# Recycling The Long and Winding Road





PACNY Conference February 27, 2020



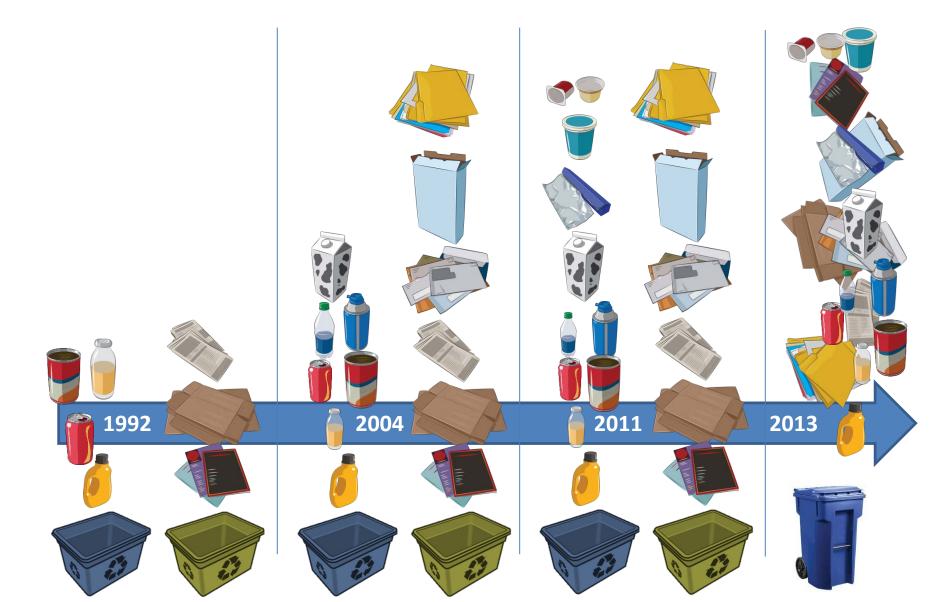
## Agenda

- History of Recycling
- Global Recycling Market Dynamics
- Wishcycling
- Recycling & Waste Reduction Tools
- Hot Topics
- Mythbusters





## **History of Recycling**



# Global Recycling Market Dynamics

#### Chinese scrap import changes **Operation Green** New environmental **Further restrictions** Shipment inspections Fence enacted announced overhauled plan launched China announces China's implements costly China releases a new China formally announces certification and onsite restrictions on the import restrictions on metal scrap pollution control plan that of recycled waste, pre-shipment inspection outlines the country's plan under Category 7, to be focusing primarily on requirements for all fully enforced January to restrict all solid waste electronic, plastic and containerized scrap imports by December 2019 paper waste exports originating from 2020 the US June 2018 February 2013 **July 2017** May 2018 DATA: GACC





## CHINA WASTE IMPORT RESTRICTIONS:

#### MATERIALS AFFECTED





#### POST-CONSUMER PLASTIC WASTE

- Soft drink bottles
- Water bottles
- Takeout containers
- Milk jugs
- Juice bottles
- Cleaning supplies
- Shampoo
- Grocery bags
- Cereal box liners
- Condiment containers

- Produce bags
- Bread bags
- Garbage bags
- Beverage cups
- Yogurt cups
- Margarine tubs
- Plastic film
- PET
- Polystyrene
- PVC







#### **BANNED RECYCLABLES**

Unsorted waste paper of various grades, such as:

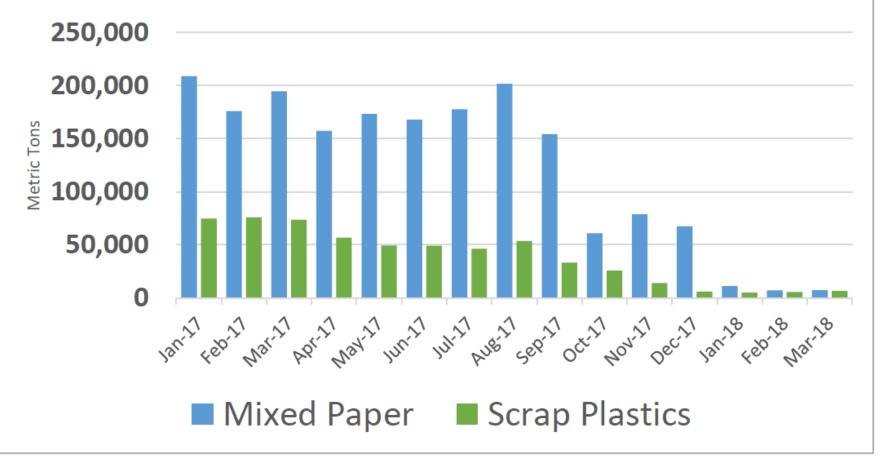
- Old mail
- Paperboard packaging
- Magazines
- Copy and computer paper
- Egg cartons

#### LOWER CONTAMINATION RATES 0.5%

- Cardboard
- Sorted paper



## U.S. Exports to China of Scrap Plastics & Mixed Paper



Data from U.S. Census Bureau/U.S. International Trade Commission courtesy of ISRI

































## What does this mean for recycling in New York?

#### Need to:

- Get back to basics of good recycling
- Clarify types of recyclables accepted
- Communicate consistently to residents among municipalities, facilities, and collection companies
- Choose Reduce & Reuse before Recycle





### **Communication Tools**

- www.monroecounty.gov/recycling
- www.ecoparkmcny.com
- Flyers & Magnets
- Recyclopedia
- **FAQ**
- E-Newsletters
- Facebook page
- Signs



N EVERY RECYCLING BIN ISN'



**Recycle Right** 

ecopark @ www









## MIXED RECYCLING









#### **PAPER**

- · Empty cartons -
- **NO liquids or straws** Flatten boxes
- Contain shredded paper in paper bag or box



#### **PLASTIC**

- · Empty bottles, jugs, jars and tubs -
- NO food or liquids
- · Reattach lids and caps



#### **METAL & GLASS**

- Clean foil
- · Empty cans and bottles -
- **NO liquids**
- · Reattach lids and caps

















www.monroecounty.gov/recycling







## TRASH



#### **POUCHES AND WRAPPERS**









#### **DISPOSABLE FOOD ITEMS**



- · Wet or dirty items
- Cups/lids

#### **SINGLE-USE PLASTICS**

**PLASTIC BAGS** 











#### **FOAM**









#### **FOOD AND LIQUIDS**

**AND FILM** 











## **Hot Topics**

- Plastic Bag Ban
- Food Donation and Food Scraps Recycling
  - Food Waste Reduction
- NYS Drug Take Back Program
- Batteries
- Textiles
- Safety





## Plastic Bag Ban

#### Date Ban Goes into Effect

Single use plastic bags will be banned as of March 1, 2020.

#### **Stores Impacted**

 All stores that collect sales tax (retailers, grocery and any small business) will be required.

#### Plastic Bags Exempt

- Bags that are <u>not</u> included are:
  - Bags made of cloth and other durable materials with handles.
  - Bags used for uncooked meat, fish or poultry
  - Bulk items
  - Sliced or prepared food
  - Newspaper bags (delivered)
  - Prescription drugs

#### Paper Bags

Paper bags are not part of the ban.





# Food Donation & Food Scrap Recycling Legislation

- 2 tons per week or more of food scraps.
- Supermarkets, large food service businesses, higher educational institutions, hotels, food processors, correctional facilities, and sports or entertainment venues.
- Exempt: residential sources, hospitals, nursing homes, adult care facilities, and elementary and secondary schools



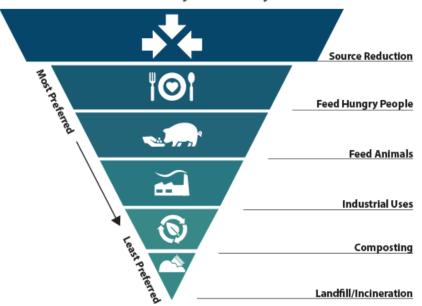




## **Food Waste Reduction Pollution Prevention Institute Tools**

https://www.rit.edu/affiliate/nysp2i/food/source-reduction

#### **Food Recovery Hierarchy**







### **NYS Drug Take Back Program**

 Drug Take Back. Pursuant to Chapter 120 Laws of 2018, the New York State Drug Take Back Act (DTB) mandates that manufacturers establish, fund, and manage a New York State approved drug take back program(s) for the safe collection and disposal of unused covered drugs











### **Batteries**

- Common single-use alkaline or zinc batteries are generally NOT
   accepted for recycling and can be disposed in the trash BUT should
   check with your local municipality.
- It is illegal to dispose of rechargeable, button and sealed lead batteries in the trash.
  - Manufacturers are required by law to provide free collection and recycling.
  - Retailers such as Best Buy, Lowes, Staples, Sprint, Target, Verizon
    Wireless, Batteries Plus Blubs, and other mail back programs will accept
    certain types of rechargeable and button batteries for recycling.

To prevent the risk of fire, use clear tape to cover the terminals before dropping them off at the ecopark. Visit the ecopark website to find a convenient location to drop off your recyclable batteries. Check each site's list of accepted items to make sure your battery is accepted. Disposable alkaline and car batteries are generally not accepted.





### **Textiles**

#### ReClotheNY

https://www.nysar3.org/page/re-clothe-ny-78.html

#### Donations

- Many options are available for donating textiles, furniture, building materials, eyeglasses, etc.
- In addition to clothes, most major thrift stores and donation centers will accept footwear, bedding, curtains, stuffed animals, and other items.
- Clothes that are no longer wearable can still be donated. Any torn, worn, or stained items can be recycled at major donation centers as long as they are clean, dry, and odorless.









### The Life Cycle of Secondhand Clothing



www.weardonaterecycle.org

#### What happens to your donated or recycled used clothing?

On average, each American donates or recycles 12 pounds of apparel, footwear, and household textiles. Here's what happens next...

Once a consumer determines that their clothing, shoes, handbags, or household textiles have reached the end of their useful life, materials are donated to a charity or should be recycled at a municipal recycling center as a final alternative to the landfill



80%

Left with billions of pounds, charities resell their salvage to recyclers which raises significant revenue and is on alternative to the landfill. Secondhand clothing recyclers sort and separate these materials into three general classifications:



30%

Majority exported as

secondhand clothing.

45%

RECYCLED AND CONVERTED

reused and repurposed

Reclaimed wiping rags are used in various ways as industrial and residential absorbents.



20% RECYCLED INTO FIBER

Post-consumer fiber is used to make home insulation, carpet padding, and raw material for the automotive industry



Only 5% ends up as waste.

Did you knows

Worn or torn, all dry clothing, shoes, and textiles can be donated or recycled. Thrift industry employs nearly 100,000 workers in the U.S. with over \$1 billionin wages paid. In addition, private sector recyclers create an additional 15,000 to 20,000 jobs nationally.2

Most private sector recyclers are small businesses with fewer than 500 employees. Every 1,000 lbs donated and recycled generates two man days of labor. Primary and secondary recyclers account for annual gross sales in excess of \$700 million.3

Charities and private sector combined handle 3.8 billion pounds annually.4 These tremendous volumes are recycled and processed due to a highly efficient industry. Your secondhand clothing goes through this entire process in just 30-60 days.5



The textile recycling process follows the conventional recycling maxim of

10-20%

Charities sell danated used

earning revenue for their

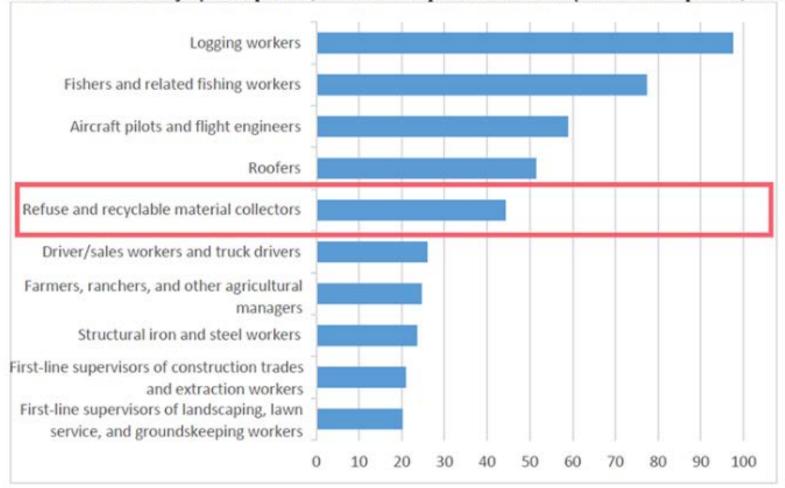
clothing at their thrift locations

Reduce, Reuse, Recycle!

SCURCES FPA 2009 FEDERAL MSW waste study: 3.8 billion ibs recovered divided by 2010 US Census Population 310 million



Chart 4. Fatal work injury rates per 100,000 full-time equivalent workers by selected occupations, 2018











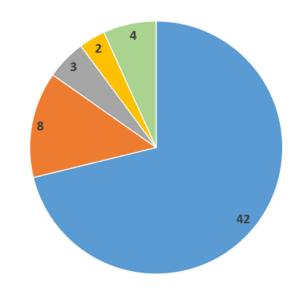
A Campaign to Save Lives

- Federal Government's List of 10 Most Dangerous Jobs
- At least 59 solid waste industry workers died on the job in 2018 in the United States and Canada, according to the Solid Waste Association of North America (SWANA), an increase of 19 fatalities from the previous year.





#### 2018 WORKER FATALITIES BY LOCATION





Collection Landfill MRF Transfer Station Other

# Mythbusters: Can it be recycled curbside?

## True or False?





## Your Neighbor Always Knows What is Recyclable...So Just Ask Them

#### **FALSE**



- Always check with your local municipality or hauler. They know what is and is not acceptable.
- Sign up for DEC Delivers e-newsletters and share our "Can I Recycle That?" editions with the public
  - https://www.dec.ny.gov/public/65855.html
- Recycling Coordinator Contacts (newly updated):
  - https://dec.ny.gov/chemical/8511.html





#### Plastic utensils & straws can be recycled.



Plastic straws, utensils, including "compostable" utensils, plastic plates and plastic cups come in such a wide variety of nonusable, low-grade plastics that it is impossible to identify and separate the recyclables from the non-recyclable look-alikes. Fast food packaging, like utensils, are complicated and are not readily recovered through modern Material Recovery Facilities (MRFs), or by secondary processors who buy MRF bales.



#### Plastic bags or film can be recycled curbside.

#### **FALSE**



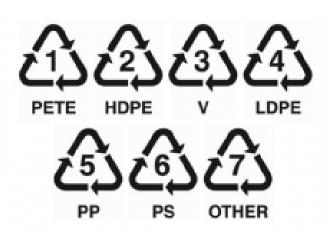
- Neither Plastic bags nor plastic film are accepted curbside (they get tangled in the MRF equipment, breaking or stopping machinery.)
- Empty plastic bags and plastic film should go back to a participating retail outlet or grocery store for recycling.





# The recycling arrows on a container means it is recyclable at a Material Recovery Facility (MRF)

#### Only in some cases



- The plastic resin identification codes #1-7 identify the plastic resin out of which the product is made.
- There are thousands of plastic products and packaging, and each one has its own unique chemical recipe. Many plastics cannot be made into new products at this time.



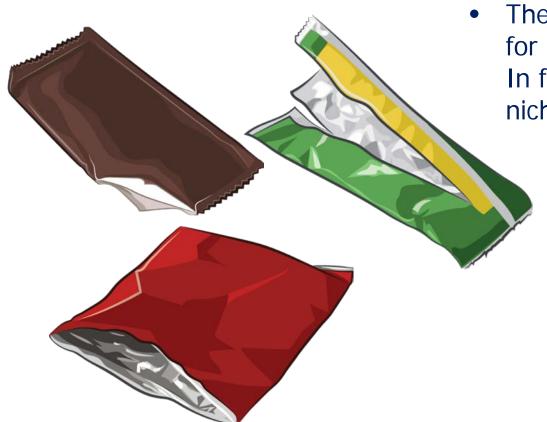


#### What Plastic Containers are accepted curbside?



## Chip bags, nutritional bar or candy wrappers can be recycled.

**FALSE** 



There is no real end market for this, often hybrid material. In fact, there are only a few niche markets for it.





### Pizza boxes can be recycled.

#### **TRUE**



food or paper liners/doilies) are acceptable. At one point, pizza boxes were made with a wax coating that made them not acceptable. The new pizza boxes (often with a paper doily serving as a moisture barrier) are high potential recyclables and should be included in curbside recycling.





#### Single serve cups can be recycled.

#### **FALSE**



- Hot and cold paper cups have a plastic or waxed coating that does not break down during the re-pulping process at paper mills.
- Lids are also NOT recyclable.

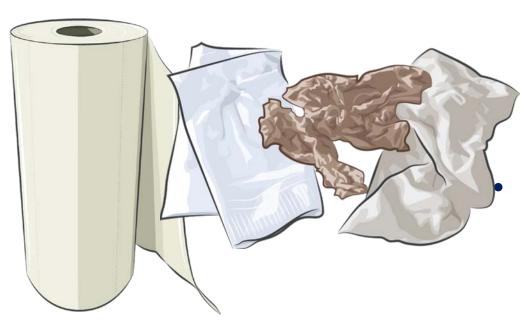






## Napkins, paper towels, and tissues can be recycled.

**FALSE** 



Napkins, paper towels and tissues are made of low-grade fiber, and are usually soiled when disposed. They are not recyclable in single stream residential Material Recovery Facilities (MRFs).

The cardboard tube in the middle of the roll of paper towels or toilet tissue can be recycled.





#### Foam cups and containers can be recycled.



- Polystyrene foam and plastic "to-go" containers and cups are made of unrecyclable materials, and cannot be collected curbside.
- Packing peanuts aren't recyclable either, however some shipping stores will take peanuts back for re-use.





## Every week, Waste Management collects 100 bowling balls in its recycling facilities

#### **TRUE**



### Nope.

Don't recycle bowling balls.

- That's more than 5,000 bowling balls a year and it works out to be 80,000 pounds of bowling balls annually.
- Everyday 14 people across the US put a bowling ball into their recycle bin







#### HHW accepted (w/ appointment):

- Automotive Fluids (antifreeze, brake, power steering and transmission fluids)
- Cleaners (soaps, waxes, drain cleaners, etc.)
- Driveway Sealers
- Flammables (gasoline, thinners, solvents, etc.)
- Mercury (thermometers, thermostats)
- Paint: Oil-based & Latex (more than 1/3 can full)
- Pesticides/Insecticides & Fertilizers
- Resins & Adhesives
- Wood Stain & Preservatives

#### **Fee-Based Items**

- Passenger Vehicle Tires
- TV/Computer Monitors (CRT, Flat Screen)
- Appliances with refrigerant

#### Giveback

Free leaf compost

#### **Accepted for free**

- Appliances
- Bulky Plastic Items
- Clean White Styrofoam Packing (no labels or tape)
- Clothing & Accessories (Donation)
- Cooking Oil
- Document Destruction (items are destroyed off site)
- Flectronic Waste
- Flags (U.S.)
- Fluorescent Lights
- Paper & Cardboard
- Pharmaceuticals & Rx Bottles
- Plastic Grocery Bags
- Printer Cartridges
- Propane Tanks (1# and 20#)
- Rechargeable and Button Batteries NO Alkaline Batteries
- Recyclable Glass/Metal/Plastic Containers
- Sharps & Syringes
- Scrap Metal (including bare tire rims)

### Thank you!

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www.monroecounty.gov/recycling

https://swananys.org/



