Shelter Island Reporter

Column

Suffolk Closeup: Turning table scraps into energy

by Karl Grossman | Featured Story

Courtesy Photo

The recent approval by the trustees of Long Island Power Authority (LIPA) for a food scraps-to-energy plant, to be built in Yaphank, links to an original purpose of LIPA — to develop safe, alternative means of power.

LIPA was created by the Long Island Power Act of 1985 primarily to prevent the Shoreham nuclear power plant from going into operation and to further safe energy technologies instead. In its three decades, LIPA has emphasized solar and wind power to generate electricity. The green lighting of the food scraps-to-energy plant marks a move to another form of safe energy.

Shelter Island Reporter

Column

The LIPA trustees voted unanimously on March 20 for an $84 million 20-year contract to buy energy from a facility to be built by American Organic Energy that would convert 180,000 tons of food scraps a year into bio-gas to fuel a six megawatt power plant as well as vehicles and equipment.

Underlying this is the huge problem of food waste in the United States. Studies have found that 40 percent of food produced in the nation is wasted. One way to deal with this was featured on the "Today" show a day before LIPA acted, in a segment titled "Cooking With Trash."

It featured Cameron Macleish, who has a YouTube channel by that name. He and his mother, Ellen, a chef, came with seemingly fresh food retrieved from a dumpster.

Dumpster-dumping for food is "like opening a treasure chest … There is so much good food thrown out on a daily basis," he stated. His interviewers were somewhat taken aback.

This is one way to reduce food waste. Another way is a movement today involving restaurants pledging to generate "zero waste" with a variety of recipes using produce that otherwise would end up in the trash.

There are other strategies. Governor Andrew Cuomo has been seeking to require "organizations that produce large amounts of excess food a year to donate edible items to food banks and recycle the rest." He heralded the new "groundbreaking clean energy project."

No matter how much there's a reduction in wasted food, there still would be inedible scraps. Charles Vigliotti, co-founder of American Organic Energy, said that for this area "the notion that we would put virtually all our commercial food waste onto trucks and carry it to Ohio and North Carolina is just insane."

The main safe alternative energy technologies — solar and wind — are an energy bonanza.

With 38 solar photovoltaic panels on the roof of our house for 10 years, I still marvel at seeing the electric meter going backwards. The panels are harvesting more electricity than we are using. We saved a lot in installing them with a LIPA rebate. That rebate no longer exists, but over the decade, the price of solar panels has halved and their output significantly increased. Houses and commercial and government buildings throughout Long Island should have solar panels on their roofs.

Coupled with this, we had an "energy audit" done of leaks and other issues and took simple steps to make our more than a century-old house energy efficient. We also have two rooftop solar panels that produce hot water.

Shelter Island Reporter

Column

LIPA has been deeply involved in the major state initiative underway to place wind turbines well off our shores.

Yet, in addition to the sun that on most days shines on us and the winds that blow mightily off our coasts, there are other available energy sources. Take wave and tidal power long advocated here by Sarah Meyland, a professor in the Department of Environmental Technology and Sustainability at New York Institute of Technology in Old Westbury.

As Ms. Meyland has stated, "no one else in the state" other than this area has "wave energy. We have it 24 hours a day. The sun doesn't have to shine, the wind doesn't have to blow. Tides rise and fall on a regular basis, day in and day out."

Countries, especially in Scandinavia, have "deployed tide-generated plants that are completely submerged and generate a lot of electricity. It's absolutely clean, and if we could support enough of these, we would solve a lot of our downstate energy problems."

Indeed, next to Roosevelt Island in the East River, Verdant Power has had a demonstration project with six turbines spinning with the river's motion. Verdant now seeks to install 30 turbines to generate electricity.

There are opportunities to use tidal power in this area, with Plum Gut off Orient Point an ideal location. Natural Currents Energy Services has been considering it. We've been in Plum Gut in our sailboat when the tide is changing, and, wow, what power waits to be tapped!

As for the waves hitting our ocean beaches, the energy that can be harvested from them is also endless.