

Case Study

Year-round Hot Water Demand Calls for Combined Heat and Power (CHP)

Through a commitment to find sustainable and innovative solutions to reduce operational costs, members of Lakeland Hills Y installed a CHP system.

CHALLENGE

Lakeland Hills Y is located in Mountain Lakes New Jersey where there are high seasonal energy costs. Titan Energy worked with the Y to find a feasible no-cost solution to address the high energy cost associated with running a year-round community center with an aquatic center. It was important to support the Y's commitment to sustainability while reducing the community center's exposure to the Northeast's expensive utility costs.

APPROACH AND SOLUTION

Utilizing an audit to determine the facility's natural gas and electricity consumption, Titan was able to size and source a co-generation unit to fit the Y's needs. Strategically ordering the 75kW Tecogen module in the summer, with installation completed in the fall, the Y was prepared for the winter demand increase and was able to cover 72% of the energy usage and cover 55% of the heating requirements.

Titan was able to significantly finance the overall project cost through a power purchase agreement (PPA). This allows the nonprofit to benefit from onsite clean energy without any initial capital requirements.

Titan also secured custom electricity pricing to better reflect the facility's remaining usage allowing the Y to take advantage of additional rate savings.

AT A GLANCE

- ▲ **Building Type:** Non-profit Aquatic Community
- ▲ **Services Performed:** Engineering, Project Management, Utility Rebate Procurement
- ▲ **System:** 75kW Tecogen CHP Unit
- ▲ **Thermal Production:** 500,000 BTUs
- ▲ **Electricity Production:** 657,000 kWh
- ▲ **Savings:** \$36,500 Annually

"Titan's responsiveness and concern for detail during our co-generation project was greatly appreciated. Their effective coordination with the installer provided for a seamless transition in our co-generation project and I highly recommend the team to any prospective YMCA considering the merits of co-generation at their facility."

- Viktor Joganow, Lakeland Hills YMCA Chief Executive Officer

TO SCHEDULE A CONSULTATION: TITANENERGYNE.COM