

Title: Waste Steam Microturbine

Company/Organization: Lonza Biologics

Type of Organization: For profit

Number of Employees: >100

Category: Workplace

Challenge or Opportunity: How to capture waste boiler steam energy and generate electricity

Approach or Solution: Worked with a technical consultant to design and install a microturbine that captures high pressure steam coming from the existing boiler system. The waste steam powers the new turbine to generate electricity for site use. This project was also coupled with another project to close an open loop plant steam condensate return, which reduced water consumption. We also worked with the local utility to receive energy rebate funding.

Impact: The microturbine has the capability to produce of 2 million KWH of electrical savings per year, which equates to over \$300K in savings. This local generation of electric also supports reduced GHG's. The water savings is approximately 630,000 gallons per year.