Connecticut’s recycling system is outdated and losing money. Is it time to rethink what we do with our trash?

The conveyors at the Willimantic Waste Paper Company snake under, over and around each other — resembling a cross between a roller coaster and a Rube Goldberg-designed highway interchange. On them are the items you put in your blue recycling bin. They clatter along, not quite drowning out the reggae playing as one of about a dozen people stationed along the line hand-sorts the items the mechanical process misses.

This is the reality of recycling in Connecticut — a state that allows residents to dump all sorts of recyclable materials into a single container only to then spend time, money and energy to have them sorted back into their original components by materials recovery facilities like the one in Willimantic. Only then are recyclables potentially suitable for processing into a raw product that can be used to make new items.

Connecticut’s systems, regulations and policies supporting recycling are decades old, and the materials coming from recyclers now have limited value as commodities — that is, if they’re not so contaminated that they have no value at all and are discarded as trash.

The state has found itself at a loss, both economically and environmentally, as well as far behind its neighbors in making its recycling systems more responsive to the times. But, as with waste management overall, no two municipalities seem to handle recycling the same. And the state is generally reluctant to make changes that could cost traditional recycling jobs or spend the money to create new recycling management systems and the jobs that would come with them. There is little recognition that the economics of recycling would improve with such changes.

Legislation he submitted this session addresses the aging trash-to-energy facility in Hartford and broad waste management concepts that include specific waste reduction mandates.

In November, Speaker of the House Joe Aresimowicz, a co-sponsor of the governor’s bill, pulled together what he refers to as a Blue Ribbon Panel on Recycling. He is a one-time supporter of the state’s system of mixing all recycling together, known as single stream. “I have since changed my opinion on single stream,” he said. “Clearly we’re not headed in the right direction.”

Too much glass in the recycling bin

The state’s bottle bill went into effect in 1980. It uses a refundable nickel deposit — an amount that hasn’t gone up since it began — as incentive to recycle an array of glass, plastic and metal containers, thus keeping them out of landfills.

The rules governing the bottle bill have barely changed in 40 years, a problem that has been compounded by the beginning of Connecticut’s “blue bin” recycling mandate in 1991. Over time, recycling has expanded to include a number of items — most commonly glass, plastic and metal bottles, cans and containers, paper and cardboard, which used to be separated.

Pushed by haulers who didn’t want to run routes twice or purchase new trucks that could accommodate two streams of recycling, everything recyclable now goes into one bin.

And that gets us to today’s problems.

“People just assumed you could put anything in them,” said Sherrill Baldwin, an environmental analyst with the Department of Energy and Environmental Protection who does recycling education and outreach.

A recent composition audit conducted by Willimantic for the Southeastern Connecticut Regional Resource Recovery Authority (SCERRA) showed trash residue in recycling is up 27% from 2016 to 2019 and now accounts for nearly 17% of the total volume, up from 11% in 2016.

And the glass that people used to return through bottle deposits are ending up there too, an unintended consequence of that nickel deposit proving to be no match for the convenience of throwing glass into the blue bin.

Gov. Ned Lamont. (Gregory B. Hladky, Hartford Courant)
For recyclers like Tom DeVivo, the third generation in the family-owned Willimantic Waste, the extra glass is the bane of their existence. Glass slices up their sorting equipment, litters the ground and contaminates all the other recycling they sort to be purchased and processed.

The contamination from glass, food, trash and other items has shifted the economics of recycling. In recent years, the biggest purchaser of U.S. recycling was China, which historically turned the separated bales of plastic, paper, cans and more into raw materials for reuse.

China instituted a new policy in January 2018, that has cut off imports of most worldwide recycling. Hardest hit are plastic and paper, though China’s largest paper manufacturer – Nine Dragons – is now acquiring facilities in the U.S., including one in Maine that could provide a regional outlet.

It’s left Willimantic Waste Paper and similar facilities searching for stateside buyers.

[Politics] Lawmakers push 14-day notice for work schedules and extra pay for workers if that doesn’t happen

The situation has upended pricing structures, which means towns that had been making a small amount of money off their recycling are now paying a lot to get rid of it. While municipalities are universally unhappy and, in some cases, financially stressed by this, making money from recycling was not always a given.

“I think the communities that continue to do source separation and dual stream are probably riding out the market a lot better than those who have pursued the mixed recycling approach,” Baldwin said, noting a similar market crash in 2008. “We rode it out. And we’re going to ride out this one too. Is it going to be a little bit longer than 2008? You bet. But that doesn’t mean it’s broken.”

Creating an economic incentive

Many believe Connecticut has missed opportunity after opportunity to modernize its recycling systems. Lynn Rubinstein, who is the executive director of the Northeast Recycling Council, is one of them.

Rubinstein and others say Connecticut’s initial mistake occurred years ago – long before China cut off imports – when the state failed to recognize the economic development potential of recycling. One step that would help now, she said, is if the state committed to buying finished recycled products.

“Not realizing that environmental policies will induce business – I would say that’s an important missed opportunity,” Rubinstein said.


For example, Connecticut doesn’t even typically use recycled glass as an aggregate in roads, a common practice in other states for decades. Instead, the glass is either shipped out of state to be used by another company, which derives the economic benefit, or – worse – sent to the landfill.

The one recycling specific in the governor’s proposed bill is a section requiring the state Department of Energy and Environmental Protection to come up with initial recommendations on recycled content use.

Rubinstein said state-sponsored loans, technical assistance and grants would also incentivize recycling businesses. “If they had funding available for new businesses that either process or use post-consumer recycled content to build in Connecticut … you’d get people showing up on your doorstep, period.”

Connecticut has only a handful of companies that use materials after they are processed by recycling facility. Pennsylvania has more than five dozen. Massachusetts and New York have a couple dozen apiece.

Strategic Materials in South Windsor is one of the few in Connecticut. A national company, it’s been in existence in some form for more than a century handling glass and now some plastic.

[Politics] Daughter pleads with lawmakers to extend PTSD benefits to correction officers one year after her prison guard father took his own life

In Connecticut, the company takes only bottle bill glass, which is much cleaner than the glass from a recycling facility. Andrew Crowley, Strategic’s director of operations for the east coast, would like to see the bottle bill expanded to provide more material. “It ensures quality,” he said. “We’ve done a couple of pilots for curbside glass. It’s difficult to keep quality at a level we need.”

Most of Strategic’s ground glass, called cullet, is shipped out of state.

A ravine on the horizon seems to be Urban Mining, which makes a substance called pozzotive from recycled glass, including items from recycling bins that tend to be more contaminated, that can be used as a partial cement replacement for concrete. The company has a plant under construction in Beacon Falls.

Louis Grasso, one of the owners of Urban Mining, said at least one concrete operation has already committed to purchasing their product. “This is an opportunity to create an example of the circular economy for Connecticut,” Grasso said.

Connecticut has some paper and cardboard recycling, such as Atlantic Pulp in North Haven. The company makes molded pulp trays from clean cardboard clippings left before cardboard is made into a box and glue and other adhesives are added – keeping those out of the landfill. Willimantic Waste Paper and other recycling operations get tons of trash like this every week that can’t be recycled. (Gregory B. Hladky/Hartford Courant)
But the state is missing out on all sorts of innovative recycling operations popping up elsewhere in the country — various types of lumber made from recycled plastics; companies like Preserve, in Massachusetts, that recycle plastic into everything from tableware to toothbrushes, or Fisher Recycling, in South Carolina, that makes countertops from recycled glass and presently has 30 cities identified as potential locations for new operations, according to owner Chris Fisher.

**Requiring producers to take responsibility**

There are two examples of innovative recycling models that are repeatedly mentioned as ideas Connecticut should consider.

Oregon has the oldest bottle bill in the U.S., starting with beer and soft drinks in 1971 and now expanded to cover everything except liquor, wine, milk and milk substitutes. The deposit was raised to 10 cents to help push redemption rates above 80% and invest in the system.

“We don’t recycle here to make money,” said Peter Spendelow, a waste reduction specialist at the Oregon Department of Environmental Quality. “We do it to reduce environmental damage. And I can’t understand why the rest of the country hasn’t figured that out.”

Oregon’s model mimics a concept known as “extended producer responsibility,” in which the producer is responsible for end-of-life disposal. A beverage recycling cooperative has evolved in which distributors opened redemption centers that are fully staffed – which creates jobs – and use machines that divert the returns into a belt system, not the slow process crushing bottles used by Connecticut.

Connecticut was among the earliest states to mandate producers take responsibility for the disposal of paint and the first to embrace mattress recycling – something Willimantic handles in its complex. Both items were troublesome and expensive for municipalities, but not a big part of their waste stream.

In the Canadian province of British Columbia producer responsibility is mandated for nearly two dozen stewardship organizations. The one that handles all residential packaging and paper – the items we put in blue bins here – calls itself Recycle BC. It’s a nonprofit, 100% designed, funded and operated by the packaging industry, and the only system of its kind in North America.

“We make one of the key factors we are looking at when it comes to hiring a post-collection contractor a willingness to invest and innovate,” said David Lefebvre, a spokesman for Recycle BC. But “all of the decisions that we make, we make with an eye toward environmental outcomes.”

**Next steps**

Some Connecticut municipalities say that recycling is no longer worth their while, but Kristen Brown disagrees.

“It will be,” said Brown, vice president waste reduction strategy at the consultant group Waste Zero, which has been working with individual cities and towns here as well as the state as whole.

The idea of regional collaborations is often mentioned – and is noted in the governor’s bill. Both items were troublesome and expensive for municipalities, but not a big part of their waste stream.

That includes taking advantage of what’s already here – operations like Simple Recycling, which began curbside pickup of textiles a little over two years ago. They pay municipalities for the materials, yet fewer than 30 have signed up.

The governor’s legislation doesn’t prescribe any specific programs. Instead it authorizes a process for requests for proposals through DEEP.

Expanding producer responsibility, a la British Columbia, is another idea. That strategy has the potential to change the economic dynamic of waste haulers and recycling facilities. DEEP Commissioner Katie Dykes, who admits the state is at an inflection point with its waste and recycling, said, whatever happens needs to be both cost effective and aligned with environmental goals.

People like DeVivo at Willimantic – who stand to lose business if their waste and recycling streams decrease – are OK with expanding the bottle bill to get more glass out of their system.

“I’m not going to complain. I’m not upset with that on the glass side. I do complain if you take away the plastics and aluminum because that’s where the money is,” he said.

Aresimowicz is on the fence about bottle bill expansion. “I don’t know, I don’t know,” he said. “I’ve been reluctant to do it. But if we’re pulling glass out and handling glass differently,
would I be open to more expansion when it comes to plastic bottles? Maybe. Yes.”

“One hundred sixty-nine municipalities and us being the land of steady habits has really limited our ability to make changes,” he said. “I’m sick and tired of hearing ‘oh we don’t do that here – that’s not how we’ve ever done it.’”