Recycle-News-Haven

The NHSWRA Newsletter

NOTICE: The New Haven Transfer Station will be closed to residents on Friday, November 11, in observance of Veterans' Day.
The Transfer Station will also be closed to *all* traffic on Thursday, November 24, in observance of Thanksgiving.

Feature The State of Recycling in New Haven, Part 1: Cost

The New Haven Solid Waste & Recycling Authority's costs have increased with a new disposal contract this year and a different recyclables market. Revenue as a result of getting household recyclables to market is far below the costs charged by the material recovery facility for processing and hauling. As a result, the City's cost to recycle has gone up significantly, like it has in most municipalities.

Examples of rejected recycling loads from New Haven

These costs are affected by our contamination rate (the percentage of material that makes it into your blue recycling container that is not recycling)

The good news is that though costs have risen, if the recycling contamination rate goes down, after a periodic review, it opens the possibility to a more favorable rate, which eventually gets passed on to the City in the form of savings or a direct revenue rebate.

We at the Authority will be looking at ways to decrease the rate of contamination, with our Recycling Awareness Presentation, as well as field studies. You as citizens can have a direct effect on our recycling rates in the future by recycling responsibly.

As always, diversion from the waste stream is also key – because anything that you re-use or reduce at the source will help bring down the cost of recycling *and* garbage disposal for the City.

Feature Hometown Recycling Day comes to The Hill

What makes a recycling collection and awareness event a success?

Is it the amount of attendees that show up? Or is it the amount of material taken in? Then again, could it be the intangibles – the level of convenience to the attendees? Or perhaps it is simply in the amount of increased awareness and good will generated about Recycling...

By the numbers:

- a full 30' box truck of electronics were collected – thank you Take2 Recycling!
- 28 mattresses / box springs – thank you Mattress Recycling Council!
- 830 lbs. of Textiles (clothing and accessories) - thank you Helpsy!
- a full box-truck of paper shredded – thank you Shred-it!
- 35 pounds of rechargeable batteries - thank you North Haven Home Depot!

By the satisfied customers:

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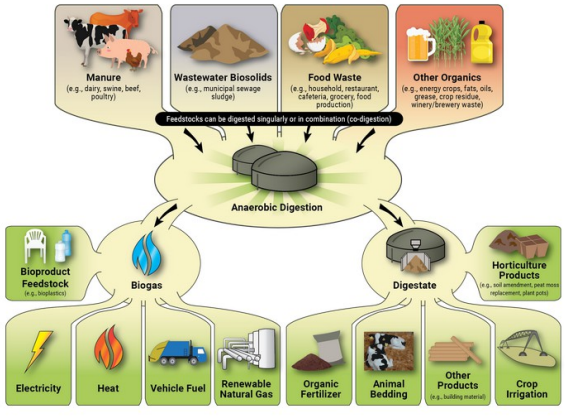
Feature Making Trash Disappear??

Okay, so we've diverted recyclables from our waste stream and collected a bunch of garbage. Now what?

WtE's
In addition to energy produced by waste-to-energy facilities, there is an 85% reduction in volume of materials, largely in the form of residual ash. WtEs fall narrowly in the renewables column, though they are considered to be 'dirty' in that they produce harmful emissions, such as sulfur, lead, mercury, dioxins, airborne particulate, and of course, C02.

And organics, which are typically 35% of the MSW mix that is the feedstock for a WtE, take more energy to burn, nor do they convert to as much energy.

Biomass
enter "Biomass" production, and to a lesser extent, aerobic composting of organics. Biomass employs anaerobic digesters and results in biogas and digestate both usable products that increase sustainability.



Anaerobic Digester Outputs

Biogas is composed of methane (CH4), which is the primary component of natural gas, at a relatively high percentage (50 to 75 percent), carbon dioxide (CO2), hydrogen sulfide (H2S), water vapor, and trace amounts of other gases.

Although decommissioning of the WtE plant at the MIRA installation in Hartford has resulted in a major burden on the waste removal infrastructure of Connecticut, it has served as a catalyst for finding new waste solutions in biomass and aerobic composting programs. CT DEEP (Department of Energy and Environmental Protection) is considering applications for grants to start pilot programs for food scrap collection and biomass production, most notably, a program in Meriden. The initial launch of 1,000 participating homes has had limited success: 24% of available food scraps were collected. 24% x 35% = 8.4% of MSW diverted (35% representing the amount of organics typically found in Municipal Solid Waste.) Though this figure is a far cry from the 35% of MSW diversion possible, it is a significant amount and a good start.

Gassification
Another significant process that has been employed for some time now is "gassification" or "garbage to gas," which involves the compression of MSW and/or organics to effectively produce ethanol and methanol fuels. (this means of production has been used to supply municipal vehicles in many

communities with alternate fuel sources – due to the proximity of these municipalities to landfills that typically are the source of this type of production.)

Gassification produces up to 30% more energy than WtE burn plants, but is more costly and the source, or feedstock is not consumed, as it is in incineration. Typically, landfills are the source for such projects, numbering over 500 in the U.S. presently. (Naturally, methane from landfills, if not gassified, will seep out in small quantities and must be burned off at the source or "flared off" in order to keep methane from entering the atmosphere, where it has 10x the greenhouse effect per cubic foot than C02)

A hybrid solution to our waste problem as it stands would be to employ all three methods of reduction: Burn plants, Biomass generation and gassification. Burn plants have the most disadvantages but at this point are a necessary process that is much preferred to continued landfilling. Gassification is a nice adjunct to this process, but still has its environmental downside. Biomass production is highly preferred (and is capable of storing carbon rather than emitting it), but obviously cannot be the whole solution, because it can at most reduce 35% of the total MSW created.

As it stands, Biomass production and the concomitant collection infrastructure have much capacity for growth and should be expanded. WtE burn plants are a necessary and imperfect part of the equation (not to mention that they are the largest component). Hopefully, carbon capture systems will continue to evolve to the point where these plants will contribute much less greenhouse contaminants to the atmosphere.

Sources:

https://www.azcentral.com/story/news/local/arizona-environment/2022/07/13/how-your-trash-could-be-turned-into-a-source-of-renewable-natural-gas/7773677001/

harvesting organics:
https://ctmirror.org/2022/06/23/meriden-food-waste-recycling-pilot-project-shows-promising-results/

Biomass:
https://www.epa.gov/agstar/how-does-anaerobic-digestion-work

pros and cons of WtE:
https://www.rts.com/blog/what-is-waste-to-energy/#:~:text=Avoid%20landfilling&text=According%20to%20the%20US%20Energy,between%20300%20and%20600%20pounds.

Calendar of events:

America Recycles Day – November 15
https://www.epa.gov/recyclingstrategy/america-recycles-day

National Recycling Week – November 13-19

City of New Haven meeting schedule:

https:/newhaven-ct.legistar.com/Calendar.aspx

New Haven Parks and Public Works info:

A Message from Parks and Public Works Resident Services:

Leaves must be placed in brown paper bags. There should only be leaves inside the brown bags. Do not mix other debris such as sticks, branches and grass. Leaf bags should not weigh more than 50-pounds and be placed on the curb the night before trash and recycling pick up. Leaves placed inside plastic bags will not be picked up. We will pick up branches that are less than 4-ft long. The branches must be bound together and cannot be wider than a foot.

Please do not place unwanted furniture and household items at the curb. These items must be brought to the Residential Drop off Station at 260 Middletown Ave. Stop by our office at 34 Middletown Ave to pick up free residential vouchers Mondays through Fridays from 7am-4pm. **Remember: you *must* present a coupon (one per load) to dispose of items at the Residential drop-off center at the New Haven Transfer Station.**

Holiday schedule: Friday, November 11 is Veteran's Day. Our office located at 34 Middletown Ave will be closed. The transfer station at 260 Middletown Avenue will be closed (open only for licensed trash haulers). Trash and recycling pick up will be on regular schedule.

Thursday, November 24th is Thanksgiving Day. Our office and the Residential Drop Off Station at 260 Middletown Ave will be closed. Trash and recycling pick up will be delayed a day.

As always, if you have any questions, give Parks and Public Works Resident Services a call at (203) 946-7700. We have been experiencing heavy call volume but if you leave your name and phone number with a question we will get back to you.

Remember you can always report Public Works issues at **See Click Fix** found on the New Haven City website (see "Links," below).

Links:

New Haven Public Works-
https://www.newhavenct.gov/gov/depts/pw/

Public Works paving schedule-
https://www.newhavenct.gov/home/showpublisheddocument/15028/637903861608081376

See Click Fix-
https://seeclickfix.com/new-haven

NHSWRA contact info and link:

14 Trumbull Street, Suite 102
New Haven, CT 06511
Office: 203.691.5374
Fax: 203.691.5990
www.nhswra.com
info@nhswra.com