

Report: System Changes to Achieve the Scope for Resource Management

Introduction

As part of its policy evaluation in 2013-2015, the Ramsey/Washington County Resource Recovery Project Board developed a Scope for Resource Management (Attachment 1). That scope followed extensive evaluation of waste conversion technologies and development of guiding principles for future waste management. The Scope is a vision, and is a system view of using technologies and techniques appropriate to the materials discarded by residents and businesses in the East Metro. The Scope is intended to build on an already successful solid waste system, and provides guidance for future decision-making.

Implementing the Scope depends on participation by a host of players. It begins with the generators of discarded materials, and choices they make (Reduce? Reuse? Recycle? Compost? Trash?). It continues with recyclers, municipalities, the waste industry, and, of course, the counties. The foundation for the Scope is, notably, that discarded materials in the future are viewed not as waste, but as a resource.

Pivoting the view from “waste” to “resource”

One of the principles adopted by the Project Board is to pivot the view from waste to resource. The current system is centered on “waste.” Statutes and plans view discarded material as a liability – items without value. Recovering value from those discards is frequently seen as the exception – we “remove” recyclables from the trash; we “separate” food waste for composting.

Pivoting our view means, in practical terms, that decisions about discarded materials take into account the value they have as a feedstock or energy resource. There are two sides to this.

- First, waste is inefficiency – at a household, business, or community level. Conserving the resource, by recycling, for example, allows us to increase efficiency in production.
- Second, there is value in discarded resources. Recovering the value of the material, or recovering energy from it, means that there is economic opportunity to be realized.

Policy Issues

The waste management system in the state has evolved –

- It began primarily with a concern for sanitation -- the State Solid Waste Act in 1969 aimed to control open burning, vermin, and water runoff with a permitting process, moving from open dumps to landfills with cover, and addressed burning.

- A more planned system emerged in the 1970's – in the early years efforts were still focused on “sanitary” disposal, but concerns about groundwater contamination emerged, and the business of recycling some commodities began receiving attention.
- The public policy framework for waste management in Minnesota was built in 1980, with the adoption of the Waste Management Act (WMA).

In the WMA the goal of environmental and public health protection is followed by an outline of ways to improve how waste is managed. The goal of the State is an integrated system, managing waste appropriately, and protecting the environment and public health. At its core, the WMA is about reducing and managing risk: environmental, public health, and economic risk – by broadly prescribing that Minnesotans take a road away from land disposal and toward an integrated system.

Our current policy framework arose out of concerns about water, health, the environment, and at the time, concern that landfill capacity was in short supply. As it has evolved, and it has been substantially amended since 1980, the law has moved from being general, to quite specific – but it has focused on that issue of reducing risk. The State goals established in 1980 aimed at abating landfills, and included a list of preferred technologies in an order of preference: a hierarchy. The State put counties in charge of planning, and continues to hold counties accountable to meet the State's objectives.

Since that time a successful system has emerged in the East Metro area – with significant advances in material, water and energy conservation. Regulations and incentives have reduced the toxicity of the waste stream. The public is well informed and supportive of the system.

Policy discussions at the state and local level are showing an additional focus in recognizing that discarded items have value, and are not simply a liability to be managed. These discussions are setting the stage for how the East Metro will view waste/resource management in the coming decades.

The Scope for Resource Management bridges the past - a focus of managing risk, to the future and pivoting from viewing discards as waste to a resource.

System changes to advance toward a 75% recycling goal

The Scope includes the expectation that there will be increased performance of the system to advance toward a 75% recycling goal by 2030. Policy work is needed at the State and local level in this campaign.

State of Minnesota:

1. *Market Development* – The Project Board and SWMCB have adopted policy positions that advocate for a strategic approach to market development for discarded materials. Creating a market “pull” is necessary to establish the economics necessary to sustain high recycling levels.

2. *Embrace Emerging Technologies* – The State needs to identify, understand and evaluate new and emerging technologies that can recover materials for recycling. New technologies may not clearly fit into the State’s current planning approaches, and flexibility is needed.
3. *Extended producer responsibility* – Continued emphasis on this approach, well designed, and aimed particularly for difficult to manage or expensive items.
4. *Incentivize the hierarchy* – Identified by the Legislative Auditor in the 2015 report, finding and implementing methods to discourage landfilling, and viewing materials as having value.
5. *Focus beyond MSW* – The State has focused almost exclusively on MSW, yet there are significant resources in construction and demolition waste, and industrial waste.
6. *Measurement and Goal Setting* – The Resource Recovery Project Board and SWMCB have also adopted recommendations for realigning measurement of progress related to the WMA.

Local Government in the East Metro

Counties are required by State law to plan and implement systems to achieve State goals. Solid waste master plans and associated policies guide other public and private entities as they make waste management decisions. At the local level there are a substantial number of actions that have been taken to increase source separation of recyclables and organics, and there are also more that can be taken.

Attachment 1 “Strategies for increasing recycling” is a comprehensive evaluation of these actions with a notation on the current progress for each strategy.

System Changes to Implementing New Waste Conversion Technologies

The Scope identifies new technologies for the East Metro to consider: Mixed waste processing, anaerobic digestion, and gasification. Attention is needed at the State and local level to further evaluate use of these technologies.

State of Minnesota

1. *Research and evaluation of emerging technologies* – The MPCA has taken a responsive approach to emerging technologies – waiting for the private sector or local governments to bring ideas forward. This approach takes time and hinders innovation. Importantly, in a “resource management” view compared to a “waste management” view, decisions to implement new technologies occur in a competitive environment; delay means Minnesota could lose opportunities.
2. *Clear processes for permitting and developing* – a corollary to the first point, is that the State’s processes for permitting emerging technologies is unclear and unspecified. This creates uncertainty for local governments and private developers, which can dampen innovation.

3. *Incentivize innovation* – Managing waste as a resource is an economic development opportunity for Minnesota. Creating incentives for innovation helps the state – an example is a proposal under consideration in the 2015 legislature that creates an incentive for production of biofuels from various materials. Production of CNG from organics used in anaerobic digestion would qualify.

Ramsey and Washington Counties

Ramsey and Washington Counties will be in the principal position to decide whether to develop new resource management technologies. Moving forward the counties will consider a number of factors in making those decisions, including

- The efficacy of the technologies;
- Selecting technologies that will support the East Metro system;
- Assuring flexibility to accommodate change;
- Identifying strong local partners; and
- Strategic local investment.

At this time the Scope identifies three technologies that should be further evaluated and considered, building on the foundation of the current Resource Recovery Facility. Foth has prepared a memo with an update on each technology, and recommendations in each for further analyses and steps that would be taken to fully evaluate the technologies. These are found in Attachments 2 – 4.