

The Forest County Potawatomi Community (FCPC) Renewable Generation, LLC., Biodigester



The Forest County Potawatomi Community (FCPC) Renewable Generation, LLC., Biodigester (i.e. waste-to-energy) Facility located in Milwaukee, Wisconsin, processes high strength wastes from more than 10 food production facilities located in Southeast Wisconsin. The facility converts liquid and solid food wastes to biogas through an anaerobic digestion process. The biogas fuels two 1.0 MW generators to produce a total of approximately 2.0 MW gross electrical power output, which is sold to We Energies, the local electrical utility. The heat is captured from the engines and transferred back to the adjacent FCPC casino.

This waste-to-energy project, the first of its kind in the Milwaukee-area and one of the largest in the Midwest, takes high strength liquid residuals which were previously handled as a waste stream from food and beverage industries and utilizes these residuals to generate electricity and heat. The biological process is one of the largest anaerobic membrane bioreactors in the world.

Partners in the project included Greenfire Management Services-the tribal construction management Company, Symbiont – Science, Engineering and Construction, Miron Construction, Titus Energy, Advanced Waste Services, Biothane, as well as bioenergy researcher Dr. Daniel Zitomer of Marquette University.