

Anaerobic Digestion Facility and Eco Center



Using anaerobic digestion to turn food scraps into clean energy and back into healthy food

Hennepin County is proposing to build an anaerobic digestion (AD) facility adjacent to the county's Brooklyn Park Transfer Station. The facility would be capable of processing a minimum of 25,000 tons per year of organics to produce energy, beneficial soil and agricultural products, and healthy food.

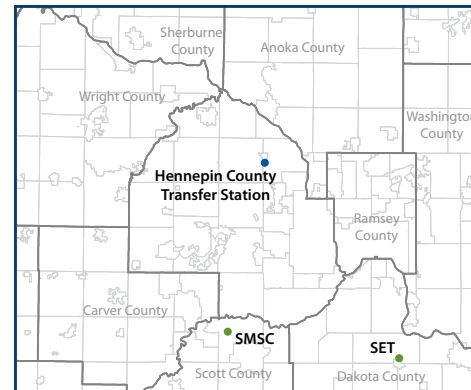
To maximize community benefits, the county's vision for this site is an Eco Center that supports our climate, zero waste and healthy community goals. Community partners could use this site for urban agriculture. The fertilizer, compost, and excess heat created in the digestion process could be used in on-site greenhouses and aquaponics systems. The Eco Center could also provide green jobs training and tours for students. The county needs the state funding and community support to make this vision a reality.



Infrastructure development needed to keep pace with organics program growth

Minnesotans are enthusiastic about recycling. And more than 77,000 households and numerous businesses participate in a new kind of recycling program, called organics recycling. Because food scraps and other organic material makes up 30% of our trash, they say it's an easy thing to do to make a big difference in reducing waste that goes to landfills.

Residents and businesses are doing their part, and now government needs to do our part by building the necessary infrastructure to process organic material. Anaerobic digestion provides an opportunity to expand and diversify local organics infrastructure and is a critical part of advancing the county's climate action, zero waste, and healthy community goals.



The two composting sites that serve the Twin Cities metro area are operating at or near capacity. An AD facility will add processing capacity in the north metro and free up capacity in the south metro for other communities that are beginning to grow their organics recycling programs.

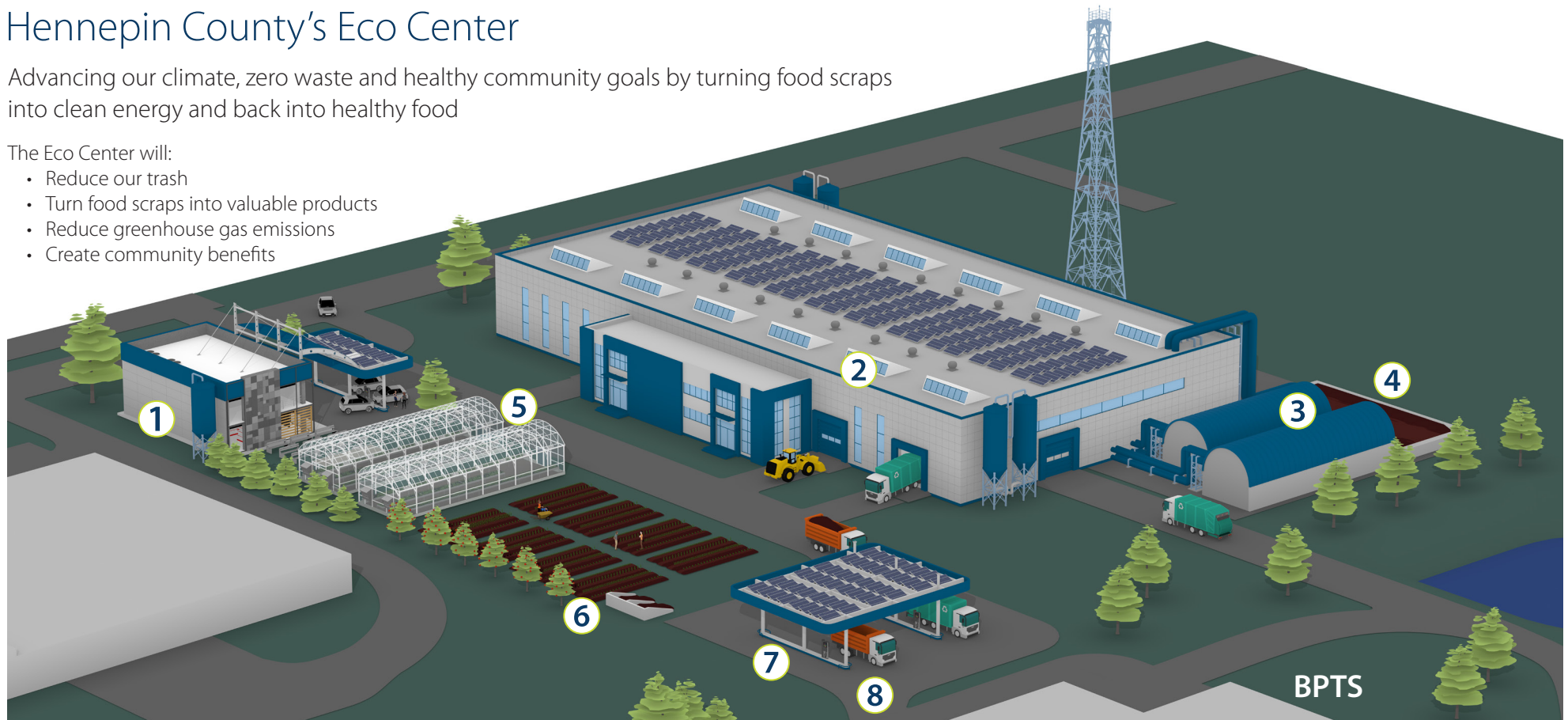
This facility would also eliminate the need to haul organics 40-50 miles to the composting sites, reducing truck traffic and greenhouse emissions in the region.

Hennepin County's Eco Center

Advancing our climate, zero waste and healthy community goals by turning food scraps into clean energy and back into healthy food

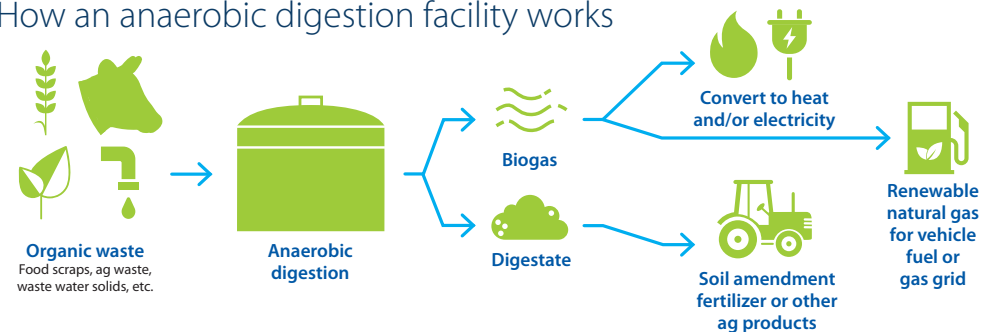
The Eco Center will:

- Reduce our trash
- Turn food scraps into valuable products
- Reduce greenhouse gas emissions
- Create community benefits



- 1. Green jobs and education**
 - Employs 10 to 15 high-wage facility operators
 - Train young adults in urban agriculture, aquaponics, and other green jobs
 - Students learn how their food scraps turn back into healthy food
- 2. Material is delivered, shredded and screened to remove packaging**
- 3. Microorganisms break down organic materials into two main products**
 - Biogas, an energy source
 - Digestate, a nutrient-rich soil product
- 4. Odor control**
 - Closed system that prevents odors from escaping
 - Biofilter to neutralize odors
- 5. Heat from the digestion process used for greenhouses and aquaponics**
- 6. Liquid fertilizer and compost from the digester used for urban agriculture**
- 7. Fuel made from biogas has the smallest carbon footprint of any vehicle fuel**
- 8. Reduced truck traffic by eliminating the need to haul organics to a facility 40-50 miles away**

How an anaerobic digestion facility works



For more information

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