

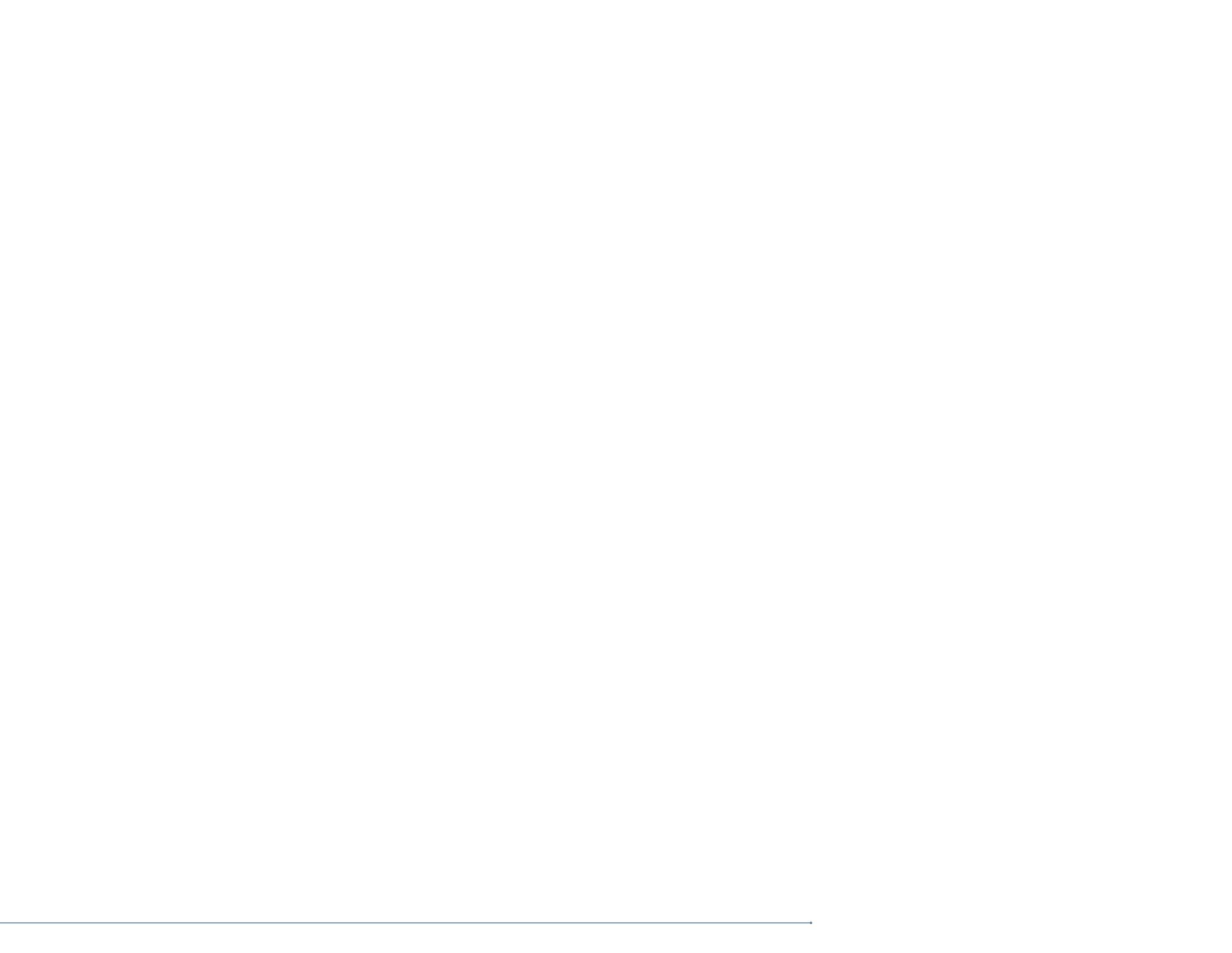
# A plan to reinvent Hennepin County's solid waste system

Prepared for the Hennepin County Board of Commissioners



February 2024







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## Purpose

This plan was prepared for the Hennepin County Board of Commissioners as directed by resolution 23-0384 R1 to develop a plan for the closure of the Hennepin Energy Recovery Center (HERC) facility between 2028 and 2040 and submit to the board by February 1, 2024.

## Overview of the resolution

The resolution outlined the following parameters to address in this plan:

- Statutory compliance
- The county's Climate Action Plan goals
- The county's Zero Waste Plan metrics
- The Hennepin County Board's declaration of racism as a public health crisis, including efforts to reduce or mitigate environmental racism

The resolution also called for this plan to include: (1) an estimated timeline, (2) estimated financial requirements, and (3) foreseeable environmental consequences related to the following:

1. Prioritization of the county's Zero Waste Plan action items that would accelerate the achievement of zero waste in Hennepin County
2. Decommissioning of the HERC facility
3. Transitioning the labor force currently working at HERC and other labor connected to HERC
4. Land disposition after HERC is decommissioned
5. Paying HERC's existing debt service
6. Future of the Brooklyn Park Transfer Station
7. Alternative waste disposal methods for the waste generated across the county
8. Ongoing natural resources and climate action programming
9. Timeline mapping out future legislative agenda items and priorities to fund natural resources and climate action programming, closure of HERC, and payment of related debt service

**Given the dependencies, timeline, and extent of coordination with stakeholders, sections of this plan may be general. Details to accomplish this plan will continue to evolve as we transition into implementation and as unknowns become known.**

# Background

## Waste management in Hennepin County

In 2022, approximately 1.27 million tons of waste was generated in Hennepin County, with 42% of this waste recycled or composted. The material that remains after waste prevention, recycling, and composting is more than 750,000 tons that is currently managed as trash. To help create an understanding of the magnitude of the amount of trash, imagine the Target Field ballpark from the field to the top of the covered canopy. Our residents and businesses fill Target Field 6 times a year with discarded items. We have a monumental lift in front of us to achieve a zero-waste future.

As an organization, we excel when facing big challenges, and the county has been a leader on solid waste policy for more than 40 years. This includes starting the first recycling programs in the 1980s, introducing household hazardous waste collections in the 1990s, and beginning organics recycling in the 2000s. In more recent years, the county's current solid waste management plan focused on eliminating wasted food. It set the course for the expansion of organics recycling, including requirements for businesses that generate large amounts of organic waste to participate in a food recycling program and cities to make the service available to residents. This plan also included innovations in food waste prevention and building material reuse programs.

## The Climate Action Plan

In 2021, the county adopted the Climate Action Plan. We were the first county in the state to have a climate action plan and set one of the most ambitious greenhouse gas emission reduction targets among climate leaders. The plan includes bold strategies on preventing food waste, tackling plastics pollution, and advocating for state leadership on zero-waste policies.

## The Zero Waste Plan

The board then commissioned a Zero Waste Plan to define what it will take to get to a future that doesn't rely on landfilling or incineration. Staff led an extensive process that spanned nearly two years and centered the voices of those traditionally not engaged in solid waste planning. Research for the plan provided a gaps analysis of our solid waste system compared with national and international zero-waste leaders. The 62 actions included in the plan were informed by data and driven by the community to achieve maximum impact.

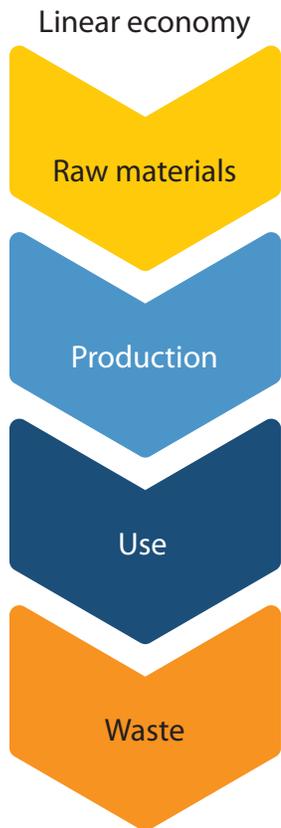
The county has defined zero waste as preventing 90% or more of all discarded materials from being landfilled or incinerated. The Zero Waste Plan and this definition will serve as the foundation of the county's next Solid Waste Management Plan that will be developed in late 2024.

The trash produced  
in the county is  
enough to fill  
Target Field 6 times  
a year



# Section I: Reinventing the solid waste system

Our solid waste system is the end of a linear economy that is driven by consuming raw materials. In this system, stuff is produced as cheaply as possible, regardless of whether it



can be repaired or recycled. Once we are done with it, we can easily discard all this stuff each week at our curb or in dumpsters behind our buildings.

In applying the Racial Equity Impact Tool (REIT) process to the Zero Waste Plan, staff and community members took a closer look at who benefits from this system. Through this analysis, a clear picture of a system from which some profit immensely while others are inequitably burdened emerges.

The multinational waste industry makes big profits from landfills, while taxpayers pick up the management and cleanup costs after they close. Product manufacturers and retailers profit from selling tons of stuff. Businesses that generate a lot of waste and residents that consume and dispose excessively don't take equitable responsibility for managing this waste. Many residents feel powerless as there is only so much they can do as an individual, and the current system makes it impossible to avoid some types of waste.

We also know that some residents are more burdened by the impacts of the system. Black, Indigenous, and other people of color as well as residents with low-income and/or disabilities are commonly not benefiting from and are being more burdened

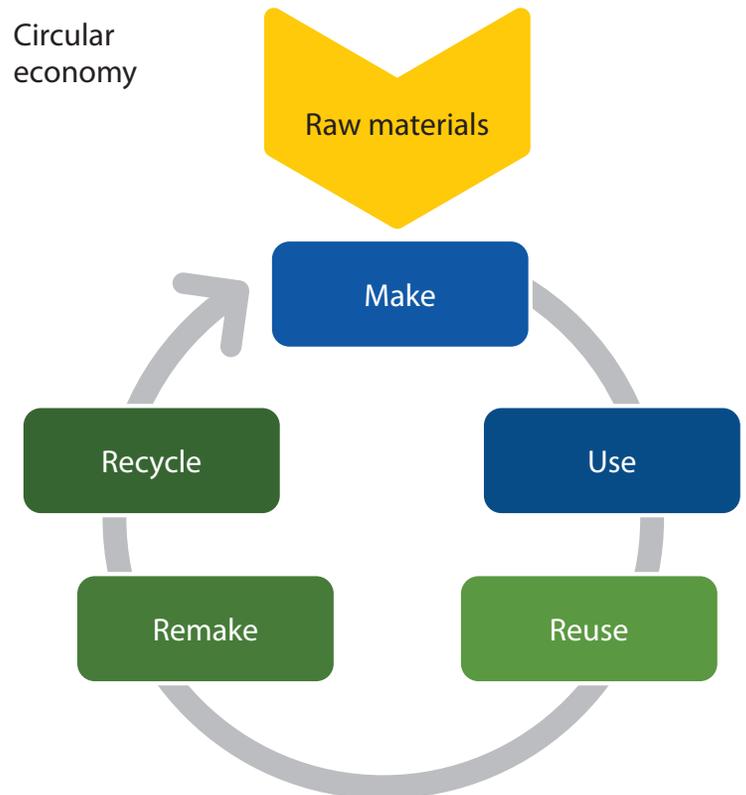
by the current solid waste system. Additionally, our youth and future generations will bear the environmental and social costs of this system long into the future.

These burdens are most prevalent for residents living near solid waste facilities, in multifamily housing or rental units, in areas with high rates of illegal dumping and litter, in high-density areas with higher volumes of truck traffic, and in areas facing cumulative impacts of pollution.

As local governments, counties and cities must deal with the trash problem with little influence over what is produced and limited resources to deliver convenient services to recover and reuse the materials.

The county's climate-action and zero-waste goals require us to reinvent our solid waste system and transition to a circular economy that values raw materials and prioritizes reuse. This will keep our valuable natural resources in a cycle of use instead of putting them in a hole in the ground or burned for energy.

Circular economy



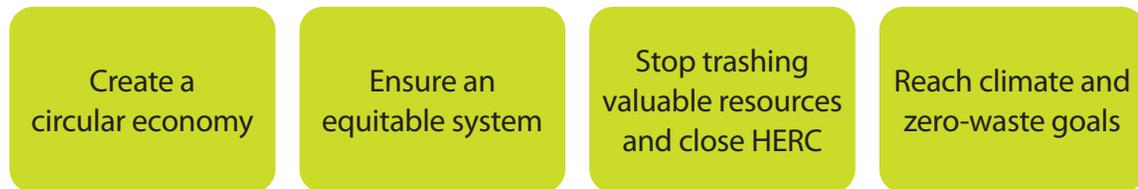
## A vision for a reinvented solid waste system



### This vision depends on:



### With these dependencies met, we can:



Our vision of a reinvented solid waste system is a zero-waste future where less waste is created in the first place, where everyone shares responsibility, and where everyone benefits from easily accessible services. This system has widespread participation in programs and social norms that align with zero waste.

This vision will require significant action from state and local policymakers, significant funding for program implementation, development of infrastructure, and an overall societal commitment to reducing waste.

The county commits to leading and building a coalition of elected officials, business leaders, and residents to prioritize the waste issue and be changemakers.

To achieve a 90% or greater recycling rate, the county will need to prevent or capture the remaining organics and recyclables being trashed, develop stronger recovery options for household goods and building materials, and find solutions for the materials that currently don't have viable options for reusing or recycling. It is also essential to address how products are designed before they get to consumers and eventually become waste.

Many of the changes needed are beyond Hennepin County's control and depend on legislative action to put Minnesota on-par with national zero-waste leaders and increase funding to match the scope of the challenges we face and the ambition of our goals. Policy changes that the state legislature needs to pass to realize this zero-waste future are outlined on the next page (page 8).

With these dependencies met, the county, along with our city and state agency partners, can create a circular economy and ensure an equitable system. We can stop trashing our valuable resources and close HERC. And we can do it while reaching our climate and zero-waste goals.

# Reinventing the Hennepin County solid waste system

Promote a zero-waste and clean-energy future to help the county meet its climate action goals and reinvent the county's solid waste system to accelerate closure and repurposing of the Hennepin Energy Recovery Center (HERC).

## Adopt policies that put Minnesota on-par with national zero-waste leaders

- Adopt Packaging Waste and Cost Reduction Act (extended producer responsibility (EPR) for packaging).
- Make it easier for local governments to have higher level of control over the waste hauling and processing system.
- Adopt and enforce material bans at landfills for all materials that emit methane, such as food scraps, paper and cardboard, wood, and textiles.
- Redirect the Solid Waste Management Tax (SWMT) currently going to the general fund to provide adequate SCORE grants. SCORE funding has been relatively flat for decades and has not kept pace with the increased volume of garbage. Current levels are not sufficient for the infrastructure investments and program changes needed to achieve zero-waste goals.
- Set a 50% or higher diversion requirement for construction and demolition (C&D) waste.

## Invest in recycling infrastructure, advancing circularity, and waste reduction and reuse

- Establish additional funding mechanisms to fully implement zero-waste actions.
- Redirect previously allocated state bonding monies and appropriate additional funds to construct a county recycling recovery facility.
- Improve statute language on volume- or weight-based pricing to incentivize waste reduction.
- Invest in market development for both traditional and hard-to-recycle items.
- Provide resources for Minnesota Pollution Control Agency (MPCA) to enforce state statutes.

## Reduce disproportionate impacts from our solid waste system

- Direct funding to areas of environmental justice concern.
- Phase in emissions requirements for waste trucks through measures such as increased use of compressed natural gas or transition to electric fleet.
- Update landfills to achieve greater environmental outcomes, including requirements for gas recovery systems and monitoring and reporting on air emissions.

## Amend existing policies to remove disincentives

- Adopt a food waste compost requirement in MNDOT specifications.
- Reduce barriers for businesses to use refillable containers.
- Revise building codes and zoning ordinances that inhibit recycling.
- Revise the current EPR system to cover collection costs for all electronic waste.

Absent significant state level action and support for zero-waste initiatives, we risk increasing landfilling and going in the wrong direction for climate action. Landfills are huge methane emitters and have been identified by climate scientists as a major contributor to our climate crisis. The county's Zero Waste Plan outlines the actions needed to make meaningful progress toward climate emissions reduction.

## Prioritization of actions to accelerate zero waste

Each of the 62 actions in the Zero Waste Plan was analyzed to calculate the potential impacts on the county's overall diversion rate. Commissioners asked staff to further prioritize the plan's action items to identify what would accelerate the achievement of zero waste in Hennepin County. The 12 highest impact actions, presented on page 10, account for almost 80% of the potential tons that could be diverted from the trash by implementing the actions in the Zero Waste Plan. Being able to successfully achieve these actions and the amount of time it will take to achieve them depends on bold leadership at the state, county, and city levels and willingness to change from manufacturers, businesses, and residents.

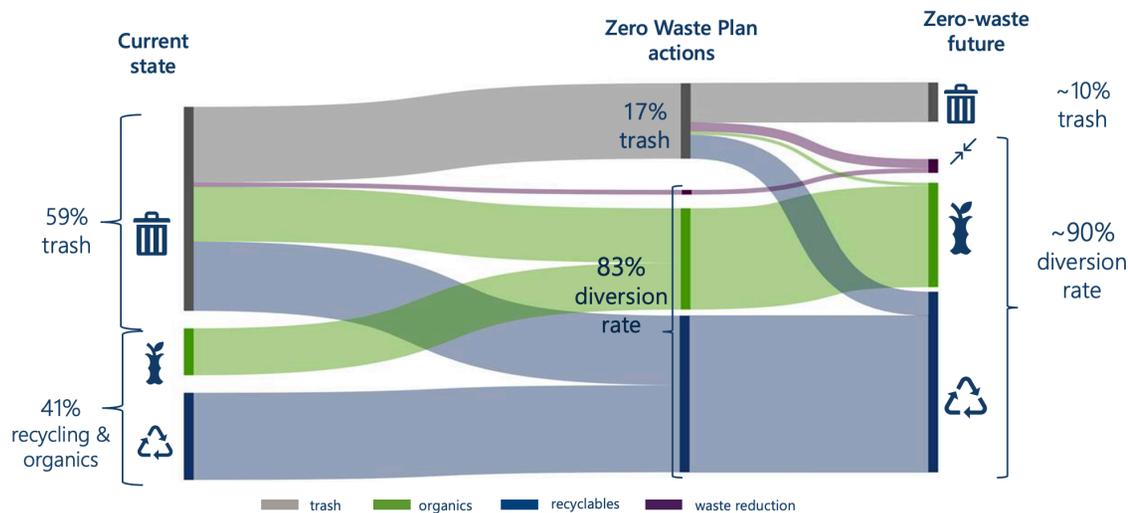
We all have a responsibility – government, businesses, institutions, and individuals – to support these actions, prevent waste, and recycle everything we can. Ultimately, the ability of the county to reach its zero-waste goals will be determined by the system we choose to create and the everyday choices and behaviors of the county's 1.3 million residents, 43,000+ businesses, and all those who visit or work in Hennepin County.

## Key steps color coding

A diagram outlining key steps to achieving each of the priority zero-waste actions is included on the following pages. The entity most responsible for each step is identified using these colors:

- Legislature
- Hennepin County
- MPCA
- Cities
- Private sector

### Where we are and where we need to go



# Highest impact zero-waste actions

Many dependencies and conditions need to occur prior to closing HERC. Many of these conditions are outside of Hennepin County's control. This includes a significant number of legislative changes that need to take place before closure. The highest impact zero-waste actions are presented in recommended order of approach and with key dependencies noted.

- Prioritize extended producer responsibility (EPR) for packaging (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 a 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)

# Prioritize extended producer responsibility (EPR) for packaging



Establish by law a fully producer-funded system that requires producers to expand reuse, recycling, and composting of packaging and paper products building on the state’s existing infrastructure.

## Overview

**Why this is needed:** Shifts responsibility to producers to use more sustainable packaging, expand markets for recyclables, and cover the cost of managing packaging waste.

**Diversion potential:** 37,000 tons

**Timeline:** Bill passage in 2024. Full implementation would take several years.

**Cost:** An EPR bill would provide additional funding to municipal recycling programs statewide, supplementing SCORE funds, which only cover a fraction of the cost.

**Examples of leaders:** California, Colorado, Maine, Oregon

## Next steps for the county

- Advocate for bill introduction and passage in 2024

## Roles and responsibilities

### County and environmental advocates

Conduct engagement and advocate for language that provides optimal solutions

### Legislature

★ Introduce and pass an EPR bill

### MPCA

Guide and oversee implementation

### Manufacturers

Comply with requirements, fund programs, and redesign packaging for sustainability

### Cities

Continue to implement curbside programs

### Residents and businesses

Participate in recycling and composting programs

## Background and additional detail

Packaging that is problematic for the recycling and composting systems is increasingly prevalent. Additionally, many items are disposable, and residents and businesses need more options for reusable, recyclable, or compostable alternatives.

EPR for packaging and paper products holds producers, specifically consumer brands, responsible for their packaging throughout the entire lifecycle – from product design all the way through to reuse, recycling, composting, or safe disposal.

A well-designed EPR system would build on Minnesota’s existing recycling infrastructure, ensure sustainable funding to offset the cost of collection, expand end markets, incentivize the redesign of packaging and paper products using eco-modulated fees that adjust based on the attributes of materials, and shift producers to more reusable and sustainable packaging – all without taxpayer funds.

## Key steps



# Secure adequate funding for zero-waste initiatives through SCORE and other sources



Increase state funding to the level of investment needed to match the scope of the challenges we face and meet zero-waste and state recycling goals. All revenue from the Solid Waste Management Tax (SWMT) imposed on waste services should be used for waste management activities, such as SCORE funding.

## Overview

**Why this is needed:** Additional funding mechanisms are needed to fully implement zero-waste actions.

**Diversion potential:** This action was not modeled in the Zero Waste Plan but is necessary to amplify and speed up all the highest impact actions.

**Timeline:** Bill passage in 2024.

**Cost:** The county received \$3.7 million in SCORE funds from the state in 2023. The legislature allocated additional funds, but the projected increase for Hennepin County is only \$704,000 (an extra \$1.30 per household). SCORE funds support city recycling programs needed to achieve recycling goals.

**Examples of leaders:** King County, Alameda County, Toronto, Ramsey/Washington counties

## Next steps for the county

- Advocate for bill passage in 2024
- Advocate for additional funding mechanisms

## Roles and responsibilities

### Legislature

★ Introduce and pass a bill

### MPCA and environmental advocates

Advocate for bill passage

### County

Conduct engagement and adopt new funding policy, support cities with implementation

### Cities

Expand programming with added resources

### Residents and businesses

Support additional financial resources for zero-waste initiatives

## Background and additional detail

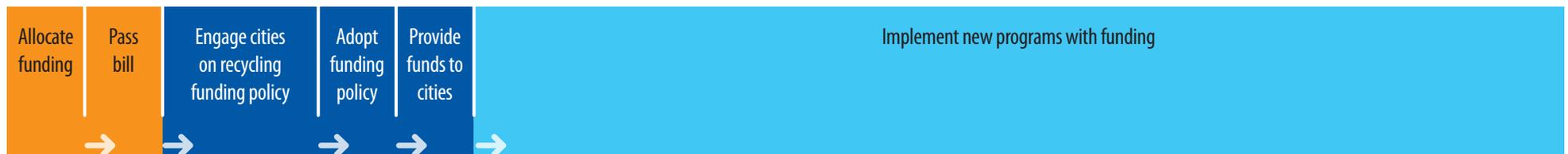
In 1989, the Minnesota State Legislature authorized SCORE grants to counties for waste reduction and recycling activities. State funding for SCORE comes from a portion of the sales tax on solid waste management services. These grants were an important source of revenue for developing recycling programs and infrastructure.

The needs of today's recycling system are different than 30 years ago. Counties and cities have expanded services beyond traditional recycling to include new organics recycling programs, more work on multifamily recycling, additional education and outreach, and more emphasis on waste prevention and reuse.

Local governments have continued to increase expenditures and develop new programs. Appropriations from the state have not kept pace. Support for county recycling programs has remained relatively flat since the inception of SCORE, while the portion of the solid waste tax redirected to the state's general fund has grown dramatically.

Hennepin County strongly advocates for an increase in SCORE grants to counties from the solid waste tax. That was the original intent for the solid waste tax on Minnesota businesses and residents. Making progress toward zero waste will require significant state support, just as the first recycling programs needed SCORE funding 30 years ago.

## Key steps



# Ban recyclable and organic materials from landfills

Establish a policy that prohibits the disposal of recyclable materials, such as cardboard or mattresses, and organic materials like food scraps in landfills.

## Overview

**Why this is needed:** Targets materials that make up a large portion of the trash stream and gets biogenic materials out of landfills, which become a big climate problem when they break down.

**Diversion potential:** This action was not modeled in the Zero Waste Plan but is necessary to amplify and speed up all the highest impact actions.

**Timeline:** Bill passage in 2024. Full implementation would take many years.

**Cost:** This policy is only effective if enforced. Funding for sufficient staff resources to enforce the ban should be provided to the MPCA. There would be increased costs for waste generators.

**Examples of leaders:** California, Massachusetts, Vermont

## Next steps for the county

- Advocate for bill passage in 2024
- Advocate for adequate MPCA staff resources to enforce the ban

## Roles and responsibilities

### County and environmental advocates

Conduct engagement and advocate for language that provides optimal solutions

### Legislature

★ Introduce and pass the bill

### MPCA

Lead on bill development and enforcement of the landfill disposal ban

### Haulers

Comply with bans and follow up with customers that aren't complying

### County and cities

Collaborate on implementation, policy changes, outreach, and education

### Residents and businesses

Support the ban and comply by not placing banned materials in the trash

## Background and additional detail

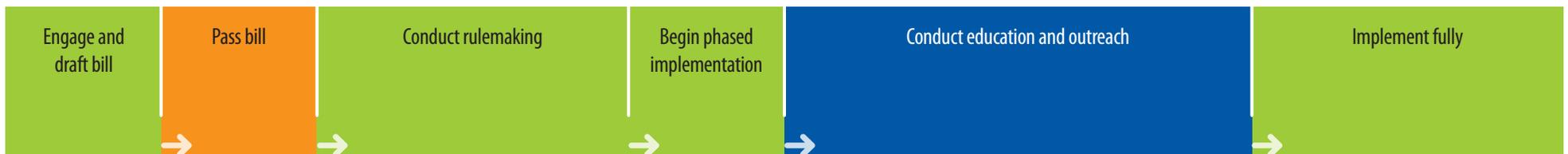
Landfill disposal bans on recyclable and organic materials are an essential component of a zero-waste system. The overarching goal is to increase recycling, capture valuable resources, reduce greenhouse gas emissions, and reduce the need for landfills.

Implementing a landfill disposal ban is a complex process that involves major changes to the existing waste management system. Requirements apply to landfills, haulers, and waste generators. Compliance is monitored through ongoing inspections at landfills. When a load has banned materials, the inspector identifies the responsible hauler and waste generators. The load may be rejected, charged an additional handling fee, and be subject to potential enforcement penalties. Having adequate staff is critical to the successful implementation.

Haulers are responsible for educating their customers and helping them develop procedures for preventing banned items from entering the waste stream. Generators are responsible for recycling any banned materials they generate. The requirements for waste generators are usually phased in, starting with the largest waste generators.

Enforcement is usually paired with support and resources to help people adapt to new waste disposal practices.

## Key steps



# Recover recyclables and organics from the trash

Develop a recycling recovery facility that uses a variety of technologies to sort cardboard, metal, some plastics, and organic materials from the trash for reuse or recycling.

## Overview

**Why this is needed:** Implementing recycling recovery alongside source separation ensures more recovery of materials regardless of individual sorting behaviors.

**Diversion potential:** 103,000 to 200,000 tons, depending on progress of other zero-waste actions

**Timeline:** 6 to 10 years to site, design, permit, and build. Immediate impact on diversion once operational.

**Cost:** \$300 million to \$500 million in capital expenditures in phases. Ongoing operational expenses.

**Examples of leaders:** Santa Barbara, King County, Ramsey/Washington counties

## Next steps for the county

- Further study critical factors: site, financing, designation, permitting, and end markets
- Tour recycling recovery facilities

## Key steps



## Roles and responsibilities

### County

★ **Lead on project development, implement waste designation**

### Legislature

**Allocate significant funding**, pass a landfill disposal ban on recyclables and organic/methane-producing materials

### MPCA

**Streamline permitting**, approve waste designation plan, lead enforcement of the landfill disposal ban

### Haulers

Deliver waste to the recycling recovery facility for processing

### Residents and businesses

Continue to sort materials to maximize reuse and recycling

## Background and additional details

### What is recycling recovery?

At recycling recovery facilities, also known as mixed waste processing facilities, trash goes through a highly automated process that combines mechanical and optical sorting equipment to sort materials based on size, shape, and composition. Materials recovered from the trash include cardboard, metals, #1 and #2 plastics, and organic materials. There is still trash to dispose of at the end of the process. Some recycling recovery facilities, like Ramsey and Washington counties' facility, are paired with waste-to-energy technology to further recover energy from trash and avoid landfilling. These facilities are generally part of an integrated solid waste management system designed to maximize materials recovery and achieve zero-waste goals.

### Source separation is better

Recycling programs where participants sort items from the trash, called source separation, will continue to be prioritized as the best way to manage waste. Source separation provides the highest quality materials with the least contamination at the lowest cost. A recycling recovery facility complements, not replaces, programs focused on increasing source separation. Combining recycling recovery with existing source separation programs has the potential to increase recycling rates quickly and significantly. Leading zero-waste cities and counties have incorporated post-collection processing into their efforts to take diversion programs to the next level.

*(continued)*

# Recover recyclables and organics from the trash

## Source separation won't get us to zero waste

Recycling programs everywhere struggle with the same challenges: low participation rates, lack of awareness, human error, competing priorities, non-compliance with sorting guidelines, and ultimately, lots of recyclables in the trash. Waste studies conducted in Minneapolis, which has one of the best residential recycling programs in the state, show that people recycle less than half of what they could be. In other words, more than 50% of recyclables end up in the trash. The situation is worse for organics. Despite having one of the best organics recycling programs in the country, the capture rate for organic materials in Minneapolis is only 16%. Because of the low capture rate for organics, 35% of Minneapolis residential trash is organics.

Implementing recycling recovery alongside source separation is a “both/and” approach that ensures a more comprehensive recovery of materials regardless of individual sorting behaviors. It acts as a safety net, capturing recyclables that might otherwise end up in landfills. By harnessing cutting-edge technologies to recover recyclables and organics from the trash, these facilities have the potential to contribute significantly to the reduction of landfilling and accelerate progress toward zero waste.

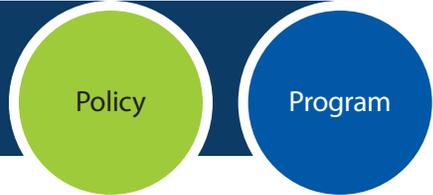
Despite that potential, a review of recycling recovery facilities demonstrates that the path forward has obstacles: high capital costs, modest recovery rates, contamination issues that affect the marketing of materials, and operational challenges that make it difficult to meet performance goals. These caveats highlight the importance of proceeding strategically and with careful consideration.

## Zero-waste innovation hub

To explore the feasibility of recycling recovery, the county hired Burns & McDonnell Engineering to conduct a comprehensive study. The study included a characterization of the county's facility needs. One potential site is the county-owned property adjacent to the Brooklyn Park Transfer Station. The site size is adequate but somewhat undersized based on an evaluation of similar facilities and discussions with equipment vendors.

Acquiring additional adjacent property would help maximize materials recovery and turn this area into a zero-waste innovation hub that supports the circular economy. The Brooklyn Park Transfer Station will continue to be needed for organics transfer, recycling, household hazardous waste and problem material drop-off, and future purposes such as reuse or recovery of hard-to-recycle materials (see page 39).

# Support the transition to organized collection across Hennepin County



Leading zero-waste communities have a higher level of control over hauling and processing systems. Depending on the city and sector, this may include the adoption of hauler contracts, franchising, expanded licensing requirements, or other organized collection strategies for multifamily and commercial.

## Overview

**Why this is needed:** Control over the system leads to better outcomes, including increasing access to recycling services, reducing the number of trucks driving down each street, providing better rates to residents and businesses, and incentivizing haulers to achieve greater levels of diversion and reduced contamination.

**Diversion potential:** 13,000 tons

**Timeline:** 6+ years with multiple phases. Engagement with city and other partners is critical to successful implementation.

**Cost:** Consulting and staff time

**Examples of leaders:** San Jose, Minneapolis commercial collection study

## Next steps for the county

- Consultant study
- Engage with partners to define goals, scope, implementation phases, and communication roles

## Roles and responsibilities

### County and environmental advocates

Advocate for bill passage

### Legislature

- ★ Pass legislation to make organized collection easier for local government

### MPCA

Advocate for bill passage, support local government with studies and implementation

### County and cities

Implementation

### Haulers

Provide waste collection services

### Residents and businesses

Support system changes that lead to better environmental and health outcomes

## Background and additional detail

### Control over the system leads to better outcomes

The Zero Waste Plan includes an action to work alongside cities and haulers to define roles and responsibilities and establish a roadmap to transition the county to more organized hauler collection systems. This transition will help reduce hauling impacts on infrastructure and neighborhoods, increase cost efficiency, improve access and equity for rate payers, reduce climate impacts, reduce pollution, and provide consistency in service options.

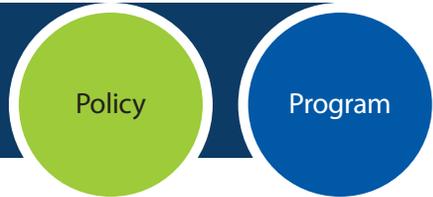
The future organized collection system should:

- Incorporate hauler incentives, such as pay-as-you-throw and performance-based contracts, that favor reuse, collection of hard-to-recycle items, increased diversion, and reduced contamination.
- Include a pathway for local and regional haulers to continue to operate within the system regardless of their size.
- Be used as a mechanism to explore a pilot for every-other-week trash collection combined with weekly organics collection.
- Support a transition to increased prevalence of alternative fuel sources for collection, such as compressed natural gas or electric vehicles, complemented by county funding or other financial incentives

## Key steps



# Increase compliance with the recycling ordinance (Ordinance 13) and expand requirements



Increase resources to support implementation of business food waste recycling requirements and improve compliance with recycling requirements at multifamily properties and businesses. Revise ordinance to provide clarity to covered generators.

## Overview

**Why this is needed:** Ensures services are available for residents to use and increases diversion of food waste, which are key to achieving zero-waste and climate goals.

**Diversion potential:** 58,000 tons with full compliance

**Timeline:** 1+ years to revise ordinance. Many years to increase compliance.

**Cost:** Contractors and/or staff to conduct site visits and provide education and labels. Staff for enforcement. Added 2 FTEs in 2024. Additional requests in future.

**Examples of leaders:** California, Massachusetts

## Next steps for the county

- Fill new positions added in the 2024 budget

## Roles and responsibilities

### County

★ Lead enforcement at the generator level, amend Ordinance 13

### Cities

Better enforce existing requirements, implement additional requirements

### Legislature

Provide resources to enforce existing state commercial recycling law

### MPCA

Better enforce existing state commercial recycling law

### Haulers

Provide and implement adequate service

### Businesses

Comply with requirements and educate employees

### Residents

Participate in programs

## Background and additional detail

### Existing requirements

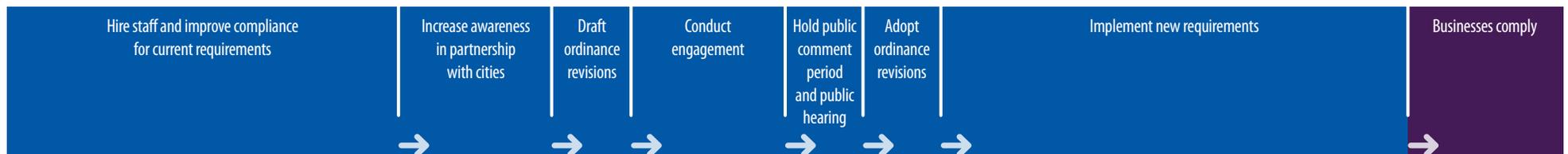
Hennepin County's recycling ordinance (ordinance 13) regulates the separation of recyclable materials, including organics, from solid waste in the county. The ordinance was most recently updated in 2018.

The ordinance requires:

- Cities have an ordinance to ensure curbside collection of recyclables from all residents and provide residents of single-family homes the opportunity to participate in organics collection.
- Commercial generators implement programs for mixed recyclables. Commercial generators that produce more than one ton of waste per week must also implement a food scraps collection program. Food scraps may be diverted through donation, collection for animal feed, anaerobic digestion, or composting.
- Multifamily property owners provide adequate recycling services and education for tenants. It does not address organics recycling for multifamily.

(continued)

## Key steps



# Increase compliance with the recycling ordinance (Ordinance 13) and expand requirements

Policy

Program

## Increasing compliance

The gaps analysis for the Zero Waste Plan found that the county's enforcement of the ordinance is not as robust as needed. In addition, existing language needs revisions to add clarity and support compliance efforts.

The following would increase the positive impacts of the ordinance:

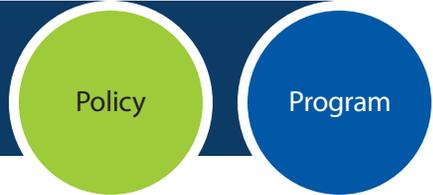
- Increase staffing to support the implementation of business food waste recycling requirements. Evaluate other resources to improve compliance and participation, such as incentives and technical assistance.
- Provide additional county resources to improve compliance with recycling requirements at multifamily properties and businesses. As a complement to increased compliance efforts, provide more technical support to building property managers and business owners to implement requirements and increase program participation and provide incentives through the expanded grant offerings.
- Revise ordinance language to provide clarity to covered generators and support compliance efforts.

## Expanding requirements

The gaps analysis also found that there are opportunities to expand the ordinance's reach through the following considerations:

- Expanding the applicability of the organics portion of the ordinance to maximize diversion of organics, including a gradual reduction in the minimum thresholds for commercial generators, adding multifamily properties to the organics requirement, and eventually requiring all generators to have organics service.
- Emphasizing food rescue and donation options for compliance to deliver food to the best and highest uses whenever possible.
- Changing requirements for residential and multifamily organics service.
- Adding color-coding requirements for bins and dumpsters for consistency, uniformity, and increased ease of use for residents and businesses.
- Adding additional requirements for haulers to improve service and reporting.

# Develop and implement a plan to eliminate food waste



Establish a food waste prevention target and develop a long-term plan that identifies strategies, timeline, and needed resources for preventing wasted food at businesses, institutions, and homes.

## Overview

**Why this is needed:** Food waste makes up 20% of trash, and two thirds of wasted food could have been eaten. While organics recycling is important to increasing recycling rates, preventing food from being wasted and entering the waste stream has far greater climate and economic benefits.

**Diversion potential:** 44,000 tons

**Timeline:** 1+ years to develop the plan (underway). Several years to implement.

**Cost:** County and city staff and financial resources will be required.

**Examples of leaders:** Denver, Oregon, Washington, Illinois, Ohio, Massachusetts, Rhode Island

## Next steps for the county

- Develop food waste reduction target and plan
- Advocate for landfill disposal ban

## Key steps



## Roles and responsibilities

### County

★ **Lead development of the plan.**

Implement, track progress, and adopt policies that prevent food waste

### Legislature

**Pass a landfill disposal ban** on recyclables and organic/methane-producing materials, adopt policies that prevent overproduction and wasted food

### MPCA

Guide and oversee implementation of landfill food ban and state policies

### Cities

Promote programs and initiatives to residents and businesses

### Residents and businesses

Implement food waste prevention actions

## Background and additional detail

Forty percent of all food grown and produced in the U.S. is wasted. Wasted food has significant environmental impacts. When food is wasted, the water, energy, and labor that went into growing the food is also wasted. If sent to a landfill, food breaks down and releases methane, a greenhouse gas 28 times more potent than carbon dioxide for trapping heat in our atmosphere.

While organics recycling and composting are better solutions than sending food to the landfill or incinerator and are important strategies for achieving zero waste, preventing food from being wasted has far greater environmental and economic benefits. Preventing food from being wasted is one of the most significant actions we can take to address climate change and reduce our trash.

This action focuses upstream on eliminating the overproduction and wasting of edible food. Strategies may include increasing the use and sale of imperfect produce, supporting federal and state tax incentives for food donation, encouraging school lunch waste reduction programs, considering regulations on food production to reduce waste, improving data tracking, supporting community food hubs, and providing education on food labels and expiration dates.

The county has already solicited proposals for a consultant to conduct a scan of the county's foodshed (how food moves throughout the food system), determine an appropriate food waste prevention target, and assist the county in the development of a food waste prevention plan. A consultant has been selected to lead the plan development, and work will begin in Q1 2024.

# Expand collection and drop-off options for hard-to-recycle items



Close the gap in access to services by increasing collection of bulky and hard-to-recycle items, such as clothing, hazardous items, plastic wrap and appliances, via curbside pickup, events, or expanded drop-offs.

## Overview

**Why this is needed:** Addresses transportation and other barriers that make it difficult for all residents and businesses to participate in recycling programs and divert more material from the trash.

**Diversion potential:** 15,000 tons

**Timeline:** Begin in 2024. Full implementation will take many years.

**Cost:** Additional staff, contracts to manage materials, and potentially building space for operations. Adding 1 FTE starting in 2024.

**Examples of leaders:** Minneapolis, Bloomington, California, Canada, Europe

## Next steps for the county

- Fill new position added in 2024 budget
- Develop a program plan
- Advocate for legislation and funding
- Engage with partners
- Roll out pilots
- Conduct broad outreach and education

## Roles and responsibilities

### County

★ Develop programs and lead on implementation, adopt policies that lead to widespread collection and processing of materials countywide

### Legislature

Adopt legislation that leads to market development for hard-to-recycle materials and provides additional funding

### MPCA

Provide grant funds, develop new markets for hard-to-recycle materials, lead enforcement of the landfill disposal ban

### Cities

Lead/collaborate on implementation

### Residents

Use expanded collection and drop-off options

## Background and additional detail

### Zero waste and disparity reduction

The gaps analysis identified lack of equal access to recycling, composting, and diversion options as a limitation to an equitable zero-waste system. Although access was generally available for residents in single-family homes and the majority of businesses, significant gaps were identified in access for residents in multifamily settings, particularly around organics recycling. Gaps were also identified for those without easy access to transportation and to services beyond conventional recycling. Because diversion options are not equally available to all community members, these gaps collectively contribute to system inequities. The following set of actions seek to expand access to services, reduce inequities, and increase diversion. State support for policies and funding to develop markets for hard-to-recycle materials and expanding collection infrastructure is critical in optimizing diversion potential.

### Expand drop-off options

- Evaluate locations of existing drop-offs in relation to areas with high proportion of residents in multifamily settings, dense urban areas, rural areas with limited access to curbside services, and communities that do not have equal access to curbside services.
- Establish evaluation criteria to identify locations for investments in improved or expanded drop-off options. Use partnerships, such as with libraries, city or county buildings, schools, and businesses, to expand the number of drop-offs.

(continued)

## Key steps



# Expand collection and drop-off options for hard-to-recycle items

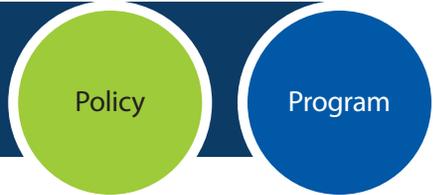


- Evaluate options to support (with technical, financial, regulatory, or other assistance) neighboring businesses or properties that choose to consolidate and share services for recycling and composting (such as a shared dumpster) and consider allowing and providing financial incentives to those that share service with community to increase local access.
- Expand the materials accepted to include a wider range of items.

## Increase bulky item reuse and recycling

- Work with cities, communities, and nonprofit organizations in the county to increase collection and reuse opportunities for bulky items, such as by:
  - Expanding collection opportunities either at the curb or via additional drop-offs.
  - Hosting or financially supporting drop-and-swap events.
  - Supporting community-led efforts to address transportation barriers and expand access for multifamily residents with mobility barriers.
- Expand collection and drop-off options for hard-to-recycle items
- Expand collection opportunities via curbside and drop-offs for harder to dispose items, including clothes and other textiles, household hazardous waste, plastic wrap, and appliances.

# Reduce single-use plastics and plastic packaging



Develop new public-private strategies and pass policies such as to-go packaging ordinances and bans for single-use plastic.

## Overview

**Why this is needed:** Plastics frustrate residents trying to recycle. Plastics contribute to litter and climate pollution, harm water and wildlife, and have largely unknown human health impacts.

**Diversion potential:** 200 tons

**Timeline:** Now and going forward

**Cost:** Staffing and financial resources dedicated to implementation. Added 1 FTE in 2024. Ongoing commitment needed.

**Examples of leaders:** California, Connecticut, Delaware, Hawaii, Maine, New York, Oregon, Vermont, and Europe

## Next steps for the county

- Fill staff position added in the 2024 budget
- Research national and international policies and make recommendation to board on policy options

## Key steps



## Roles and responsibilities

### County

★ **Research, draft plan, and conduct engagement.** Pass and enforce requirements.

### Legislature

**Strike the ban on bag bans.** Consider statewide legislation to reduce single-use plastics.

### MPCA

Enforce statewide bans

### Cities

Collaborate with the county on implementation, policy changes, and enforcement.

### Manufacturers

Reduce plastic use in design and manufacturing

### Public/private partnerships

Explore research and commitments that reduce plastic, such as the U.S. Plastics Pact, Hennepin University Partnership, and MNimize.

### Residents and businesses

Support policy changes, reduce plastics in day-to-day life and operations.

## Background and additional detail

Plastics are unavoidable in our modern lives, and the use of plastics is projected to triple by 2050 from 2013 levels. Plastics will account for 20% of global oil use and 15% of global greenhouse gas emissions. About half of the plastics produced each year are intended for single-use, and about a quarter of all plastics produced are for packaging.

Plastics contribute to litter and climate pollution, harm water and wildlife, and have largely unknown human health impacts. During engagement for the development of the Zero Waste Plan, residents reported great frustration with the amount of plastics they were dealing with, inability to avoid them, and confusion over how to recycle them. Businesses said they struggle to avoid plastics due to application needs, convenience, and low cost.

Recycling capture rates for plastics remain relatively low, and many plastics aren't recyclable in traditional curbside recycling programs. Increasingly, studies are finding plastics in the environment, including the soil, water, and air, and in our bodies. Research on the impacts of plastic pollution both on the environment and our health remains lacking due to the complexity of the issue.

Some progress has been made on requirements and commitments to reduce plastics. In recent years, the cities of Edina, Minneapolis, and St. Louis Park have passed to-go packaging ordinances to reduce non-recyclable and non-compostable to-go materials. The county partnered with Minnesota Waste Wise to develop a campaign to reduce single-use plastic use at restaurants.

The county could develop new public-private initiatives, pass policies such as a requirement that all cities adopt to-go packaging ordinance or adopt one countywide, and consider bans for other single-use plastic materials.

# Increase the reuse and recycling of construction and demolition waste



Advocate for a minimum diversion requirement for construction and demolition projects at the state level, support and encourage city adoption of deconstruction policies, support expansion of markets for building materials, and continue to fund and implement programs that divert used building materials from landfills.

## Overview

**Why this is needed:** Materials such as cement, aluminum, steel, and plastics have high climate impacts and significant diversion potential. About 85% of the materials in a typical demolition project could be salvaged but only 30% are currently.

**Diversion potential:** 76,700 tons

**Timeline:** 3+ years to develop and adopt policy. Several years to implement.

**Cost:** Requirement only effective if enforced. Funding for sufficient staff resources to enforce diversion requirement should be provided to the MPCA. Additional staff and resources needed for programming. Increased costs for construction and demolition waste generators.

**Examples of leaders:** Portland, OR, California, Cook County, IL, San Antonio, TX

## Next steps for the county

- Continue to develop and implement new programs
- Advocate for a state minimum diversion policy and increased landfill fees

## Roles and responsibilities

### County and cities

Continue to support deconstruction through funding and program initiatives

### Legislature

- ★ Pass legislation for minimum diversion requirements for construction and demolition projects

### MPCA

Enforce state policies

### Construction industry

Conduct research on used building material use and develop and standardize design specs for deconstruction, recycling, and use of used building materials

### Residents and businesses

Divert building materials for reuse and recycling

## Background and additional detail

Construction and demolition waste is a large waste stream – estimates suggest it is equivalent to municipal solid waste (MSW) generation. Although construction and demolition waste isn't considered MSW and there are specific construction and demolition landfills for this material, waste studies show it still typically makes up 7% to 10% of the MSW trash stream.

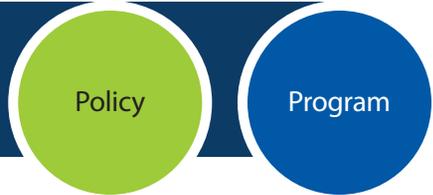
Authority to regulate construction and demolition waste falls on the state and cities, related to their role in permitting construction and demolition projects. While counties are not legislatively mandated to address this waste stream, the climate benefits of reusing and recycling these materials make a strong case for focusing on them.

The county has made many efforts over the past several decades to advance the reuse and diversion of construction and demolition waste, including supporting the growth of deconstruction services and use in the metro, offering building material reuse grants, launching a pre-demolition inspection program in partnership with cities, and adopting a county policy on construction and demolition waste reuse and recycling. These efforts will only go so far, and without authority to regulate construction and demolition waste, the county is running out of tools to address this material stream.

## Key steps



# Mandate participation in recycling and composting programs



Adopt mandatory recycling and organics recycling participation requirements for all waste generators that use rigorous enforcement and fines to ensure proper recycling.

## Overview

**Why this is needed:** Voluntary participation will only get us so far. Mandating participation is a last step to get the remaining recoverable materials out of the trash.

**Diversion potential:** 63,300 tons

**Timeline:** Last phase of plan implementation. Other actions must move forward first. Full implementation will take many years.

**Cost:** Funding for sufficient staff resources to enforce the mandate is required.

**Examples of leaders:** San Francisco, Seattle

## Next steps for the county

- Hire a consultant to conduct study

## Roles and responsibilities

### County

★ Lead enforcement at the generator level

### Cities

Better enforce existing requirements, potentially implement county requirements

### Legislature

Pass legislation that bans landfill disposal of recyclables and organic/methane-generating materials

### MPCA

Lead enforcement of landfill disposal ban, better enforce existing state commercial recycling law

### Haulers

Check for compliance and notify customers of contamination

### Residents and businesses

Participate in recycling and composting programs

## Background and additional details

### Mandatory participation goes above and beyond basic recycling requirements

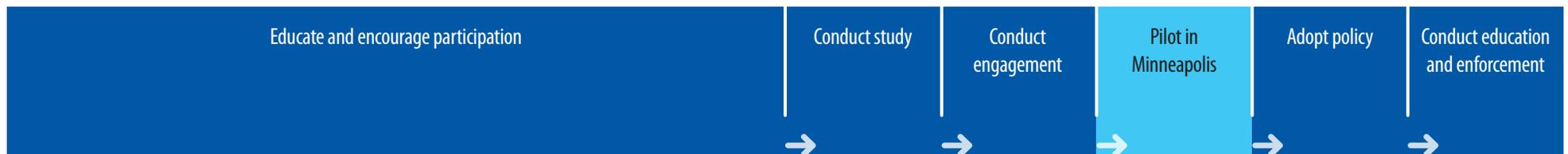
The Zero Waste Plan includes an action to work with cities to adopt requirements that would ban recyclable or organic materials from the trash and mandate the separation of recyclables from the trash by residents and businesses. Enforcement would occur through inspections.

Several zero-waste leaders have implemented stringent mandatory recycling ordinances with fines for noncompliance and improper recycling that go far beyond the county's targeted approach in the recycling ordinance (ordinance 13). For example, San Francisco conducts regular inspections of waste bins to ensure proper sorting, and if violations are identified, warnings or fines are issued. The city has a tiered system of penalties with escalating fines for repeat offenses. This approach is in stark contrast to recycling requirements that go largely unenforced, such as the Minneapolis 2011 commercial recycling requirement and the state's 2016 commercial recycling law.

### Vocal opposition should be expected

The implementation of mandatory recycling requirements has faced pushback and negative reactions in various communities. Critics often cite concerns about perceived infringements on personal freedom or increased government intrusion. Some individuals may find the additional effort required for sorting and separating recyclables burdensome or inconvenient. Others argue that the penalties associated with non-compliance can be overly punitive and regressive in nature. Additionally, there may be confusion or dissatisfaction with the specific guidelines for what can and cannot be recycled. For these reasons, it's recommended this strategy is pursued after earlier strategies have been implemented.

## Key steps



# Ensure every individual has equitable access to zero-waste tools



Expand program reach and multicultural outreach, develop a rate assistance program, establish an equity panel, address litter, increase green jobs, and fund community-centric solutions.

## Overview

**Why this is needed:** Support equitable access to services and community leadership in solutions.

**Diversion potential:** 16,000 tons

**Timeline:** In progress and ongoing. Implementation on some Zero Waste Plan actions, such as the Apartment Recycling Champions, has already begun.

**Cost:** \$3 million to \$5 million per year for program development and implementation, promotions, and contracts with community organizations. Staffing to administer the program.

**Examples of leaders:** Toronto, New York City, Austin, TX

## Next steps for the county

- Reallocate staff resources
- Further research best practices and community ideas identified in the plan

## Key steps



## Roles and responsibilities

### County

★ Partner with community groups and cities to improve access and increase education, outreach, and programming

### Cities

Collaborate with the county and community groups on implementation

### Haulers

Ensure adequate service is provided and accessible to residents in multifamily housing and small businesses

### Legislature

Provide additional funding for waste prevention and diversion programming and initiatives

### Residents and businesses

Participate in programs

## Background and additional detail

In June 2020, the Hennepin County board passed a Board Action Resolution that declares racism as a public health crisis that affects the entire county. This declaration supports the county's foundational work to develop strategies that mitigate personal bias and prejudice in the community, create systems that build equity, and reach a vision of a future where all residents are healthy and successful and all communities thrive.

Hennepin County is committed to making sure that pollution does not have a disproportionate impact on any group of people – the principle of environmental justice. This means that all people – regardless of their race, color, national origin or income – benefit from equal levels of environmental protection, have opportunities to participate in decisions that may affect their environment or health, and have equitable access to zero-waste tools.

Throughout the zero-waste planning process, county staff, community members, and industry stakeholders identified the following communities as being unfairly burdened by the current system: Black, Indigenous and other people of color (BIPOC), families with low-income, residents with disabilities, and youth. This is especially prevalent for residents who live in cities with solid waste facilities, multifamily housing units or rentals, areas with high rates of illegal dumping and litter, densely populated communities or those by busy roads that experience more trash truck traffic, and areas affected by cumulative health impacts from multiple sources of pollution.

*(continued)*

# Ensure every individual has equitable access to zero-waste tools

Program

Inequity in the system places unfair economic burdens or costs on some communities, results in uneven access to services and opportunities, and creates pollution that is unfairly borne by certain communities and neighborhoods. This includes the impacts that facilities such as HERC and landfills have on their adjacent communities.

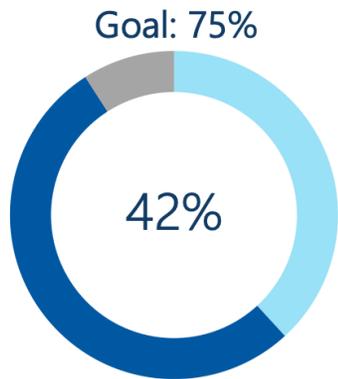
Creating an equitable zero-waste system will require all communities in the county to contribute equitably to the effort. If only a portion of the county has access to programs that lead to zero waste or all the negative impacts of waste diversion are borne by a sector of the community, zero waste will not be achievable nor will the system be equitable.

# Tracking progress toward zero waste

The resolution directed a plan to accelerate the closure and repurposing of the Hennepin Energy Recovery Center (HERC) that complies with state law, does not increase landfilling, and remains focused on climate and equity. The only way to accomplish this is to aggressively pursue zero-waste policies, programming, and infrastructure – with state leadership and in partnership with cities. Using this direction as guideposts, staff recommend establishing a zero-waste dashboard to define the criteria to be met to responsibly close HERC and to identify 22 policy changes that need to be passed by the state legislature to realize this zero-waste future. Staff will report to the board annually on the progress toward these metrics.

## Zero-waste dashboard

Recycling rate



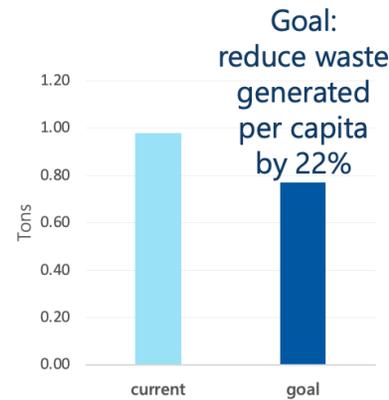
✓ Meets state statute

Amount of food, paper and other biogenic materials in the trash



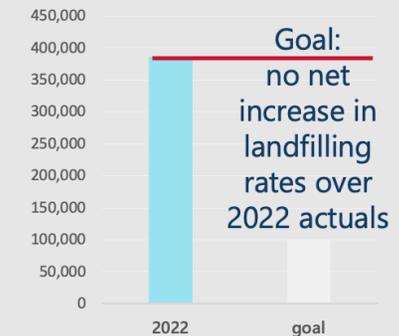
- ✓ Climate-driven
- ✓ Critical to meeting recycling goals

Waste generated per capita



- ✓ Climate-driven
- ✓ Critical to meeting zero-waste goals

Landfill rates



- ✓ Climate-driven
- ✓ Critical to meeting zero-waste goals

The zero-waste dashboard includes four metrics. The following summarizes the rationale for including each metric in the dashboard.

**1. Recycling rate: Progress toward the state-mandated goal of 75% recycling rate.**

Keeps the county in compliance with state law and tracks progress toward zero-waste goal.

**2. Percent of food, paper and other biogenic materials in the trash: Establish a goal of 10% or less.**

Targets materials that make up the largest portion of our trash and focuses on getting biogenic materials out of landfills, which become a big climate problem when they break down. Preventing or recycling these materials are keystones for meeting climate and zero-waste goals.

**3. Waste generated per capita: Reduce waste generated per capita by 22%.**

This metric helps us track progress toward transforming our solid waste system from a linear process that consumes natural resources and prioritizes disposal to a circular economy that values materials and their reuse. This metric is important for achieving both zero-waste and climate-action goals. The consumption habits of Americans are driving greenhouse gas emissions around the world. We need to change our behaviors and practice more thoughtful consumption to reduce the climate impact of what we buy and how we dispose of it.

**4. Landfill rates: Establish a red line – no net increase in landfilling over 2022 actuals for landfilling rates.**

If we do not succeed in advancing zero-waste actions, we risk increasing landfilling and going in the wrong direction for climate. Landfills have been identified by climate scientists as a major contributor to our climate crisis. Establishing a metric to not increase landfilling rates over 2022 actuals of 357,000 tons makes it clear to our legislative partners and environmental advocates that the county will not accept closure or repurposing of HERC if it results in shipping more of our trash to landfills in other communities.

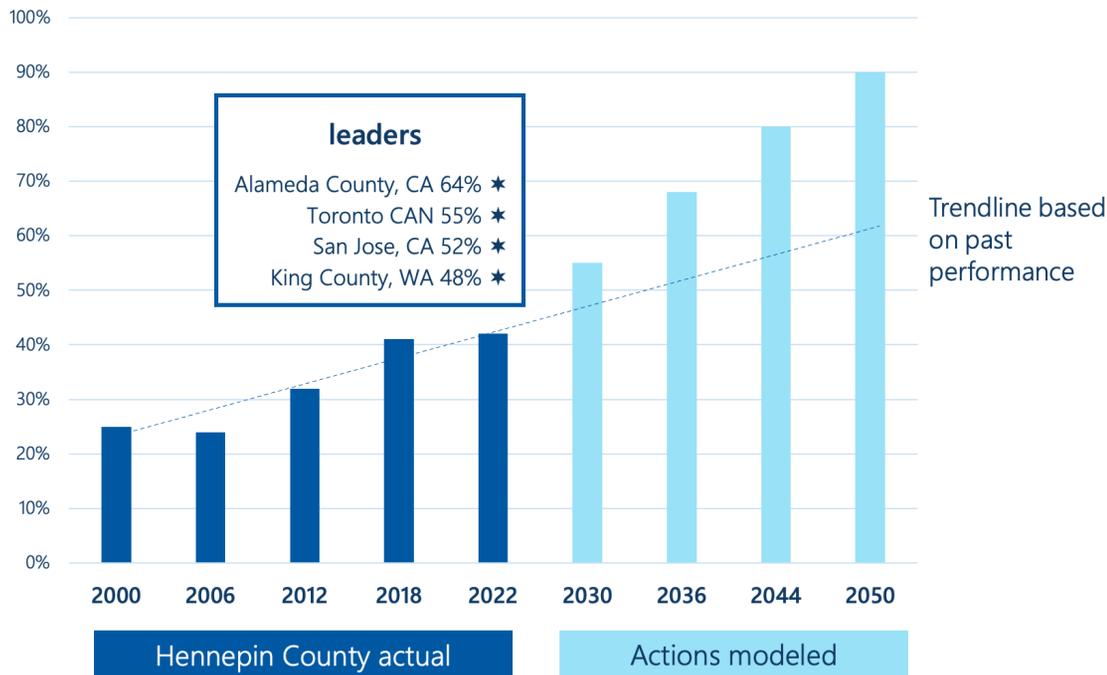
## State legislative policy dashboard

In its 2024 state legislative priorities, the Hennepin County Board of Commissioners is promoting a zero-waste and clean-energy future to help the county meet its climate-action goals and to ensure the timeline for closure of HERC between 2028 and 2040. To achieve these priorities, the county's Intergovernmental Relations team is leading a multi-session campaign to advocate for state leadership to put Minnesota on-par with national zero-waste leaders. In the upcoming 2024 session, the county has prioritized these four actions for inclusion on a 2024 legislative session dashboard:

1. Pass the Packaging Waste and Cost Reduction Act (extended producer responsibility bill).
2. Redirect the Solid Waste Management Tax (SWMT) going to the general fund to SCORE grants.
3. Invest in a recycling recovery facility.
4. Make it easier for local governments to have a higher level of control over hauling and processing systems.

## Progress and comparison to zero-waste leaders

The county further modeled potential recycling rates resulting from these actions. The model includes the county's progress based on previous results and comparisons to zero-waste leaders that were evaluated in the development of the Zero Waste Plan. The following chart shows the diversion rate achieved by long-time zero-waste leaders ranges from 48% to 64%. The Zero Waste Plan system gaps analysis identified state-level zero-waste policies and a higher level of government control over the solid waste system as key defining factors for these high performing leaders.

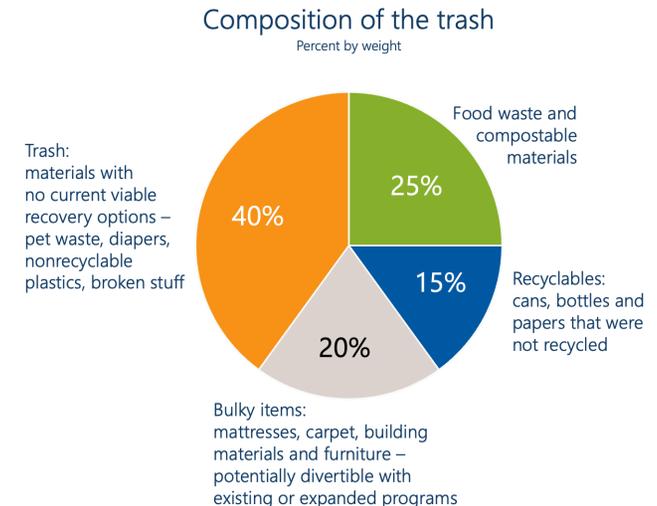


The dark blue bars show the county's recycling progress over the past 20 years. The trendline to 2050 is based on past performance. The light blue bars show the recycling rate goals we need to meet to achieve zero waste, defined by the county as 90% diversion rate from landfills or incinerators.

The county has done all the easy things, and even those things took a long time. Without a dramatic shift in priority at the state level to advance zero-waste policies that give government greater control over solid waste system, the historical data trends project no more than 1% percent increase in recycling rates per year and an expected plateau after 50% recycling is achieved.

## There is still a lot of trash in our trash

Waste composition studies show that approximately 25% to 30% of what is currently trashed is organic material, which includes food waste and other compostable materials. Another 15% is recyclable – this is cans, bottles, and paper that were not recycled – and 20% is bulky items that are potentially divertible with existing programs, such as mattresses, carpet, building materials, and furniture.

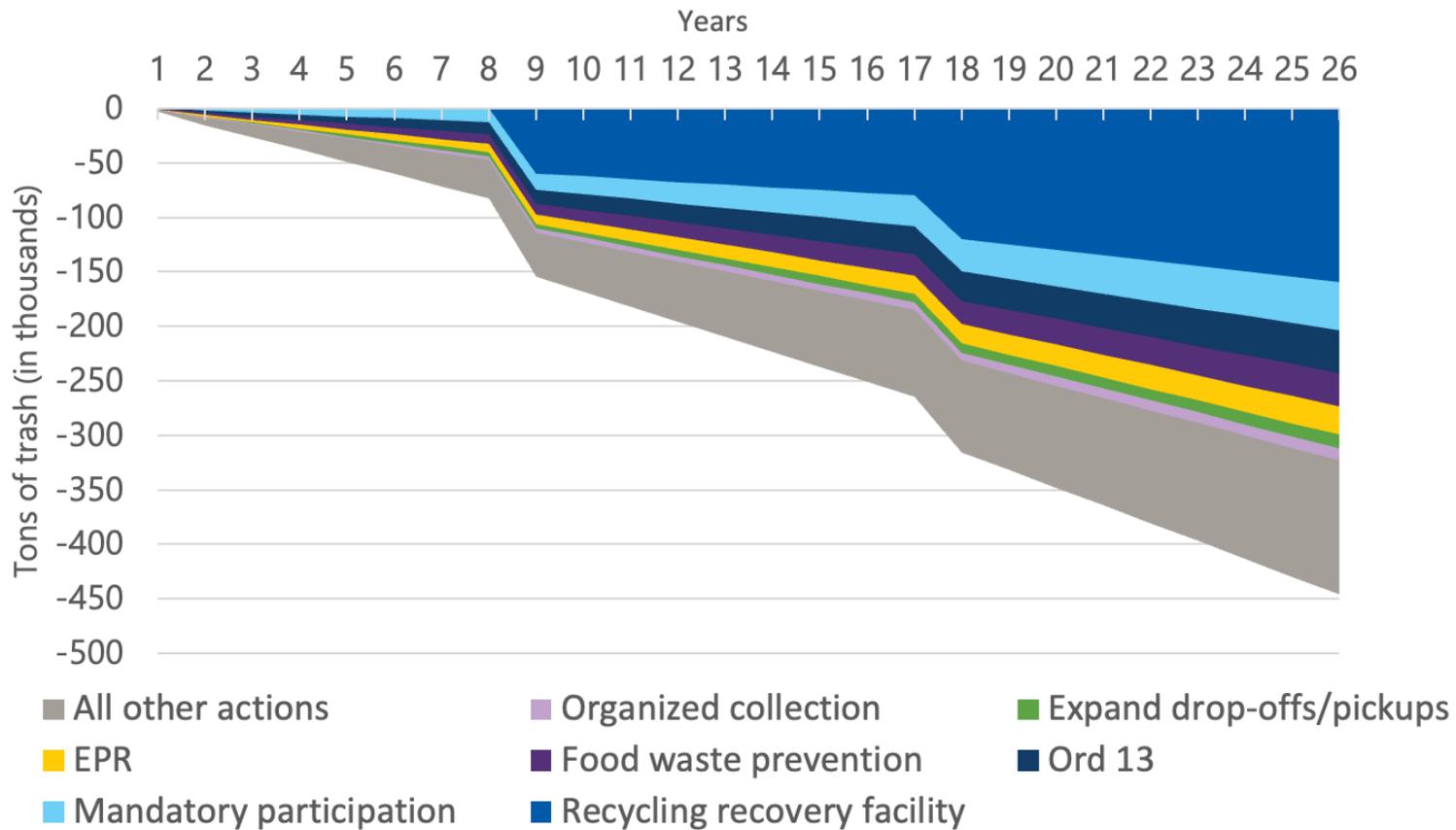


There is also still a lot of trash – or materials for which the county does not currently have viable recovery options – in the county's waste stream. This trash, which represents 40% of the waste generated, includes pet waste, diapers, hygiene products, nonrecyclable plastics, and broken and unwanted stuff. Until state or national policies are in place that lead to market development for these hard-to-recycle items, we will still have a significant amount of trash to dispose.

# Potential for highest impact actions to divert trash and reach zero-waste goals

County staff refined the Zero Waste Plan model to show the highest impact actions individually and the incremental progress to be expected. The time it will take to achieve these actions will depend on how quickly zero-waste policies are adopted and the level of funding for implementation. The rate of progress will also depend on how fast infrastructure can be planned, sited, designed, and built and the overall societal commitment to reducing waste.

## Trash diversion by year from implementing the zero-waste actions



## Background and additional detail

The Zero Waste Plan consultant used a dynamic zero-waste planning model to calculate the potential impacts of the plan's actions on the county's overall diversion rate. The model is based on Hennepin County's two-year average generation, disposal, and diversion tonnages, relies on U.S. Census data for population and household counts, and incorporates data on waste composition from past studies conducted in Hennepin County, the City of Minneapolis, surrounding counties, and the State of Minnesota.

Each of the 62 actions were included in the model to estimate each action's impact on generation, diversion, source reduction, and disposal. Model impacts are cumulative and include dependencies between actions. The underlying zero-waste model assumes that all the actions have not only been implemented, but that they have been implemented successfully and effectively. For example, the modeled impacts assume that extended producer responsibility (EPR) legislation is not just advocated for, but that a well-designed and effective EPR policy is adopted at the state level and implemented across Minnesota. The model outputs, including the range of estimated impacts for each action, is included in Appendix B of the Zero Waste Plan.

The county refined the model to apply a timeline for implementation (see chart on page 30). The county used the high side of tonnage estimates, assumed almost perfect implementation, and modeled impact on tons of trash to be diverted by 2050. The following is a comparison of the assumptions behind the models.

Zero Waste Plan modeling by RRS consultants	Zero-waste action implementation modeling by county staff
Range of tonnage estimates (high and low)	High side of tonnage estimates
All actions implemented	All actions implemented, all actions starting in year 1, and fully resourced
Assumes perfect implementation	Assumes almost perfect implementation
500,000 tons diverted by all actions	446,000 tons diverted by all actions
77% to 83% recycling rate	76% recycling rate
No timeline provided	By 2050

## Section II: Operational considerations and actions to close and repurpose HERC

In addition to prioritizing action items that would accelerate zero waste, the board resolution identified parameters to address in a closure plan. The following section outlines the actions that would need to be completed to stop incinerating trash, including considering alternative locations for trash disposal and a sequence of key events that would follow a board resolution directing County Administration to repurpose HERC or stop incinerating trash on a certain date. This action would then trigger a cascading sequence of steps to accomplish this direction, all of which would have financial, legal, and environmental impacts.

These considerations and actions were based expertise and understanding of the current solid waste system. Additional information can be found in the report *HERC and its role in the solid waste system*. Many of the considerations and actions will depend on when the HERC closure process is initiated, the progress toward successful implementation of the zero-waste actions and ultimately, how much trash remains at that time.

As part of the county's due diligence in operating the solid waste system, staff will continue to communicate significant changes in the solid waste system as it relates to actions in this section.

### Board resolution parameters

BE IT FURTHER RESOLVED, that the Plan should include: (1) an estimated timeline, (2) estimated financial requirements, and (3) foreseeable environmental consequences related to the following:

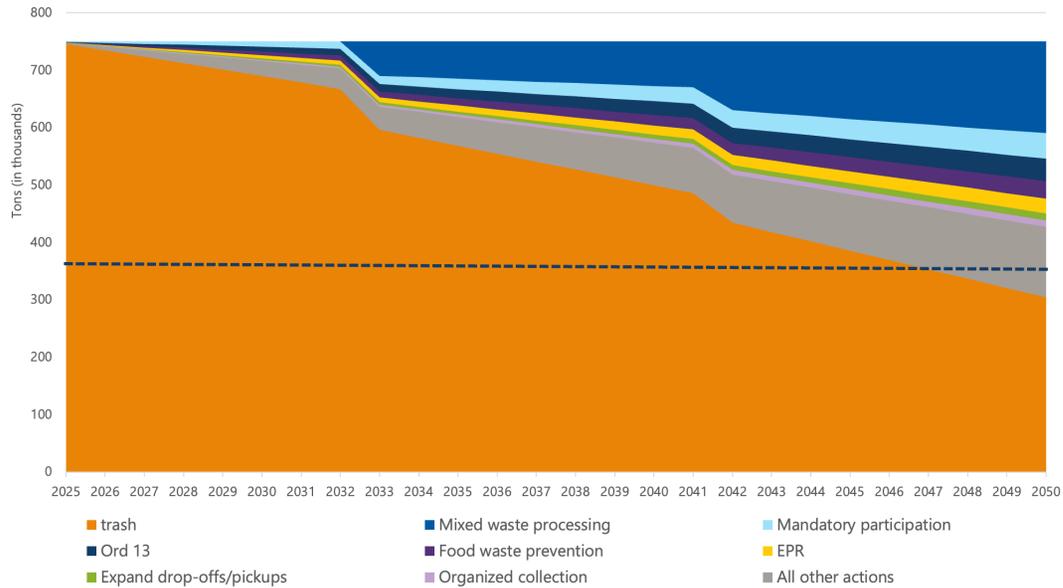
- a. prioritization of the county's Zero Waste Plan action items that would accelerate the achievement of zero waste in Hennepin County (page 1- 26)
- b. decommissioning of the HERC facility;
- c. transitioning the labor force currently working at the HERC and other labor connected to HERC;
- d. land disposition after HERC is decommissioned;
- e. paying HERC's existing debt service;
- f. future of Brooklyn Park Transfer Station;
- g. alternative waste disposal methods for the waste generated across the county;
- h. ongoing natural resources and climate action programming;
- i. timeline mapping out future legislative agenda items and priorities to fund natural resources and climate action programming, closure of the HERC and payment of related debt service

## Alternative disposal locations for the trash generated

After waste reduction, reuse, and recycling, the remaining materials would be disposed of in a landfill. Since there are no active landfills in Hennepin County, upon the closure of HERC, trash generated in the county will be disposed of at landfills outside of the county.

### Projected trash tons to dispose while accelerating zero-waste actions

HERC can process up to 365,000 tons per year



To understand how much trash is expected to require disposal as the county pursues zero-waste actions, the county used the projected trash diversion potential of the zero-waste actions (See the chart on page 30) and applied it to the current amount of trash discarded, which is approximately 750,000 tons per year.

Future trash projections (year)	2028	2034	2040
Tons of trash discarded	735,000	667,000	513,000

The chart above shows the amount of trash requiring disposal over time in orange. The significant decrease in trash in 2033 shows the impact of the first recycling recovery facility becoming operational. The additional decrease in 2042 is also related to the recycling recovery facility. As artificial intelligence improves, the county anticipates an additional capital investment to upgrade equipment in the facility to further capture more recyclables. The remaining actions are projected to have a linear increase in trash diverted as implementation improves over time.

The dotted line on the chart shows how much of the trash could be processed at HERC (up to 365,000 tons/year) to reduce the amount of material that would require landfilling. To effectively show the impact of the zero-waste actions over time on the amount of trash diverted, these projections do not account for population growth on the amount of total trash discarded.

Even with this incredibly optimistic projection of how fast and how well we can implement these actions, we will still have a lot of trash to dispose while advancing zero-waste actions.

## Metro area landfill and transfer station capacity

If trash diversion projections from successful implementation of high-impact zero-waste actions come to fruition, it is anticipated that there is enough designed landfilled capacity and permitted transfer capacity to manage the trash generated in Hennepin County at metro area landfills through 2040. This depends on these landfills successfully completing Certificates of Need and the permitting process for waste, which is expected to exceed the 2020 Certificate of Need allocation.

It is anticipated that trash from the county would be disposed in the following metro area landfills.

Name	Owner	Additional awarded capacity in 2020 permitted status	Miles from the Hennepin County Government Center	Located in an area of concern for environmental justice
Burnsville Landfill	Waste Management	1,692,893 tons awarded and permitted	17	Yes
Elk River Landfill	Waste Management	Operating under current existing permitted capacity	38	No
Pine Bend Landfill, Inver Grove Heights	Republic Waste Services	2,398,764 tons awarded, in process for permitting	22	No
Dem-Con Landfill, Shakopee	Dem-Con	627,244 tons awarded and in process for permitting	32	Yes
Rich Valley/ Inver Grove Heights Landfill	Waste Connections	893,889 tons awarded. Have not begun process to permit.	22	No

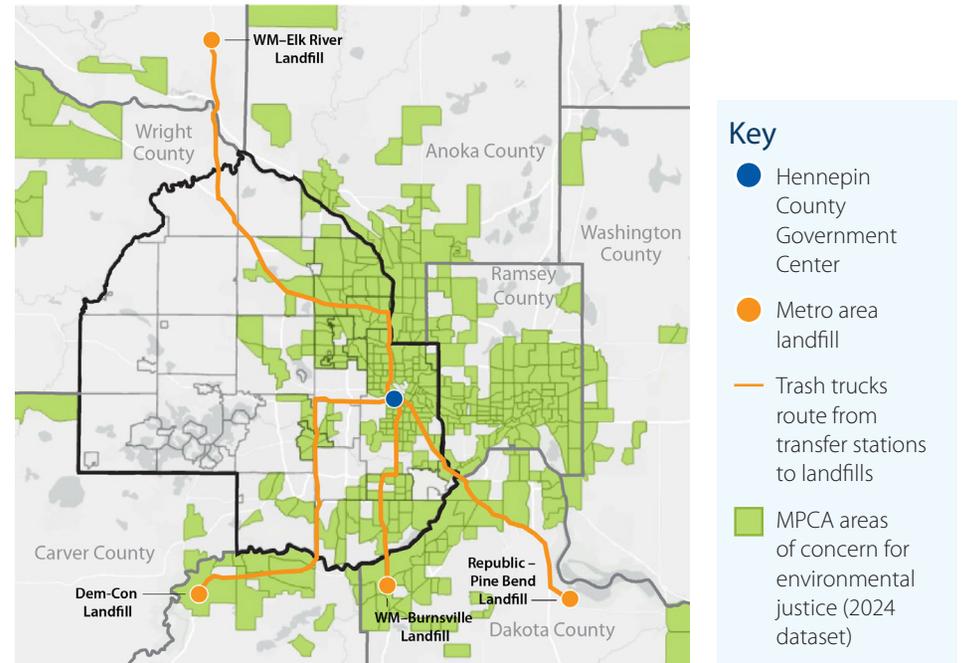
Additional out-of-metro-area landfills include Waste Management’s landfills in Lake Mills and Spirit Lake, Iowa and Republic Services’ landfill in Sarona, Wisconsin.

About 75% of the trash delivered to HERC comes from Minneapolis residents and businesses. The remaining 25% is residential trash from primarily Bloomington, Champlin, Deephaven, Excelsior, Hopkins, Loretto, Maple Plain, Medina, Minnetonka Beach, Osseo, Richfield, Robbinsdale St. Bonifacius, St. Louis Park, Tonka Bay, and Wayzata.

Because of their proximity to Hennepin County, it is anticipated trash being delivered to the Burnsville and Dem-Con landfills will be delivered by a combination of direct haul and transfer trailers. Trash from Minneapolis is likely to be hauled to a transfer station, then loaded into semi-trailers and disposed at Burnsville and/or Pine Bend landfills. Trash from Bloomington, Edina, and Richfield would most likely be hauled directly to the Burnsville Landfill. Trash from Eden Prairie and cities located around Lake Minnetonka would most likely be hauled directly to the Dem-Con Landfill. Trash from the remaining cities would

be hauled to a transfer station and disposed of at the Elk River or Pine Bend landfills, based on which hauler picks up the waste. The map below depicts the location of these landfills and the likely route the trash would travel, shown in orange, in relation to areas of concern for environmental justice, shown in green.

## Location of landfills in relation to areas of concern for environmental justice



Source: Hennepin County, MPCA

The county has identified eight permitted transfer stations that are likely to be used to transfer waste from Hennepin County to metro area landfills. The eight transfer stations have a permitted annual capacity of 1,144,300 tons. In 2022, these stations transferred 615,543 tons. Given that the permitted capacity exceeded the 2022 actuals by 528,757 tons, it is likely that additional transfer station capacity would not be required in the short- to mid-term to manage the 425,000 tons currently managed through the county’s Brooklyn Park Transfer Station and hauled directly to HERC. Transfer capacity may be strained in the longer term if HERC no longer processed trash, Brooklyn Park Transfer Station was repurposed and no longer transferring trash, and trash generation continued to grow due to population increases and/or lack of progress toward zero-waste. Because of uncertainty of its future operations, the county did not include the Brooklyn Park Transfer Station, which has a permitted capacity of 273,000 tons,

in its trash flow projections. A transfer station located in Dakota County was also excluded due to its proximity to a landfill. This transfer station would most likely be used to transfer waste to landfills outside of Minnesota.

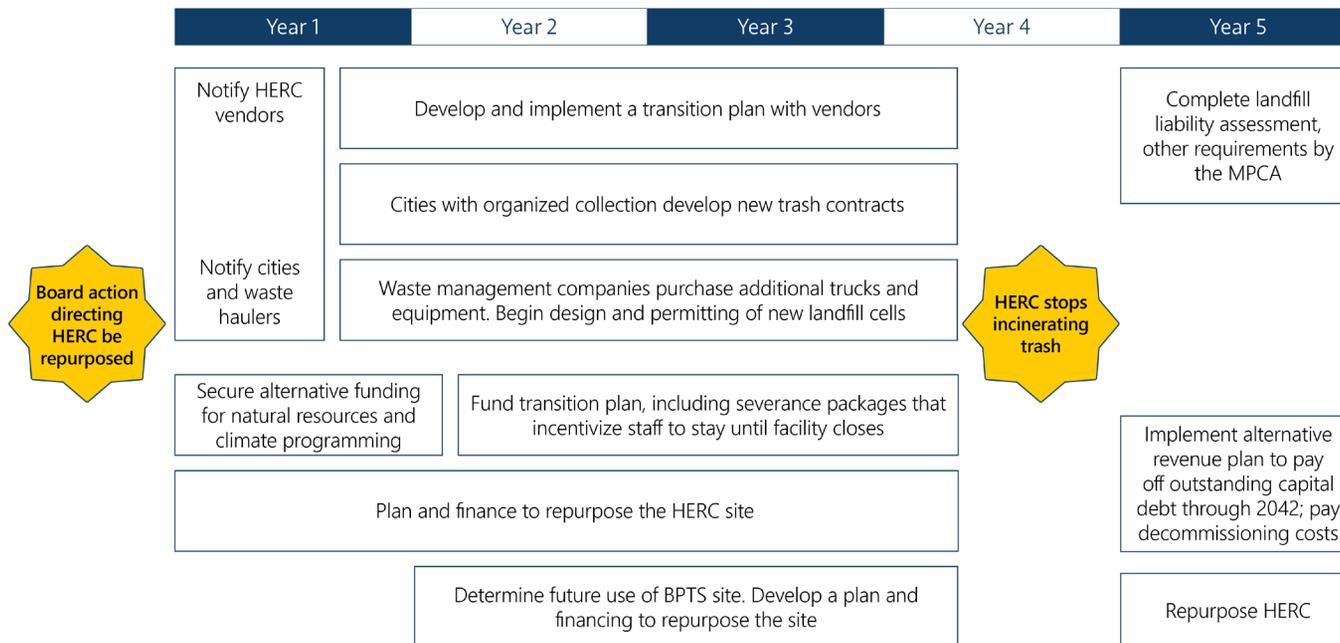
Companies that own the four metro area landfills control 66% of the transfer capacity. The remaining 34% of transfer capacity is controlled by two companies that do not own local landfills. Larger independent haulers expressed concern that when HERC is closed, they could be priced out of competition if their only options are landfills owned by the two big national waste companies.

## Key sequence of operational steps

The following section provides an overview of the key operational steps that would need to be completed to stop incinerating trash at HERC at any point in time. The order of these steps and estimated timeline to complete are also included.

The first set of steps includes what would happen were the board to pass a resolution directing County Administration to repurpose HERC or stop incinerating trash on a certain date. This action would trigger a cascading sequence of steps to accomplish this direction. The second set of actions would happen after HERC stopped incinerating trash.

The following graphic depicts these two key actions with yellow stars and then shows a sequence of actions up to five years. A five-year timeline has been identified by staff, cities, and haulers as the maximum time needed to minimize disruptions to the solid waste system to close HERC. A one-year timeline would be the minimum notice needed.



## First set of steps

### Notify vendors of contract cancelations

The county manages various contracts to operate HERC and recover resources. To terminate the contracts, a County Board Action directing the HERC operator to stop incinerating trash on a certain date, or when processible waste falls below a certain amount, must occur. When negotiating these contracts, the county sought to mitigate potential liability if the county needs to terminate these contracts early due to federal, state, or county action. In summary, the minimum notice needed to terminate the operations agreement with Great River Energy HERC Services and the steam service agreement with Energy Center Minneapolis (Cordia) because of a county action is 365 days.

The following is a summary of the early termination clause by each contract.

#### Contract summaries

##### Great River Energy HERC Services, LLC (GREHS)

For management, operation, and maintenance of HERC.

Expires December 31, 2025. Planned execution of new contract with a term through December 31, 2033.

Summary of out clauses in proposed contract:

- If federal or state law significantly restricts or eliminates the county's ability to operate HERC, thereby reducing the delivery of solid waste to HERC to zero or nearly zero, the county can terminate the agreement early by providing 180 days written notice to GREHS. Such a termination would be treated as an early expiration of the agreement rather than a default by the county. This clause is intended to cover circumstances beyond the county's reasonable control.
- If the county itself acts to decommission HERC, because it has achieved zero waste for example, the county can terminate the agreement early by providing 365 days written notice to GREHS. As with termination due to state or federal action, this termination will be treated as an early expiration and not a default.

In either scenario, the county and GREHS would develop a transition plan to cease waste-to-energy operations in a safe and orderly manner. The county could also elect to engage GREHS in developing and/or managing a decommissioning plan which could, but does not have to, include demolition/redevelopment, full or partial site remediation, and/or repurposing of the site. To ensure an orderly cease of operations and possible decommissioning process, the county would provide GREHS with a severance payment for GREHS to incentivize existing staff to remain in their positions through those processes.

##### Energy Center Minneapolis LLC

Steam service agreement with the downtown district energy provider.

Expires: March 2, 2025. Planned execution of new contract with a term through December 31, 2033.

Summary of out clauses in proposed contract:

Similar to the operation and maintenance contract with GREHS, this agreement may be terminated early by the county:

- If federal or state law directly or through substantial economic effect prevents the county from providing steam under the agreement. The county could then terminate the agreement without any liability. This clause is intended to cover circumstances beyond the county's reasonable control.
- If the county itself acts to decommission waste-to-energy processing at HERC, making it impossible to provide steam under the agreement, it could terminate the agreement early providing Energy Center Minneapolis with at least one year's written notice of its anticipated need to terminate. As with termination due to state or federal action, this termination will not confer liability on the county.

##### SKB

Disposal of ash; metal-recovery services

Expires: December 31, 2025. Planned execution of new contracts with terms through December 31, 2033.

Summary of out clauses: Not applicable. The county has no obligation through these two contracts if HERC is not operational, where no ash is produced and there is no metal to recover.

## Twins Ballpark LLC

Sale of steam to heat spaces in the ballpark

Expires: 2040

Summary of out clauses: The contract calls for the county to be responsible for the cost of securing and connecting replacement steam service; however, the ballpark is already connected to the downtown district energy system, so there would be no additional cost. The county is required to give the Twins immediate notice of such a closure and will make diligent efforts not to disrupt or otherwise interfere with the normal operations of the ballpark.

## Power Purchase Agreement

Electricity sales

Expires: December 31, 2024

The county's power purchase agreement with Xcel Energy expires at the end of 2024. The county is exploring alternative paths to selling its electricity.

## Project for Pride in Living LLC

HERC apprentice/workforce development project

Expires: July 31, 2024. Renewed annually until the year prior to HERC closure or repurposing.

Summary of out clauses: N/A – annual contract terms

**Estimated timeline:** One month to notify all vendors.

## Notify cities, landfills, and waste haulers

Cities, not the county, are responsible for ensuring that “every residential household and business in the city or town has solid waste collection service” (Minn. Stat. § 115A.941 (a)). Upon a board decision to end waste-to-energy operations at HERC, the county would need to notify the following cities that currently contract with waste haulers to deliver residential trash to HERC: Bloomington, Champlin, Deephaven, Excelsior, Hopkins, Loretto, Maple Plain, Medina, Minneapolis, Minnetonka Beach, Osseo, Richfield, Robbinsdale, St. Bonifacius, St. Louis Park, Tonka Bay, and Wayzata. Many of these cities have five-year contracts in place for this service and have requested as much notice as possible to arrange for alternative disposal at a landfill.

Upon a county decision to end waste processing at HERC, private landfill owners will need to begin procurement processes to purchase more trucks and equipment. They would also begin the process to design and permit new landfill cells. Landfills will require improvements to infrastructure, such as roadways and scalehouses, to handle the added deliveries of the county's waste.

The county would also notify the 60 waste haulers with contracts to deliver trash to HERC. These are receivable contracts that the county can terminate upon 30 days' written notice.

**Estimated timeline:** One month to notify parties. Up to two years for landfills and waste haulers to purchase trucks and equipment. Up to four years to design, permit, and build new landfill cells.

**Estimated financial requirements:** The City of Minneapolis will experience the greatest financial impact when HERC closes. The city should expect a significant increase in tipping fees each year and additional administration, equipment, labor, and fuel costs.

Financial impacts on businesses and the 16 suburban cities that contract with waste haulers to dispose of residential trash at HERC is unknown, but cities that responded to the request for input overwhelmingly believe that disposal costs will increase significantly. The county and cities cannot foresee how trash disposal fees at landfills will change, but in a completely privatized solid waste market, it is certain that the county would have no influence on the tipping fees the private sector disposal sites charge. In the end, customers will, in all likelihood, pay more.

**Environmental consequences:** The environmental consequences can be determined by knowing the following information at the time of disposal:

- What fraction of the trash being disposed in a landfill is food, paper, and other biogenic material that would break down in a landfill and produce carbon dioxide and methane.
- How methane gases are managed at landfills where the trash will be disposed – whether the gases are flared or if the landfills have added renewable natural gas plants.
- How much of the energy consumed in our region is renewable. As more energy in the state is generated from renewable sources, the climate benefits of waste-to-energy will decrease. Currently, 34% of our region's electricity is generated from renewable sources, so waste-to-energy is still offsetting a fraction of the fossil fuels burned for energy.
- How much metal remains in the trash and the amount of metal that can be recovered in a recycling recovery facility. Currently, the amount of metal that can be recovered from the trash through a recycling recovery facility is less

than what is being recovered from HERC. Incineration recovers metals that could not otherwise be separated and recovered. Additional metal, including valuable non-ferrous metal, can be recovered from the ash through further screening.

- The conclusion to the MPCA's PFAS monition plan and recommended minimization strategies to reduce PFAS released into the environment. PFAS in landfills can migrate into the leachate, which is often treated at a wastewater treatment facility. Few existing removal systems installed at landfills or wastewater treatment plants are capable of removing PFAS, creating the potential for PFAS to be discharged into surface water with the treated wastewater. Thermal destruction is among the mitigation technologies suggested by the U.S. Environmental Protection Agency (EPA) to control PFAS in air emissions. HERC, along with 144 other waste facilities, is likely to be asked to participate in the MPCA's PFAS monitoring plan, which would involve collecting and analyzing PFAS air emissions data in HERC's annual emissions test. This data will help the MPCA and federal agencies develop minimization strategies to reduce PFAS releases into the environment. Results of this data collection effort are expected in 2025.

## Secure alternative funding for natural resources and climate action programming

State statute does not allow the county to use revenue from traditional solid waste activities to fund natural resources programs. However, a specific statute does allow the county to use the sale of electricity and recovered materials from HERC to fund these programs. Currently, HERC electric and material sales are the primary sources of funding for these important climate-driven programs.

Upon HERC's closure, the county will need to implement one or more of the following solutions to cover the resulting funding gap:

1. Obtain additional state revenue
2. Propose and implement new sources of funding
3. Use property tax revenue
4. Scale back natural resources programming

**Estimated timeline:** Years 1 and 2, depending on when the action to stop incinerating trash or repurpose HERC falls during the year-long budgeting process. The new financial strategy should be completed no later than when HERC stops accepting trash and collecting tipping fees.

**Estimated financial requirements:** To be estimated based on electrical revenues generated at time upon decommissioning of the waste-to-energy operations at HERC.

**Environmental consequences:** The county has been ramping up our natural resources programming, including pursuing the one million trees goal and preserving 6,000 acres of natural areas with conservation easements. The funded staff positions have allowed the county to aggressively pursue state and federal dollars to further leverage this work.

## Develop and implement transition plan for the labor force

As identified in the HERC report, a total of 352 jobs (as of 2023) are associated with HERC. The county would develop and implement a transition plan for this labor force upon board action to repurpose the HERC site. In general, county staff positions in natural resources would be funded through alternative sources of revenue, and the solid waste positions would be reallocated within the county's other operations. GREHS staff would receive a severance payment to incentivize staff to remain at their highly technical and skilled positions through the end of waste-to-energy operations at HERC. The various sub-contractor teams that work at HERC during maintenance outages would receive ample notice to secure alternative contracts.

**Estimated timeline:** Years 4 and 5

**Estimated financial cost:** The primary costs would be the severance payments as a part of transition plan to incentivize staff to stay until the facility closed, and the alternative funding sources for the natural resources staff.

## Plan and finance repurposing of the HERC site

As decisions and progress towards zero waste are made and details are better known, a comprehensive financial plan will be developed.

## Determine future of Brooklyn Park Transfer Station (BPTS), plan and financing to repurpose the site

The county's transfer station is located at 8100 Jefferson Highway in Brooklyn Park. This transfer station is used to unload trash from haulers in smaller trucks and reload it into larger vehicles for transport to disposal facilities, primarily HERC. In 2022, the county transferred 154,000 tons of trash through this facility. The county also uses this facility as a drop-off center for residents to dispose of hazardous items and to transfer organics to composting facilities. The county anticipates in the near-term this facility will continue to function as a transfer station. As progress is made on zero-waste actions, the county will explore how the facility could best support zero-waste infrastructure.

The central location of the transfer station provides an opportunity to efficiently collect and process organics and reduce emissions from transporting the material. The county also owns a property adjacent to the transfer station, the former Sheriff's Communications site that is no longer is being considered for an anaerobic digestion facility and could be repurposed for other zero-waste infrastructure.

Combining two or more of the following proposed uses at the BPTS and adjacent site could be the start of an innovation hub that focuses on material circularity in the county. Acquiring additional land could provide private-public partnership opportunities to further concentrate waste reduction, reuse and recycling activities in this area. A proposed zero-waste Innovation Hub could include one or more of the following:

### Recycling recovery facility

Staff recommendation is to pursue next steps for the development of processing waste to recover recyclables. At a recycling recovery facility, trash goes through a highly automated process that combines mechanical and optical sorting equipment to sort materials based on size, shape, and composition. Materials recovered from the trash include cardboard, metals, #1 and #2 plastics, and organic materials. There would still be trash at the end of the process that would require disposal.

As needs change, other zero-waste infrastructure options will be explored, including, but not limited to:

### Expand organics transfer capacity

BPTS has been used for organics transfer for almost 20 years. Because it was designed to manage only trash, some design changes are needed to improve how organics are received, inspected, stored, and transferred at BPTS. Modifications to the facility would make organics transfer more effective and efficient. The local organics composting sites are located on the outskirts of the southern metro area. Transporting organics directly from collection routes in northern Hennepin County to the composting sites takes more time and money for haulers, which can translate into higher costs for their customers. To support the cost-effective expansion of organics recycling, additional capacity is needed to receive, transfer, and process organics near to where the organic materials are generated and collected.

### Pre-processing of organics

Pre-processing of organics typically involves some combination of debagging, depackaging, size reduction, and removal of contamination. Pre-processing organics would enable the county to take advantage of two opportunities: producing very clean organics that would be a premium feedstock for any local organics processor and providing depackaging capability that would allow for the removal of organics from sealed packages. Depackaging capability at BPTS would create an outlet for the enormous amounts of expired and off-spec food products that get disposed on a regular basis. Depackaging is a critical need for helping food and beverage manufacturers, food distributors, and food retailers move toward zero waste.

## Salvage and reuse center

BPTS could serve as a building materials and bulky item drop-off facility for residents. Incoming materials would be sorted and evaluated for potential reuse and recycling. This would expand on the county's existing efforts to salvage cabinets, doors, light fixtures, windows, and other items.

It could also provide more options for reusing and recycling new types of bulky items, such as furniture. Reupholstery, refurbishment, and repair would extend the lifespan of those products, reduce waste, and support climate-action goals related to consumption.

The facility would also support the expansion of city collection programs by serving as a hub for material reuse and recycling. It could also house county surplus items and/or donated office supplies for schools to reuse.

By collaborating with established nonprofit partners, the county would support workforce development programs, meet the needs of individuals and families facing economic challenges, and create meaningful opportunities for community involvement.

## Plastics Recovery Facility

A Plastics Recovery Facility (PRF) is a facility that sorts, grades, and prepares post-consumer mixed plastic material by individual resin types. Most materials recovery facilities (MRFs), which are facilities that sort mixed recyclables, separate #1 and/or #2 plastics. Some MRFs send their sorted plastics to a PRF for further processing and "polishing" to achieve higher quality material separation.

Sorting plastic into individual resin types has important advantages. Additional sorting at a PRF increases the value of the plastic material. Recyclers also benefit from being able to purchase post-consumer plastic material of individual resin types. Since no further sorting is required, recyclers who purchase the commodities save time and resources.

## Second set of steps

This set of actions would happen after HERC stopped incinerating trash.

## Paying HERC's debt service

The county plans approximately \$5 million to \$6 million per year in capital improvement projects at HERC. These investments maintain the facility and preserve HERC's complex environmental controls to not only ensure compliance with air emission permit requirements but also to invest in emission reduction technology to achieve greater environmental performance for residents and safety measures for employees. As of December 31, 2022, the outstanding debt from capital projects was \$37.7 million, which would be fully paid off in 2042 (if it is not added to going forward). This indebtedness is through general obligation bonds tied to 20-year maturities. Currently, revenue generated by HERC pays this debt service obligation. When HERC no longer generates revenue, the county's Office of Budget and Finance would develop a plan to pay this debt.

## Landfill liability assessment or other MPCA requirements

HERC provides the ability for cities and public entities to dispose of solid waste through waste-to-energy, which is ranked higher on the state's waste management hierarchy than landfilling. As long as the county's solid waste management plan includes HERC as a strategy to reduce landfilling, cities comply with the county plan and the waste hierarchy by utilizing HERC. If cities were to shift toward landfilling while the county's solid waste management plan preferred waste-to-energy over landfilling, as the current plan does, those cities may need to plan for potential liability.

## Statutory compliance

### Implementing the MPCA's Metro Policy Plan

Minnesota statutes require metropolitan counties to create and follow solid waste management plans that implement the MPCA's Metropolitan Policy Plan. The Metropolitan Policy Plan "shall address the [the waste hierarchy]" (Minn. Stat. § 473.149) and set "quantifiable metropolitan objectives for abating . . . land disposal," which the county solid waste management plans must implement (Minn. Stat. §§ 473.149, subd. 2d; 473.803, subd. 1c).

The MPCA released their final Metropolitan Policy Plan on January 30, 2024, just two days before this plan was submitted to the county board. Staff will review the Metropolitan Policy Plan and communicate the process, timeline, and any associated risks presented by implementing the Metro Policy Plan with the county's solid waste management plan by February 29, 2024.

The MPCA may reject a county solid waste management plan that does not implement the strategies of the Metro Policy Plan. Ultimately, a rejected plan could lead to the loss of county SCORE funding (Minn. Stat. § 115A.557, subd. 3.)

### Restricting landfill disposal and certifying unprocessable waste

As part of the Landfill Abatement Act, the statutory "restriction on disposal" prohibits disposal of unprocessed metro waste at landfills unless the trash has been certified by a county or waste processing facility as unprocessable (Minn. Stat. § 473.848). Each year, the county must submit a certification report to the MPCA that includes: (1) how much county waste was not processed prior to disposal, (2) the reasons it was not processed, (3) a strategy for ensuring waste processing with a timeline for implementation, and (4) any progress in reducing unprocessed waste. *Id.*

Were the county to shut down HERC without either: (1) first significantly decreasing the amount of waste generated so that the county would not landfill more waste than it currently does and/or (2) replacing HERC with a facility that could process waste higher up on the waste hierarchy than either incineration or landfilling, the county would have to report that nearly all its waste is landfilled because HERC was voluntarily closed.

To the county's knowledge, no publicly owned waste-to-energy facility in Minnesota has been decommissioned when it could still successfully process waste higher on the hierarchy than landfilling. Under existing law, the MPCA has authority to regulate compliance with the landfill abatement statutes and to impose administrative penalties for violations of the restriction on disposal. See Minn. Stat. § 116.072 (authorizing the MPCA to issue orders and assess penalties for violations of chapter 115A); *BFI Waste Sys. of North America, LLC v. Bishop,*

*927 N.W.2d 314, 322 (Minn. Ct. App. 2019)* (finding that Minn. Stat. § 473.848, the restriction on disposal, is "an implementation arm of chapter 115A" and specifically of the waste hierarchy in Minn. Stat. § 115A.02). If the MPCA rejects two or more consecutive certification reports from the county, it is possible that the MPCA will seek to require the county to implement techniques for processing waste through its administrative powers (see Minn. Stat. 473.848).

To maintain compliance with the statutory restriction on disposal, the requirement to comply with the Metro Policy Plan, and the waste hierarchy itself, the county will need to significantly reduce its waste and replace HERC with a different waste processing facility before taking HERC offline.

### Increasing landfill capacity with Certificates of Need

The MPCA carefully monitors and restricts landfill capacity in the metro area. It will not permit a new landfill or increased capacity at existing landfills without first issuing a Certificate of Need (CON) finding that the additional disposal capacity is needed (Minn. Stat. § 473.823, subd. 6). The MPCA will only issue CONs if there are "no feasible and prudent alternatives" to landfilling, including "resource recovery." (*Id.*) While HERC is operational and part of the county's solid waste management plan, it could be difficult for the MPCA to approve CONs to dramatically increase metro area landfill capacities, since disposing of waste through landfilling would run contrary to the statutory CON process.

The need for CONs and landfill capacity would not be as great, however, (or be needed at all, potentially) if the county dramatically decreased its waste generation before transitioning away from waste-to-energy. If the county was able to maintain the "redline" against additional landfilling over 2022 levels (see page 27) because it achieved many of its zero-waste goals before repurposing HERC, then additional CONs – beyond those already projected – would likely not be required.

### Delegation of solid waste responsibilities and goals

The county may delegate solid waste responsibilities to cities, including the responsibility to implement aspects of the Metro Policy Plan, if it establishes a funding mechanism "to assure the ability of the entity to . . . adequately carry out the responsibility delegated" (Minn. Stat. § 115A.46). Similarly, counties are permitted to determine that the private sector may achieve the goals and requirements of implementing the Metro Policy Plan (Minn. Stat. § 473.803, subd. 5). Decommissioning HERC without replacing that infrastructure to continue implementing the Metro Policy Plan and meet its landfill abatement requirements would risk triggering the funding mechanism requirement for cities and could potentially cede solid waste management to the private sector, which currently lacks the capacity to process additional waste higher on the hierarchy than landfilling.

## Conclusion

This plan responds to the resolution to develop a plan to close and repurpose HERC and reinvent the solid waste system. Extensive information, analysis and recommendations have been provided over the past several months. There are many dependencies that inform the timeline to achieve a zero-waste future. These considerations and actions are based on staff's expertise of the solid waste system. This plan and the supplemental information and are available for review at [hennepin.us/solidwasteplanning#HERC](https://hennepin.us/solidwasteplanning#HERC).