CASE STUDY



Sustainable Solutions to Help Leonard Oakes Estate Winery Reduce Environmental Footprint



Challenge

Leonard Oakes Estate Winery wanted to identify opportunities to help them become more sustainable.

Solution

NYSP2I and CEEL worked with Leonard Oakes Estate Winery to assess current winery operations and identify opportunities to reduce its environmental footprint.

Results

The ERP Sustainability Initiative for NYS Wineries assessment identified opportunities to reduce water usage, solid waste, and energy use in the winery.

Leonard Oakes Estate Winery

Leonard Oakes Estate Winery (LOEW), located in Medina, NY, boasts a 100 year history of ties to agriculture. On average, approximately 2,500 cases of wine are sold per year. LOEW continues to seek practical approaches to becoming more sustainable.

Challenge

LOEW wanted to improve sustainability practices and reduce their environmental impact. The New York State Pollution Prevention Institute (NYSP2I), paired with the Cornell Enology Extension Laboratory (CEEL), performed an assessment as part of the Environmental Results Program (ERP) Sustainability Initiative to assist in LOEW's efforts to become more sustainable.

Solutions

As part of the assessment, NYSP2I and CEEL collected baseline information regarding water/chemical use, wastewater generation, solid waste, and energy consumption. The team then created a list of opportunities for LOEW to consider.



Results

Prior to this project with NYSP2I and CEEL, LOEW already had several practices in place that lowered the winery's environmental footprint. Some of these practices include:

- · Capturing all wastewater and disposing of the water in an environmentally-safe manner.
- · Reducing use of caustic chemicals in cleaning processes.
- · Utilizing a high pressure steam cleaner without chemicals to clean stainless steel tanks and barrels.
- Installing LED lighting in processing room.

The work performed by NYSP2I and CEEL identified other potential Best Management Practices to help reduce environmental impact. Some of the opportunities LOEW can consider include:

- Using dry cleaning methods.
- Converting to low flow nozzles and expanding high pressure cleaning.
- · Reusing final rinse water in other areas to reduce water usage.
- Reviewing potential options to valorize the solid waste as opposed to composting.
- Increasing the chiller suction pressure to reduce compressor energy.
- Reducing the chiller head pressure during the winter months to improve the performance.
- Repairing the non-operational evaporator fans on the chiller.
- Utilizing tartrate inhibitors to manage tartrate crystallization while using less energy.

Partners











For more information please contact us:

 \$85-475-2512
nysp2i@rit.edu
rit.edu/nysp2i
111 Lomb Memorial Drive, Bldg 78 Rochester, NY 14623

Although the information in this document has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement X9-96250700 to the New York State Pollution Prevention Institute at Rochester Institute of Technology, it has not gone through the Agency's publications review process and, therefore, may not necessarily reflect the views of the Agency and no official endorsement should be inferred.

Funding for this project has also been provided by the Environmental Protection Fund as administered by the NYS Department of Environmental Conservation. Any opinions, findings, conclusions, or recommendations expressed are those of Rochester Institute of Technology and its NYS Pollution Prevention Institute and do not necessarily reflect the views of New York State.