# Greening Your Life One Day at a Time

Presented by Marta M. T. Keane



### Introduction

- Nearly 30 years of professional waste/recycling experience
- Recycling Bin Improvements and Problems
- Beyond the Curbside Cart
- Remember the Basics Reuse & Waste Reduction
- Beyond Materials Energy, Water, Transportation

### **Recycling - Bin Improvements and Problems**

- Late 1980s Curbside Recycling Bins appeared
- Keep 'em separated: Newspaper, Glass bottles, Aluminum Cans, Tin Cans, and Plastic #1 & #2 (take off labels)
- 1990s Paper expanded: Cardboard, Chipboard, White and Colored Paper, Magazines, Catalogs, Phone Books, Envelopes, Letterhead, Post-It Notes
- 1990s Additions: Aluminum Foil, Aluminum Baking Pans, Empty Aerosol Cans, Dried Out Paint Cans, and Plastic #3, #4, #5, & #7

### **Curbside Service Improves Participation**

- 2000s Switch from Bins to Carts!
- CoMingle is the Word: All the paper and all the containers
- No more washing Tin, Aluminum or Steel containers
- Plastics simply need rinsed
- Put the Caps back on the Plastic Bottles!
- Participation Grows Recycling is Easy
- **Contamination Grows** not everything can get recycled through the curbside programs.



# China's Impact

- > 2013 China enacted the Green Fence Policy
  - > 10 months markets fell as shipping containers were rejected
  - First real push to all MRFs to send less contaminated bales of material
- 2018 China enacts the National Sword Police
  - Call on developed nations to stop treating China as a dump site
  - Impossible high standard for bales of material
  - Huge problems for MRFs as loads are rejected and returned
  - Values of materials plummet
- > 2019 Haulers pass increased costs to cities and commercial clients
  - Some cities and commercial clients stop recycling

# Ying and Yang



- Some MRFs responded by upgrading
  - Equipment costs millions of dollars and many MRFs are investing for the long haul
  - MRFs that can't improve are being sold to investors
- Education is being pursued again
  - Since 2001 little has been done to educate residents on recycling
  - Some communities are partnering with haulers to leave contaminated carts at the curb
  - Statewide Contamination Task-Force was formed in Illinois
  - Statewide messaging on common recyclables is being pursued
- Recycling is still WORKING!
  - Steel, Aluminum and Glass, along with some plastics, are recycled domestically
  - Plastics and more are being sold to other Asian nations and still getting to China
  - More items are available that are made from recycled content

# Beyond the Curbside Cart

- Household Hazardous Waste
- Batteries (hint: Single Charge Batteries are not hazardous)
- Construction & Demolition Materials
- Books (hint: soft cover can go in the curbside program)
- Electronics
- Plastic Grocery Bags and other plastic film
- Textiles

#### Tires

# Beyond the Curbside Cart - Food and Composting

#### Hierarchy to Reduce Food Waste and Grow Community

. ...

SOURCE REDUCTION

EDIBLE FOOD RESCUE

0-

HOME COMPOSTING

SMALL-SCALE, DECENTRALIZED

MEDIUM-SCALE,

IOCALLY-BASED

CENTRALIZED COMPOSTING

OR ANAEROBIC DIGESTION

MECHANICAL BIOLOGICAL

MIXED WASTE TREATMENT

LANDFILL AND INCINERATOR

- Prevention. Do not generate food waste in the first place! Reduce portions, buy what you need, and organize your fridge for optimal food usage.
  - Feed hungry people. Divert food not suitable for people to animals such as backyard chickens or to local farmers' livestock.
  - Composting in backyards or in homes. Avoid collection costs!
  - Onsite composting, or anaerobic digestion, and community composters can accept material from off-site or simply process their own material.
  - Compositing or anaerobic digestion at the small town or farm scale. These systems handle typically between 10 and 100 tons per week and are designed to serve small geographic areas.
  - Facilities serving large geographic areas that typically handle more than 100 tons per week. Material generally leaves the community in which it is generated.
  - Mixed garbage is mechanically and biologically processed to recover recyclables and reduce waste volume and the potential for methane emissions before landfill disposal.
  - Food waste should be banned from landfills and trash incinerators due to their high capital costs, pollution, and contribution to greenhouse gas emissions.





Least Preferred

Most Preferred

# Remember the Basics -ReUse and Waste Reduction

- Better than Recycling a Plastic Bag:
  - Bring a Reusable Bag
  - Reuse the bag as a garbage can liner
  - Knit the Plastic Bags into Mats
- Better than a Single Use Cup:
  - ► A reusable, washable Water Bottle
  - A refillable coffee mug
- Better than a Straw:
  - Drink without a straw
  - ► Use a paper or steel straw



### **ReUse and Waste Reduction**

- Better than Buying New Buy Used
  - It takes 1,100 gallons of water to grow enough cotton to make one pair of jeans
  - It takes 400 gallons of water to grow enough cotton to make on tshirt
  - Shop Garage sales, Goodwill, Thrift Stores, Plato's Closet, Ebay
- Look for Items made from recycled plastic and recycled cotton



### Prairie View Landfill Waste Generates Methane Methane is Captured, Turned into Energy





# Beyond Landfill - Energy from Waste

- Will County with Waste Management installed Gas-to-Energy
- Three engines provide power to 3,000 homes
- Considering Expanding to turn some into fuel
- Considering Solar Panels on buffer area
- Funds from selling the energy are used for Green Will County Offices





# **Beyond Materials - Energy**

- Earth Hour is in March on a Saturday evening 8:30-9:30pm
- Kill-O-Watt Meter Everything
- Switch to LED lights
- Consider Installing Solar
- Consider Geothermal
- Do you really need blow up decorations?



### **Beyond Materials - Water**

- Install Rainbarrels at home and at work
- Create a Rain Garden in part of your yard
- Put a Bucket in the Shower until the water gets hot
- Take your Car to the carwash instead of doing it yourself
- Ask your City to do bioswales in parkways
- Plant Native Species
- Run the Dishwasher when full
- Use Cold water to Wash clothes



# **Beyond Materials - Transportation**

- Mass Transit: Train, Bus, Pace Rideshare
- Switch to an Electric Car
- EV causes you Range Anxiety? Switch to a Hybrid Vehicle
- Bicycle to a restaurant, a movie, the grocery store
- Do all the errands in a single trip
- Pull away from stops slowly
- Walk into take-out places, don't idle



# Last Thoughts & GIANT THANK YOU!

- Subscribe to the County's Green Email Newsletter
- Follow us on Facebook or Twitter
- Tell your friends and family what you learn
- Continue to make the best choices for you and your family with the environment in mind!
- Questions or comments: mkeane@willcountygreen.com