

CULTIVATING A GREEN TEAM

Most organizations have at least one person who is concerned enough about environmental issues that they take it upon themselves to become the unofficial "recycling coordinator" or "energy conservation specialist." These champions are evidence of an innate value laying dormant in most employees who would be willing to play an active role in bettering the workplace if given the opportunity. By bringing these individuals together, businesses can leverage the "green energy" that exists to move the entire enterprise in a more sustainable direction.

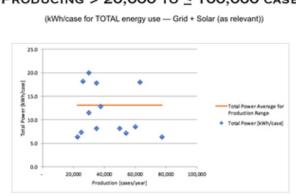
One of the most effective ways to capture this energy is to form what is known as a "Green Team." The term "Green Team" often inspires a focus on questions of resource conservation and improving efficiency. While initial commitment and enthusiasm is often high, at least among some team members, the energy can quickly wane due to the limited expertise and knowledge on how best to achieve results, as well as a lack of empowerment and investment from leadership.

To help avoid that from occurring it is important that the Green Team includes staff across departments and management hierarchies, sharing diverse perspectives on the opportunities, issues and concerns. This requires there be at least one representative of senior management on the team with budgetary authorization to define the team's budget, so that identified actions can be implemented.

Below are a few tips for cultivating a viable, long-term team that will provide many opportunities to harvest:

- Napa Green Certified Wineries who are launching a Green Team start with a huge advantage they have received an Integrated Resource Assessment and already have their baseline metrics in-hand of energy and water intensity and waste diversion. They also have a detailed report providing near-term and longerterm recommendations. From Day 1 Napa Green Teams have valuable information at their fingertips they can put to work!
- Emphasize Two Shades of Green: Reducing energy costs is a great business strategy that also offers environmental benefits. If the team focuses on saving money by increasing their energy efficiencies they will also harvest environmental benefits. In most cases, the team will discover two shades of green for implemented actions.

The example scatter graph below shows a range of energy intensity metrics across wineries. This shows that if the average kWh cost is accounted for wineries of a similar scale can have significantly divergent per case energy costs based on efficiency.



ENERGY INTENSITY METRICS FOR WINERIES PRODUCING > 20,000 to ≤ 100,000 cases

Note – at a cost of ~\$0.20/kWH Most Efficient \$1.20/case ~ Least Efficient \$4.00/case

- Define the baseline the Team is starting from. You have to know the costs and impacts of current business practices in order to track results. Metrics need to be established to track savings and accomplishments over time. These baselines and metrics may include:
 - Basic utility costs
 - kWh/case; gallons of water used per gallon of wine produced; waste diversion percentage (% of waste recycled and composted)
 - Identifying which suppliers generate the most waste
 - Inventorying the amount of toxic chemicals in use
- By the janitorial staff
- In pest management of the vineyard and winery
 - Defining the full cost of water
 - Defining the full cost of bottles and wine shipments, including the carbon footprint

Provide regular feedback on what is being accomplished, and make the data meaningful. Once the team
has established baseline metrics and goal posts have been set the key to keeping everyone aligned and on
track is regular feedback on progress, or lack thereof, so everyone knows what's working and where
adjustments need to be made. The Green Team should share the message across departments and can
leverage existing production check-ins or safety trainings to carve out a small window of time for a progress
update.

St. Supery Estate setup monthly tailgate sessions with production staff to share water use over time and comparisons across years and asked for suggestions in how to make improvements. As the cellar staff saw their actions were really adding up they got a little friendly competition going and ultimately were able to cut water use by 25% in just two years. At Francis Ford Coppola Winery staff was tracking and communicating water use but the numbers weren't really resonating. A staff member was walking by the swimming pool one day and thought, "Let's put water use in the context of how many swimming pools worth of water we're using or saving." Suddenly the numbers had tangible meaning.

• As production cost savings are realized set up an account to reinvest in continuing improvement. This is critical to keep the momentum of the team moving forward. Most teams do a very good job of identifying the "fruit on the ground" opportunities, like getting a free energy meter rate analysis and saving \$3,000 per year with a simple account adjustment. Once those opportunities are harvested, the "low hanging fruit" and the "investment grade quality" is difficult to capture if the company has absorbed the savings rather than making that money available for the next level of opportunities. This is when the Green Team becomes self-funded.

Once the conversation is happening within the company and results are being realized the Green Team member(s) representing marketing and sales can take the success stories out to customers through wine club shipments, the tasting room, retailers and distributors. Now that the winery has internal alignment and sustainable momentum it is time to put the logos on the bottles and share the accomplishments in the marketplace, inspiring others with what can be achieved.

The primary indicator of success will occur when everyone is talking about the connection between sustainability and the quality of the wine, the quality of the business and the quality of the environment.

GREEN TEAM EXAMPLES

1. Cakebread Cellars — In 2008, Cakebread Cellars had a 20 yard trash bin too tall for anyone to see what was landing inside. They started working with staff to improve sorting of trash and recycling and quickly realized they could cut their trash capacity in half, saving significant money on their waste management bill. They setup a Green Team that ultimately set the goal to become a Zero Waste winery. The team soon discovered that since the waste management company can't track how full bins are when they are picked up they couldn't accurately track their waste diversion. So the Green Team created simple forms and tasked the hospitality staff to go out daily to validate proper sorting and record the level of trash, recycling and green waste. The team made the case for Big Belly solar-powered trash and recycling compactors that significantly reduce the frequency of required waste pickups. Today they have increased diversion to over 92%, which has also come with a big economic benefit - over \$30,000 in annual savings!

2. J Lohr Vineyards — With water being a scarce resource in Paso Robles the folks at J Lohr took more of a 'Blue Team' approach by implementing a water use guessing game in the cellar. Workers were asked to guess how much water they used per day and then were provided with a portable flow meter that attached to the hose bib. After using the meter for a day, workers had a snapshot of their water footprint. The worker who was closest to his guesstimate won a \$100 gift card. See the video here: https://vimeo.com/65327329



WHAT ARE THE GOAL POSTS?

Keep in mind the caveat of scale. It's generally easier to achieve greater efficiencies at higher scales of production. However, committed small family wineries making 10,000 cases a year have been able to achieve as good or better energy and water efficiencies than corporate wineries producing over 200,000 cases.

The goal posts listed are based on industry research from groups like the California Sustainable Winegrowing Alliance, and the results of ~70 Integrated Resource Assessments of Napa Valley wineries.

ENERGY

Excellent <10 kWh/case; Okay 10-15 kWh/case; Needs Improvement >15 kWh/case

WATER — Process + Administration + Hospitality (Excluding landscaping or irrigation)
 Excellent 3-6 gallons of water/gallon of wine;
 Okay 6-10 gallons/gallon;
 Needs Improvement >10 gallons/gallon

WASTE — Over 75% diversion NOT including pomace

Pomace artificially inflates the diversion tonnage. The County of Napa estimates that more than 90% of waste generated by wineries is recyclable or compostable.