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## PC joins PurposeEnergy for ribbon-cutting at 2,600 s/f Middlebury Resource Recovery Center

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Middlebury, VT PC joined PurposeEnergy for a ribbon-cutting ceremony to mark the completion of construction for the new Middlebury Resource Recovery Center (MRRC). The MRRC is an industrial organic waste treatment center for converting food and beverage residuals and wastewater into renewable energy and treated water. The 2,600 s/f, two-story facility, situated on a half-acre site, consists of an anaerobic digester, a generator to produce renewable electricity from digester biogas, and a related building and piping.

The center of the facility is PurposeEnergy's patented Tribid-Bioreactor, which converts organics in food and beverage waste into a biogas that then generates electricity. That process is supported by three 47-ft.-tall steel digester tanks, two 33-ft.-tall steel flow equalization tanks, hydrogen sulfide scrubbing equipment, and methane and thermal energy recovery systems. PC also installed new

offsite pump stations and force mains to allow several nearby food and beverage manufacturers to connect directly to the facility.

In addition to the large producers directly connected to the facility (Agri-Mark for Cabot Creamery and the Vermont Cider Co.), the MRRC can also accept food waste from other producers within 50 miles. The project offers these manufacturers a lower-cost, greener alternative for disposing of food waste, and it supports renewable energy generation by producing 1.014 MW of electricity for Vermont homes and businesses on a 24/7 basis.

When fully operational, the MRRC will treat approximately 80,000 gallons of food waste and wastewater per day, converting over 90% of the organic content into renewable biogas. It is estimated that this facility will reduce greenhouse gas emissions by more than 2,000 tons of CO<sub>2</sub> per year, primarily by the elimination of 278 tanker truck trips each month

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