

Georgia GRCC Carton Recycling Update

*The Carton Council's
Carton Recycling Access Campaign
August 21, 2011*



Carton Council
RecycleCartons.com



Who is The Carton Council?

The Carton Council is a group of carton manufacturers united to deliver long term collaborative solutions to divert valuable cartons from the landfill.



Associate Member

 Carton Council
RecycleCartons.com
Jeffrey Fielkow



Weyerhaeuser

What Does the Carton Council Want?



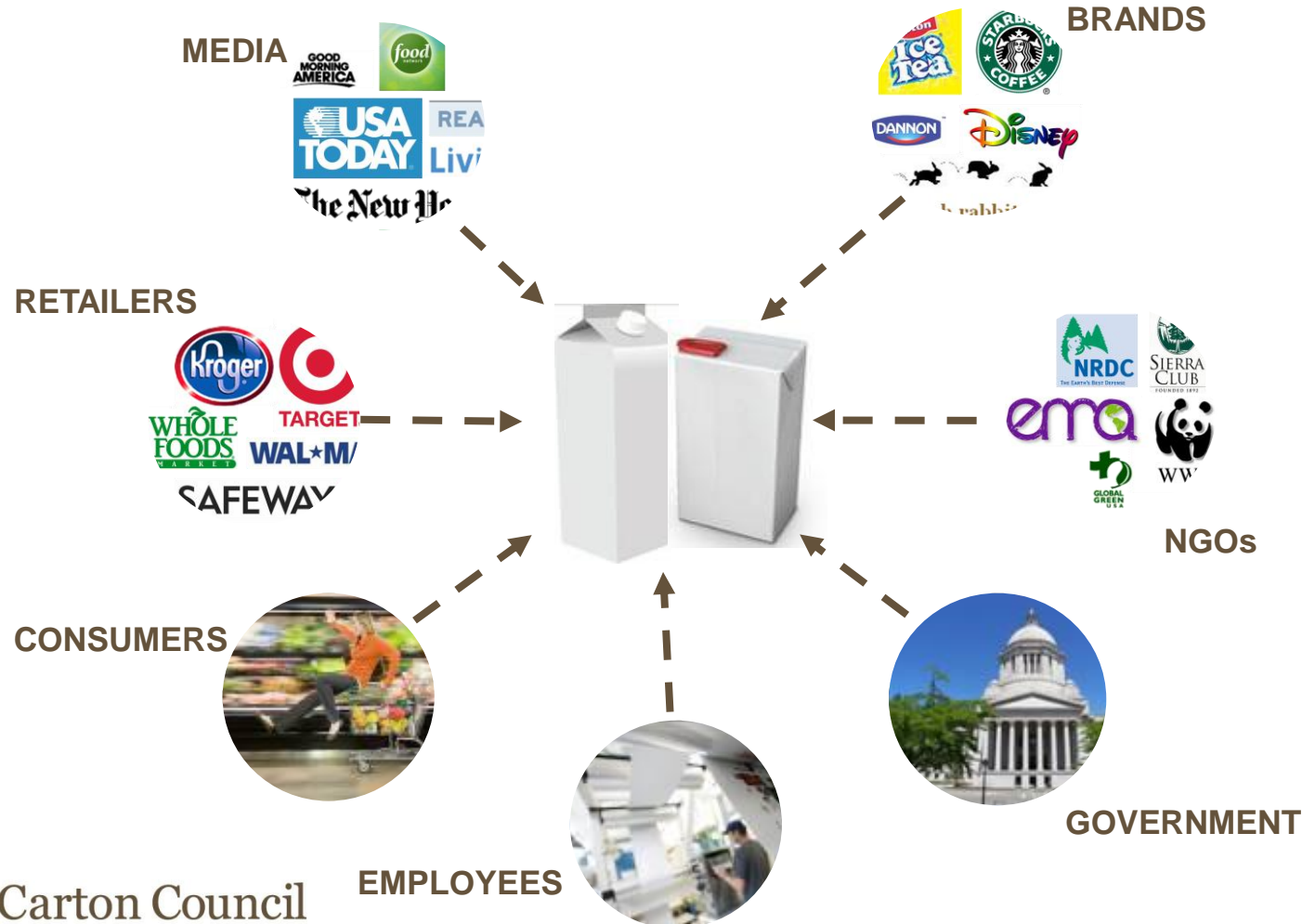
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What are Drivers for Carton Council Goals?



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What are “Cartons”?



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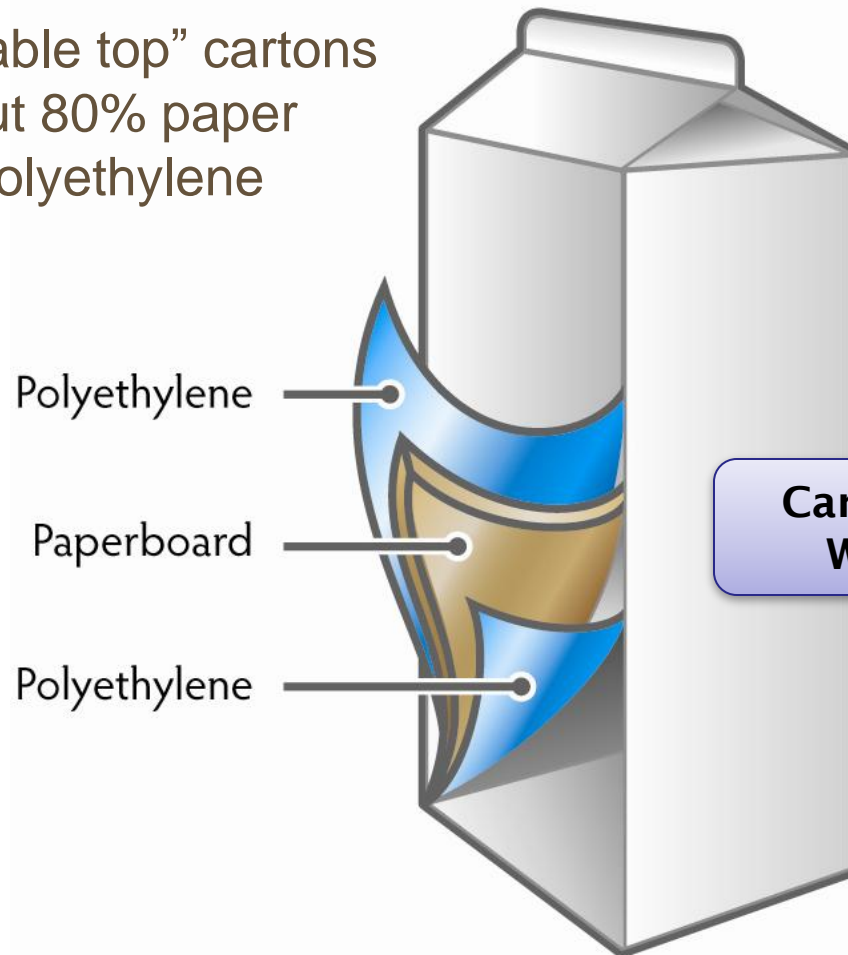
Uses for Cartons

- **Refrigerated (Gable Top):** used for milk, juice, creamer ...
- **Shelf stable (Aseptic):** used for soups, milk, juice, wine, water...



What are Cartons Made From?

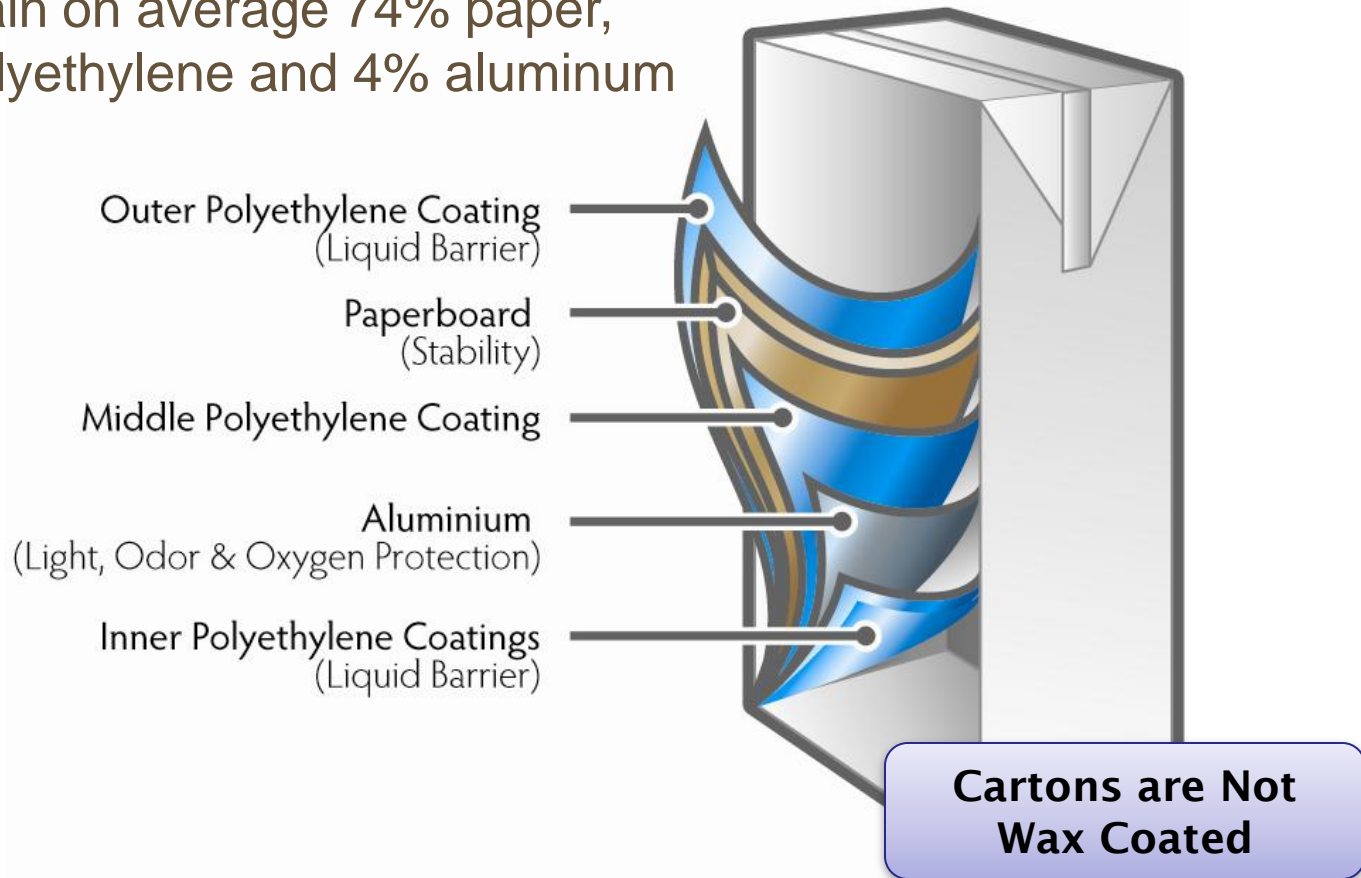
Refrigerated “gable top” cartons contain about 80% paper and 20% polyethylene



**Cartons are Not
Wax Coated**

What are Cartons Made From?

Shelf-stable “aseptic” cartons contain on average 74% paper, 22% polyethylene and 4% aluminum



Sustainable Cartons

Cartons are one of the most sustainable food and beverage packages

RENEW



- Made mainly from paper
- Paper is a 100% renewable resource
- Fiber comes from well-managed forests

REDUCE



- Light weight and compact
- Low package-product ratio
- Low carbon footprint through lifecycle

RECYCLE



- Cartons are recyclable
- In fact...

Recycling and Cartons – A Misunderstood Commodity In US

- High Value Material
 - 100% virgin fibers – no ink
 - Some of the best fiber still in the waste stream
 - High yield for mill operations
- Carton Recycling Standard Practice Globally
 - Over 140 mills taking cartons worldwide, 9 in N.A.
 - We are playing catch-up here in the US
- Cartons Recycled in US for More than 2 Decades
 - Proven in large markets like New York
 - Expect Cartons to be .5% and higher of incoming material

Carton Recycling Supply Chain

Seeking Partnerships across supply chain

Cities

Sorters

Brokers

Mills



Collection Volume



Sorters



Pull Factors
High Value End Markets



Car
R

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Carton Recycling Access Campaign

1. Build sustainable markets
 - *Build the Demand*
2. Build sustainable infrastructure
 - *Build the Supply “Pipeline”*
3. Develop consumer awareness and participation
 - *Fill the Supply “Pipeline”*

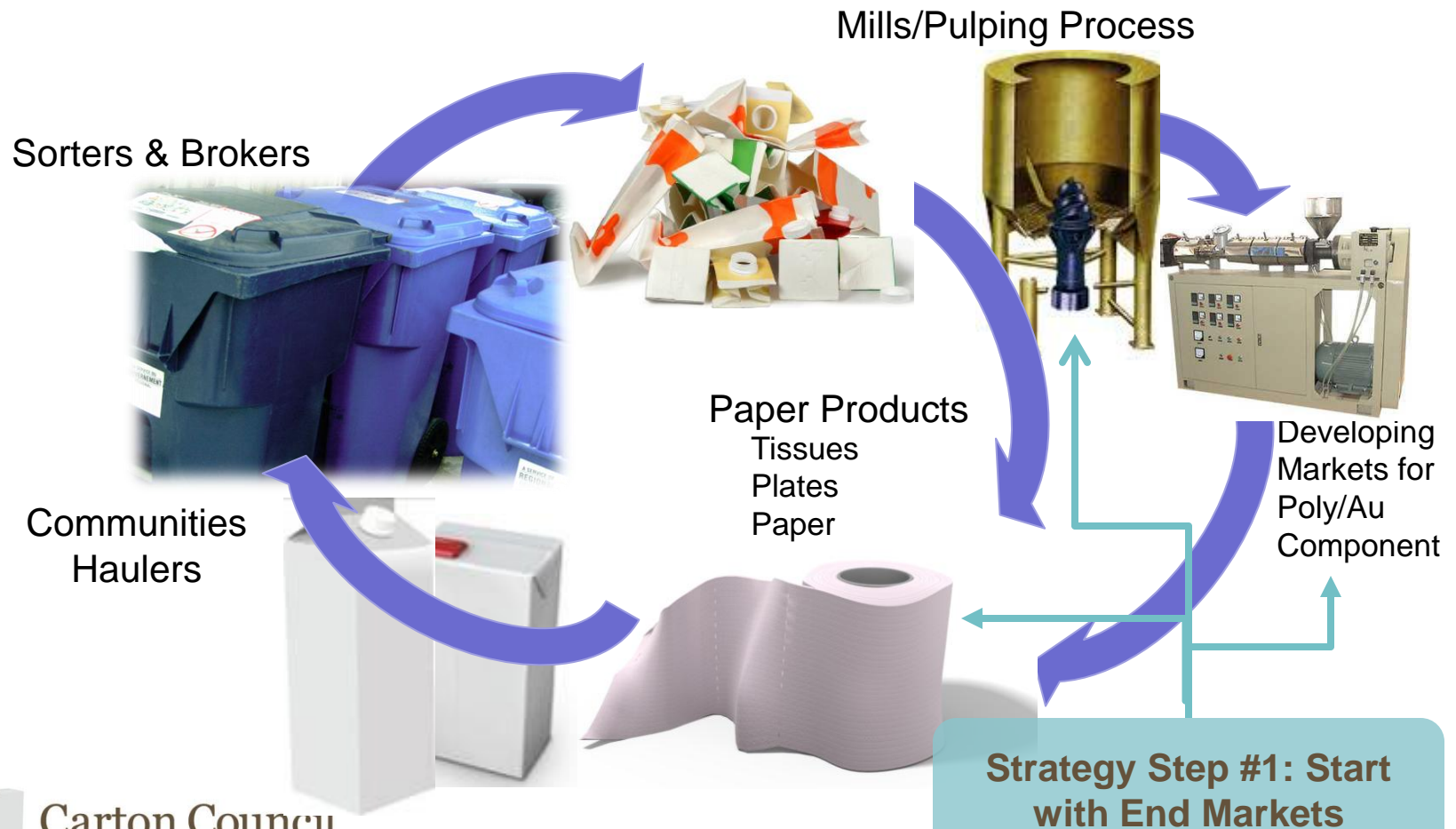
Achieving the “Right Formula”

- Pro-active industry partnership for voluntary producer responsibility
- Pushing carton friendly financial and technical resources into supply chain
- Supporting sorting facility capital upgrades
- Providing marketplace assistance for guaranteed movement of cartons
- Building community and hauler support for carton recycling access

Carton Recycling Strategy – Working Backwards from End Markets



Carton Recycling Strategy – Working Backwards from End Markets



Carton Recycling Strategy – Working Backwards from End Markets

Strategy Step #2: Targets MRFs and Sorting

Mills/Pulping Process

Sorters & Brokers

Communities
Haulers

Paper Products
Tissues
Plates
Paper

Developing
Markets for
Poly/Au
Component

Strategy Step #1: Start
with End Markets

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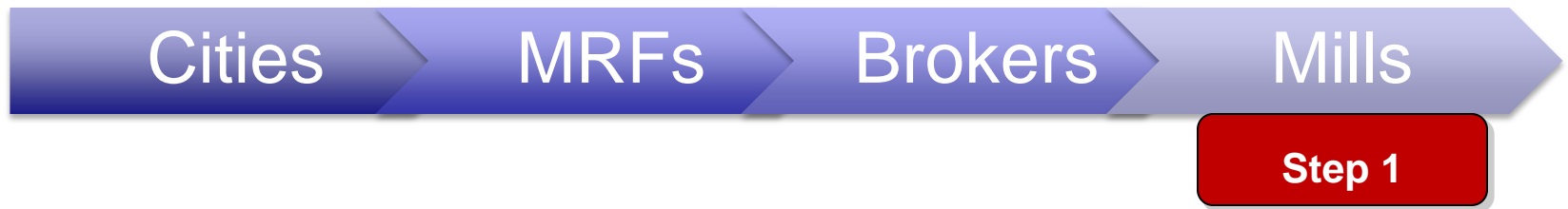
Strategy
Step #3: Targets
Household Access

Strategy Step #1: Start
with End Markets

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Step 1: Build Sustainable Markets



- Identify Suitable N.A. mill partners
- Negotiate agreements with mills to buy cartons at prices that drive collection and sorting
- Develop broker ties to move supply to markets

Focus on Results

– Building Domestic Markets – 2008

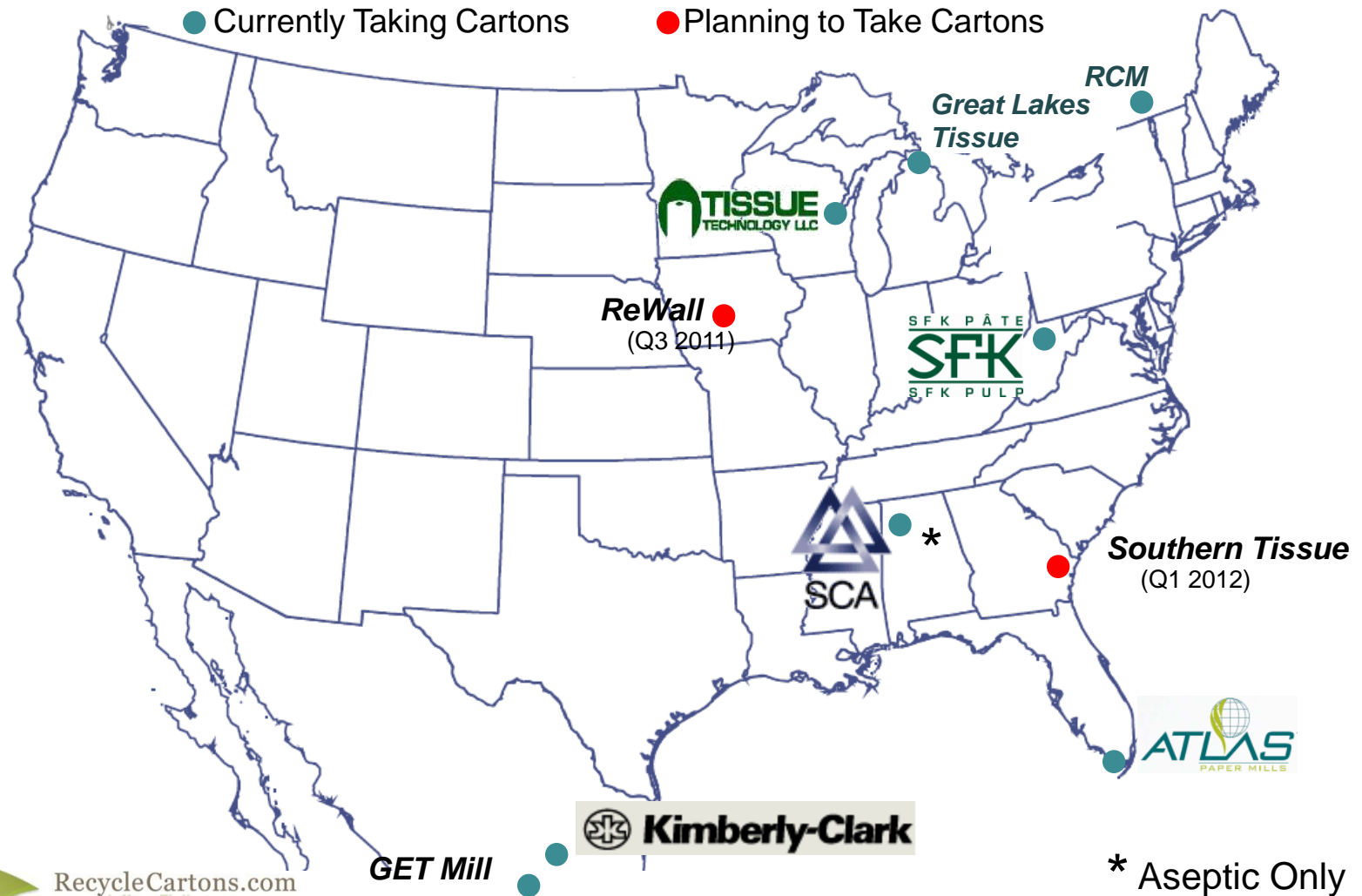


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Focus on Results

– Building Domestic Markets – 2011



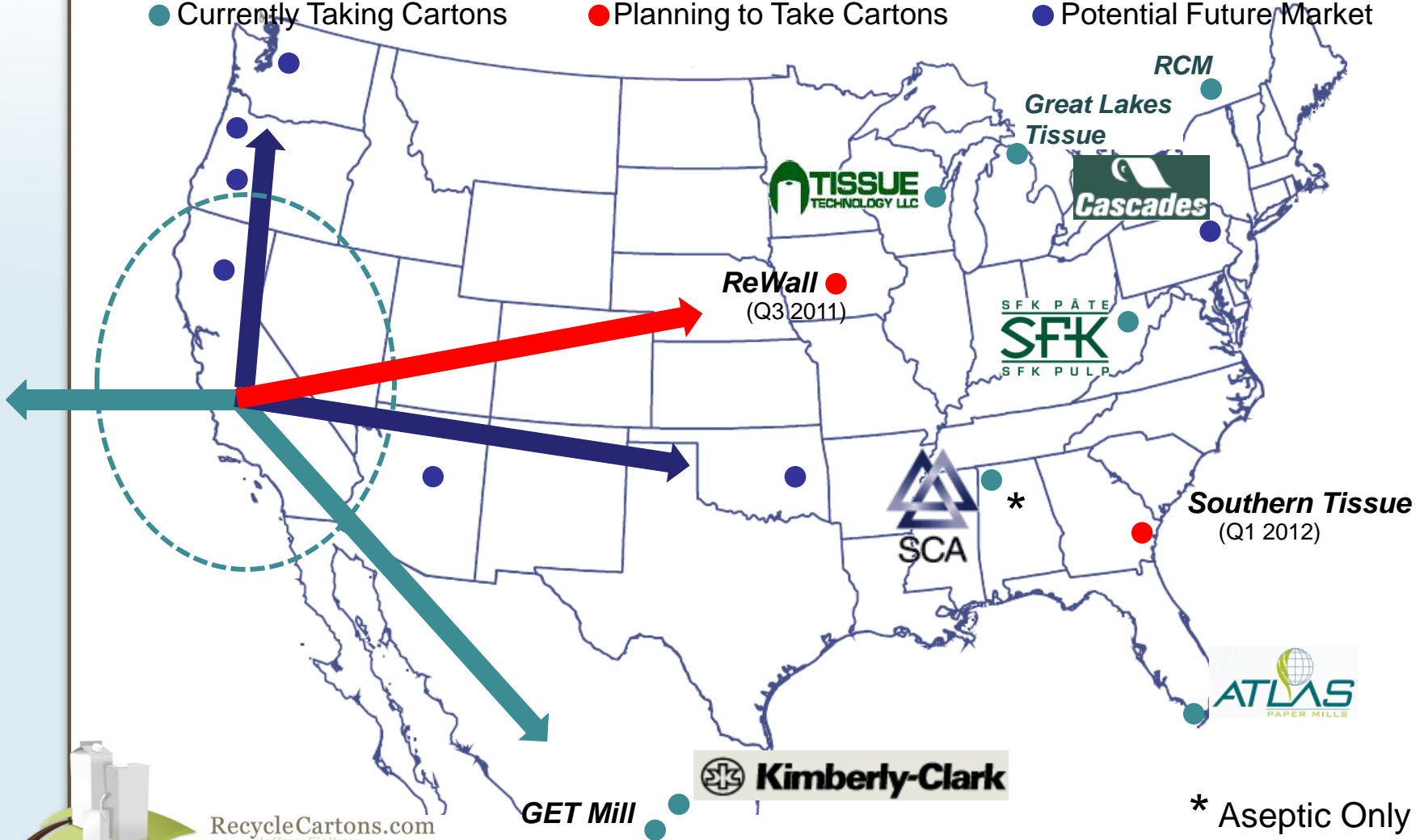
Focus on Results

– Building Domestic Markets – Forecast

● Currently Taking Cartons

● Planning to Take Cartons

● Potential Future Market



New PSI* Spec Grade #52 Aseptic/Gable Top Cartons

- 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*

Sustainable Carton Pricing

- Grade #52 announced in April, reflecting industry recognition of this grade – eventual use of index expected
- 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

End of Life Carton Recycling –

- Preferred for Highest Yield
 - Whole Carton Recycling into Building Products
 - Positive Sort of Carton into Tissue/Pulp with Poly/Al Recovery
 - Both Reach 90 to 100% of Carton Recovery (fiber and poly/al)
- Preferred for High Yield
 - Positive Sort of Carton into Tissue/Pulp – no Poly/Al Recovery
 - Yields 90% of Fiber Recovery, 70% Total Recovery
- Acceptable – Lower Yields
 - With Mixed Paper into Domestic or Export (Tissue/Pulp)
 - Recovery Depends on Pulping Time/Temp – 50-60% Total
 - By Product Processing Increases Yield
- Unacceptable – Disposal

Step 2: Build Sustainable Supply Infrastructure

Step 2

Cities

MRFs

Brokers

Mills

- Provide promotional assistance to motivate collectors to add cartons
- Phase in collection to grow supply in step with new market capacity and allow for existing contract end dates
- Assist collectors with enhancing program efficiency and effectiveness
- Incentivize sorting facilities to sort cartons and ship to designated mills
- Assist sorting facilities with enhancing sorting efficiency and effectiveness

Supply Development Strategy

- Develop long term partnerships with MRFs
- Provide capital for sorting equipment
- Use brokers to help move cartons to support and stabilize market demand and build commodity market value
- Educate, assist, invest and ensure carton recycling access in all markets
- Build volume – fill the pipeline

Small and Medium Sorting Center Needs

Small Sorting Centers (25%)

May include sorting conveyors, with heavy reliance on manual labor for sorting



Typical capital need:

- Hoppers for storage of manually sorted cartons

Medium Sorting Centers (35%)

May include air sort, trommel, eddy current, steel belt conveyor, self-dumping bins and push-through bunkers



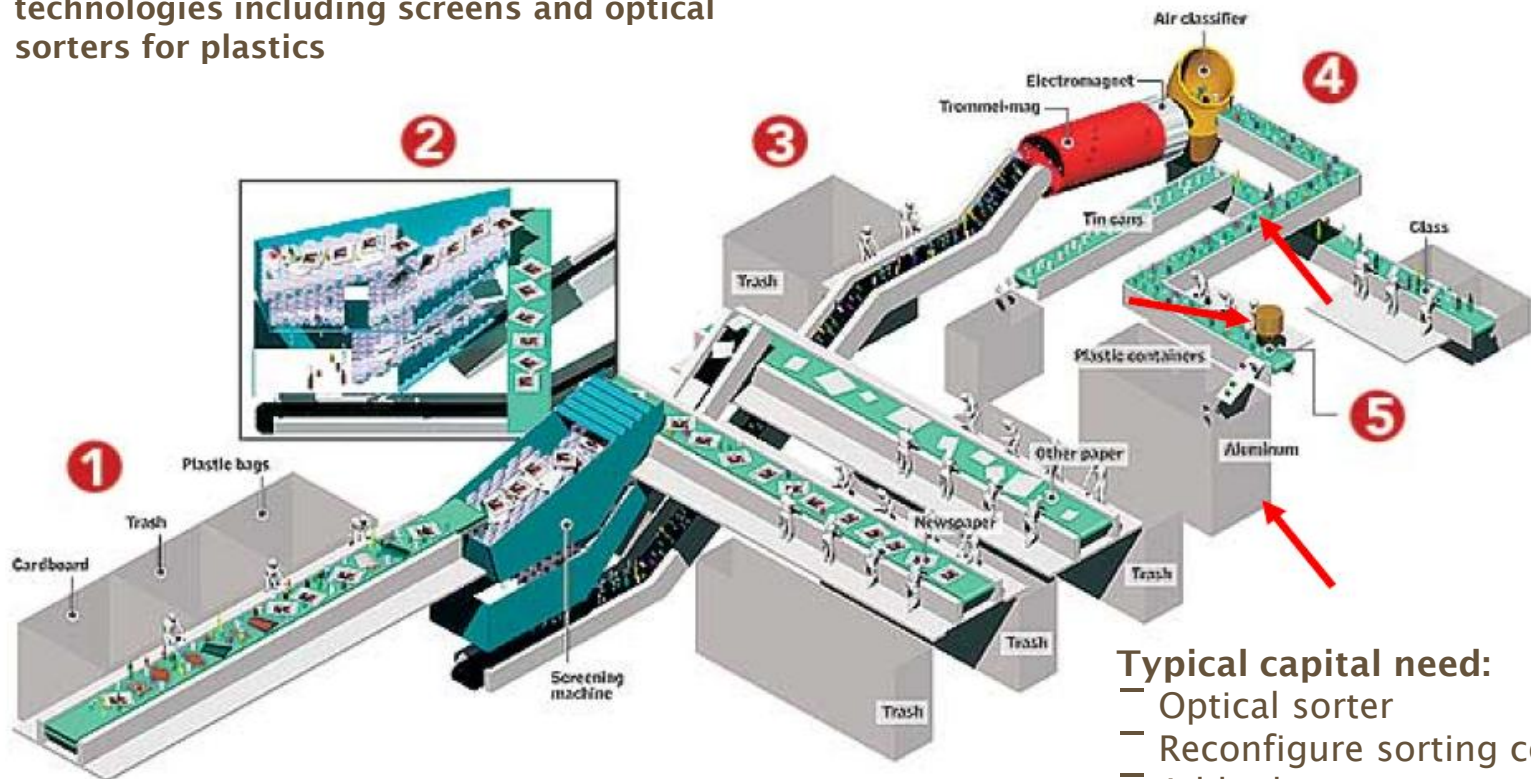
Typical capital need:

- Reconfigure sorting conveyor
- Extend sorting platform
- Add bunker

Large Sorting Center Needs

Large Sorting Centers (40%)

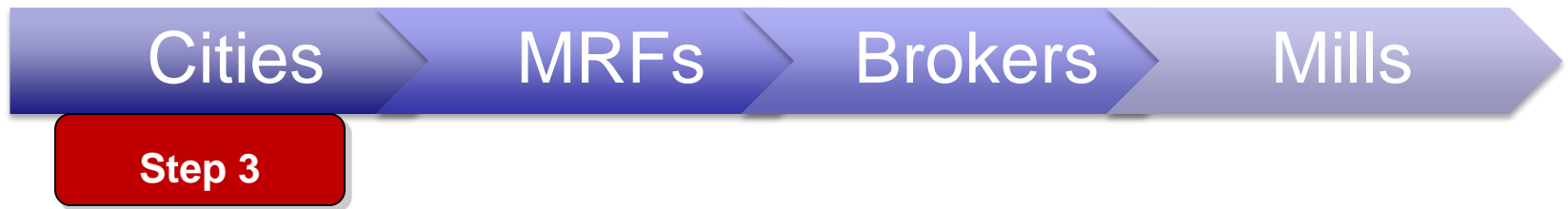
May include advanced mechanical sorting technologies including screens and optical sorters for plastics



Typical capital need:

- Optical sorter
- Reconfigure sorting conveyors
- Add takeaway conveyor
- Extend sorting platform
- Add bunker

Step 3: Build Collection System

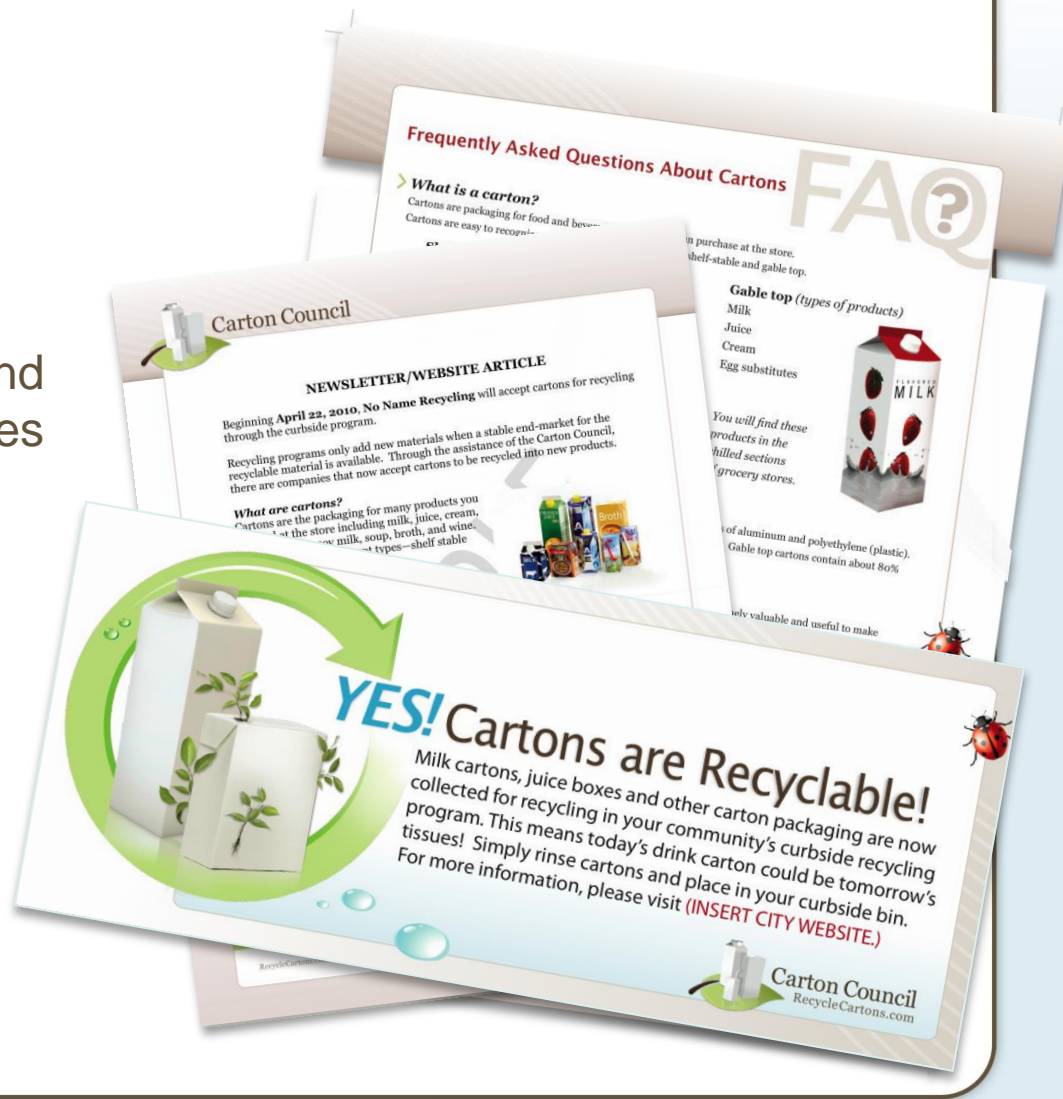


- Partner with local governments to add cartons to community & hauler collection programs
- Implement promotion and education campaigns to inform consumers about cartons recyclability and boost participation and volumes at MRFs
- Involve Carton Council customers in targeted local campaigns (e.g. dairies, brands, etc.)

Tools for Collection Communications

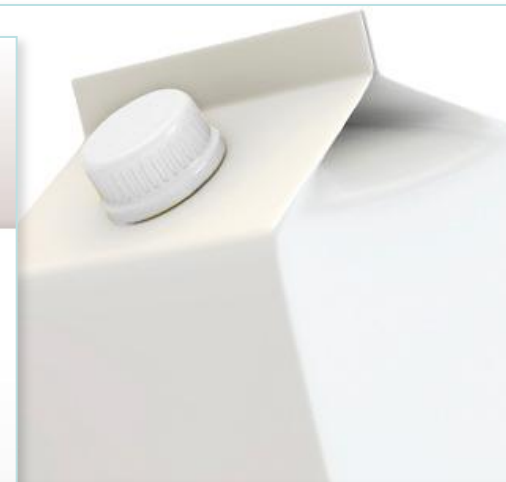
PR Tool-kit

- » Templates for use by communities, haulers and sorting facilities
 - Press releases, photos and text for websites, templates for giveaways, letters to customers
- » Awareness about recyclability of cartons
- » Drive volumes at MRFs



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Carton Website - RecycleCartons.com



Alamo, MI
Ann Arbor, MI
Brady, MI
Bridgeport, MI
Buena Vista, MI
Charleston, MI
Climax, MI
Comstock, MI
Cooper, MI
Detroit, MI
Frankemuth, MI
Galesburg, MI
Oshtemo Charter, MI
Parchment, MI

Recycling Your Cartons!

Just put them in your recycling bin along with other recyclables. If your community separates recyclables into more than one bin, check with your local recycling coordinator to determine which bin to place the cartons

If your community is not in the list, carton recycling is not available yet. The Carton Council is working to improve carton recycling availability and we hope to include your community soon. Check later for updates.

OK

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Recycle Cartons @RecycleCartons

Committed to increasing carton recycling in the US.
Promoting both recycling technology & local collection programs. Help us keep cartons out of landfills.
<http://www.recyclecartons.com>

Follow

Text Follow RecycleCartons to 40404 in the United States

Carton Recycling and Schools

- If you can recycle cartons at home, you can recycling cartons at school!
- Guide and technical assistance available



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The LA Carton Story



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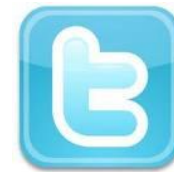


Above: Press conference



Left: In-store display

The Mecklenburg County, NC Story



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The Firststar Fiber, NE Carton Story

“The Carton Council’s initiative guarantees an outlet for cartons, so we are happy to add them to our stream and offer carton recycling to our customers.”

*Dale Gubbels,
Firststar Fiber*

WASTELINE
March 2011
City of Omaha
Jim Suttle, Mayor

Recycling, Garbage and Yardwaste Information for the Citizens of Omaha, Nebraska
Public Works Department Robert G. Stubbe, P.E., Director Environmental Quality Division

Omaha Recycling Gets Juiced

JUICE BOXES THAT IS, along with milk cartons and soup boxes too, are now recyclable in your curbside recycling drop-off bin and at Omaha's recycling processor Firststar Fiber has added equipment to their sorting process enabling them to add these food cartons. These food cartons are easily recognizable and are available in two types:

- ▶ shelf-stable, also known as "aseptic" that often contains products such as soup, soy milk and juice
- ▶ refrigerated, also known as "gable-top" that contain products like milk, cream and fresh juice.

Cartons are made mainly from paper, as well as thin layers of polyethylene (plastic) and/or aluminum. Shelf stable cartons contain on average 74% paper, 22% polyethylene, and 4% aluminum. These layers provide protection from light and air, allowing the product inside the carton to remain fresh for a long time, compared to similar products in different packaging.

Cartons are not difficult to recycle as long as the right systems are in place. Since cartons are made mainly from paper, they are valuable as a recyclable commodity and may be made into many different new products. Some cartons are recycled into tissues, while other cartons are used to make office paper. In some cases, cartons are even being used as one of the materials for wall board manufacturing. The plastic and aluminum from the packaging are also recycled into new products.

Cartons are a smart environmental choice for consumers. They are lightweight, and have a great product to package ratio. This means if you choose a product in a carton, you're taking home on average 94% product and only 6% package. The lightweight cartons also contribute to efficient transportation because the square cartons fit on trucks better and they require fewer trucks for deliveries and this means less greenhouse gas emissions.

One Can One Purpose

A trash can labeled YW should never be used for garbage. You must remove the YW label if you need to use the trashcan for garbage.

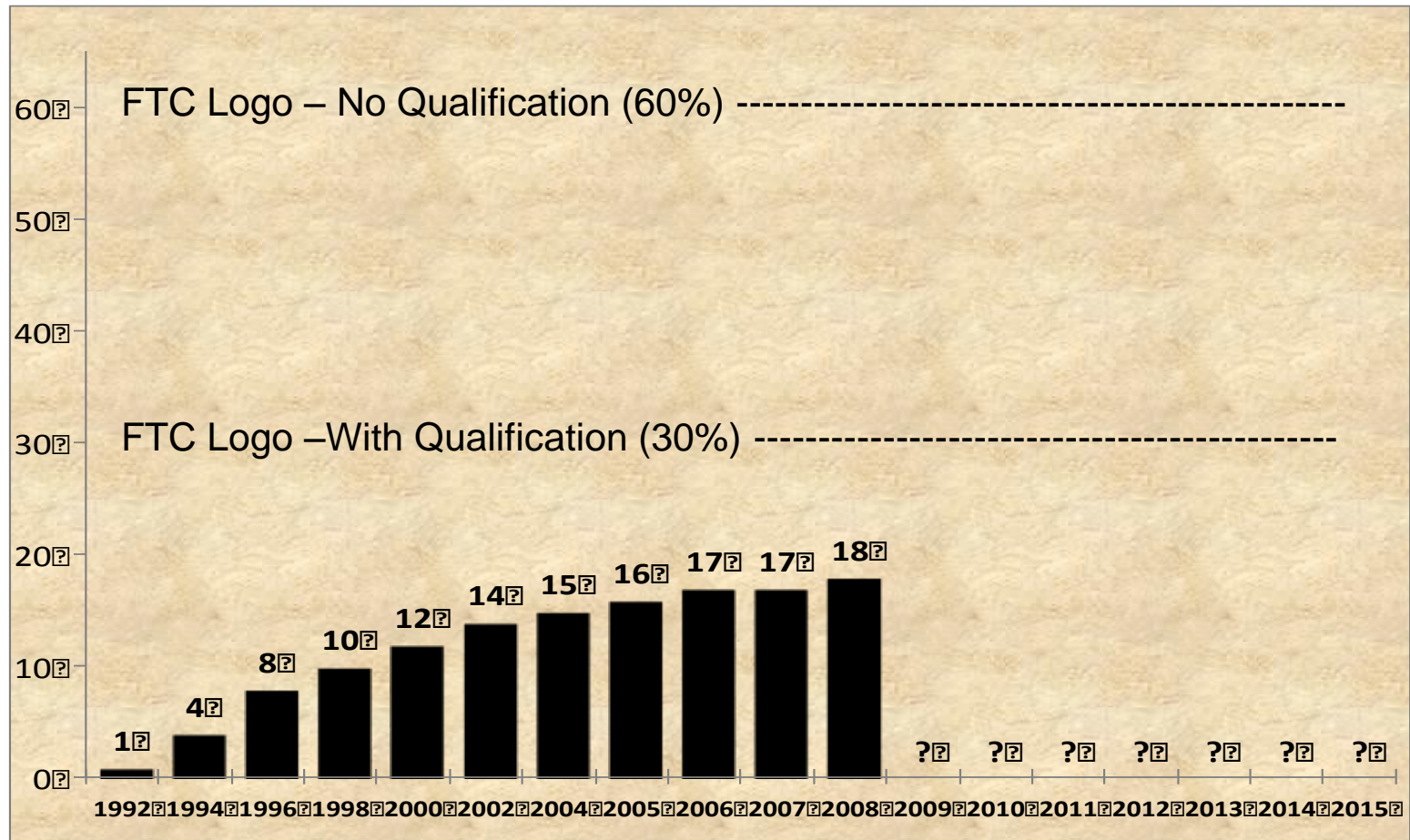
Only a yardwaste collection truck

Garbage goes

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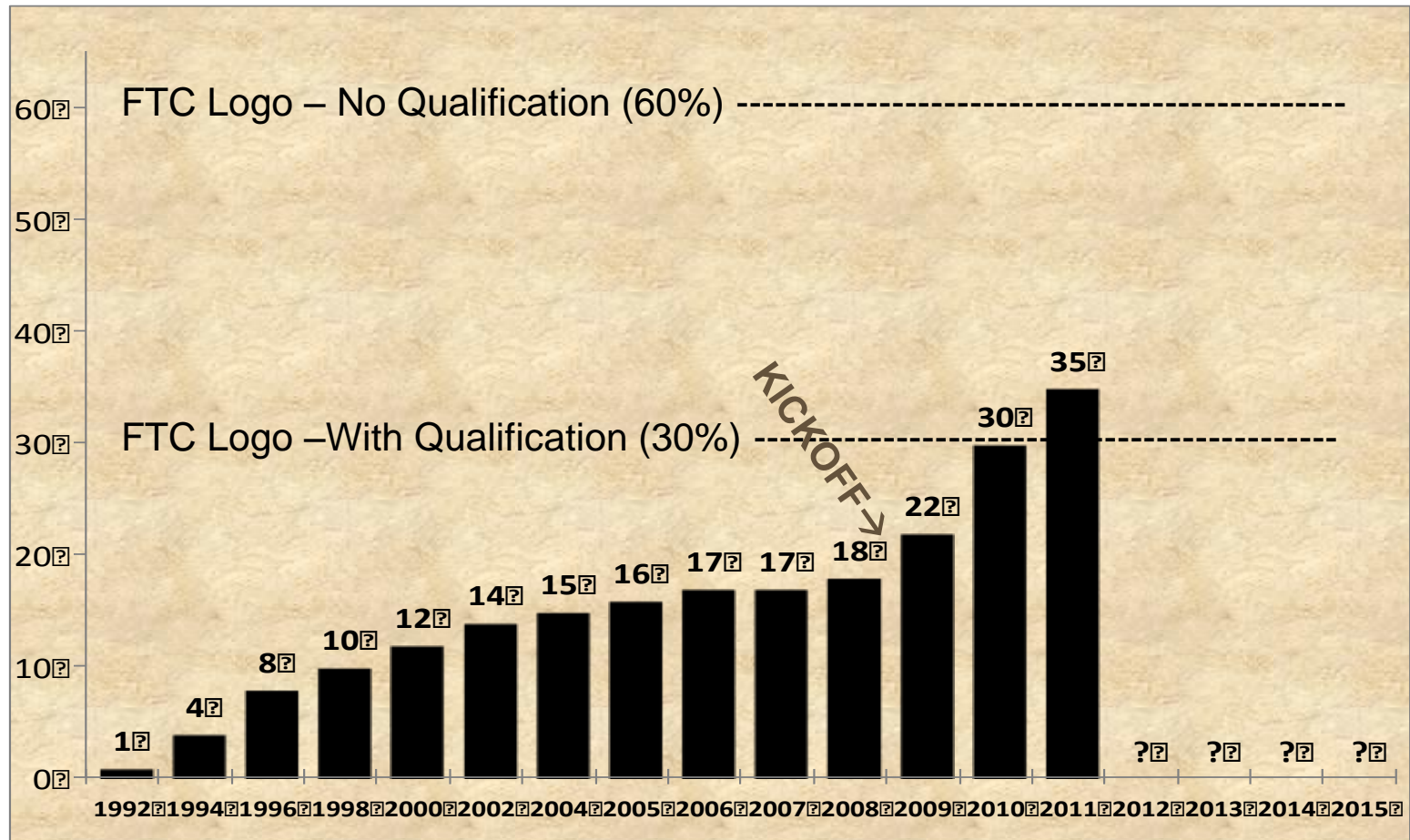
Focus On Results

– Carton Recycling Access 2008



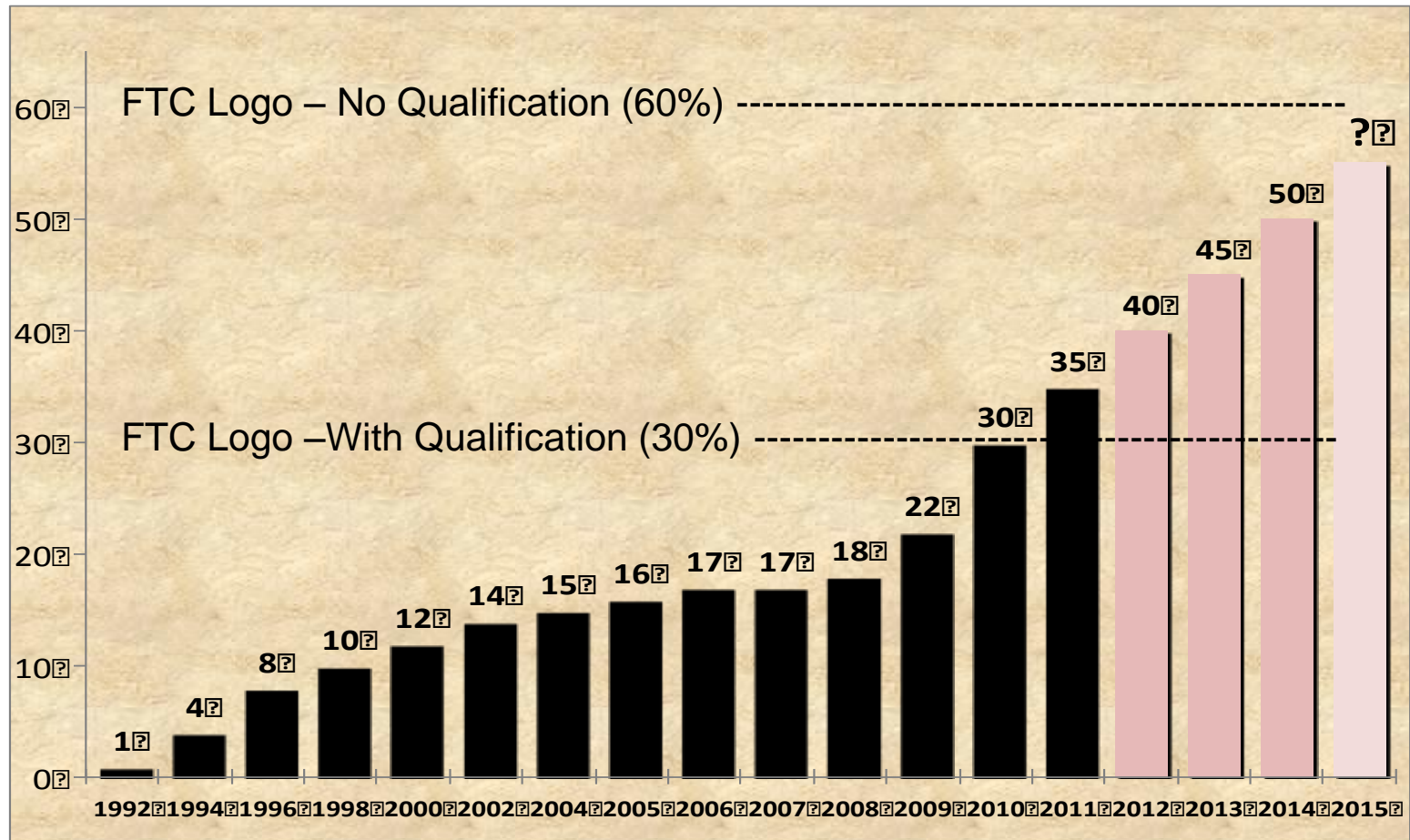
Focus On Results

– Carton Recycling Access Mid-2011



Focus On Results

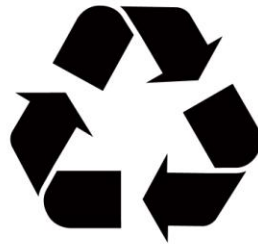
– Carton Recycling Access Goals



What 30% Access Allows

- Possibility to add a qualified logo on-pack
- As per FTC guidelines: *When facilities are available to a “significant percentage” of the population or communities, but not to a substantial majority, the Guides suggest that marketers qualify their recycling claim*.*

RECYCLABLE



ONLY WHERE FACILITIES EXIST

Visit recyclecartons.com to
see if recyclable in your area

Carton Council
RecycleCartons.com

*With a negative qualifier



Get involved!

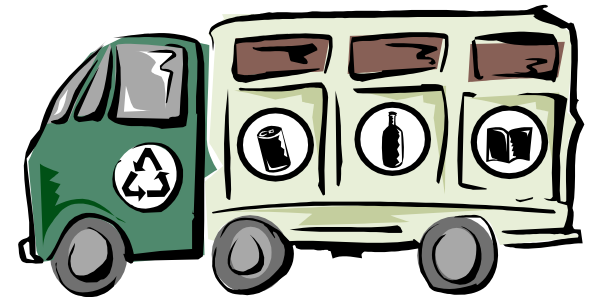
Communities



Facilities



Haulers



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How You Can Recycle Cartons Too

Material Recovery Facilities

Agree to:

- Sort cartons into separate grade
- Offer to municipal customers/haulers
- Sell cartons via Carton Council approved brokers



Provide:

- # households you serve & haulers/communities
- What capital upgrades you need (we can help ID)
- Floor price desired to begin negotiations

How You Can Recycle Cartons Too

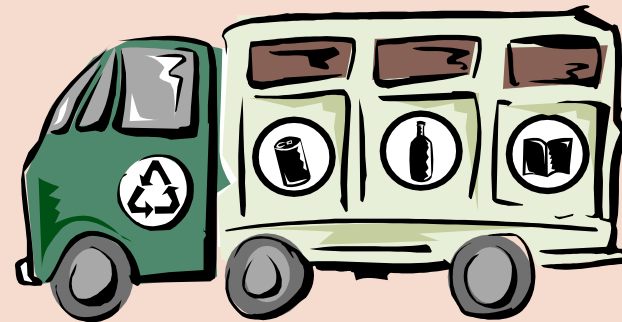
Haulers:

Agree to:

- Collect cartons
- Offer to your municipal customers

Provide:

- # households you serve
- MFR contact if we need to get them on board
- List of communities you serve



How You Can Recycle Cartons Too

Municipalities:

Agree to:

- Collect cartons
- Promote to your residents

Provide:

- # households you serve
- MFR or Hauler contact if we need to get them on board



Thank you!

Jim Frey

frey@recycle.com

Visit the Carton Council:

www.recyclecartons.com

For updates and information,
follow Carton Council on Twitter @RecycleCartons



Recycle Cartons

@RecycleCartons

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