

# Winery Case Study



## Project Profile

**SolarCraft** both designed and built this 30 kW solar electric system for Wellington Vineyards in Glen Ellen, CA, providing 100% of the winery's annual electricity needs.

The winery's building is roughly 5,000 square feet and now supports (174) Mitsubishi 170 watt solar panels. These solar modules comply with the highest environmental standards, using reliable, lead-free fabrication techniques that improve the power efficiency. The 2,400 square feet of high capacity solar panels will generate roughly 30 kilowatts peak power. The system will generate enough electricity to virtually eliminate expensive peak-period usage, while also selling excess power back to the local utility

company for credit. The credits are sold to the utility company at peak rates and the customer uses them back when needed, such as during nights and winter.

A certified Sonoma County Green Business, utilizing green energy was Wellington's primary motivation for installing the PV system.

Wellington's new solar system will generate enough clean electricity each day to power 12.5 average homes. The new system will spare the air nearly 22 tons of harmful greenhouse gases annually, comparable to planting over 4 acres of trees. Over the next 30 years, the air pollution saved will be equivalent to driving over 1.5 million miles.



## Specifications

<b>System Size</b>	30 kW DC 26 kW AC
<b>Location</b>	Glen Ellen, CA
<b>Solar Panel</b>	(174) Mitsubishi 170W
<b>Inverter</b>	(5) SMA SB 6000US
<b>Mounting System</b>	ProSolar
<b>Estimated Annual kWh</b>	40,586
<b>Cumulative Cash Positive</b>	5-6 Years

## Customer Profile

Wellington Vineyards is a family winery owned by the father and son team, John and Peter Wellington. They practice sustainable agriculture, using a blend of organic and traditional farming practices that promote healthy vines and a healthy environment. The estate vineyards consist of 21 acres, 8 of which are 81 to 113 years old, with the most common being Zinfandel, Carignan, Alicante Bouschet, Grenache and Syrah. In addition, there are 10 acres of 11 to 16 year old vines that consist of Merlot, Chardonnay, Marsanne, and Syrah.

Wellington's first vintage was 1989. Close to 50% of their wine is sold through the tasting room; availability elsewhere is and will continue to be extremely limited.

## About SolarCraft

**SolarCraft** is one of the most experienced solar energy contractors and retailers in California. For more than 24 years the certified "Green Business" has been providing Solar Thermal and Solar Electric services including consulting, design, installation, monitoring and maintenance. **SolarCraft** has installed more than 4,300 solar energy systems in California with over 1.3 million square feet of solar collector surface area, saving customers more than \$7 million annually and preventing production of more than 28,000 tons of greenhouse gases every year.

*"It's the right thing to do. Solar energy is good for the environment and the reduction of greenhouse gases is good for the community. With the financial incentives, it's a no-brainer. **SolarCraft** was chosen for the job based on their reputation and long track record in the industry."*

**Peter Wellington**  
Co-Owner  
Wellington Vineyards