

Wineries join forces to reduce plastic waste

By Chris Benz

Wineries seeking sustainable certification, such as Napa Green, must address what happens to their waste. The search for how to recycle plastic waste led to the formation of the Wine Industry Zero Waste Collective, along with two innovative programs for recycling stretch film, a plastic wrap, and PET liners, the plastic backing for wine bottle labels.

The Collective was started in 2023 as a result of the Napa Green RISE symposium session on reducing winery waste. It is currently chaired by Megan Hernandez, a representative for Orion Cooperage and 2B FermControl wine additives, and Brooke Shenk, winemaker at St. Supéry Estate Vineyards & Winery.

Hernandez, Shenk, and several others met with Stephanie Barger from the TRUE Zero Waste certification program (<https://www.gbci.org/about-true>), who shared information about Trex Decking's recycling program. Trex Decking purchases waste polyethylene stretch film and uses it to make its composite plastic decking products. Wineries use this film to wrap pallets of wine cases and other materials, and receive it as wrapping on wine barrels.

"We called Trex", Hernandez said, "then called the Wine Service Co-op, and a week later, we were able to start collecting. In my job, I travel to wineries in different states and see that they want solutions to recycling this kind of waste. But it's not something an individual winery can do on its own."

The program has grown rapidly. It now includes more than three dozen Napa and Sonoma County winery participants, as well as other businesses, including an auto parts supplier, Napa Sanitation, and Mare Island Brewing Company.

Plastic wrap is collected and baled at the Wine Service Cooperative locations in St. Helena and near the Napa Airport. To date, the program has collected 50,000 pounds and shipped nearly half of that to Trex in Fernley, Nevada.

Setting up the PET liner recycling program was more complex. The rolls of label liners, made from polyethylene terephthalate (PET), are heavy and don't have a resale value. Shenk researched companies that recycle this material and met Michael Garretson of RafCycle, a recycling program of UPM Raflatac, a manufacturer of label products. The PET liners are recycled into outdoor and automotive carpeting.

"RafCycle was willing to pay for trucking and helped us create a partnership with Golden Bear Recycling, a cardboard manufacturer," Shenk explained. "Golden Bear provided the pallet boxes that the PET liners are collected and shipped in. Now we are starting a cardboard recycling program with Golden Bear."

The cardboard recycling program is the type of circular economy that the Collective hopes to see.

“They take cardboard from wine country, reprocess it into case box inserts in Tracy, and send it back to wine country,” Hernandez explained. “But the PET liners only show up in winery-dense regions. It’s not a valuable product, so no one is buying it. We hope that if we collect a significant amount of the liners then label manufacturers will develop a way to reuse them. That would make it circular.”

Recycling plastic waste is important because it reduces the amount of virgin plastic produced from fossil fuels. An April 2024 study from Lawrence Berkeley National Laboratory reported that plastics production from fossil fuels generated more than 5% of global greenhouse gas emissions. The report stated that plastic production is expected to double or triple by 2050.

The Collective also promotes recycling efforts such as the Tinfoil Wine Capsule Recycling Project run by the Teacher Resource Center of the North Bay. Capsules are collected and sold to buy school supplies for local educators.

And there is another benefit of the Collective’s programs.

“Wineries are saving money by reducing what they put in their dumpster,” said Shenk. “The plastic isn’t going into the landfill. It’s being reused and we know exactly how.”

Actions you can take:

1. Learn about the Wine Industry Zero Waste Collective at <https://www.wineindustryzerowaste.com/>.
2. Contact the Teacher Resource Center at (707)782-6053 about the wine capsule recycling project.
3. Recycle your clean plastic wrap at Napa Recycling’s Payment Center, a 598 Lincoln Street, Napa, Monday-Friday, 8:30am-5pm.

Chris Benz is a retired winemaker and co-founder of Napa Climate NOW!

Napa Climate NOW! is a local nonprofit citizens’ group advocating for smart climate solutions based on the latest climate science, part of 350 Bay Area.
Info, napa.350bayareorg

Photo credit: Chris Benz

Photo caption: Brooke Shenk and Megan Hernandez of the Wine Industry Zero Waste Collective with plastic wrap and rolls of plastic label liners ready for recycling.

