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# On the Way to Zero Waste (Part Two)

*Zero waste advocates and industry professionals weigh in on how to prevent and cut waste, as well as how to deal with leftovers.*

Arlene Karidis | Aug 24, 2018

*In a two-part series this week, Waste360 takes a look at zero waste and some of the actions industry professionals are taking to achieve zero waste. Read part one* here *.*

Entities moving along on the way to zero waste will always have discards to deal with—some that can be recycled or somehow reused, and some that are just trash with no purpose. So, what do you do to first prevent and cut waste? And then how do you deal with leftovers?

Zero waste advocates and industry professionals in solid waste management weighed in on these questions for this article. They pointed to strategies like better product and package design; a system to pull out otherwise landfill-bound recyclables that also has other benefits; and ways to write zero waste plans that will be relevant for decades.

A true zero waste approach starts at the design table with manufacturers, says Dan Matsch, director of compost and the center for hard to recycle materials for Eco-Cycle.

“There is no way you will get to zero waste just by recycling,” he says. “There are too many new products and new forms of packaging. You have to design your way out of waste by ensuring a reuse or recycling avenue at the end of life.”

He suggests policies that would incentivize manufacturers to produce more sustainable packaging and products. And he suggests policies that educate consumers on sustainable choices.

Leslie Lukacs, director of zero waste for SCS Engineers and a board member of Zero Waste International Alliance (ZIWA), helps cities develop zero waste plans. She asks businesses, residents and others a lot of questions to understand their unique challenges and priorities to help tailor a workable approach.

“We write plans 20 to 30 years out with milestones we believe are achievable based on current infrastructure and projections for future infrastructure,” she says.

Lukacs also helps develop waste characterization studies to learn what’s going in the stream, as well as to identify what percentage is recyclable or compostable and problematic materials being landfilled.

“We may say you should look into banning polystyrene used by foodservice providers and grocers. If restaurants need to-go wear, we may suggest replacing what they have with recyclable or compostable materials,” says Lukacs.

There will be methane at landfills for as long as organics go to them, though she does not recommend capitalizing on it to make energy. Instead, she suggests first reducing organic generation, then donating food.

With what’s left, Lukacs says, compost it.

“Composting enables you to reduce carbon emissions and put nutrients back in the land. It enables roots to grow deeper, which requires more carbon. So, it sequesters carbon from the atmosphere and locks it in the soil [where it’s utilized],” says Lukacs.

A system called mechanical recovery biological treatment (MRBT) extracts recyclables and pretreats leftovers through a compost-like process where much of the organic fraction degrades. What’s left is landfilled. It’s the best option to recover the greatest amount of recyclables remaining after collections, reduce landfilling and stabilize the organic fraction, says Kate Bailey , Eco-Cycle’s director of Eco-Cycle solutions and a co-author of a study that found these outcomes.

“A well-designed MRBT system could process mixed or source-separated materials, enabling us to deal with trash now, while also being set up to recycle and compost more as trash declines. This flexibility can support source separation to retrieve valuable materials, which is the first priority of zero waste,” says Bailey.

As communities get closer to zero waste goals, there are basically only two material types left in the stream, says Ruth Abbe, president of Zero Waste USA, an affiliate of ZWIA.

One is materials no longer manufactured that are considered harmful and inappropriate for recycling, like lead paint and asbestos. For now, they have to be landfilled in a lined cell, preferably a monofill in case there is a practical, responsible use for them in the future, she says.

The other waste type is what she calls “problem products” that can be recycled but not in their current form—like most multi-material coffee capsules. This is where she believes, like Matsch, manufacturers can be called on to design products that can be recycled or composted, and that consumers can be incentivized to ask for these products.

“As communities adopt zero waste plans, these two waste types become a bigger piece of the pie because they’ve recycled out everything else,” explains Abbe. “But the vast majority of materials are not in these categories. They can be recycled or composted.”

“So, understand what’s in the trash. Identity what’s a problem and what can be put to better use. Then, come up with the best way to deal with each,” she adds.

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