

A collaboration between Hennepin, Ramsey, and Washington counties

# Partnership on Waste and Energy

## Waste-to-Energy recovers resources and prevents methane emissions

**The Partnership on Waste and Energy (PWE) seeks to end waste, promote renewable energy and enhance the health and resiliency of communities we serve while advancing equity and responding to the challenges of a changing climate.**

Processing waste to recover energy and resources is preferred over landfilling in federal and state law. Studies comparing landfilling to waste-to-energy find that processing waste reduces the exposure of pollution to our residents and environment. While we work towards a circular economy where waste is designed out of the system, waste-to-energy is an important part of an integrated solid waste management system.

### Renewable waste-to-energy reduces greenhouse gas emissions from waste

Communities that rely on waste-to-energy are partners in the fight against climate change and understand their important role in protecting the state's land, air, water and public health. The Environmental Protection Agency and twenty-three states, including Minnesota, recognize waste-to-energy as a renewable energy because it recovers energy from a consistent byproduct of our daily lives.

- Processing waste provides a second chance to recover recyclables not captured by curbside recycling. Over 25,000 tons of metal are recycled each year from the Recycling & Energy Center in Washington County and the Hennepin Energy Resource Center. Since recycling steel requires 60% less energy than producing steel from iron ore, this reduces 45,800 tons of greenhouse gas emissions.
- Every ton of trash processed by waste-to-energy generates 30 times less greenhouse gases than a ton of trash put into a landfill. Decomposing garbage in landfills produces methane, a greenhouse gas at least 20 times more potent than carbon dioxide.<sup>1</sup>

<sup>1</sup>Waste Reduction Model (WARM) | US EPA One ton of MSW landfilled generates 0.31 MTCO<sub>2</sub>E compared to one ton of MSW combusted generates 0.01 MTCO<sub>2</sub>E.

### Waste-to-energy is preferred over landfilling trash

Until we no longer create waste, local authority must be preserved to manage waste as directed by Minnesota's waste management hierarchy. Waste-to-energy creates value from today's discarded resources instead of storing them in landfills at the expense of future generations.

- Without waste-to-energy, our three counties would send 675,000 tons of trash to landfills each year. This would use up all the additional landfill capacity the state recently approved at 4 metro area landfills in about 8 years.
- Waste in landfills poses perpetual environmental and health risks, including risks to groundwater. Landfilling may seem cheaper in the short-run, but managing these risks and paying for the consequences costs more in the long-run. Minnesota has already spent over \$400 million cleaning up landfills.
- Waste-to-energy prevents wasteful landfilling by reducing waste volume 90%, leaving 10% as ash.
- Waste-to-energy is more efficient at recovering energy than landfill gas capture. A ton of processed trash creates enough electricity to run a house for 21 days, compared to only 3 days for landfill gas from a ton of decomposing trash.<sup>2</sup>

<sup>2</sup>Is It Better To Burn or Bury Waste for Clean Electricity Generation? | Environmental Science & Technology (acs.org)

### Contact for More Information

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