Can We Become a Near-Zero Waste, Sustainable Community?

First, let's take a look at where we are: In 1960, EPA data shows that the United States alone produced 60,000,000 tons of Municipal Landfill Waste.... by 2018, it was almost 5 times that amount weighing in at **292,000,000** million tons. On average, only 35% of this waste was recycled. Some materials which have the highest consumption rates have much lower recycle rates: Only 9% of plastic is recycled compared to paper which is closer to 66%. Only 30% of food waste is composted (the natural version of recycling). Arguably, food waste is one of the worst contributors to greenhouse gasses coming from landfills.

In 2018, China outlawed intake of recycled materials, limiting markets for them, and increasing costs worldwide. Low energy costs have made it <u>less</u> expensive to use virgin materials than recycled. Without a doubt, recycling rates can improve. But, at what cost?

Virtually everyone agrees we need a more sustainable, longer lasting waste reduction model. The current one has to change... Do YOU want a landfill in your back yard? Of course not, no-body does! Landfills are, unsightly, they stink, and produce methane gas, which is 80 times more efficient than CO2 at warming the atmosphere. The real solution to this problem is source reduction. **We don't have to landfill waste we don't generate**



Zero Waste: The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning, and with no discharges to land, water, or air that threaten the environment or human health.

We all know that this is not going to happen completely, or 100% of the time. That is why we use "NEAR ZERO WASTE". We can do this one step at a time. It seems to me, we should choose projects that can, and have been done successfully by communities of our size like Egg Harbor, Wisconsin and Emmet County here in Michigan. We should choose projects that yield the highest impact at the lowest cost, and within our available resources. If we stick with these principles, our communities can reach a Near Zero Waste goal. The good news is that each step along the way, we become more sustainable.

The Tri-Community Recycling Committee has been working for over a year on making recycling more available and efficient. There is still a long way to go and we are continuously setting our sites on next steps as we learn what other communities have accomplished. As we gain experience, it has become clear that we can, and should do more than concentrate on recycling efforts. *Reducing the sources of waste is where big gains can be made.*

These are just some of the possibilities:

Reduce or eliminate single use plastics where possible: Plastic bags, straws, water bottles and plastic ware.

Facilitate community supply of Compostables: Bags, Boxes, Napkins, Straws & cutlery, and re-usable bags through a Group Purchasing Organization (GPO). The goal would be to provide materials at workable cost to our retail and restaurant businesses. (It is also important to mention that compostables are NOT recyclable but they do not rely on petroleum to produce, have a smaller carbon footprint and degrade in a fraction of the time as plastic does.)

Facilitate Local Community Composting: Create the capability to collect and process compostables, organic materials, as well as all community Tree, Yard, and Food Waste.... at a cost citizens can afford.

Facilitate water bottle refilling stations throughout the community, and provide re-useable water bottles to our retail businesses at workable cost (through a GPO).

These, and other projects can get us where we need to go. The Tri-County-Recycling Committee can use the experience of other communities to research, identify, and facilitate projects that fit our capabilities. A Near Zero Waste initiative will not happen overnight. It will take time, persistance, and eventually participation from everyone in our communities.

As the world continues to warm at alarming rates, our landfills reach capacity, plastic contaminates our rivers and oceans, it is possible, with open minds, and willingness to try, to lead the way in West Michigan to become, sustainable, Near-Zero Communities...

Please remember, if we don't create waste, we don't have to find a way to dispose of it. If we are mindful of what type of products we buy, what they are made of, and how they are packaged, we can make a difference now.

Emmet County Michigan information: https://www.emmetrecycling.org Egg Harbor Wisconsin Information: https://www.villageofeggharbor.org/sustainability

NEAR ZERO WASTE COMMUNITY

U.S. Conference of Mayors

Excerpts from <u>2015 Adopted Resolution - U.S. Conference of Mayors: In Support of Municipal Zero Waste Principles and a Hierarchy of Materials Management EXIT</u>

WHEREAS, the concept of zero waste goes beyond recycling and composting at the end of a product's life cycle, to encompass the entire life cycle of a product, beginning with product design, and envisioning the use and management of materials in ways that preserve value, minimize environmental impacts, and conserve natural resources; and WHEREAS, materials management through zero waste can begin to shift the fiscal burden of waste and empower industry to embrace resource responsibility by rewarding stewardship through purchasing and economic development incentives; and

WHEREAS, while industry and the federal government have variously defined and categorized zero waste strategies, it behooves the nation's cities, with primary responsibility for waste management, to devise a definition that encourages shared fiscal responsibility and legislative innovations,

NOW, THEREFORE BE IT RESOLVED, that The United States Conference of Mayors adopts a definition of Zero Waste, and set of Zero Waste principles, that recognizes a Hierarchy of Material Management as follows:

Extended Producer Responsibility and Product Redesign

Reduce Waste, Toxicity, Consumption, and Packaging

Repair, Reuse and Donate

Recycle

Compost

Down Cycle and Beneficial Reuse

Waste-Based Energy as disposal

Landfill Waste as disposal

A Near-Zero Waste Community - First PRACTICAL Actions?



Two workable Waste Reduction options

Recycle Existing waste



Facilitate

(at near-zero addition cost to community businesses)

Elimination or reduction of plastic waste where possible.

Supply of Compostable Bags, Boxes, Napkins, Straws & Cutlery, Re-Usable Bags

Composting of Tree & yard waste, Food scraps, Bags, Boxes, Napkins, Straws & Cutlery

Local Composting Capacity

Re-useable Water Bottles



Vehicles for Waste Reduction

Tri-County Recycling Committee Activities (<u>reduce waste</u> by increasing effective recycling)







Considerations

Reduce or eliminate single use plastics where possible:

Plastic bags, straws, water bottles, and plastic ware.

Supply of Compostable Bags, Boxes, Napkins, Straws & Cutlery, Re-Usable Bags

Form a GPO (Group Purchasing Organization) by:

- a) GPO Negotiates with manufacturer for bulk pricing for entire needs, and individual billing & delivery... (essentially facilitate a "buying group sale".
 - a) Pros: non-profit (GPO) is just negotiating for the communities. Best net price for items
- b) GPO Negotiates with distributor for same.
 - a) Pros: non-profit (GPO) is just negotiating for the communities.
 - b) Cons: higher price for items
- c) Set up GPO to buy direct from manufacturer, in bulk quantities, to supply needs of the communities, bypassing distributor profit.
 - a) Pros: best net price to individual users, net of expenses for administrative, warehousing, delivery, and AR costs?
 - b) Cons: financing, and operating expenses of operating a full function distribution operation.

Composting of Tree & yard waste, Food scraps, Bags, Boxes, Napkins, Straws & Cutlery

- a) Consider community run composting center, and pick-up system
- b) If commercial composter, then define compatibility, and capacities for each stream, costs, and separation requirements.

Local Composting Capacity

- a) Committee is already on this.... Critical to the entire project
- b) Consider setting up community (public) composting

Provide Re-useable Water Bottles & filling stations

- a) PET water bottles are a high-volume issue.
 - i. questionable recycle rate?
- b) How many refill stations, and where?
- c) Bulk purchase of bottles to supply local vendors at a cost that replaces profit from bottles water sales?

POSSIBLE NEXT STEPS?

- 1) Set up committee to visit Egg Harbor, and Emmet County to get a full understanding of what they have done, timing, cost, source of funding, and challenges along the way.
- 2) Identify other communities that have set up GPOs and study.
- 3) Determine all-community potential quantities of Compostable Bags, Boxes, Napkins, Straws & Cutlery, Re-Usable Bags, food scraps, and Brown waste.
- 4) Committee is already working with Wormies but include this issue of collection large quantity recycling. Also seek additional sources, and evaluate make-buy consideration on the issue.
- 5) Identify manufacturers and distributors of compostables to establish availability, community-labeling potential, costs at various volumes, purchasing methods, delivery, & billing options.
 - 1) Uncommon Grounds and others are working with a companies for supply of compostables. Seek information from these folks.
- 6) Identify sources, and cost of Re-usable water bottles as well as purchasing options.
 - 1) Made of compostable or recyclable material
 - 2) Community labeled
 - 3) Perhaps molded to spec. for cost and utility purposes