

Reinventing the county's solid waste system

Board Briefing
January 25, 2024



Materials are posted online at:
hennepin.us/solidwasteplanning#herc





Reinventing the county's solid waste system

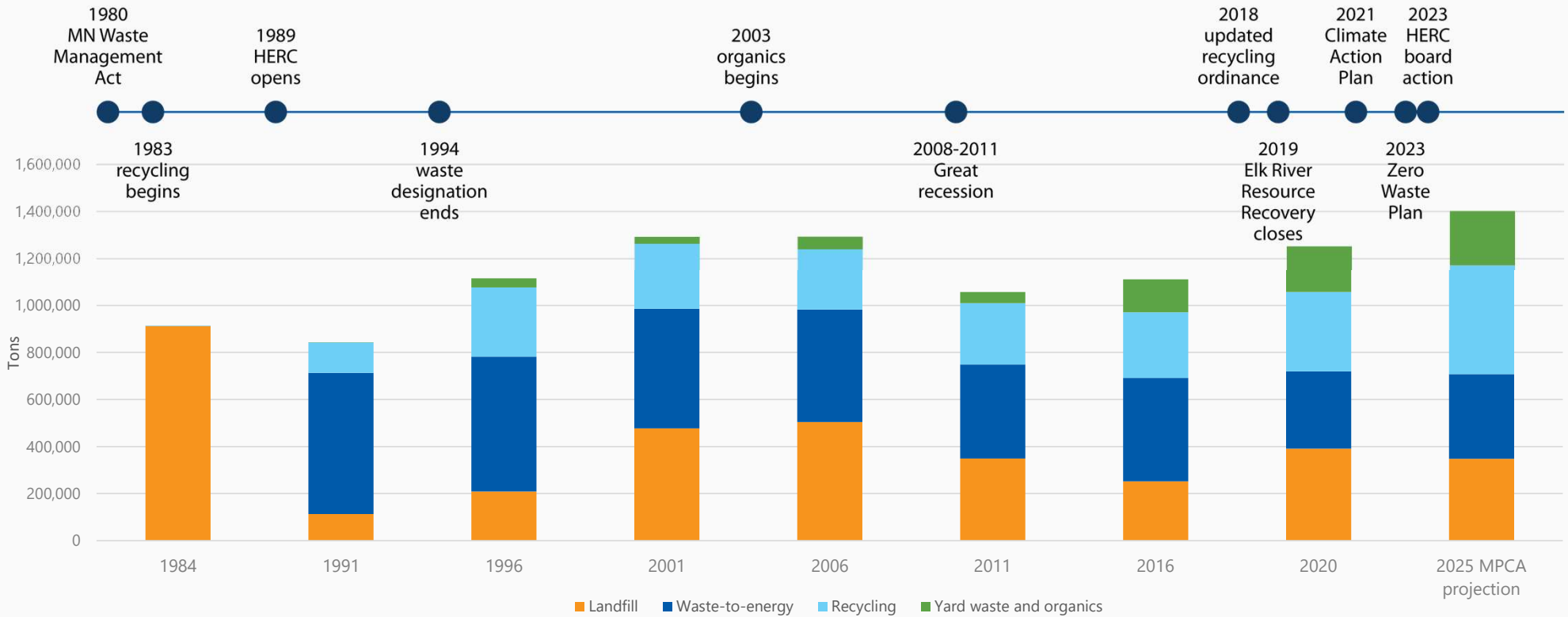
Hennepin County Board Briefing January 25, 2024



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



Waste management in Hennepin County



Review of board resolution 23-0384 R-1

1. Propose legislative priorities and platform items by December 1, 2023
2. Engage city elected officials and gather input – comments due January 15, 2024
3. Engage a consultant to assess viability of the county investing in renewable energy sources by February 1, 2024
4. Develop a HERC closure plan between 2028 and 2040 and submit to the board by February 1, 2024
5. Prepare contingency plans in the event of a sooner closure date

Responsibly closing HERC

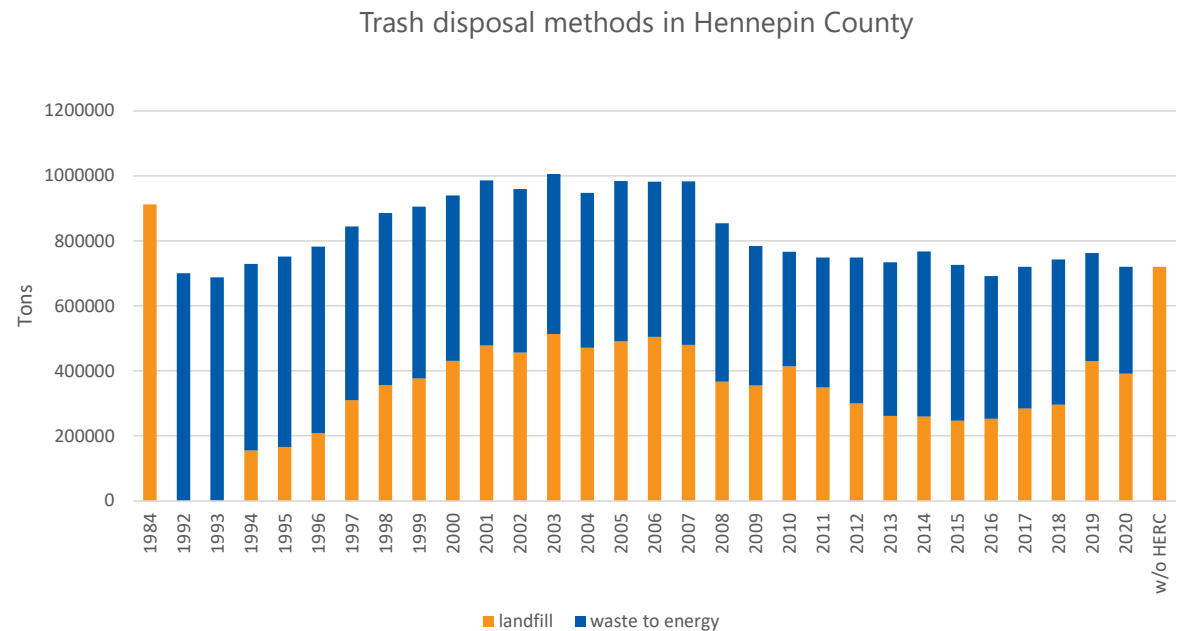
Conditions to be met

- Compliance with all applicable state and federal laws, rules, and regulations is maintained
- Goals of the county-board-approved Climate Action Plan are achieved
- Metrics identified in the county's Zero Waste Plan are achieved
- The State of Minnesota is at or near its 100% renewable electricity goal
- Recycling rate is at least 85%
- Food waste, paper, and other biogenic materials make up less than 10% of trash needing disposal
- Alternative funding sources are secured for county natural resources, forestry, zero waste, and climate work
- Alternative energy sources are found to heat, cool, and electrify homes and businesses

Consequences of shutting down HERC prematurely

An immediate and significant increase in landfilling

- Non-compliance with state statute
- Moving in the wrong direction for climate
- Places burden of county trash on communities outside of the county
- Loss of funding for environmental programs
- Increase in cost to cities and residents to manage trash
- Loss of jobs



What we heard from cities

Engagement

- Overwhelmingly expressed concerns and seek information to understand potential impacts.

Timeline

- HERC closure timeline should be contingent upon conditions being met to protect the environment and mitigate climate change impacts.

Costs

- HERC closure will increase disposal costs.
- Will need resources for additional zero-waste action.

Environmental impacts

- Strong concerns about climate impacts related to landfilling more waste.
- Shift the burden of the county's trash to communities outside of the county.

Summary of engagement

- Mailing to mayors and city managers. Board Clerk received responses from: Bloomington, Champlin, Crystal, Deephaven, Eden Prairie, Greenwood, Hopkins, Independence, Maple Grove, Maple Plain, Medina, Minnetrista, Minnetonka, Minnetonka Beach, Plymouth, Richfield, Robbinsdale, Rogers, St. Louis Park, Wayzata
- Courtesy message to city recycling coordinators and discussed at regular meeting attended by Bloomington, Brooklyn Park, Champlin, Deephaven, Eden Prairie, Edina, Golden Valley, Independence, Maple Grove, Medicine Lake, Minneapolis, Minnetonka, Minnetonka Beach, Minnetrista, Orono, Osseo, Plymouth, Richfield, Robbinsdale, Shorewood, St Louis Park, and Wayzata



What we heard from other stakeholders

State lawmakers and partners staff

Lawmakers

- Many competing priorities, manage expectations of what can be accomplished in each session

MPCA agency staff

- Alternatives/progress on zero waste needs to be further along before HERC is shut down.

Other counties and cities

- Hennepin is stepping back at a time when our leadership is needed
- Concerned about how this is going to impact their operations

Waste management companies

Large, multinational firms

- Excited about the business opportunity but will need time to adjust without HERC in the system
- Have capacity at Burnsville, Elk River and Inver Grove Heights landfills, will need time to design, permit, and build additional cells

Independent or small haulers

- Very concerned their business models are challenged without HERC

Environmental advocates

- 2028 is too late, 2040 is unacceptable
- Want to partner on zero-waste legislative platform

Residents and businesses

- Confusion over the range in timeline for closure and what it means.

Take aways from HERC briefing/resolution discussions

- Accelerate the closure of HERC between 2028 – 2040
- Invest in renewable energy to replace the energy produced at HERC
- Don't increase landfilling, keep focus on climate and equity
- State legislative leadership is key to meeting these objectives
- Cities need to be partners to accelerate a zero-waste future

Reinventing our solid waste system

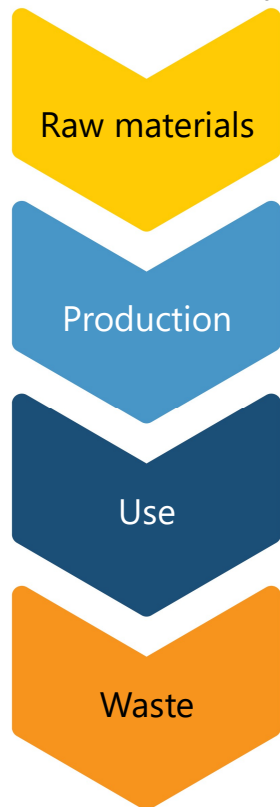
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Why? Solid waste system is driven by consuming and discarding

Linear economy



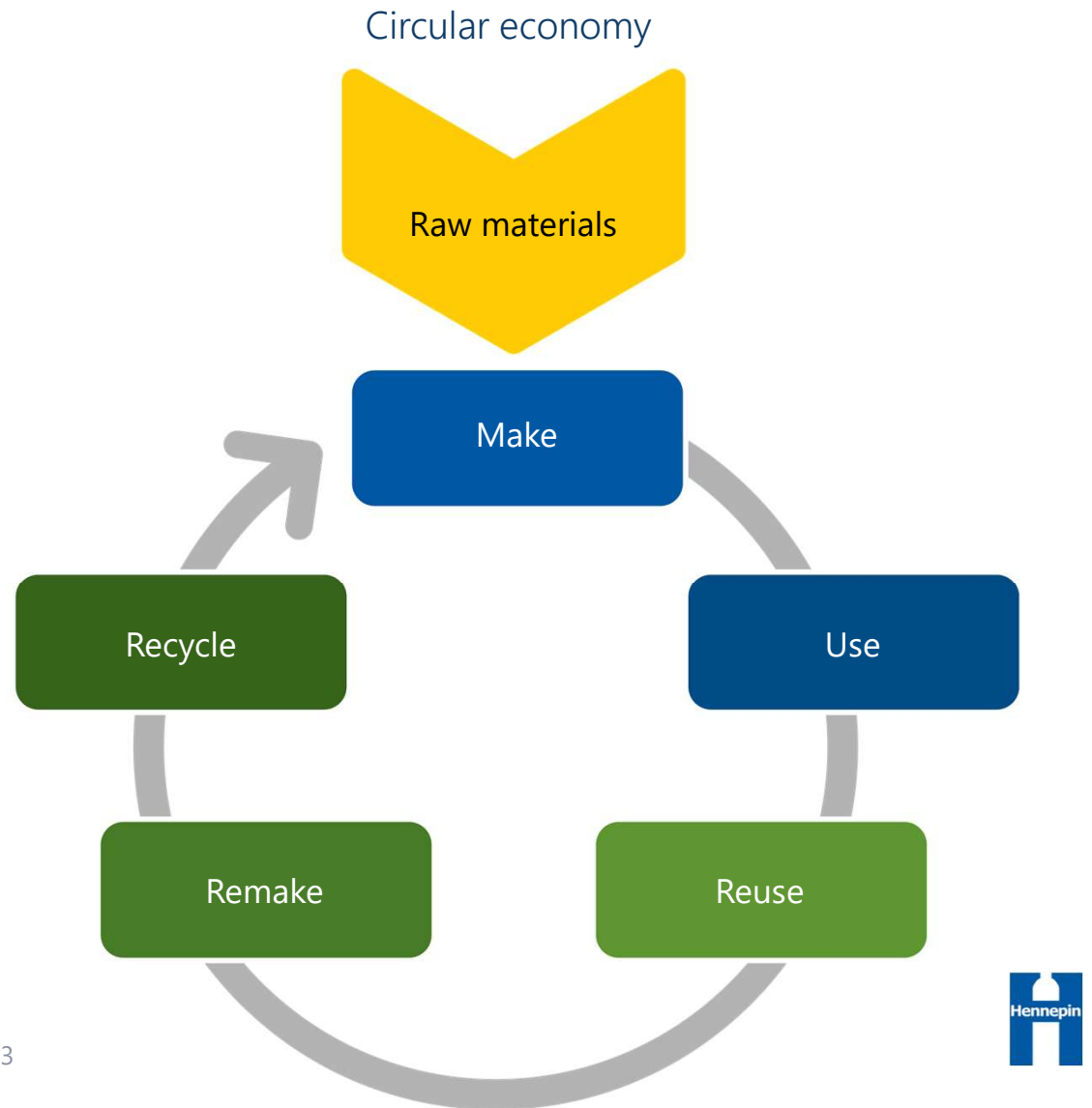
Who benefits?

- Multinational waste industry that makes big profits from landfilling
- Manufacturers and retailers
- Businesses that generate a lot of waste
- Residents that consume and dispose excessively

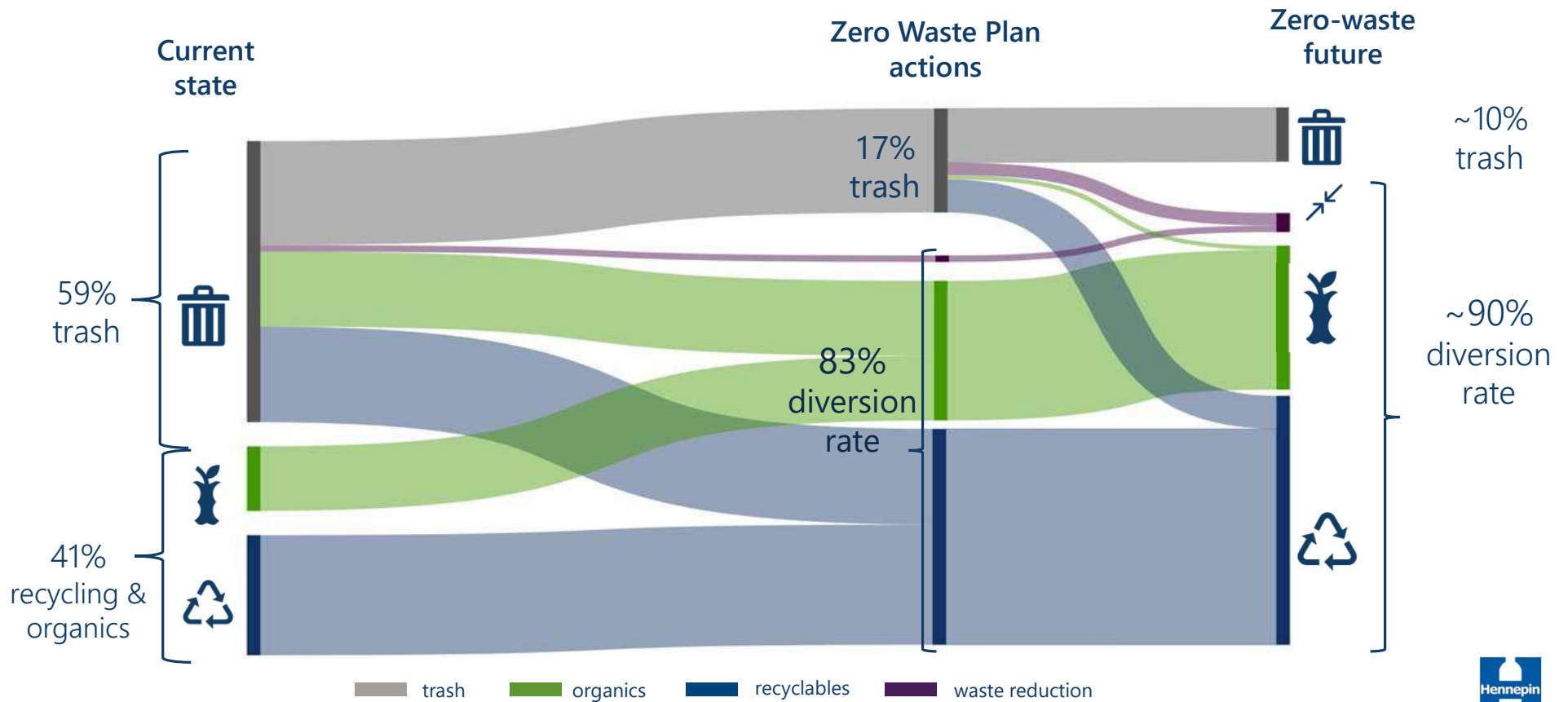
Who is burdened?

- Residents who live near trash facilities
- Residents who live in multifamily housing that don't have access to recycling services
- Local governments that must deal with the trash problem

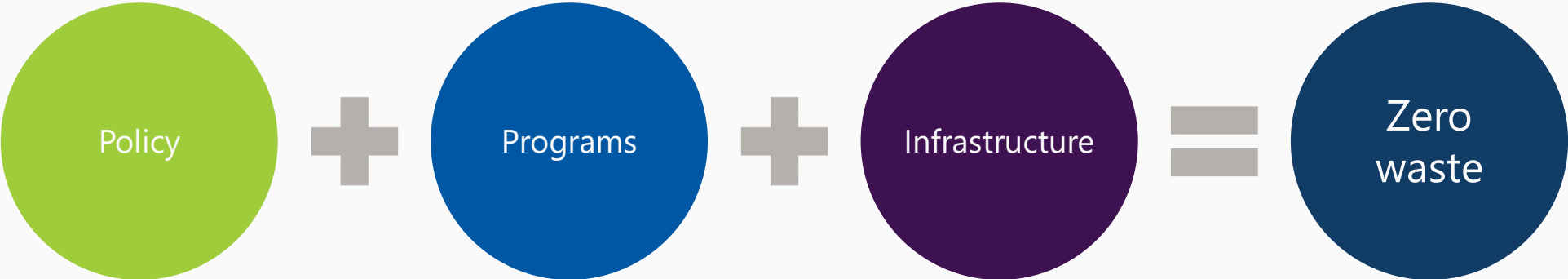
Climate and zero-waste goals require a shift that values materials and prioritizes reuse



Where we are and where we need to go



Reinventing our solid waste system



Highest impact zero-waste actions

- Prioritize extended producer responsibility (**Legislature**)
- Secure adequate funding for zero-waste initiatives through SCORE and other sources (**Legislature**)
- Ban recyclable and organic materials from landfills (**Legislature and MPCA**)
- Recover recyclable materials from the trash – recycling recovery facility (**Legislature and county**)
- Support the transition to organized collection across Hennepin County (**Legislature, county and cities**)
- Increase compliance with Ordinance 13 and expand requirements (**County**)
- Develop and implement county plan to eliminate food waste (**Legislature and county**)
- Expand collection and drop-off options for hard to recycle items (**Legislature and county**)
- Reduce single-use plastics and plastic packaging (**Legislature and producers**)
- Increase the reuse and recycling of construction and demolition waste (**Legislature**)
- Mandate participation in recycling and composting programs (**Legislature and county**)
- Ensure every individual has equitable access to zero-waste tools (**Legislature and county**)

Extend producer responsibility for packaging

What is needed?

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

Why? Shift the responsibility to producers to use more sustainable packaging, expand markets for recyclables, and cover the cost of managing packaging waste.



Timeline

Bill passage in 2024 session. Full implementation would take many 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.

Example of leaders

California, Colorado, Maine, Oregon

Max diversion potential

37,000 tons

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

Ban recyclable and organic materials from landfills

What is needed?

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

Why? 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 breakdown.



Timeline

Bill passage in 2024. Full implementation would take many years.

Cost

Policy only effective if enforced. Funding for sufficient staff resources to enforce the ban should be provided to the MPCA. Increased costs for waste generators.

Example of leaders

California, Massachusetts, Vermont

Max diversion potential

Not modeled in the Zero Waste Plan, but necessary to amplify/speed up all the highest impact actions.

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 are not 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

Secure adequate funding for zero-waste initiatives

What is needed?

State funding must rise 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.

Why? Additional funding mechanisms needed to fully implement zero-waste 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.

Example of leaders

King County, Alameda County, Toronto, and Ramsey/Washington counties

Max diversion potential

Not modeled in the Zero Waste Plan, but necessary to amplify/speed up all the highest impact actions

Roles and responsibilities

County and environmental advocates

Advocate for bill passage

Legislature

★ **Introduce and pass a bill**

MPCA

Advocate for bill passage

Cities

Expand programming with added resources

Residents and businesses

Support additional financial resources for zero-waste initiatives

Recover recyclables and organics from the trash

What is needed?

A facility that uses highly automated processes to sort cardboard, metal, some plastics, and organic materials from the trash for reuse or recycling.

Why? Implementing mixed waste processing alongside source separation ensures more recovery of materials regardless of individual sorting behaviors.



Timeline

6 to 10 years to plan, design, permit, and build. Immediate impact on diversion once operational.

Cost

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

Example of leaders

Santa Barbara, King County, Ramsey/Washington counties

Max diversion potential

200,000 tons

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 mixed waste recovery facilities and not landfill

Residents and businesses

Continue to sort materials to maximize reuse and recycling

Support the transition to organized collection across Hennepin County

What is needed?

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 schemes for multifamily and commercial.

Why? 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.

Timeline

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

Cost

Consulting and staff time

Example of leaders

San Jose, Minneapolis commercial collection study

Max diversion potential

13,000 tons

Roles and responsibilities

County and environmental advocates

Advocate for bill passage

Legislature



Pass legislation making organized collection process easier for local government

MPCA

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

County and cities

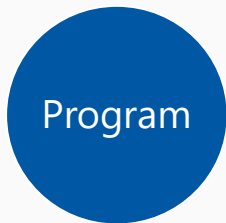
Implementation

Haulers

Provide waste collection services

Residents and businesses

Support system changes that lead to better environmental and health outcomes



Increase compliance with Hennepin County's Recycling Ordinance and expand requirements

What is needed?

The county's Recycling Ordinance #13 regulates the separation of recycling, including organics, from the trash. 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.

Why? Ensures services are available for residents to use, increases diversion of food waste, key to achieving zero-waste and climate goals.



Timeline

1+ years to revise ordinance. Many years to increase compliance.

Cost

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

Example of leaders

California, Massachusetts

Max diversion potential

58,000 tons

Roles and responsibilities

County

☆ **Lead enforcement at the generator level, amend the county's Recycling Ordinance #13**

Cities

Implement city requirements, collaborate with the county on education and outreach, better enforce existing city requirements

Legislature

Provide resources to MPCA to enforce existing state commercial recycling law

MPCA

Better enforcement of existing state commercial recycling law

Haulers

Provide and implement adequate service

Businesses

Comply with requirements and educate employees

Residents

Participate in programs

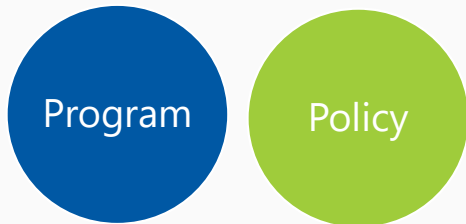


Develop and implement a plan to eliminate food waste

What is needed?

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.

Why? Food waste makes up 20% of trash, and two thirds of wasted food was edible. 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.



Timeline

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

Cost

County and city staff and financial resources will be required.

Example of leaders

Denver, Oregon, Washington, Illinois, Ohio, Massachusetts, Rhode Island

Max diversion potential

44,000 tons

Roles and responsibilities

County

★ **Lead development of 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



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

What is needed?

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

Why? 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.



Timeline

Begins in 2024. Full implementation will take many years.

Cost

Additional staff required, contracts to manage materials, and potentially building space for operations. Added 1 FTE starting in 2024.

Example of leaders

Minneapolis, Bloomington, California, Canada, Europe

Max diversion potential

15,000 tons

Roles and responsibilities

County

★ **Develop programs and lead 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 provide 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 and businesses

Use expanded collection and drop-off options

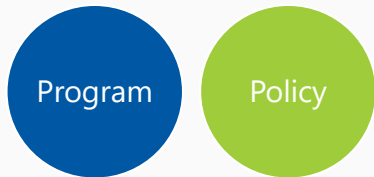


Reduce single-use plastics and plastic packaging

What is needed?

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

Why? Plastics frustrate residents trying to recycle. Plastics contribute to litter and climate pollution, harm water and wildlife, and have largely unknown human health impacts.



Timeline

Now --> Forward

Cost

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

Example of leaders

California, Connecticut, Delaware, Hawaii, Maine, New York, Oregon, Vermont, and Europe

Max diversion potential

200 tons

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 U.S. Plastics Pact, Hennepin University Partnership, MNimize

Residents and businesses

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



Increase the reuse and recycling of construction and demolition waste

What is needed?

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.

Why? 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.



Timeline

Now --> Forward

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.

Example of leaders

Portland, OR, California, Cook County, IL, San Antonio, TX

Max diversion potential

76,700 tons

Roles and responsibilities

County and environmental advocates

Advocate for state and city policy changes

County and cities

Continue to support deconstruction through funding and program initiatives

Legislature

★ **Pass legislation for minimum diversion requirements on construction and demolition projects**

MPCA

Enforce state policies

Haulers

Provide dumpster service and deliver materials to construction and demolition waste recycling facilities

Residents and businesses

Divert building materials for reuse and recycling

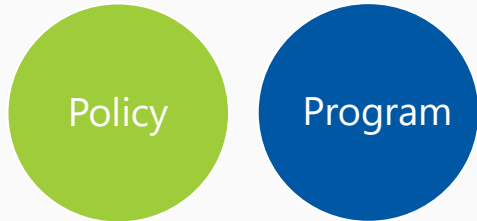


Mandate participation in recycling and composting programs

What is needed?

Mandatory participation requirements that use rigorous enforcement and fines to ensure proper recycling.

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



Timeline

Last phase of plan implementation. Other actions must move forward first. Full implementation will take several years.

Cost

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

Example of leaders

San Francisco, Seattle

Max diversion potential

63,300 tons

Roles and responsibilities

County



Lead enforcement at the generator level

Cities

Provide better enforcement of existing requirements (Minneapolis commercial recycling), potentially required to implement county requirements

Legislature

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

MPCA

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

Haulers

Check containers for compliance, notify customers when containers are contaminated

Residents and businesses

Participate in recycling and composting programs



Ensure every individual has equitable access to zero-waste tools

What is needed?

Expand program reach and multicultural outreach, develop a rate assistance program for low-income residents, establish an equity panel to advise the county on waste issues, provide public waste collection bins to decrease litter, increase green jobs, and fund community-centric solutions.

Why? Support equitable access to services and community leadership in solutions.



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.

Example of leaders

Toronto, New York City, Austin, TX

Max diversion potential

16,000 tons

Roles and responsibilities

County

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

Legislature

Provide additional funding for waste prevention and diversion programming and initiatives

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

Residents and businesses

Participate in programs



Our vision of a reinvented solid waste system

Less waste

Shared responsibility

Easy access to services

Social norms align with zero waste

This vision depends on:

Minnesota joining national leaders in zero-waste policies

State funding that matches the scope of the challenges and ambition of the goals

Residents and businesses support a zero-waste future

With these dependencies met, we can:

Create a circular economy

Ensure an equitable system

Stop trashing valuable resources and close HERC

Reach climate and zero-waste goals

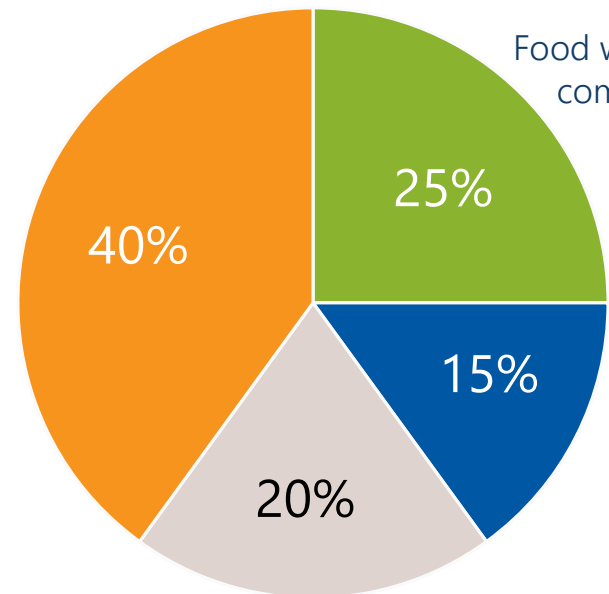


There is still a lot of trash in our trash

Composition of the trash

Percent by weight

Trash: materials with no current viable recovery options – pet waste, diapers, nonrecyclable plastics, broken stuff



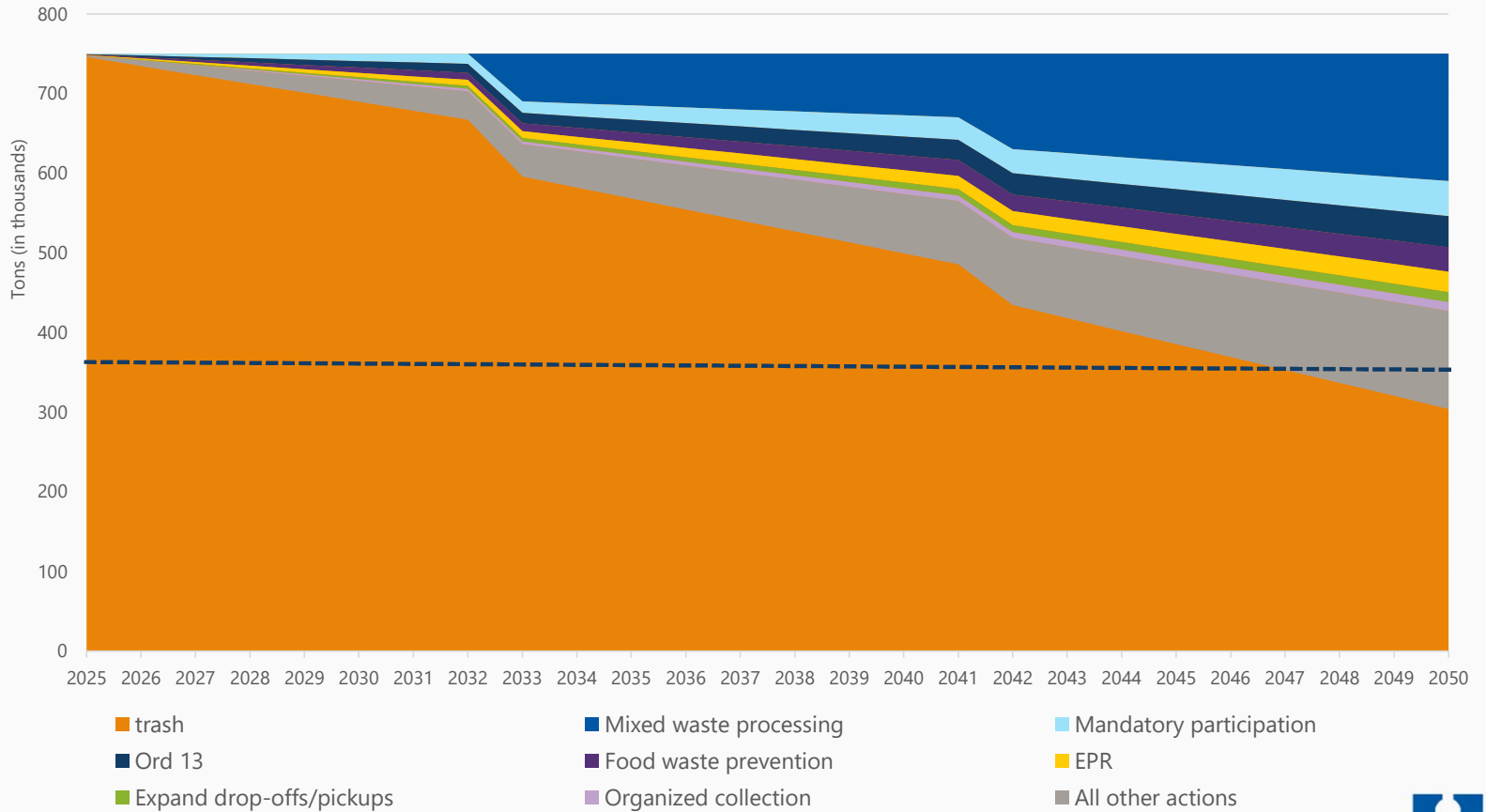
Food waste and compostable materials

Recyclables: cans, bottles and papers that were not recycled

Bulky items: mattresses, carpet, building materials and furniture – potentially divertible with existing or expanded programs

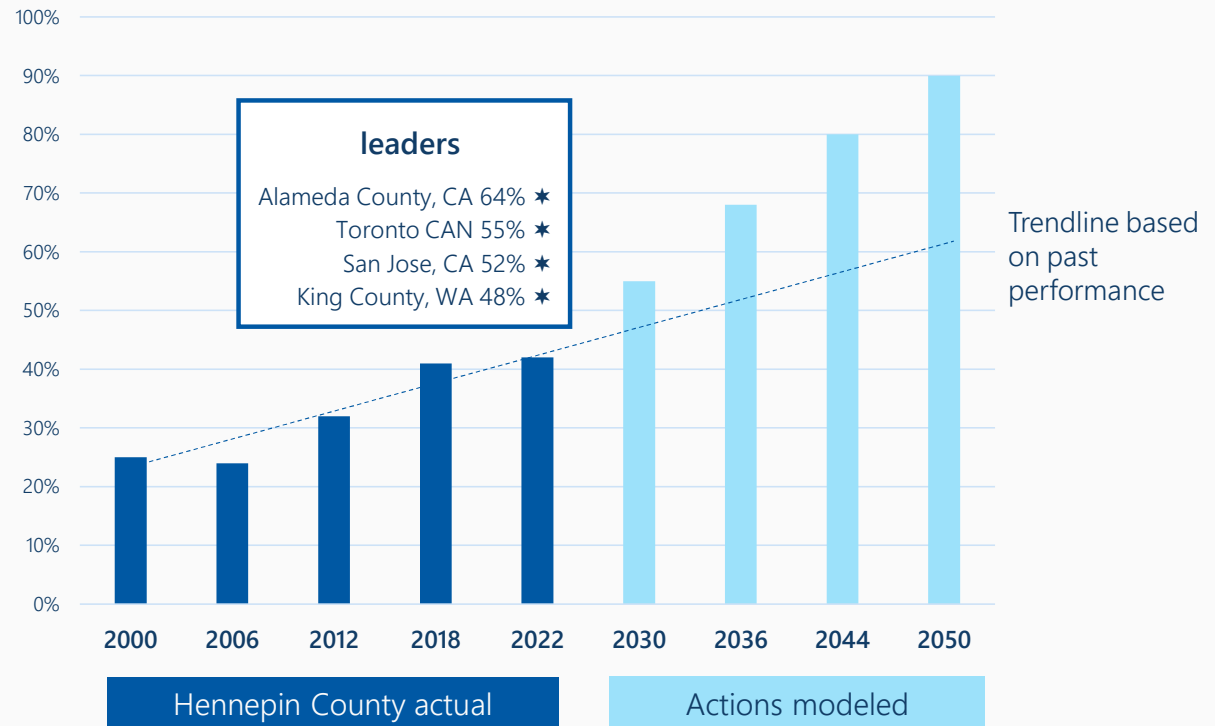
Projected trash volume to dispose while accelerating zero-waste actions

HERC can process up to 365,000 tons per year



Progress and comparison to zero-waste leaders

- Diversion rates achieved by long-time zero-waste leaders range between 50% to 60%.
- Defining factors of high-performing communities include state-level zero-waste policies and higher level of public control over the solid waste system.
- We've done the easy things, and the easy things took time.



Financial considerations

Capital

\$300 -500 million

Increased costs for
businesses and
residents for
trash pickup

Programs

\$200+ million

Landfills leave
costly taxpayer
cleanups

Tracking progress toward zero waste

2024 state legislative session

Policy

Platform: 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).

22 critical policy items in the following categories:

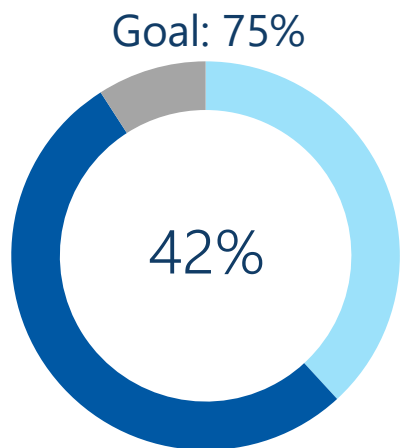
- Adopt policies that put Minnesota on par with national zero-waste leaders
- Invest in recycling infrastructure, advancing circularity, and waste reduction and reuse
- Reduce disproportionate impacts from the solid waste system
- Amend existing policies to remove disincentives

2024 session dashboard

- Pass The Packaging Waste and Cost Reduction Act (Extended Producer Responsibility bill)
- Redirect the solid waste management tax (SWMT) going to the general fund to SCORE grants.
- Invest in a recycling recovery facility.
- Make it easier for local governments to have a higher level of control over hauling and processing systems.

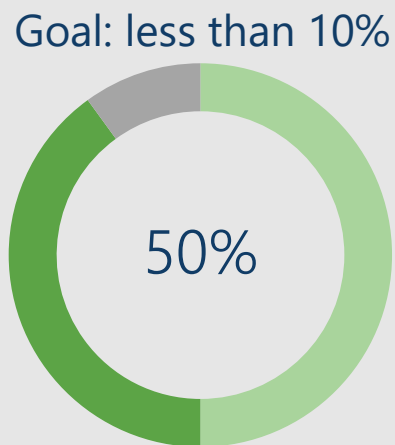
Zero-waste dashboard

Recycling rate



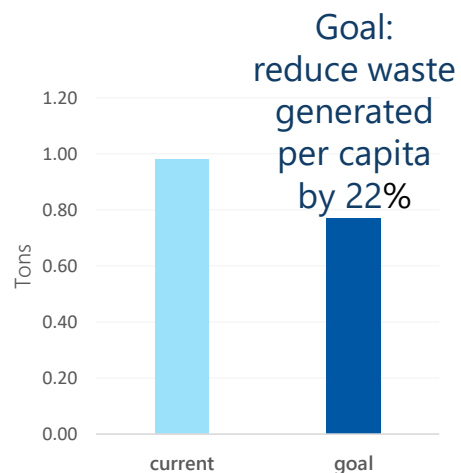
✓ Meets state statute

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



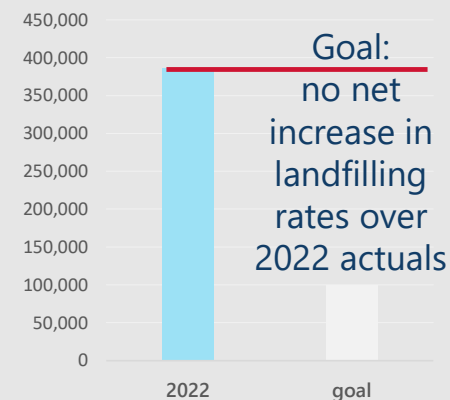
- ✓ Climate-driven
- ✓ Critical to meeting recycling goals

Waste generated per capita



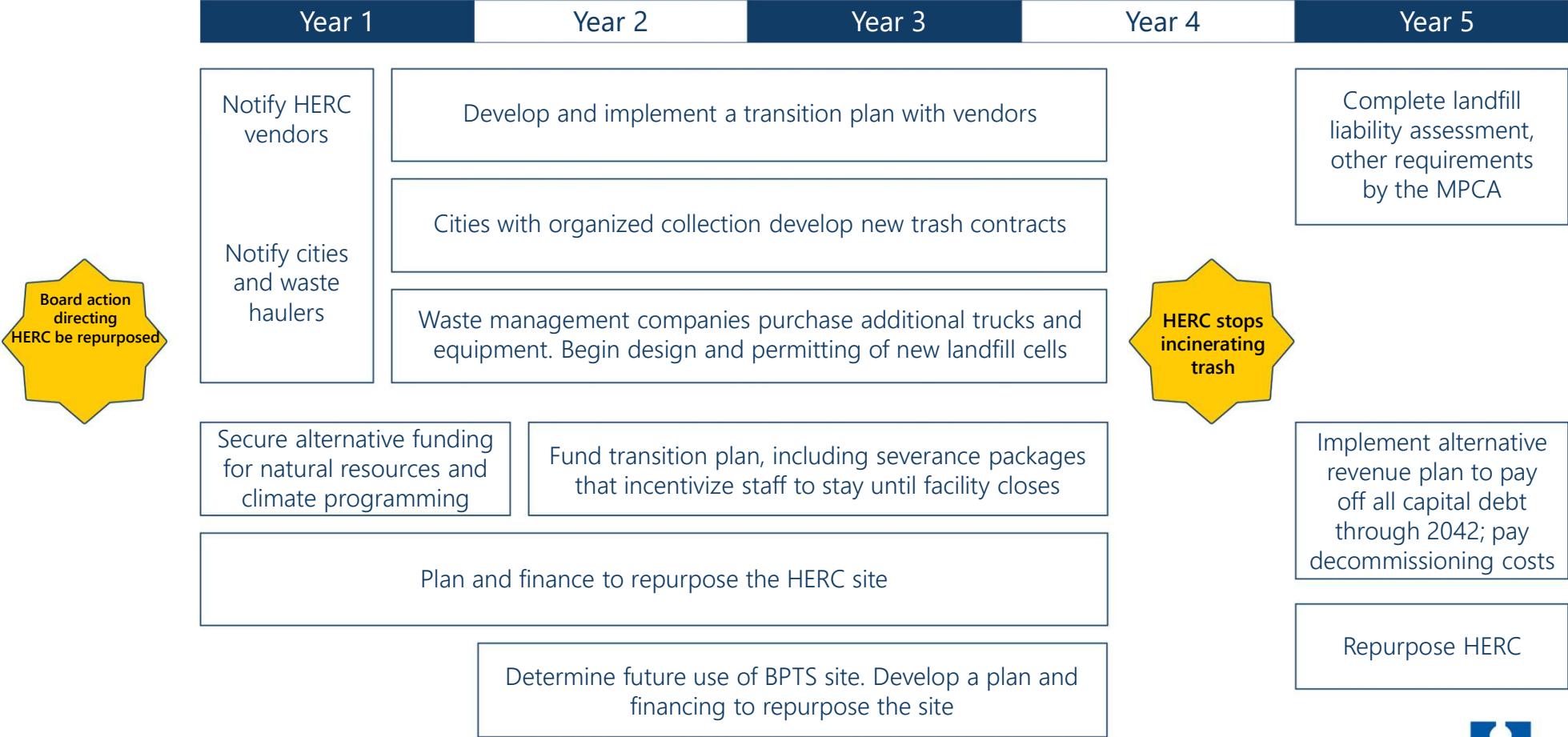
- ✓ Climate-driven
- ✓ Critical to meeting zero-waste goals

Landfill rates



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

Key sequence of steps



Next steps

- Be present during the legislative session to drive legislative change
- Extend operational contracts
- Approve out of cycle Capital budget increase
- Prepare and bring forward actions to modify ordinances
- MPCA finalizes metropolitan policy plan, kicks off county 2024 solid waste management plan process
- Report back on zero-waste dashboard metrics and session progress in June and annually there after



Questions and discussion