Post 3: Current Topic 2021-2022

Waste Prevention and Reuse

Connecticut

1. What's waste prevention? How is it different from recycling?
2. What does the term "waste diversion" mean? Is it used the same way in every state across the country?
3. What is a single-use item vs. a durable item?
4. What's upcycling? How is that different from down-cycling?
5. What's a reuse center?
6. How is a library connected with the sharing economy and how is that part of the reuse industry?
7. Give examples of how some public libraries 'lend' more than just books; what other materials does your town library offer beyond books?
8. What is embodied energy as it relates to building deconstruction?

In Connecticut…

What is Waste Reduction?

Waste reduction also known as waste prevention, is the act or ability to prevent waste from being generated. Or perhaps it's lengthening the life of a product or material to avoid disposal.

Reducing waste can be as simple as repairing your jeans if there is a tear or hole, using a refillable water bottle instead of single-use bottles, or buying in bulk rather than individually packaged items (reducing the amount of packaging that is recycled or disposed). Waste prevention conserves resources, reduces pollution, reduces the amount of materials sent for disposal or recycling/composting and usually saves money.

Waste reduction focuses on the concept that we need to *not generate waste*, reducing the need to recycle, compost or dispose of materials in an incinerator or landfill.

Reducing waste is tied to consumption – the amount of materials we buy and resources we consume. Preventing waste reduces needless consumption and preserves renewable and non-renewable resources. Reducing waste conserves energy and reduces the air, soil, and water contamination that is often caused by the manufacture of those materials and supplies that become waste, and from the fossil fuel powered transportation that delivers those goods and hauls them away after they become waste. Reducing waste also reduces the use of landfills and waste to energy facilities.

The less waste we generate,
the less waste there is to dispose.

Is Waste Reduction the Same as Recycling?

No. Recycling is an important part of any waste management strategy, however, the greatest environmental benefits are achieved through waste prevention and reuse.

When we talk about recycling or composting, this is an act of "waste diversion" because it's materials already generated and needs to be disposed. Proper disposal includes recycling and composting. Connecticut views "diversion" of materials as a type of disposal; recycling and composting do not prevent waste, they do reduce the amount being disposed in incinerators or landfills.

The challenge is understanding that waste reduction or waste prevention is about not generating the waste to begin with so no diversion or disposal is necessary.

<u>Consider some examples:</u>

- We can reduce trash disposal and save raw materials if we collect plastic grocery bags for recycling and incorporate them into a new product such as plastic lumber. A better option would be to take no bag at all, as no natural resources or energy are used to first produce, then collect and reprocess disposable bags. Using a reusable bag would have similar environmental benefits as the bag could replace thousands of disposable bags over its useful life.
- When schools install refillable water stations giving students and staff a way to easily refill a reusable water bottle. Water bottles can be collected for recycling, but a better option would be to reduce the consumption of single-use bottles.

Any organization reviewing their waste management strategy should first consider ways to prevent waste being generated and incorporate reusable products to achieve the maximum benefit to the environment.

How Do We Practice Waste Reduction or Waste Prevention?

Like we practice most new things; best to take on one new strategy at a time. Once you've mastered one strategy in your home, business or institution, add more.

Ideas to Get Started: Reducing the Amount of Materials You Need to Recycle, Compost or Dispose.

- Print on both sides of paper
- Read/subscribe to on-line newspapers instead of print
- Switch to paperless bills
- At work, use a reusable coffee mug
- Practice "GrassCycling," Leave grass clippings on the lawn

- Reduce your junk mail
- Implement tray-less lunches in the cafeteria; or use washable/reusable trays and utensils
- Eat ice cream only in cones!
- Use reusable bags when you shop
- Reduce food waste by eating leftovers and/or prepare only what you will eat
- Buy in bulk
- Avoid using single-use items

Reuse

Reuse is often considered the same as recycling, but they are quite different.

> REUSE is any activity that lengthens the life of an item, such as using a washable mug instead of a disposable one, repairing your automobile to keep it running smoothly and also buying items that are durable and can be repaired, such as a durable dish washer or stove.
>
> RECYCLING is the reprocessing of an item into a raw material for use in another new product, for example, reprocessing plastic bottles into fibers for carpets and polar fleece.

Different types of Reuse

Durables: This used to include lamps, large appliances (stove, washing machine) and small appliance and even televisions. But more and more manufacturers make it challenging to repair these items. When an item is designed specifically for a short-term use without the ability to lengthen its life through repair, it's referred to as a product that is "planned obsolescence." IPhone's are notorious for this, making it near impossible to repair, creating incentives to purchase new instead of repairing your current phone. Due to this, different groups work on legislation called "Right to Repair." An interesting group is called iFixit, which take apart products, then figures out how to put them back together again to create manuals and offer tools so you and I can repair just about anything.

Repair: Repair clinics – more than just IT – help with mending clothes which may include patches, repairing a tear, hemming pants or dress, how to put on a button, how to repair a zipper and even as far as how to darn socks! Repair clinics also help individuals learn how to repair lamps, small appliances and sometimes replace a smart phone battery!

Buying Used: Thrifts, consignment, Craigslist, Facebook Shopping and more provide us opportunities to buy used items. It has been quite common and acceptable to buy used cars, books and furniture, and now there are opportunities to buy just about

anything. There are stores that specialize in used baby items, musical instruments, sports equipment, LPs/CDs/DVDs, vintage clothing, and more!

Sharing: The act of sharing is often viewed as waste prevention or reuse. This is done in an institutional setting through public libraries – which includes the obvious books and videos, but also access to computers, sometimes tools, cookware, art, and more. Could also include Swap shops at town transfer stations. Grassroots sharing includes free mini-libraries, community fridges, and community gardens.

Free Stuff: Sometimes people have stuff they just want to give away. More and more people offer free stuff, including some examples already stated like Swap Shops or Mini-Free Libraries, but items are also offered and taken through FreeCycle, Buy No More (Facebook group) and other platforms, to ensure items get reused and not disposed.

Food Recovery: Redistributing food to feed people is the second tier of EPA's Food Recovery Hierarchy. EPA estimates that in 2018, about 63 million tons of wasted food were generated in the United States. While Americans dispose of millions of tons of food, the U.S. Department of Agriculture estimates that 10.5 percent of American households - about 13.7 million households - had difficulty providing enough food for all their members due to a lack of resources at some time during 2019. In many cases, the food tossed into our nation's landfills or incinerators is wholesome, edible food.

Connecticut has many leaders in our communities that collect unspoiled, healthy food and redistributes to our neighbors. By donating food, we're feeding people, not incinerators or landfills, supporting local communities, and saving all the resources that went into producing that food from going to waste.

There may be many grassroots efforts that redistribute food and at least four organizations that focus on collecting and redistributing edible food in Connecticut, including Food Rescue US representing greater Hartford, Fairfield and Northwest regions, and Haven's Harvest in greater New Haven region. And many K-12 schools have set up sharing tables in their cafeterias.

Creative Reuse: Also known as upcycling or repurposing, is when the addition of creativity is added to an already manufactured item and brings a new function. A CD jewel case can become a bird feeder, wine corks turned into a cork board, a t-shirt transformed into a rug or tote bag. Creative reuse centers also are known as thrift shops for artists and crafters, taking in used craft items including yarn, fabric, sewing notions, beads, craft kits, etc. Connecticut has at least one creative reuse center, EcoWorksCT, in North Haven.

Building Deconstruction: The process of dismantling a structure to maximize the recovery of reusable material. Sometimes called "construction in reverse" or "unbuilding," deconstruction removes a building by selective disassembly of structural and non-structural building components. This stands in contrast to conventional

demolition, which uses mechanical equipment like bulldozers and wrecking balls, resulting in limited reusability.

Salvaging materials for future reuse is an old tradition and was sometimes called “hand demolition” in the nineteenth and early twentieth century. In the United States, the process was formalized under the name “deconstruction” in the 1990s. Deconstruction has the potential to create stable jobs with low training thresholds, close the consumption loop of building materials, foster community connections, and contribute to more sustainable construction practices.

CT Essential

- Pollution Prevention (EPA) Learn About Pollution Prevention | US EPA
- Glossary of terms https://portal.ct.gov/DEEP/Reduce-Reuse-Recycle/Municipal-Recycling-Resource-Center/Glossary-of-Recycling--Solid-Waste-Terms
- Deconstruction (CT DEEP)
- What is Creative Reuse https://scrapcreativereuse.org/What-Is-Creative-Reuse

CT Good Resources

- Building Materials Reuse Centers in Connecticut A Guide to Local Building Material Reuse Centers (ct.gov)
- Find A Creative Reuse Center http://trashn2tees.blogspot.com/2014/11/FindACreativeReuseCenterLocationNearYou.html
- Build Reuse https://www.buildreuse.org/ - empowering communities to turn construction and demolition waste into local resources
- Upstream Upstream | Sparking innovative solutions to plastic pollution (upstreamsolutions.org)
- Annual Demolition Data By Town (1990-2020) Exports and Housing Data (ct.gov)

CT Resources if you want to know more/dig deeper

- Massachusetts Publishes Reuse Economy Study (2021) https://www.buildreuse.org/community-highlights/massachusetts-publishes-reuse-economy-study
- Right to Repair (The Repair Association) https://www.repair.org/
- iFixit iFixit: The Free Repair Manual
- Embodied Energy Calculator Embodied Energy + Carbon Calculator - EECC (pdx.edu)
- Shareable Shareable - People-powered solutions for the common good
- New Dream https://newdream.org – empowers individuals, communities and organizations to transform the ways they consume to improve well-being for people and the planet
- Food Recovery Hierarchy https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy