



**GET THE MOST OUT OF
YOUR SINGLE-STREAM**



- ReCommunity Overview
- No Waste
- Industry Trends
- Maximizing Recycling Program

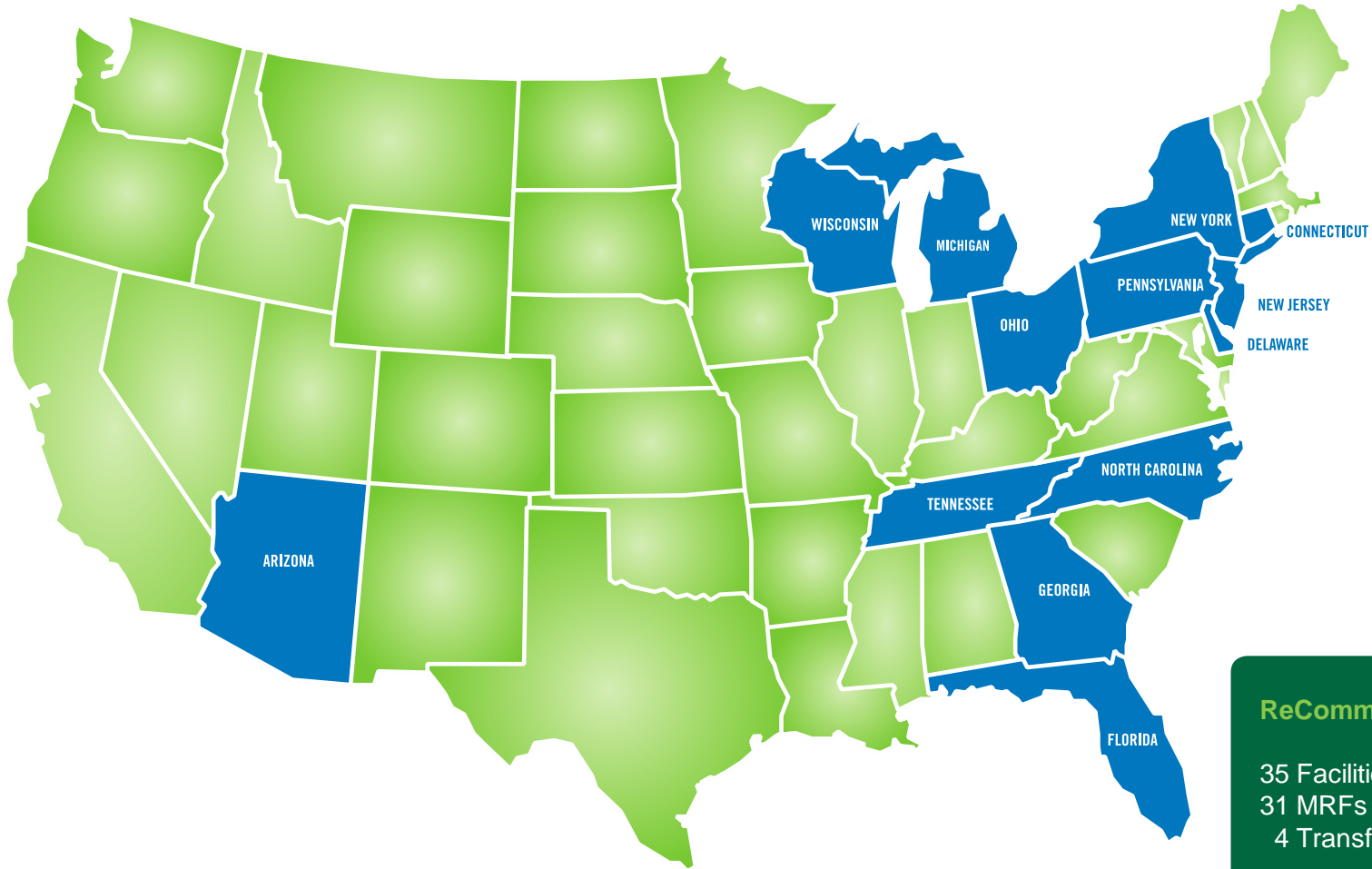


RECOMMUNITY OVERVIEW



- 30+ years of Industry Leading Experience
- Formerly FCR, GLR, and Hudson Baylor
- Headquartered in Charlotte, NC
- ReCommunity is the largest pure-play recycling company in the United States with 35 facilities in 13 states
- More than 1.8 million annual tons processed
- More than 1500 Employees

Proven: Facility Map



ReCommunity Stats:

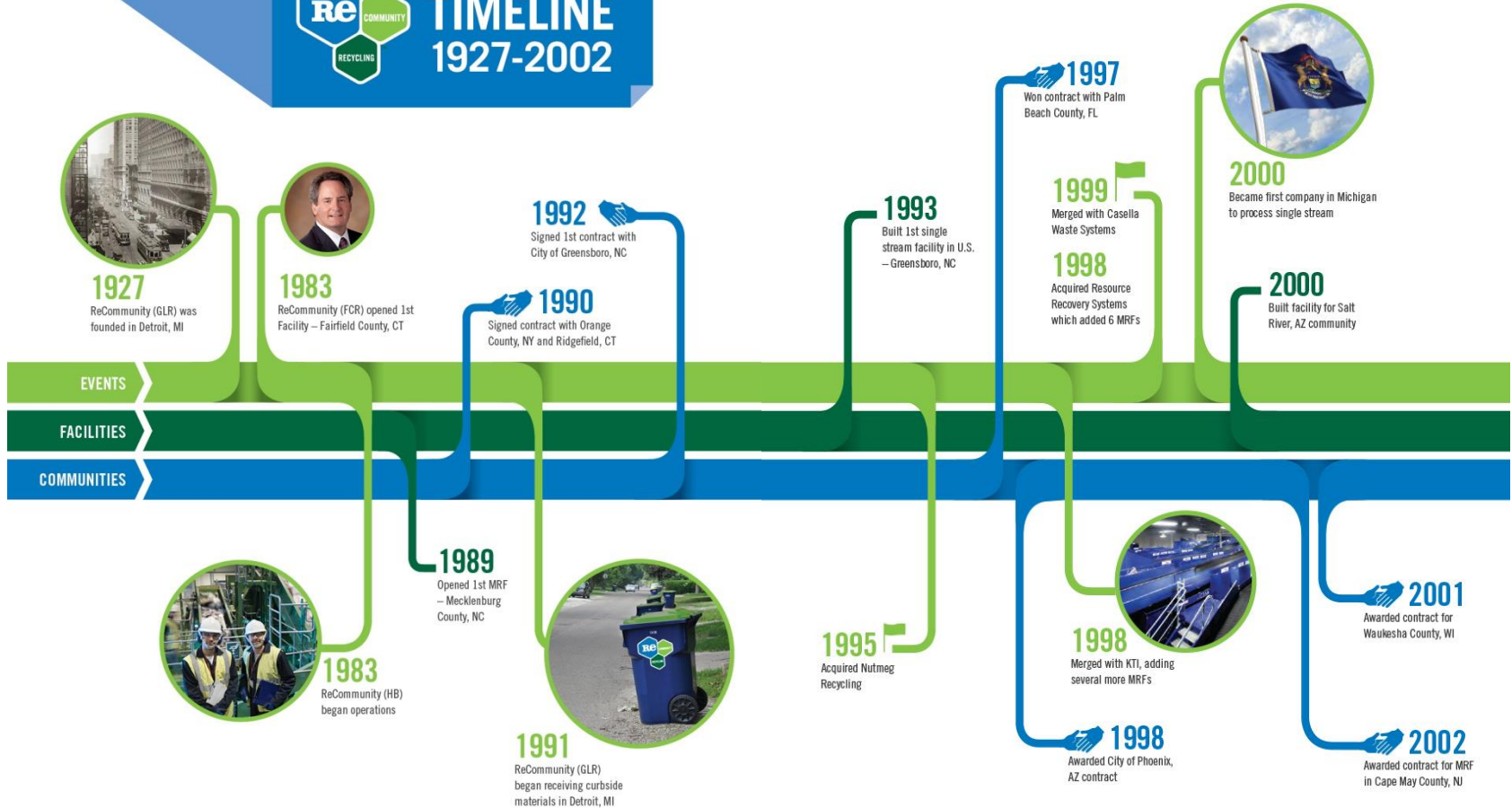
- 35 Facilities
- 31 MRFs
- 4 Transfer Stations

ReCommunity Locations 

Proven: Timeline



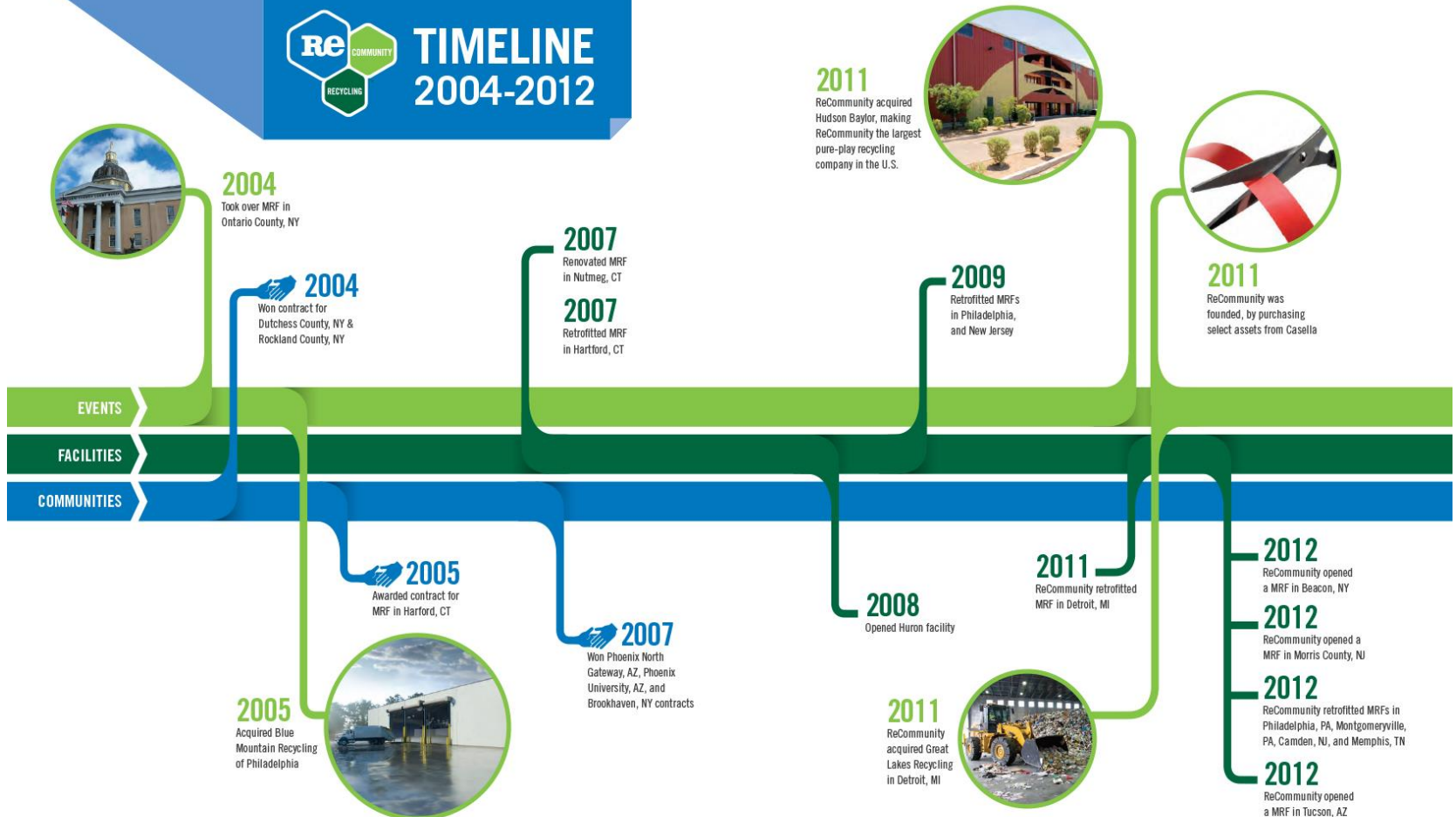
TIMELINE 1927-2002



Proven: Timeline



ReCOMMUNITY RECYCLING TIMELINE 2004-2012





We are experts in Public/Private Partnerships

- We provide Operations, Maintenance and Marketing Services for 14 publicly owned MRFs.
 - Industry leading talent and expertise
 - World-Class **SAFETY** programs with excellent track record
 - Highest reputation on meeting end market **QUALITY** specifications
 - Proprietary information management systems to measure and manage **PRODUCTIVITY** and provide **TRANSPARENCY**
 - Customize programs with transparent business model to foster strong **CUSTOMER RELATIONS.**



Experts in Single Stream Operations

22 Single Stream MRFs

- Hartford
- Beacon
- Morris
- Camden
- Philadelphia
- Cape May
- ACUA
- Charlotte
- Ann Arbor
- Delaware
- Huron
- Athens
- Fort Myers
- Detroit
- Roseville
- Memphis
- Greensboro
- Tucson
- Phoenix 27th Ave + NGW
- Phoenix- University + River

State-of-the-Art MRFs

Automated and Efficient MRF's

- Continuously invest in the most advanced processing technologies to maximize the volume and quality of recyclables.
- Efficient Site Design
- Process starts at the tip floor
- Pre-sort is crucial



Example of Single Stream MRF



Example of Single Stream MRF



Detroit- Single Stream MRF



ReCommunity Michigan Overview



- 4 Single Stream MRF
- 1 Dual Stream MRF
- Commercial Single Stream
- Residential Single Stream
- Container Processing
- Baled OCC Routes
- Consulting Services



Detroit-Area- MRF Locations



Saginaw- MRF

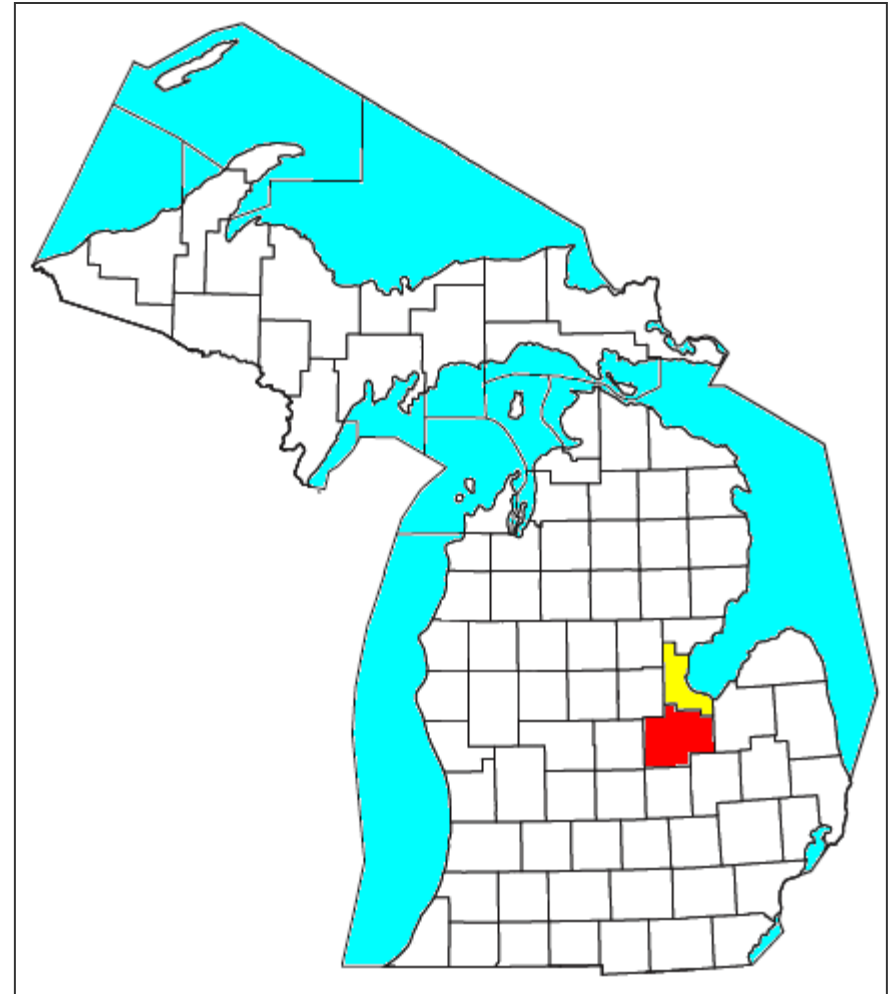


Saginaw

- 61,000 residents
- 23,000 households

Saginaw County

- 200,000 residents
- 79,000 households



Michigan Annual Sustainability Report



¹ Metro, 2008. Labor Production: Growing the Recycling Economy in the U.S., 2011. ² Based on 64 grams per 12oz can average. ³ <http://www.boeing.com/commercial/777/aircraft/facts.html>. ⁴ <http://oag.ca.gov/water/energy/energy.asp>. ⁵ Based on 4.3 grams per 8 1/2 x 11" paper. ⁶ http://www.epa.gov/owow/education/quest/garbage/quest/quest2_chapt.pdf. ⁷ Based on average swimming pool size of 30' x 15' x 6' = 270 cubic feet/1 cubic foot = 7.48 gallons. ⁸ Based on 200 grams per 12oz bottle average. ⁹ <http://www.epa.gov/owow/energy/energyfacts.html>



No Conflicts A “Pure Play” Model



- No conflicts mean:
 - We don't own landfills.
 - We don't own trucks.
 - We are focused on maximizing recovery.
 - We designed our model that way.
- We don't own trucks and landfills because if we did, our decisions would not be based solely on maximizing recovery for communities.

There is No Waste



- You will never find “waste” in our name because there is no waste; only resources.
- Calling it waste allows companies to charge for a problem. We only deal in solutions and value.
- Communities don’t have problems with waste, they have opportunities with resources.



INDUSTRY TRENDS



- Municipalities moving from Dual Stream to Single Stream:
 - Lowers hauling cost
 - Greater fleet flexibility with single compartment trucks
 - Increases recycling rate
 - Expands product categories to be recycled

Industry Trends



Single Stream Conversion

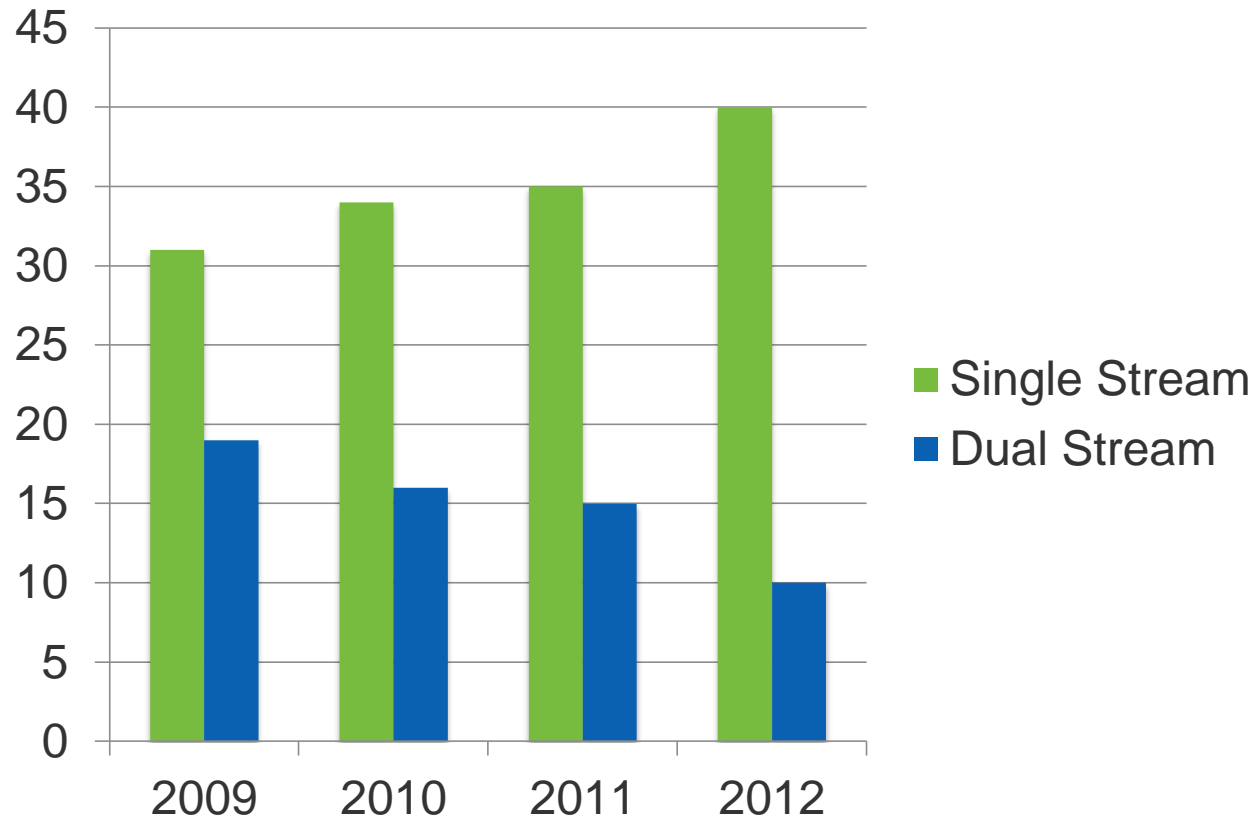
- Reduces carbon footprint
- Reduces disposal fees to landfill
- Communities typically increase recycling tonnages by 15-35%



Trends – Single vs. Dual Stream



Top 50 Communities in U.S.



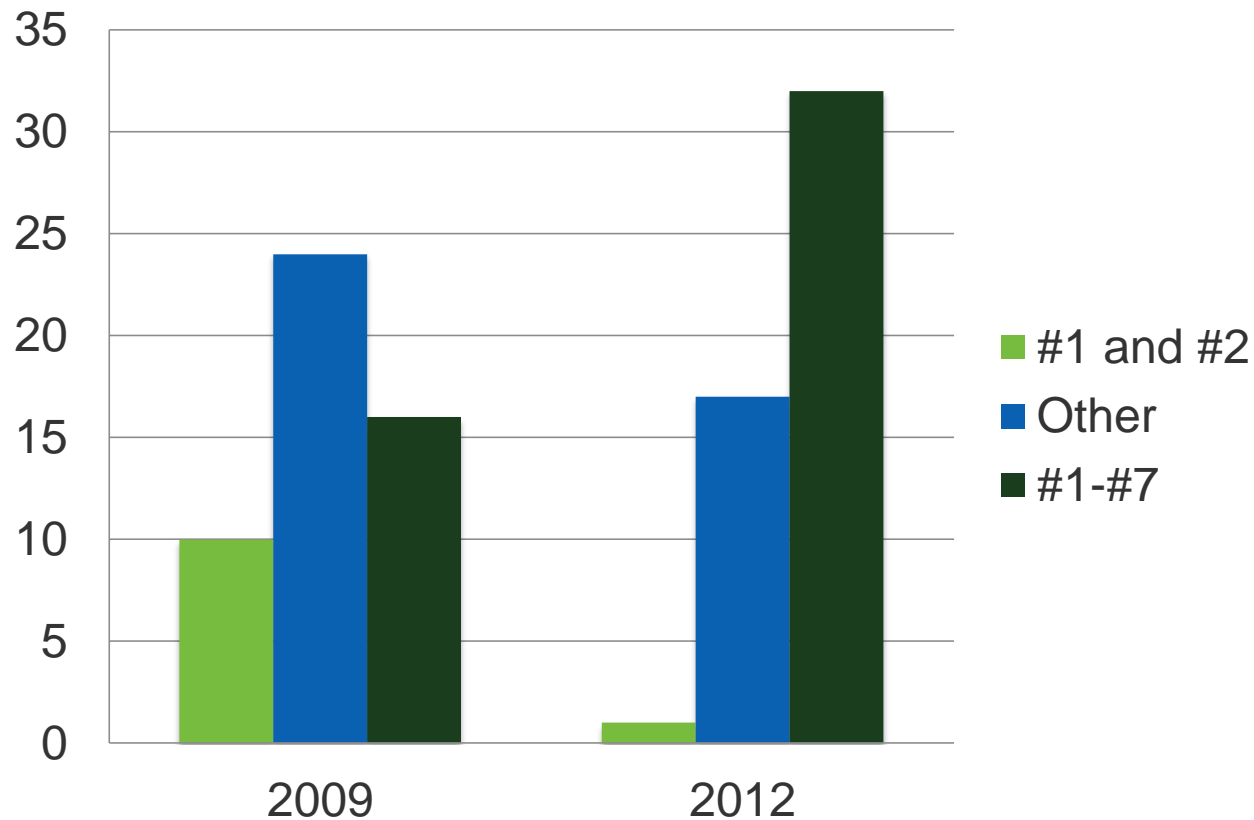


- Acceptable list of recyclables continues to grow:
 - Plastics 3-7
 - Milk and Juice Cartons
 - Pots & Pans
 - Bulk Rigid Plastic Containers

PET and HDPE only



Top 50 Communities in U.S.





- Problematic Materials Still need a Solution:
 - Plastic film bags
 - Extruded polystyrene foam (i.e Styrofoam)
 - Bi Material products (Paper + Metal Container or Paper + Plastic)



- End Market Considerations:
 - China “Green Fence” government policy creating short-term export challenge with plastic grades
 - Prices have stabilized this year, but certain grades starting to show some signs of weakness



- **What is the Green Fence?**
 - **Policy to decrease contaminated loads of recyclables sent to China**
 - **Focus on plastic grades.**
 - **Containers that fail inspection will be returned to sender, without ability to redirect**
 - **Policy is creating domestic uncertainty and stricter quality checks**



MAXIMIZING RECYCLING PROGRAMS

Maximizing Recycling Programs

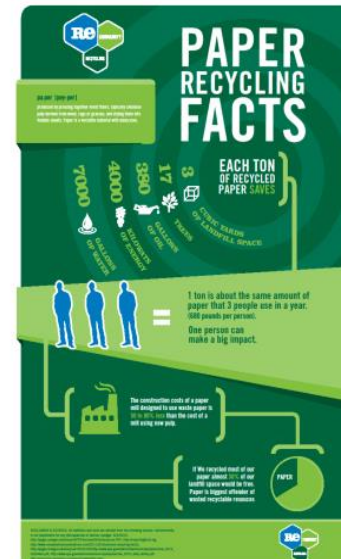
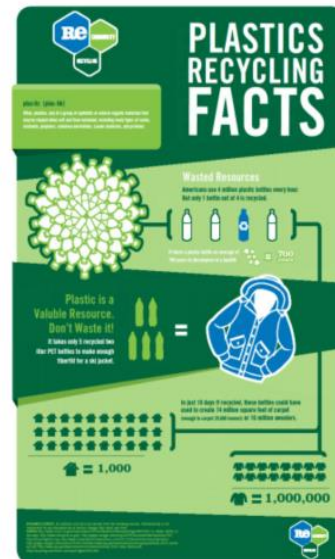
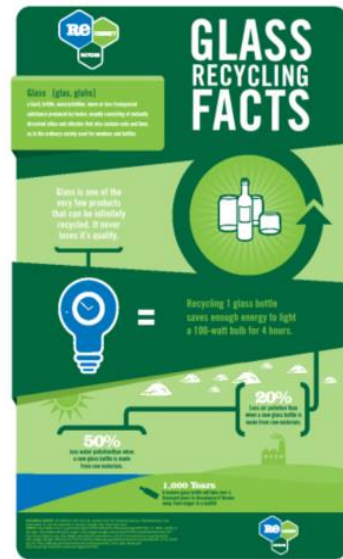
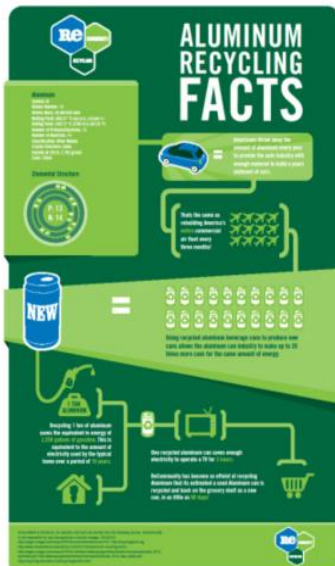
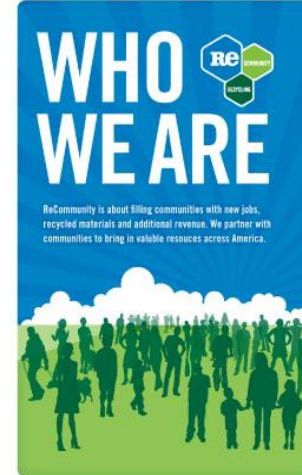
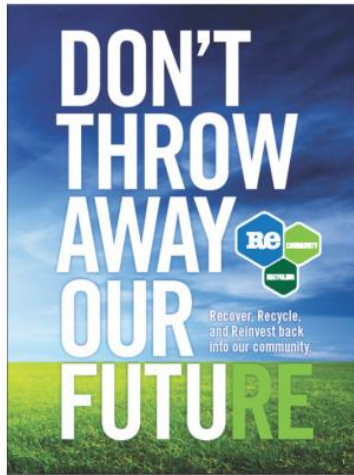


- Ways to maximize recycling programs
 - Separate hauling/processing contracts
 - Convert to 64 or 96 gal carts
 - Increase collection frequency of recyclables and decrease waste collection
 - Expand products to be recycled
 - Education and Community Engagement



- Acceptable Materials Signage
- Teacher-approved lesson plans with recycling educational material
- Interactive MRF
- Recycling animated videos
- Facility Tours
- Recycling events and competitions

Educational Materials



Acceptable Materials



RECYCLE WELL

These categories are acceptable for recycling.
Study carefully and recycle well.

A woman with long brown hair, wearing a green and white striped shirt and blue jeans, is sitting cross-legged on top of a large blue recycling bin. She has her arms raised in a happy gesture. The bin has the 'RE Community Recycling' logo on its front. The background is a bright blue sky with a green field at the bottom.

Plastics 1, 2, 4, 5 & 7
(Jugs, bottles, etc)

Aluminum & Metal Cans

Paper (Office Paper, Junk Mail & Newspaper, etc)

Glass Bottles & Jars

Cardboard & Food Boxes

Magazines, Phone Books & Cartons

Educational Programs



Facility Tours



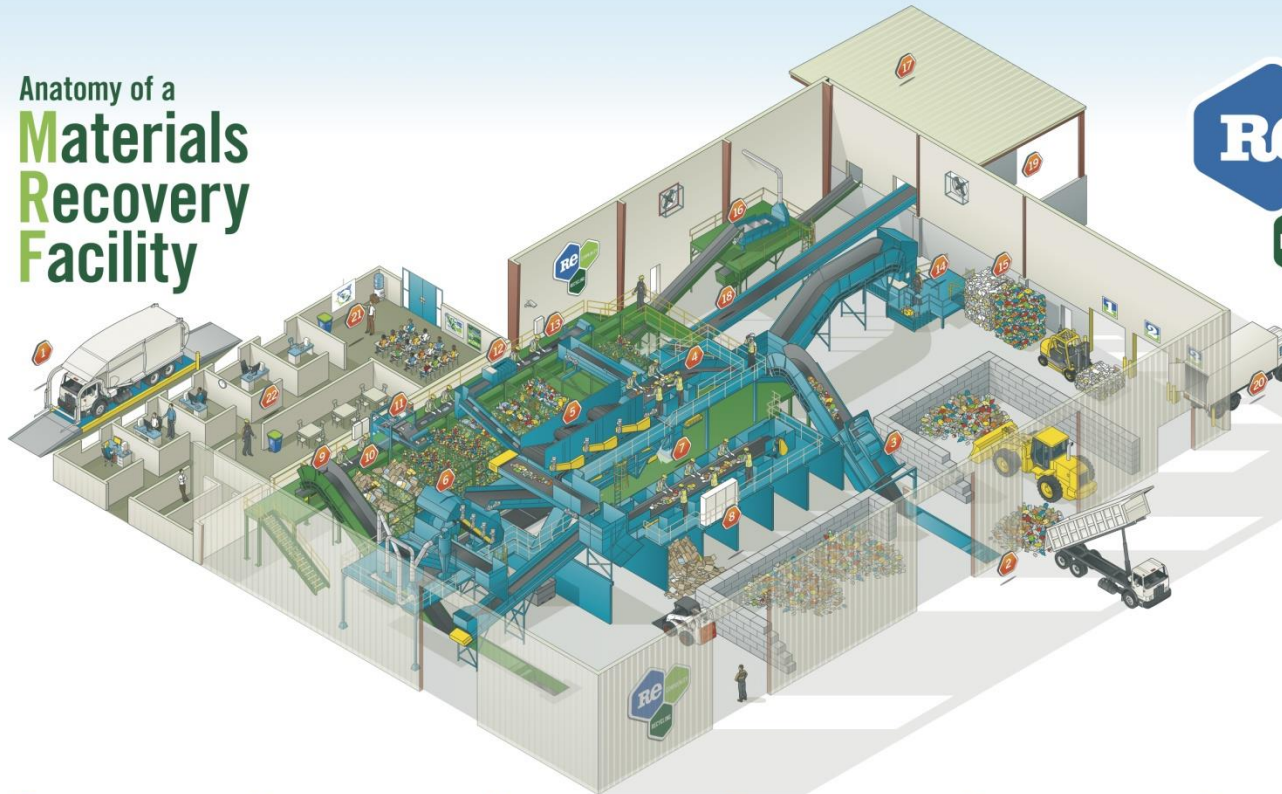
Virtual Tour



Interactive MRF



Anatomy of a Materials Recovery Facility



- | | | | | | |
|--|--|--|--|---|--|
| <p>1 Scale The process begins with the scale and palleting equipment. Inbound trucks are weighed. The material and weight are recorded and stored in a central database. The material is then moved to the next stage of processing.</p> <p>2 Tipping Floor The tipping floor is a large area where the material is dumped. The material is then moved to the next stage of processing.</p> <p>3 In-Feed Conveyor The material is moved from the tipping floor to the in-feed conveyor. The conveyor is a long, narrow belt that carries the material to the next stage of processing.</p> <p>4 Pre-Sort The material is moved from the in-feed conveyor to the pre-sort area. The pre-sort area is a large area where the material is sorted into different categories.</p> | <p>5 OCC Screen The OCC screen is a large screen that separates the material into different categories. The material is then moved to the next stage of processing.</p> <p>6 ONP Screen The ONP screen is a large screen that separates the material into different categories. The material is then moved to the next stage of processing.</p> <p>7 Glass Breaker Screen The glass breaker screen is a large screen that separates the material into different categories. The material is then moved to the next stage of processing.</p> | <p>8 Paper Sorting The paper sorting area is where the material is sorted into different categories. The material is then moved to the next stage of processing.</p> <p>9 Commingle Conveyor Belt The commingle conveyor belt is a long, narrow belt that carries the material to the next stage of processing.</p> <p>10 Plastic Sorting The plastic sorting area is where the material is sorted into different categories. The material is then moved to the next stage of processing.</p> <p>11 Steel Magnet The steel magnet is a large magnet that separates the material into different categories. The material is then moved to the next stage of processing.</p> | <p>12 Optical Sorter The optical sorter is a large machine that separates the material into different categories. The material is then moved to the next stage of processing.</p> <p>13 Eddy Current Separator The eddy current separator is a large machine that separates the material into different categories. The material is then moved to the next stage of processing.</p> <p>14 Balers The balers are large machines that compress the material into bales. The bales are then moved to the next stage of processing.</p> <p>15 Bale Storage The bale storage area is where the bales are stored until they are ready to be shipped.</p> | <p>16 Glass Cleanup System The glass cleanup system is a large machine that separates the material into different categories. The material is then moved to the next stage of processing.</p> <p>17 Glass Bunker The glass bunker is a large area where the material is stored until it is ready to be shipped.</p> <p>18 Residue Belt The residue belt is a long, narrow belt that carries the material to the next stage of processing.</p> <p>19 Residue Bunker The residue bunker is a large area where the material is stored until it is ready to be shipped.</p> | <p>20 Outbound Truck The outbound truck is a large truck that carries the material to the next stage of processing.</p> <p>21 Education Center The education center is a large area where visitors can learn about recycling.</p> <p>22 Offices The offices are where the facility's management team works.</p> |
|--|--|--|--|---|--|

Interactive MRF



5

OCC Screen

The OCC (Old Corrugated Cardboard) screen separates large cardboard from the material flow. Paper, small cardboard and other small materials are screened off. The OCC Screen is generally placed at the beginning of the waste stream.

VIDEO



Animated Videos



Materials Recovery Facility



How Recycling Works



Recycling Cans



Recycling Plastic



Lesson Plans



Grades 1-5

Grades 6-12

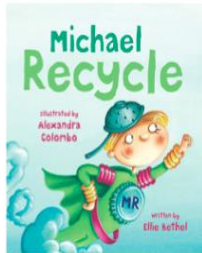
ON TO RECYCLING

Homework

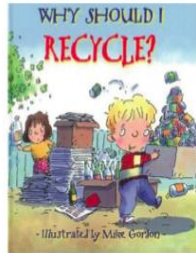
Recycling Audit: Send each student home with a recycling code chart and a list of items that are recyclable in your city. Have them collect and bring to class five clean trash items that can be recycled and a few that cannot. The next day, chart the different materials that were collected and have students separate the items into "recyclable" and "trash" bins.

Read About It!

There are a number of entertaining children's books that can support your recycling lesson. Considering class time with story from one of the below books.



Michael Recycle
by Ellie Bethel, Alexandra Colombo



Why Should I Recycle?
by Jen Green, Mike Gordon



The Adventures of a Plastic Bottle
A Story About Recycling
by Alison Inches



ION TO RECYCLING

The trash in landfills not only takes up space but it poisons the air we breathe and wastes precious natural resources to create new products. Recycling is one of the best solutions to all of these problems. By simply understanding what can be recycled and placing garbage in the proper bin (recycling or trash), we can keep most items out of landfills and in the product chain for years to come. Recycled materials are sometimes used to make the same item and sometimes they are used to make an entirely different item. For instance, plastic from water bottles can be processed into tiny threads that are used to make clothes or rugs.

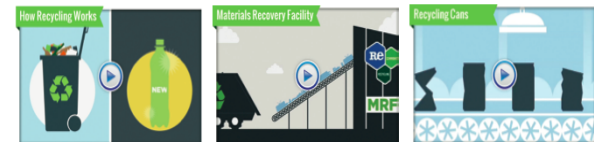
Recycling Facts:

- Recycling a single run of the Sunday New York Times would save 75,000 trees.
- Recycling one aluminum can saves enough energy to run a TV for three hours. In spite of this, Americans throw out 1,500 aluminum cans per second!
- When you recycle an aluminum can, it can be back on the grocery store shelf as a new product in as little as 60 days
- The power saved by recycling one glass bottle can power a computer for 30 minutes
- Recycling plastic saves twice as much energy as burning it in an incinerator
- Half of the polyester carpet manufactured in the US is made from recycled soda bottles

Part 2 - What happens to our recycling?

Videos

The videos explain how products go from the bin, through the recycling process and back on store shelves to be enjoyed again.



Recycling Competitions & Events



- ReCommunity is proud to have sponsored many events and recycling competitions over the past year, including:
 - Grand Opening ceremonies
 - Earth Day events
 - Recycling competitions (e.g. Greensboro Plastic Bottle Blitz, RecycleBowl, etc.)





THANK YOU