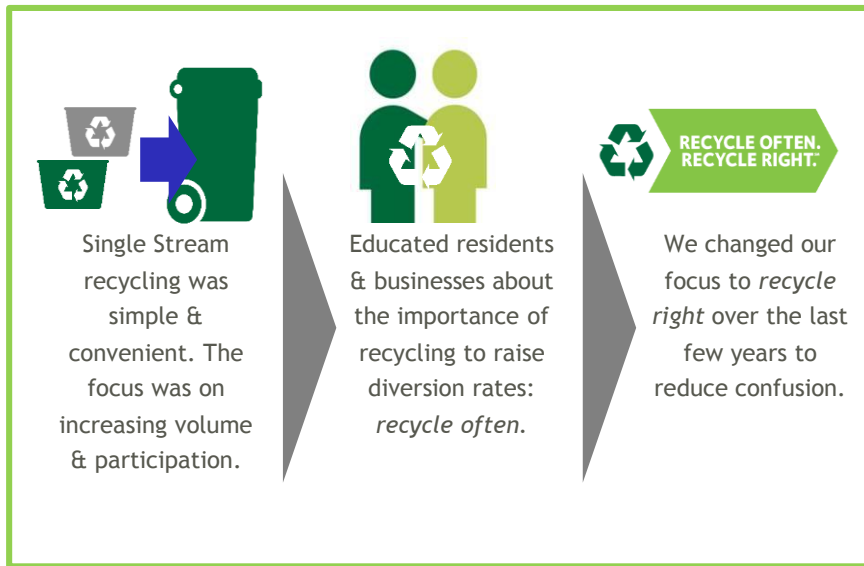




Recycling is Mightier than the Sword

Theresa Evans, Recycling Specialist
Onondaga County Resource Recovery Agency
Wells College, Sustainability Perspectives, March 25, 2019

The Evolution of Recycling



What has changed:

- ✓ China is enforcing a 0.5% contamination rate and complete ban of mixed paper
- ✓ Operating costs have increased
- ✓ Diversion has led the way to aspirational recycling

What hasn't changed:

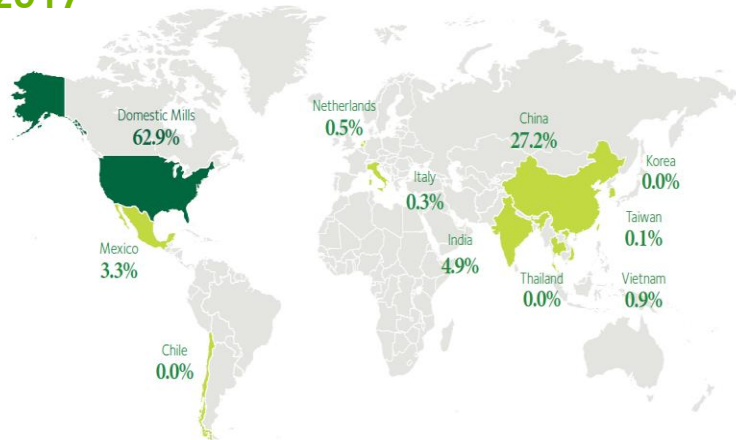
- ✓ People still want to recycle & "do the right thing"
- ✓ States & local government have established recycling bans, goals & mandates
- ✓ "The Right Thing" must be reframed - not all materials can be recycled



Following the Path of Our Commodities

Destination of our fiber recyclables 2017 vs 2018

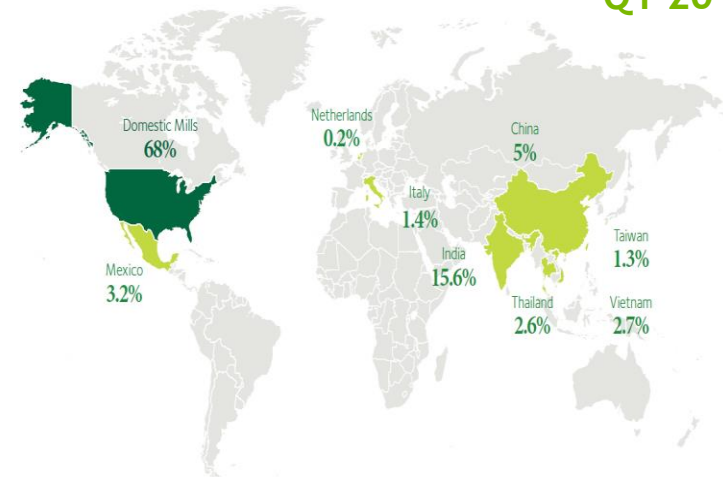
2017



~27% of our fiber went into China in 2017 vs 5% in Q1 2018

Alternative markets to move material were developed: India, SE Asia, and domestic mills are all being used by WM export group.

Q1 2018

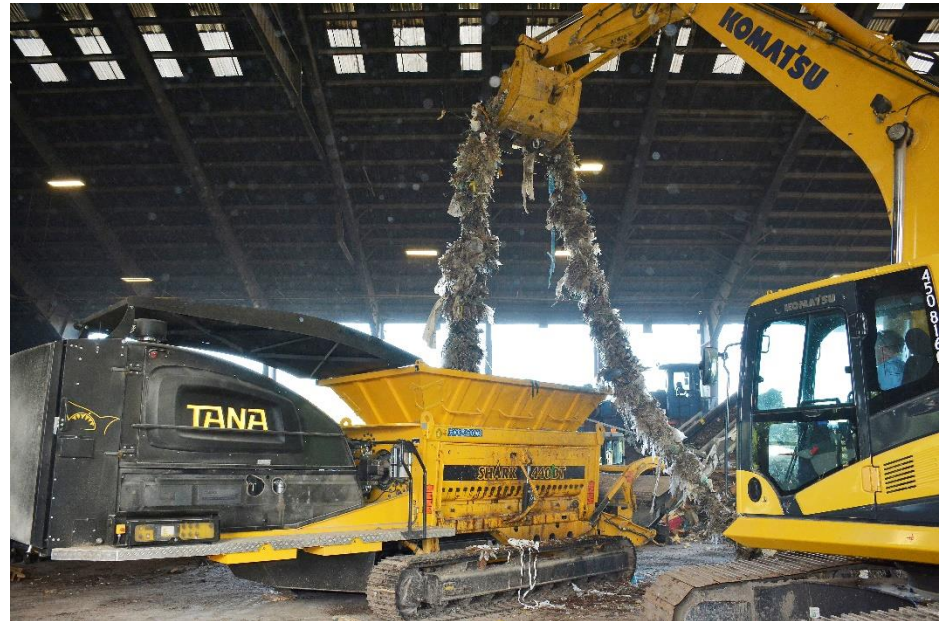




WestRock

Local mill recycles 850,000 tons of cardboard

- Reduced transport distance by 88%
- Recovered ~3,000 tons metal / year
- Diverted 44,000 tons of waste from landfill



You Have the Power!

Ever wonder, "Why and how to recycle?"
When you use **"Recycle Often."**

Recycle Right.™ great things happen.
Every day we encounter hundreds of
recyclable items. By recycling properly,
you help materials get to their next best
use, which in turn saves tons upon tons of
raw materials, time, energy and expense.

It's Time to Rethink Recycling

69% of plastic bottles don't get recycled.*
45% of aluminum cans end up in the
garbage.* Liquids often spoil a whole load
of otherwise recyclable paper. That's why
it's time to get back to the basics of good
recycling. The fact is that some recycling
actions make a bigger impact than others.
The **Recycle Often. Recycle Right.™**
Recycling Rules will help you rethink
recycling to make a sustainable impact!

Visit RecycleOftenRecycleRight.com to
make the promise and become a Recycling
Ambassador. Whether you're a home owner,
teacher, city official, business, kid, or a
recycling enthusiast, all the information
you need to help pass it on is just few
clicks away.

*Source: US Environmental Protection Agency

RECYCLING RULES

**1. RECYCLE ALL BOTTLES,
CANS AND PAPER**

**2. KEEP ITEMS
CLEAN AND DRY**

3. NO PLASTIC BAGS

Certain offenders can slow down the
recycling process or even ruin the load.

Make the Promise at
RecycleOftenRecycleRight.com
...and then pass it on

Participation
is Key



With the help of communities
across the country, Waste Management
recycled enough material
last year to fill 168,819 Boeing 737s.

© 2014 Waste Management, Inc. The Recycle Often. Recycle Right.™ recycling education program was developed based upon national best practices. Please consult your local municipality for their acceptable materials and additional details of local programs, which may differ slightly.

Always recycle:



**Plastic Bottles
& Containers**



**Food & Beverage
Cans**



Paper



**Flattened
Cardboard
& Paperboard**



**Food & Beverage
Cartons**

Do NOT include in your recycling cart:



NO Food Waste



**NO Plastic Bags
& Film**



**NO Foam Cups
& Containers**



NO Needles

To Learn More Visit:
RecycleOftenRecycleRight.com

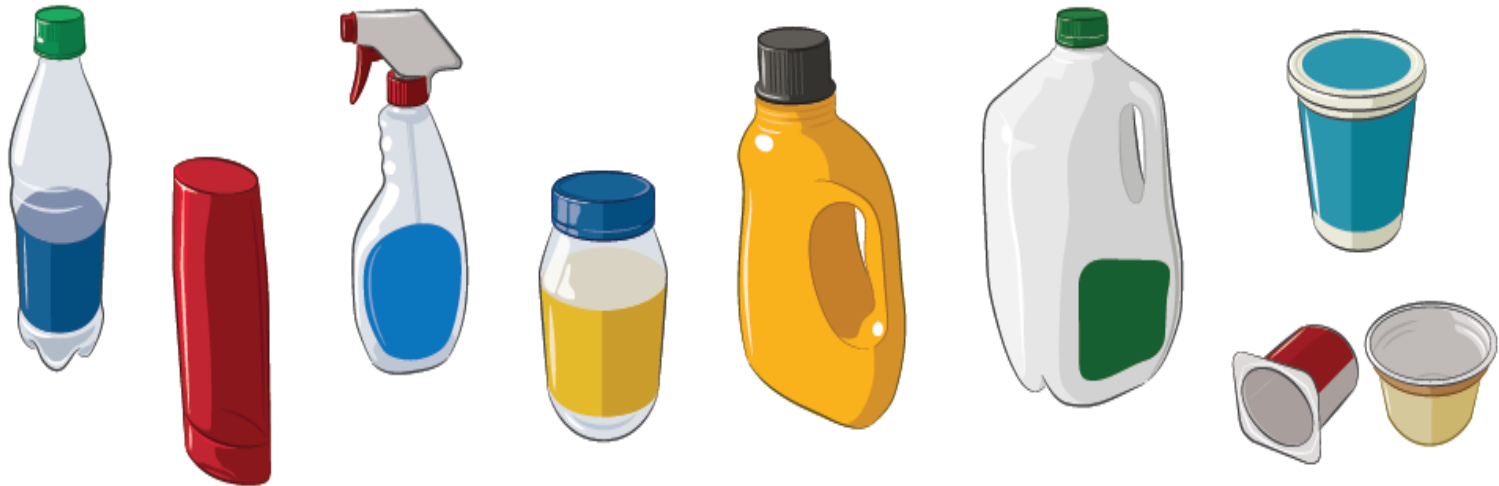
#RORR

Paper:



- **Newspapers, Magazines, Catalogs, etc.**
- **Home Office Paper, Files, School Papers, etc.:** shredded paper in brown paper bags only.
- **Junk Mail, Advertisements and Brochures**
- **All Envelopes:** window envelopes too!
- **Corrugated Cardboard:** flattened, 2x4 feet maximum (Do not bundle or tie together)
- **Phone Directories and Soft-cover Books**
- **Paper Boxes—cereal, cracker, soda, tissue, shoe, gift, toy, etc.:** flatten box and recycle any plastic liners at grocery store with other plastic bags.
- **Pizza Boxes & Paper Egg Cartons:** discard all contents and flatten.

Plastic:



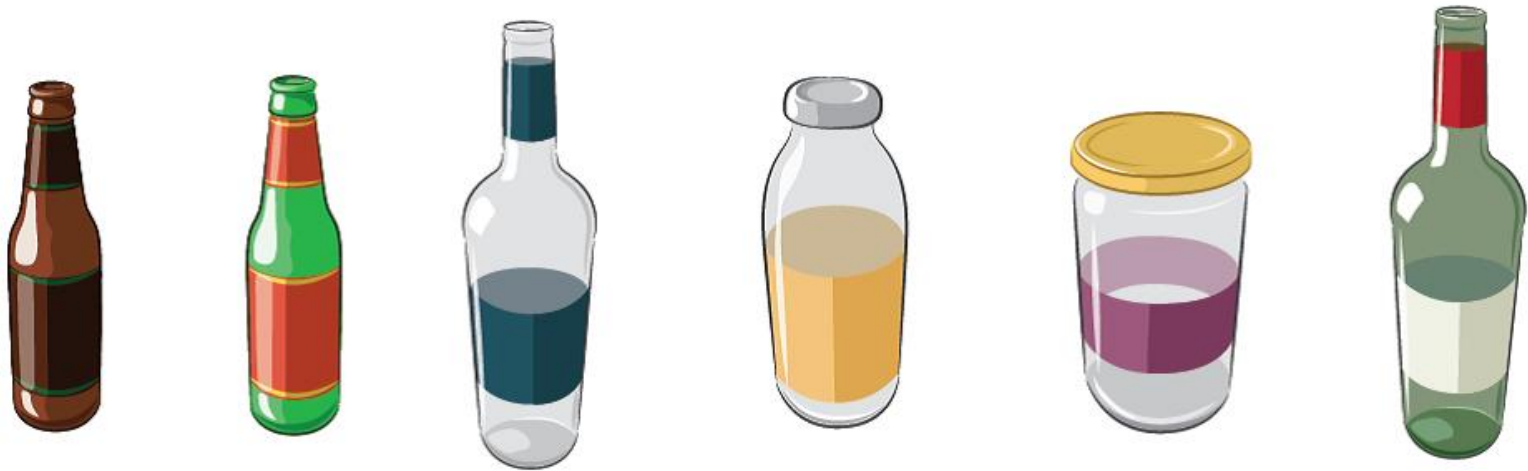
- **Bottles:** beverage, soap, squeeze bottles, and spray bottles (reattach caps, pumps, and lids)
- **Jugs:** milk, laundry detergent, etc. (reattach caps)
- **Jars:** peanut butter, mayonnaise, sauce, etc. (reattach lids)
- **Tubs:** dairy products like sour cream, margarine, yogurt etc. (reattach lids)
- **NO plastic bags, foam egg cartons, single-use plastics (coffee pods, straws, utensils, cups) or prescription bottles**

Metal:



- **Metal Food and Beverage Cans:** lids are accepted.
- **EMPTY Aerosol Cans:** with caps. **NO pesticides or spray paints.**

Glass:



- **Glass Food and Beverage Bottles, Jugs and Jars:** reattach and recycle lids and caps.
- **No drinking glasses, window glass, pyrex, light bulbs, etc.**

Items Not Accepted in Recycling Program



- Plastic bags*
- Foam*
- Food or liquid waste
- Propane tanks*
- Cord/Hoses/Ropes
- Prescription bottles*
- Electronics*
- Tarps or Pool Covers/Liners
- Sharps/Syringes*
- Clothing*

We Waste a LOT of Food!

- **Nationally, about 35 million tons/year; \$165 billion wasted**
- **In Onondaga County: about 36,000 tons/year trashed**
- **25% of the food we buy wasted**
- **265 lbs. / person/year**



Organics Recovery

- Largest municipal facility in NYS



Plastic Bags



Current Laws:

- NYS Plastic Bag Reduction, Reuse and Recycling Act of 2009 (retail store collection).
- In NYS, 14 municipalities have enacted plastic bag ordinances.
- In U.S., 121 cities, towns & municipalities have taken steps to reduce consumption of single-use plastic bags; primarily through outright **bans**.



Current Proposals



Sen. Krueger/Assemb. Englebright [S.7760/A.9953](#)

- Bans single-use carry out plastic bags
- Fee on paper bags; 80% of revenue goes to Environmental Protection Fund (EPF) for municipal pollution reduction, clean up, education, purchasing reusable bags; 20% of fee to retailers.
- Minimum fee of \$0.10; maximum of \$0.25



Each Day We Use Hundreds of “Complex” Products



The Trash Stream . . .

Some products contain toxins.



**Beryllium, PVC,
brominated flame
retardants, lead,
copper**



4 g mercury



4 mg mercury



**BPA,
endocrine
disruptors**



**Petrochemicals,
volatile organic
compounds**



**Brominated
flame
retardants**



**4 lbs lead;
barium, nickel,
cadmium, rare
earth metals**



**Pharmaceutical
compounds**



**Nickel,
lithium,
cadmium**

The Trash Stream . . .

Some products are bulky and hard to manage at end-of-life.



The Trash Stream . . .

All products eventually reach their end-of-life and must be managed properly



The DRAWDOWN

- **#3 Reduce Food Waste**

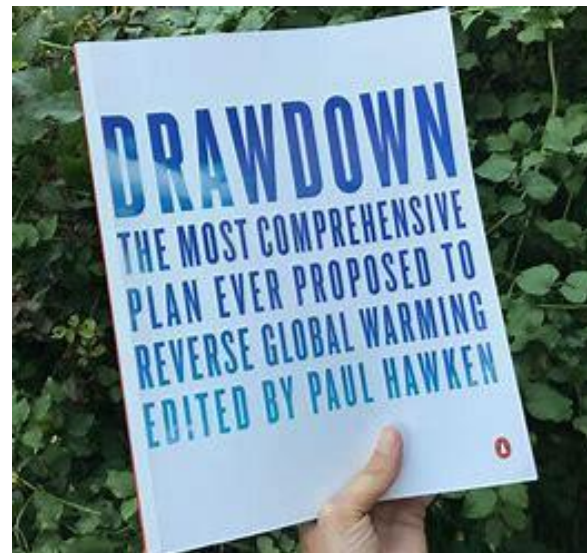
70.53 gigatons avoided if 50%
global food waste reduced by 2050

- **#55 Household Recycling**

2.77 gigatons avoided if average
global recycling rate is 65% by 2050

- **#68 Waste-to-Energy**

1.1 gigatons avoided if 62.6 GW of
WTE facilities installed globally by 2050



Source: *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming*, Edited by Paul Hawken, 2017

Thank You!

Theresa Evans, OCRRA



Save the world
a little each day.®

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