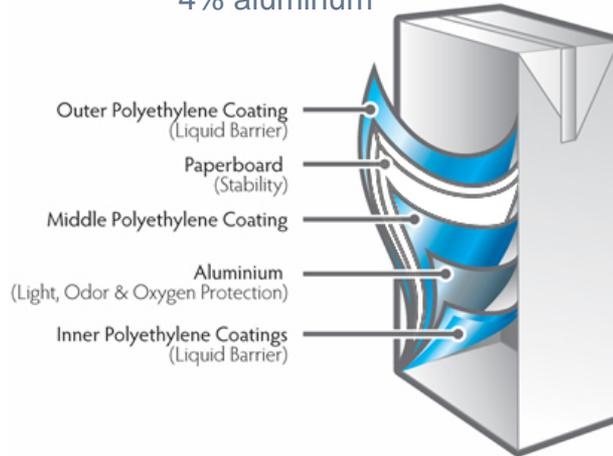
- 80% paper
- 20% polyethylene



Shelf-stable “aseptic” cartons

On average the makeup is:

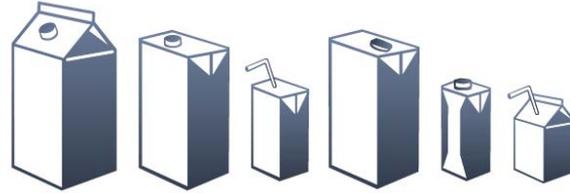
- 74% paper
- 22% polyethylene
- 4% aluminum



No wax or “waxy coating”

A Variety of Uses for Recycled Cartons

With 100% virgin fiber, cartons contain some of the best fiber in the stream



Fiber - Pulp



Poly/Al Mix – Pulp Byproduct



Whole Cartons



Tissue and Paper Products



Plastic Products



Building Products

Our Goal

To establish **sustainable recycling** of food and beverage cartons

- ✓ INCREASE ACCESS
- ✓ INCREASE PARTICIPATION



The State of Carton Recycling

When we started in 2009



The Current State of Carton Recycling

THE CURRENT STATE OF CARTON RECYCLING

61.4% HOUSEHOLD ACCESS



71,644,366 HOUSEHOLDS
WITH ACCESS

13,100 COMMUNITIES
WITH ACCESS



49 STATES



82 OF TOP 100
U.S. COMMUNITIES



**STRONG CARTON
RECYCLERS IN
NORTH AMERICA**



*AS OF THE END OF AUGUST 2017

CARTON RECYCLING VALUE CHAIN



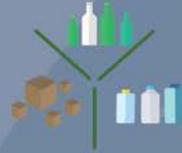
Once the product is consumed, the carton is placed in a recycling bin or cart.

1
AT HOME



A collection truck takes the cartons, along with other recyclables, to a local recycling facility for sorting and baling.

2
COLLECTION



Cartons are sorted and separated from other materials. They are then baled for shipping to a carton recycler.

3
SORTING & BAILING



Brokers connect materials recovery facilities (MRFs) with carton recyclers.

4
MOVING CARTONS



At mills, the fiber is extracted and separated and the pulp that comes out is used to make paper products such as tissues, paper towels, printing and writing paper.

5
RECYCLING

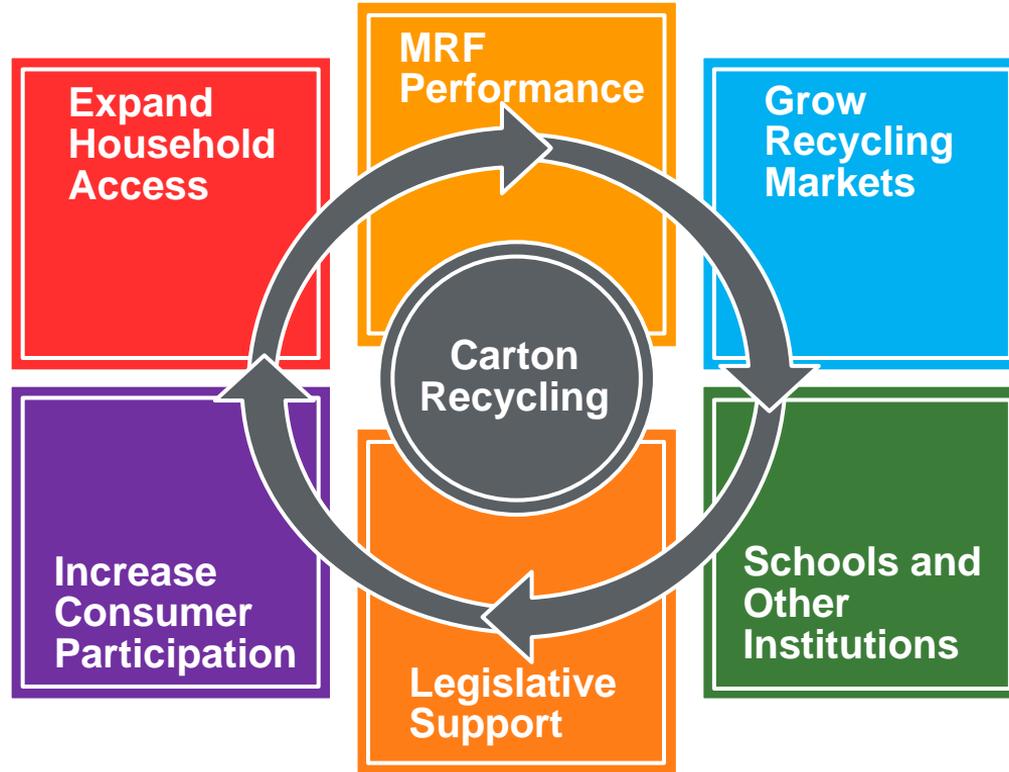


At manufacturing companies, the whole carton is used to make high-quality green building materials, such as ceiling tiles, roof cover board and backer board.



Comprehensive Strategy

To increase carton recycling



Carton Recyclers

Recycling End Markets for Cartons
in North America



New and Expanding U.S. End Markets

- ReWall utilizes whole cartons to produce building and construction materials
- Environmentally friendly process, uses no water or chemicals
- Strength, durability and resistance to mold and moisture make cartons ideal for creating high-quality building materials
- With demand growing for products, the challenge will now be to collect more cartons
 - Recently expanded their facility, more than doubling their capacity and demand for cartons



Increasing Consumer Participation

- Working with brands to place logo on-pack

- *The package is the first place consumers go to determine recyclability.*
- *Consumers assume a package is not recyclable if it does not contain any recycling information.*



RECYCLECARTONS.COM

Carton recycling – Why?

1. Consumers expect to be able to recycle cartons due to recycling logo on-pack
2. Demonstrates the program is up to date – Significant amount of products packaged in cartons
3. Cartons are a valuable material – virgin fiber
4. Recycling cartons help with local diversion goals
5. Adding new material and/or promoting material helps increase recycling of all materials



Increasing Consumer Participation

- When cartons are added to a facility, priority should be to inform stakeholders
 - Collectors, communities, residents
- Cartons should be added to list of accepted materials on website and other materials
 - *City website is the second place consumers go to look for recyclability information**
- Postcards and/or bill stuffers – the most effective education tactic**



* Source: RDI Consumer research commissioned by Carton Council, Jan 2016

** Education campaign evaluation surveys

Carton Council is Here to Help

- Toolkit with template press release, website language, ad creative, social media posts, etc.
- Leverage national campaign efforts
- Mini-grants to assist with costs
- Technical assistance



Information and Tools at CartonOpportunities.org



Cartons open up opportunities.

They represent a huge potential when they are recycled.



About carton recycling and the Carton Council

Get involved:

Communities/Facilities

Companies/Brands

Carton Recycling Markets

Schools

Supporting Policy Tools

Robots Become a Reality in the Evolution of Carton Recycling

Following the successful pilot launched earlier this year, the Carton Council and AMP Robotics are proud to announce that a second installation of the AMP Cortex robot to sort food and beverage cartons is occurring at Dem-Con Companies, a Minnesota-based recycling, processing and disposal company.

The AMP Cortex identifies, grabs and sorts food and beverage cartons from the recycling stream so they can be sent to recyclers and turned into new materials, such as tissues, paper towels and other paper materials, as well as sustainable building and construction materials. Read more [here](#).

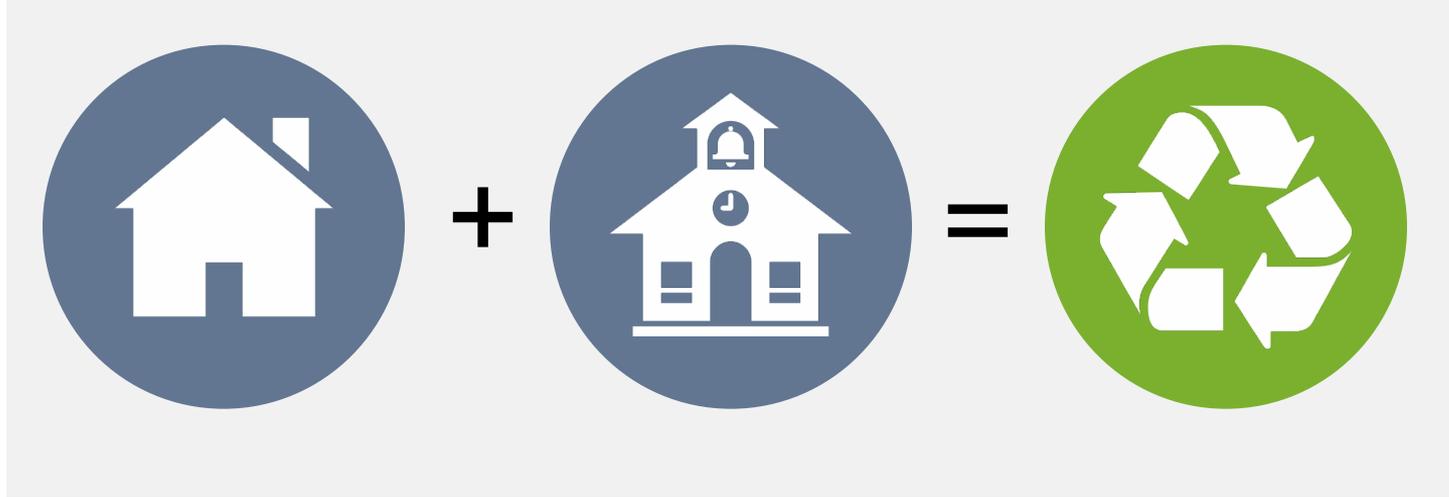
Artificial Intelligence Used to Sort Food and Beverage Cartons

- AMP Cortex has achieved a pickup rate of 60 cartons per minute.
- AMP Cortex has learned to identify more than 150 carton variations, and is always improving and ready for changes in the material stream.



recyclecartons.com
cartonopportunities.org

Adding School Recycling to the Equation



Schools Generate Cartons!



One elementary student consumes **133 servings** of milk or juice each year.



Six billion cartons are consumed in schools each year.



The average elementary school consumes **75,000** cartons per year.

Carton Council is Here to Help

Assistance offered

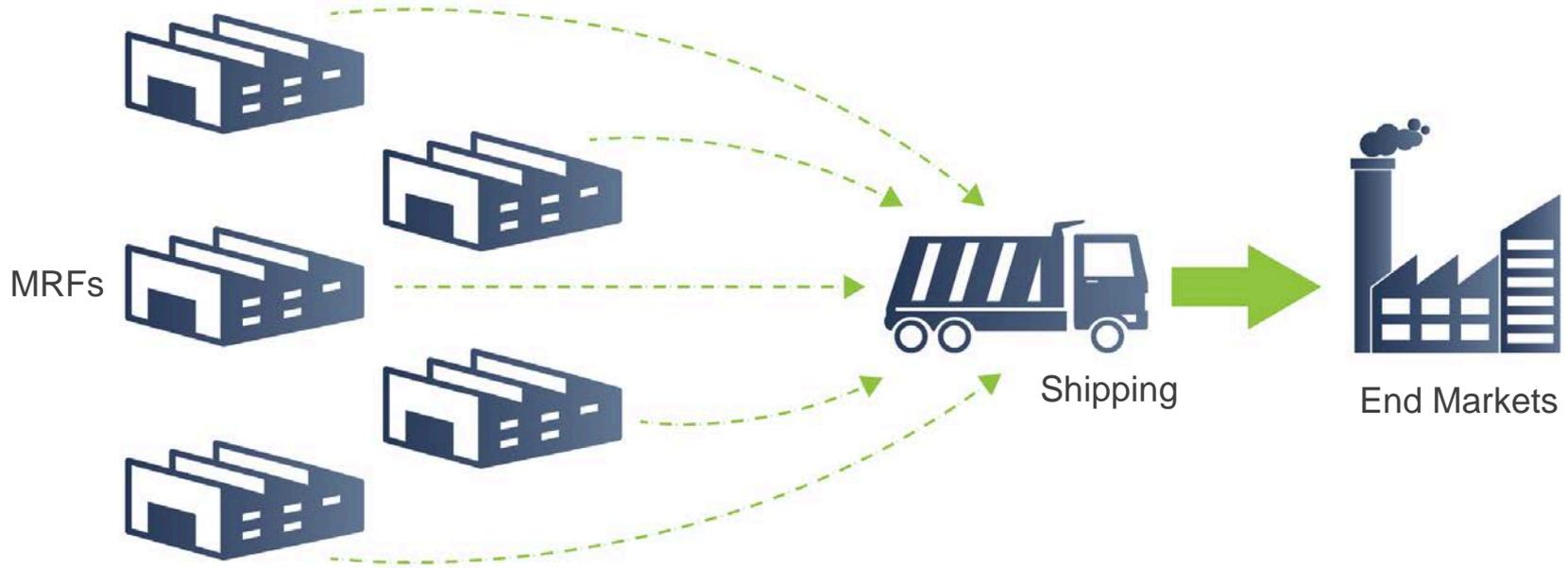
- Grants for program start-up
- Grants for carton recycling bins
- Start-up Guide, Best Practices Posters and other education materials
- Elementary school lesson plan
- Dedicated team to provide local level support

CartonOpportunities.org

RecycleCartons.com



Hub and Spoke Model



Carton Council is Here to Help

Assistance offered:

- Capital equipment grants available
- Matchmaking with broker networks
- Assistance with movement of bales/partial loads
- Best practices for optimal performance
- Support for customer outreach
- Residential Public Education Grants
- Residential Public Education Toolkit
- School Carton Recycling Grants
- School Carton Recycling Guides, Curriculum and Materials

Get Involved!

We are here to help

- Whether food and beverage cartons have been recycled in your community for years, or are a new addition, we can help you communicate.
- If your community/facility/school does not yet accept cartons, we can provide:
 - Resources and expertise to help add cartons.
 - Email us at info@recyclecartons.com to get started



Stay in touch...

visit RecycleCartons.com
CartonOpportunities.org



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Thank you!

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