

# Water, Energy, and Chemical Assessment Helps Channing Daughters Pursue Sustainability-based Opportunities



## Challenge

Winery seeks to learn more about sustainable opportunities.

## Solution

NYSP2I conducted on onsite assessment and analyzed data obtained to help determine where cost improvements could be made.

## Results

- Reduce water consumption by 22% by using high pressure washers
- Insulating chiller tanks can save \$3,500 annually
- Reduce electricity usage through a control system that staggers use of high energy equipment to avoid "spikes"

# **Channing Daughters Winery**

Located on the South Fork Wine Trail of Long Island, Channing Daughters Winery produces about 12,000 cases/ year of red, rosé and white wines. While Channing Daughters has achieved certification through Long Island Sustainable Winegrowing (LISW) for vineyard-related operations, the winery was interested in learning about potential sustainable opportunities for the winery operations.

"Channing Daughters found the RIT team thoughtful, creative and thorough. We were able to better understand how to conserve energy and water. We were able to implement several of their recommendations." LawrencePerrine, Channing Daughters Winery

## **Solution**

New York State Pollution Prevention Institute (NYSP2I) visited Channing Daughters to conduct an onsite assessment that included determination of baseline water consumption and an evaluation of chemical and energy use. NYSP2I analyzed data obtained, such as water and electricity bills to examine process and seasonal variations in water and energy use information that would help to determine where cost-effective improvements could be made.

## Results

NYSP2I identified the following environmental improvement/cost saving opportunities:

- Reduce water consumption by 22% through utilization of high pressure washers for cleaning equipment (pressure washer already on location).
- Save energy and overall costs via the following recommendations:
  - 2.4 year payback to replace fluorescent lighting with LED lighting in hospitality room (approximately \$400/year savings).
  - Insulation of chiller tanks can lead to \$3,500 savings annually (\$200-350 per 30-day cold stabilization run; several tanks have already been insulated as part of implementation).
  - Reduce electricity usage using a control system that staggers use of high energy equipment to avoid "spikes" and prevent excessive charges.
  - Switchover from propane to natural gas heating would save \$10,000 per year and reduce greenhouse gas emissions by 18%.

## Implementation

• Replaced fluorescent lighting with LED lighting in hospitality room (~\$400/year savings).



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