

SUNY Oswego
Category A Feasibility Study
NYSERDA PON 4614

Oswego County

Technical Lead: M/E
Engineering

Anticipated completion of
study/availability of final
report: October 2022



The Site & Beneficiaries

SUNY Oswego is an educational campus of 55 buildings on 700 acres along the shore of Lake Ontario and at the western outskirts of downtown Oswego. The school's Climate Action Plan aims for the campus to be climate neutral by 2050. This study will act as a pilot to determine if community heat pump systems should be considered at other locations across campus.

This project will explore electrification of a cluster of four diverse buildings, collectively 160,000 square feet, including residences, an office building, and a dining hall. These sites are in close proximity and adjacent to open space where a borehole array could be located. Each building also has aging heating equipment that will soon need to be replaced. Thermal loads from the varying energy peaks in each building can be combined across the sites to reduce heating and cooling peaks.

Potential Thermal Resources

The leading candidate system approach for this community heat pump system will be a geothermal system with a continuous loop connecting all four buildings. The analysis will compare a geothermal community heat pump system to the existing building HVAC systems and to geothermal heat pump systems serving each building separately.

Potential Configuration

SUNY Oswego owns all of the buildings and property and maintains the systems that encompass this proposed community heat pump area, minimizing any installation barriers, permission requirements, variances, or re-zoning issues. This study may also provide a road map for future sustainability efforts at SUNY Oswego, as well as valuable information for other colleges, universities, healthcare campus and neighborhoods that encompass various building types.