

Solid Waste Management Overview

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When does something become waste?



Waste Management Hierarchy in Minnesota

Waste prevention and reuse

Don't create waste in the first place

Recycle

Turn the material into a new product

Compost

Recycle organic material into compost

Waste-to-energy

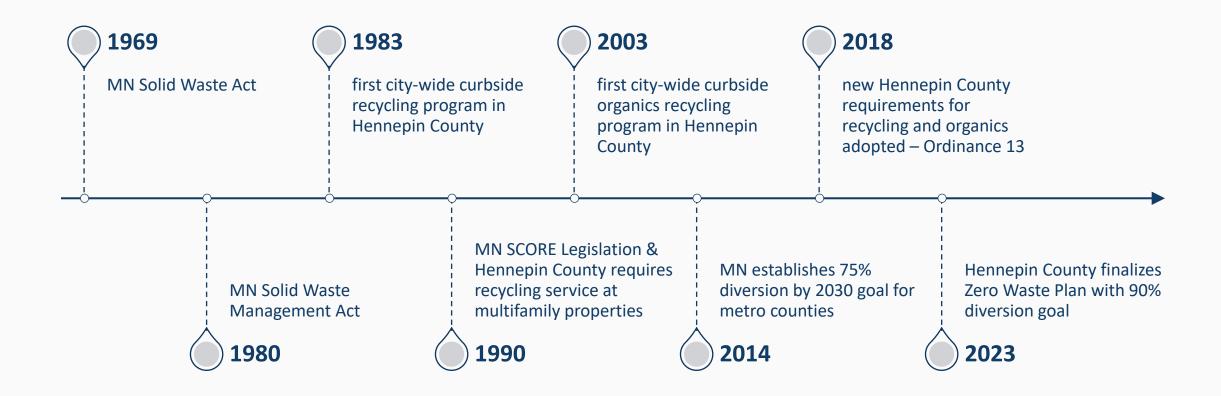
Burn waste to produce electricity and steam to power our homes

Landfill

Bury waste

- Waste hierarchy guides preferred management practices
- Designed to protect public and environmental health, support a vibrant economy and wise use of resources.
- At least 9 times more jobs in reuse and recycling than landfilling
- Study by the MPCA estimated \$285 million worth of recyclables landfilled in 2010

Solid Waste Management History



What percentage of waste is recycled or composted?



Residents and businesses discarded 1.3 million tons of waste in 2023





How is waste collected?

- Open hauling collection
 - Customer chooses hauler
 - Many haulers compete in geographic area
 - Includes all commercial (recycling, trash, organics), most multifamily (trash, recycling, organics), and some residential collection (trash, recycling, organics)
- Organized collection
 - City contracts with hauler on customer's behalf
 - Only one hauler in geographic area
 - Mostly limited to residential collection programs (trash, recycling, organics)

Where does it go -Recycling

- 8 material recovery facilities (MRFS) in metro, all privately owned
- About 80% of the materials are processed in the region
- MN recycling markets include West Rock and Pioneer (paper and cardboard), Master Mark and Choice Plastics (#2 HDPE plastic) and Anchor Glass
- Cost to process recyclables (sorting into material streams) is \$70-110/ton



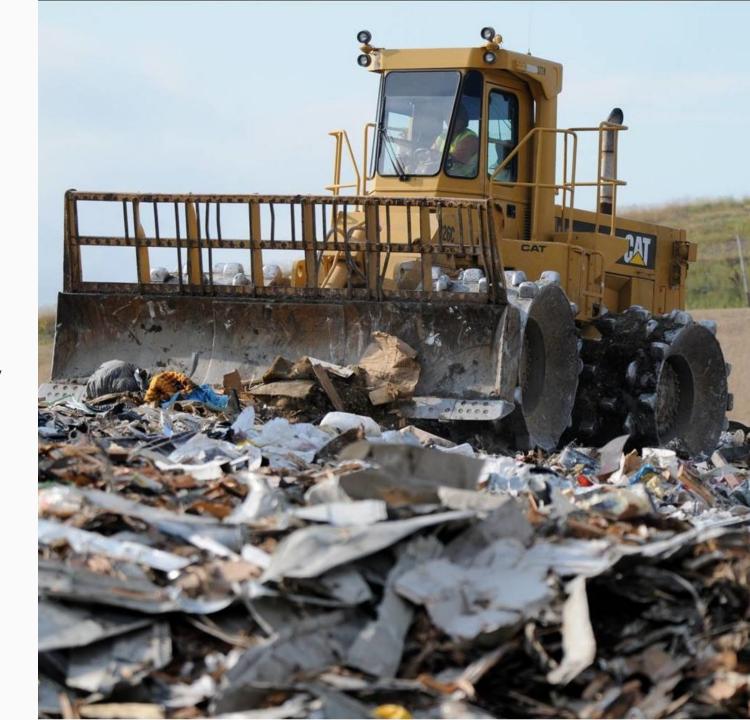
Where does it go – Organics

- Commercial programs send material to food rescue organizations, farms and processors for animal feed, or to compost facilities
- Residential programs send to compost facilities
- 2 compost facilities in metro
- Brooklyn Park Transfer Station (BPTS) subsidized rate \$35/ton
- Cost to process organics into compost \$45-60/ton



Where does it go – Trash

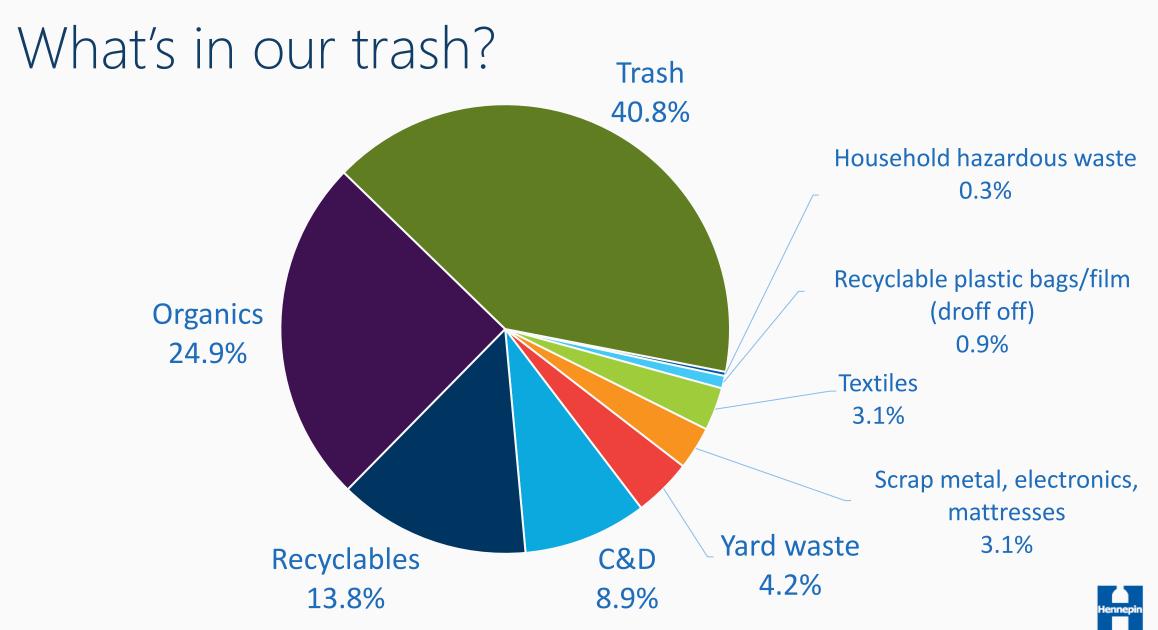
- Hauled direct or to transfer stations which haul in 20-ton loads to:
 - Waste to energy -Hennepin Energy Recovery Center (HERC)
 - 6 landfills (2 in WI), most goes to 2 sites in Dakota County & 1 in Elk River
- Cost of disposal \$77/ton



Where does it go – County-owned Facilities

- Brooklyn Park Transfer
 Station & drop-off
- South Hennepin Bloomington drop-off
- HERC
- Recycling Recovery Facility (in the works)





Waste Management Tools

- Incentives
- Subsidized rate for organics
- Taxes and fees on trash
- Grants to cities, businesses, multifamily properties, homeowners and schools
 - Containers
 - Waste prevention projects
 - Organics drop-off sites
 - Food rescue
 - Building deconstruction and reuse



Waste Management Tools

- Education
- Residential programs Zero Waste, Plastic-Free and Stop Food Waste Challenges, Community Recycling Ambassadors, Choose to Reuse, Fix-it Clinics
- Community partnerships Green Partners Env. Education Program
- School recycling program
- Education campaigns and materials





Waste Management Tools -Investments in Market Development & Infrastructure

- SCORE funds residential recycling & organics
- Organics recycling subsidized rate
- Mattress recycling workforce and market development
- Food waste prevention research, grants
- Reuse & Repair retailer support, Fix-it Clinics
- Deconstruction workforce and market development

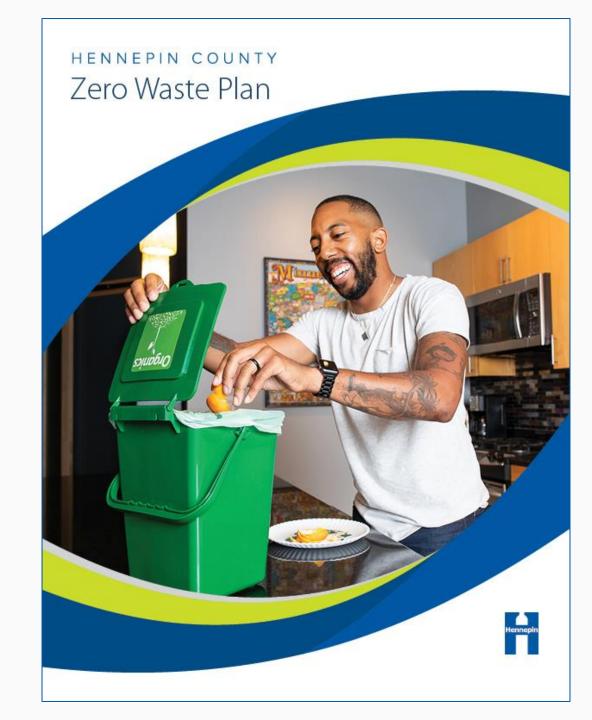




Waste Management Tools - Policy

- State requirements waste hierarchy, management plans and diversion goal for metro counties – 75% by 2030
- County requirements Recycling ordinance 13, licensing
- City requirements multifamily & business recycling, packaging ordinances, licensing
- Product stewardship and extended producer responsibility (EPR) – problem materials like electronics, paint, and packaging

Hennepin County's Zero Waste Plan includes 62 total actions to transition the county to a zero-waste system



Reinventing the solid waste management system: Highest impact zero-waste actions

- Prioritize extended producer responsibility (Legislature)
- Secure adequate funding for zero-waste initiatives through SCORE and other sources (Legislature)
- Ban recyclable and organic materials from landfills (Legislature and MPCA)
- Recover recyclable materials from the trash – recycling recovery facility (Legislature and county)

- Support the transition to organized collection across Hennepin County (Legislature, county and cities)
- Increase compliance with Ordinance 13 and expand requirements (County)
- Develop and implement county plan to eliminate food waste (Legislature and county)
- Expand collection and drop-off options for hard to recycle items (Legislature and county)

- Reduce single-use plastics and plastic packaging (Legislature and producers)
- Increase the reuse and recycling of construction and demolition waste (Legislature)
- Mandate participation in recycling and composting programs (Legislature and county)
- Ensure every individual has equitable access to zero-waste tools (Legislature and county)



Beyond disposal – material impacts and Hennepin County's Climate Action Plan



Most of the environmental and health impacts of a product happen before disposal. Materials with the greatest climate impacts include food, plastics, concrete, aluminum and steel.

We can't recycle our way out of this, getting to zero waste will require transformative changes in the policies, programs and resources that make up the solid waste system and significant shifts in who benefits from the system.



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