



Columbine Vineyards

Vineyard Reaps Savings From Energy Efficiency Initiatives

As they expand their business – which focuses on growing, packing, and shipping delicious, high-quality table grapes – third- and fourth-generation Caratan family members take pride in continuing the heritage of Marin Caratan, who began harvesting crops in 1926 in California’s fertile San Joaquin Valley.

Part of that heritage for Columbine Vineyards (a company of M Caratan) includes a commitment to doing the right thing, which today includes promoting sustainability and supporting the community.

Of course, profitability matters too, so as the company grows, it’s working with us to find ways to remain true to its culture while saving energy and money.

New Storage Facility: Incentives and Long-Term Savings

Several years ago, the company determined it needed to build a new cold storage facility. We pointed out Savings By Design (SBD), a program administered by several California utilities that offers incentives to encourage high-performance nonresidential building design and construction.

The 200,000-square-foot facility – which began operating in mid-2014 – includes several features that help lessen both electricity use and greenhouse gas (GHG) emissions:

- Significantly improved insulation levels beyond standard industry practices;
- Aggressive refrigeration controls and variable frequency drive (VFD) fan controls; and
- Reduced Lighting Power Density (LPD) via high-efficiency light fixtures, in conjunction with the use of occupancy motion sensors.

For this project, the company received approximately \$129,000 in incentives, with projected annual savings of 957,000 kilowatt-hours (kWh) – equivalent to GHG emissions reductions of nearly 674,000 pounds per year – and peak demand reduction of more than 330 kW. Carter said the facility is also designed for a solar power installation, and the company plans to place it on a Demand Response (DR) program during the next off-season. With DR, by reducing energy consumption during peak periods, companies relieve stress on the electricity

Estimated Savings by Managing Energy

Name: Columbine Vineyards (a company of M Caratan)

Industry: Agriculture

SCE Programs Utilized:

- Savings By Design
- Pump Test Services

Results:

Cold Storage Facility

- Projected annual electricity savings of 957,000 kWh, peak demand reduction of more 330 kilowatts, and incentives of approximately \$129,000 for new cold storage facility
- Projected annual electricity savings of nearly 404,000 kWh, and incentives of more than \$44,000 for pump upgrades

Pumps

- Greenhouse gas emissions reductions of approximately 958,000 pounds (479 tons) annually

grid and the environment, and in turn earn bill credits that help offset monthly energy charges.

Carter noted, “Our leadership understands the need to pay higher up-front costs knowing that down the road we’re going to realize savings. We’re also trying to promote the idea of sustainability and community. We don’t look to take shortcuts.”

Reduced Costs to Pump Water to Vineyards

Columbine Vineyards also has tapped into our free Pump Test Services, which evaluate pump plant conditions to identify improvements that can bring sites back to optimal design and efficiency.

In 2015, Columbine Vineyards added VFD drives on two pumps and made operational adjustments to increase efficiency, lowering the pumping cost per acre-foot for water delivered to its fields. The company is projected to receive more than \$44,000 in incentives for these upgrades, with estimated annual savings of nearly 404,000 kWh. This equates to reducing GHG emissions by nearly 284,000 pounds per year.

Carter said, “As we have grown, we have looked for even more efficient ways to do business. To continue to be profitable we need to pursue every avenue.”



33% Refrigeration Defrost Water Usage Reduction

Columbine Vineyards’ commitment to resource use reductions extends to other areas. According to Carter, it has decreased its refrigeration system’s defrost water usage by 33% by reprogramming the defrost cycles. The company also uses best practices to reduce dust and soil compaction, recycles extensively, and consolidates truckloads to lessen fuel consumption and traffic congestion.

Clearly, Columbine Vineyards is continuing to make a difference with sustainability initiatives that improve its bottom line and reduce its carbon footprint.

“It’s become second nature,” Carter concluded. “It’s something we just do.”

As a business owner or manager, you have a wide selection of savings opportunities, and SCE can deliver energy management programs and solutions with incentives and bill credits to go with them. Our energy management solutions offer a range of efficiency options, developed with your industry in mind, to help your business maximize savings over the long term through the permanent and temporary reduction of electricity usage.

“Going into this [cold storage facility replacement] project, I wasn’t aware of Savings by Design. But our SCE Account Manager brought it to our attention, and it helped us save money and make the project more energy efficient than it would have been otherwise.”

*Columbine Vineyards Facility Manager
John Carter*

To learn more about our energy management solutions, ways to reduce your energy usage, and manage your energy costs, visit sce.com/business or call your SCE Account Manager.

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