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# Hennepin County Plans To Build Brooklyn Park Facility To Convert Food Waste Into Fuel

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Hennepin County wants to build a processing facility in Brooklyn Park that would convert meal scraps and other organic materials into natural gas, compost and fertilizer.

The project is part of the county's new climate action plan and part of its broader goal of being waste-free by 2050. The $45 million facility would put the county on the leading edge of urban recycling and be the first in the Midwest to use a digester for food waste.

"When food decomposes in a landfill, it does nothing but produce greenhouse gases," said Dave McNary, the county's assistant director of environment and energy.

Cities and counties nationwide are looking at building similar digesters, and millions of dollars are pouring into researching the technology for a range of uses, including for agricultural waste.

County officials estimate about 30% of the 700,000 tons of waste it produces annually is tossed food and paper products perfect for a digester.

Although some of the waste still ends up in landfills, the county brings the food scraps to two metro sites already running at maximum capacity.

The capacity crunch is fueling the fresh urgency to build the new digester, McNary said. The county is hoping the anaerobic digestion facility will be operating by 2025.

The facility will be built in Brooklyn Park where the county has a recycling and waste transfer station. The two facilities' proximity is another step to reaching climate goals, he said.

"Collecting organics plays a key role in our zero-waste plan," McNary said.

Hennepin County leaders will ask the Legislature next year to pick up half the expected $45 million cost. It is not clear whether the Legislature will embrace the request, but smaller scale projects and research of the technology has typically received bipartisan support.

County leaders expect to recoup their costs from the sale of biogas and fees paid for disposal of waste at the facility.

Anaerobic digestion is a relatively simple process involving the natural process in which microorganisms break down organic materials, McNary said. Digestion can also be used for manure and wastewater sludge.

Digestion happens in closed spaces where there is no air. The end product is methane, the primary component of natural gas. The biogas product can be used to power engines, fuel boilers and furnaces, run alternative-fuel vehicles and supply homes and businesses through natural gas pipelines, McNary said.

Anaerobic digesters are being used in Europe and parts of Canada and California, said McNary. Ramsey and Washington counties are considering building facilities, he said.

Another piece of the county's climate action plan is to remove carbon from the power plant by U.S. Bank Stadium that is used to heat and cool county buildings.

McNary said removing carbon is an emerging field and the deadline for proposals to overhaul the plant ended Wednesday.

The county has been exploring an anaerobic digester since 2018, and commissioners included $21 million in the capital budget for the facility in 2021. At the same time, the state was pushing a goal for metro counties to recycle 75% of waste by 2030.

Although collections of organic waste has slowed during the pandemic, the county has had ordinances in place for several years with certain mandates to encourage the practice.

In 2020, the county required restaurants, grocery stores and institutions to recycle larger amounts of organic food waste. This year, the county required cities with populations over 10,000 to offer curbside organic waste pickup.

Small cities must offer sites were residents can drop off organic waste, said McNary. The county provides grant funding for these programs.

Researchers continue to study and refine the technology, with some promising results for dramatically expanding its use. University of Minnesota researchers set up a pilot project two years ago in the parking lot of Second Harvest's Brooklyn Park facility. Second Harvest tosses out 1,500 tons of food waste a year, which costs about $200,000.

The study's preliminary findings concluded that the comparatively small digester could provide 70% of the heat and power needed to run the massive Second Harvest facility.

The U said that new anaerobic digesters are popping up across the state, including at wastewater treatment facilities, farms, and food waste operations. The U's scientists said there is even greater potential to turn organic waste into heat, energy and fertilizer, "and create a greener economy in Minnesota."