In Jessup, turning food waste into energy and something good for the earth | COMMENTARY

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Work continues on a new plant in Howard County that converts food waste, among other organic matter, into energy. The project is scheduled to be completed in September. (Baltimore Sun Staff)

First, a word about swill. That's an old English noun referring to mushy garbage, usually from kitchen scraps, that farmers feed to pigs. Here's another

old English word: piggery, meaning a farm for the breeding and raising of pigs.

In the New England town where I grew up, a man came to our house to fetch a bucket of swill and take it to the local piggery. Sounds downright Dickensian, but it's true.

Set in the ground outside our house was a galvanized cylinder, about 2 feet in diameter and 3 feet deep. It had a cast iron lid that opened and closed by foot pedal. Inside the cylinder was a swill bucket with a handle. Inside the swill bucket was garbage from our kitchen — wilted lettuce and other greens, potato and apple peels, onion skin, eggshells, citrus rinds, meat scraps.

I don't know how or when the arrangement was made, but a man drove a dump truck to our house at regular intervals (maybe every two weeks), pulled the swill bucket from its underground cell, lifted it to his shoulder, hauled it to his truck, dumped its contents and took it to the piggery. There it was fed to pigs we never saw but could smell at significant distance.

So we disposed of our food waste — our swill — by turning it into feed for livestock. The piggery is long gone, but I tell the story because it shows that households once were not as wasteful as they are now. We routinely made the effort to separate food scraps from trash, and the food scraps went to the farmer for feed.

These days most of our swill gets mixed with trash and ends up in landfills or incinerators.

While household composting has become more popular, we still send tons of food waste into the trash stream. So do the big, commercial providers — supermarkets, restaurants, institutions, wholesalers.

The Environmental Protection Agency says the nation generated 63 million tons of wasted food in 2018. The Maryland Department of the Environment estimates that the state generated 927,926 tons of food waste in 2019, and

only 15.5% of it was recycled in some way that year.

Something big and cool is about to happen on this front, and you might call it "swill for the greater good" — that is, food waste turned into energy and a useful material known as an "organic soil amendment." (More on that in a minute.)

Using technology developed by an Italian company specializing in anaerobic digesters — facilities that use bacteria to break down organic matter — a Maryland company called Bioenergy Devco is in the process of building a large zero-waste processing plant at the sprawling food wholesale center in Jessup. The anaerobic digester is expected to be online by September.

If it's successful, the project will bring sustainable food waste processing to the kind of scale already seen in Europe. BTS Biogas, the Italian company involved in the project, has been in business for 20 years and built more than 200 plants in Europe and East Asia. The Jessup facility is Bioenergy Devco's first project in North America.

In two 1.2 million-gallon tanks now under construction, microorganisms — Bioenergy Devco's chief development officer, Peter Ettinger, calls them "bugs" — will break down organic matter, such as vegetable and fruit trimmings from produce companies in the nearby Maryland Food Center.

The result of the "digestion" is methane gas that is captured and sold into the local pipeline. The other marketable product is something you can hold in your hands, that "organic soil amendment" I mentioned. It's not quite fertilizer, per se, though it enhances soil quality. It's meant to hold moisture and nutrients. It can be used in land development, gardening, farming and stormwater management.

Companies that deal in produce will save on disposal costs. Instead of having all their "pre-consumer food waste" trucked to landfills or farms for livestock, they will pay a tipping fee to send some of it to the nearby digesters. Ettinger

believes the twin tanks will be able to handle 125,000 tons of organic material a year; most of it will come from companies within seven miles of the digesters. The company expects to have between 15 and 25 full-time employees. It is looking for more digester sites in Maryland and other states.

Why not one in each county?

This is the stuff of the Green New Deal, the comprehensive plan to confront climate change, expand new technologies to reduce carbon emissions and create a whole field of new jobs that will be badly needed after the pandemic.

The American Biogas Council, using data culled from federal studies, claims that new biogas systems — digesters like the one in Jessup, wastewater treatment plants, farms and landfills — together could produce 103 trillion kilowatt-hours of electricity a year, reducing emissions equivalent to that currently generated by 117 million passenger vehicles. The trade association says these facilities would represent $45 billion in capital, produce some 374,000 construction jobs and 25,000 permanent ones.

Given all that, it would seem wise for more of us to get involved in this on a mass scale — every household separating food scraps from trash, supporting the growing waste-to-energy stream. Imagine the curbside pickup of the future — next to the trash can and the recycle bin, a swill bucket.

Dan Rodricks is a long-time columnist for The Baltimore Sun, and a local radio and television personality who has won several national and regional journalism awards over a reporting, writing and broadcast career spanning five decades. He is the author of three books, including "Father's Day Creek" (Apprentice House 2019).

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