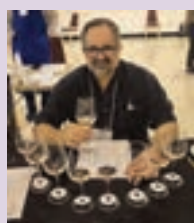


TRIALS & TROUBLESHOTS

Tap Trifecta: The Wine Group Expands Keg Program, Develops New Protocol

The Wine Group scales their on-premise program with stainless steel kegs from Free Flow Wines to meet rapidly expanding demand for still and sparkling wines

Bryan Avila

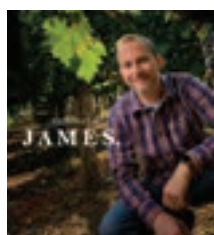


Meet the Author: Bryan Avila has more than 20 years of experience in winemaking, applied research, writing and education. Bryan facilitates conversations among growers, vintners and technical leaders, highlighting how science and real-world observation help overcome challenges, improve grape and wine quality, and reduce environmental impact. Contact Bryan at bryan@vintnersinstitute.com.



TRIAL LEAD: Matt Roemer, director of national accounts, The Wine Group, Scottsdale, AZ

Matt Roemer is an Arizona native with over 20 years of experience in the wine industry, specializing in both on- and off-premise sales. Throughout his career, he has built a strong reputation for driving growth and cultivating key customer relationships across diverse markets. Most recently, Matt took a strategic detour into product development, focusing on innovation within the on-premise channel. His combination of commercial expertise and creative insight makes him a valuable leader in the evolving beverage landscape.



WINEMAKING SUPPORT: James Foster, senior director of super-premium wines, The Wine Group, Livermore, CA

James Foster did not fall into winemaking by chance. He was raised on his family's farm, the historic Roseland Plantation in Eufaula, Alabama, where they farmed peanuts, hay and cotton. His dad, who later went to work in the California wine industry, was always his biggest inspiration. During the summer, James was put to work, pruning and picking the vineyards, racking and blending in the cellars, and running equipment on the bottling lines. But it wasn't until James was given the opportunity to shadow the winemakers that he knew this is what he wanted to do for the rest of his life.

BACKGROUND:

In 2011, Barry Dugan, writing for *WineBusiness Monthly*, reported that UC Davis professor Dr. Roger Boulton estimated that 51% of CO₂ emissions from the wine industry came from the manufacture of glass bottles¹. In 2014, a Wine Institute study revealed the California wine industry's carbon footprint². The biggest takeaway from the report was that between vineyard, winery, distribution

and packaging, newly manufactured glass bottles accounted for 29% of wine's carbon emissions. According to the U.S. Environmental Protection Agency, less than 40% of all wine and liquor bottles are recycled³. While the recycled portion is easier to melt and saves up to 30% of the energy required to make new glass bottles, getting a consistently colored bottle is difficult.

In looking at glass alternatives, plastic is not biodegradable; and while it is often touted as 100% recyclable, its actual recycling rates hover between a dismal 5 to 8.7%⁴. Aluminum cans offer a more lightweight package and are far more recyclable, but wine's acidity isn't a great pairing with aluminum if the can's plastic liner is compromised. Reusing wine bottles could solve a lot of problems, but without some level of standardization in wine bottle molds and color, this presents a logistical nightmare. [Author's note: Honorable mentions should be given, however, to Revino in Oregon and Good Goods in New York, organizations that are blazing these trails in bottle reuse.]

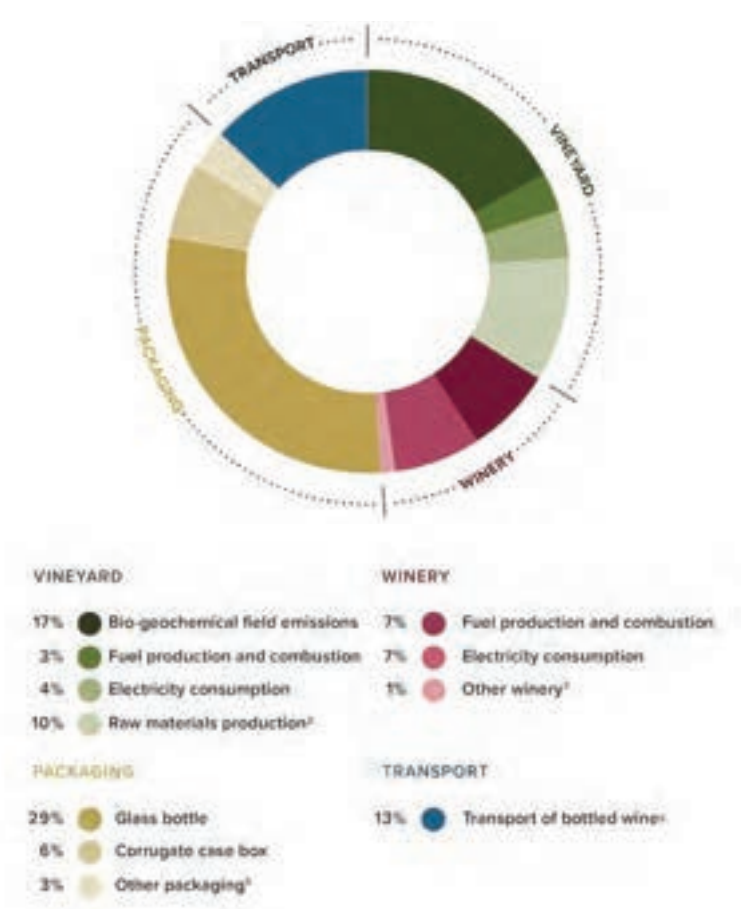


FIGURE 1 Wine Institute Life Cycle Assessment of vineyard, winery, packaging and transport systems (2014).

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Stainless steel, on the other hand, is durable, impervious to wine chemistry and is known to be one of the most recyclable materials in the world. While too expensive for the 750ml format, stainless steel remains a great back-of-the-house container. Most on-premise settings, restaurants, bars and hotels sell upwards of 75% to 80% of their wines by the glass (BTG), and the consumer rarely sees the bottle. One keg of wine holds just over two 12-pack cases of wine. That's 26 bottles, capsules, closures and labels that don't end up in the landfill.

This article spotlights how The Wine Group's sales and winemaking teams have listened to those pouring wine on the front lines and how they overcame technical and cultural challenges by teaming up with Free Flow Wines to offer wine in kegs. Sonoma-based Free Flow Wines provides wine kegging services to more than 450 distributors across the United States.

PILOT MARKET OBJECTIVE:

The Wine Group scales wine for their on-premise program in stainless steel kegs with Free Flow Wines to meet rapidly expanding demand.

PILOT MARKET APPROACH:

The Wine Group (TWG) is a leading global wine producer based in California known for their diverse portfolio of over 60 brands. Currently, only top varietal performers within TWG's brands get kegged. More brand recognition by the customer means more sales for the BTG establishment and more re-orders of wine. The main challenge with a kegged format is that kegs are sold differently than a bottle of wine. The customer never gets to see a branded package. Instead, kegs are sold directly to businesses which engage in on-premise alcoholic beverage sales in the same manner as draft beer. While most bartenders have experience with kegged systems, as one can imagine, there are nuanced cultural and technical differences to be worked out.

A taproom with an extensive wine-on-tap list run by terroir-conscious bartenders is not yet the norm. Scaling good wine into places with kegs on tap presents some cultural and technical adaptation and requires good collaboration among sales and winemaking teams. The following key learnings are summarized by The Wine Group's Matt Roemer and James Foster who have been leading the charge in both the front- and back-of-the-house operations:

KEGGED PRODUCT PLACEMENT OPPORTUNITIES:

- The wines appear fresher on tap.
- No 750ml packaging costs allow for better BTG price.
- Business to Business (B2B) sales are more direct. You know exactly who the customer is.
- Sustainability is a great selling point.
- Wine-on-tap service is much faster than wine in bottle.
- Creates more opportunities to connect with new drinkers.
- Leads to sales of bottled varieties within a brand.
- Time savings for the bartender and the barback.

CHALLENGES:

- The customer must have the infrastructure to store, chill and operate kegs.

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- User error can lead to poor experiences with kegs in the case of flat or gushing wines.

WINEMAKING PROCESS DEVELOPMENT

OPPORTUNITIES:

- Kegs are more durable when compared to labeled and bottled wines, which can scuff, leak and break.
- Large fill volumes and far fewer containers make the filling operation much simpler.
- No need to constantly order new bottles, corks, capsules, labels or cartons.
- Kegs preserve wine quality extremely well.
- Free Flow Wine keging service has a 48-hour turn-around time from tankers to palletized kegs.

CHALLENGES:

- Similar to screw-capped wine bottling regarding chemistry and quality.
- Kegging systems are sophisticated enough to require third-party outsourcing.
- Good communication and audits help keep quality levels high and allow for better adaptability and responsiveness, especially with a product in a pilot market situation where learning is so rapid.

Post-Mort Q&A with Matt Roemer (MR) & James Foster (JF)

What was the motivation to put wine in kegs? Why did you decide to work with Free Flow Wines?

Roemer: The Wine Group's commitment to sustainability and innovative packaging dates back to 1981 when our founder, Art Ciocca, revolutionized the industry by introducing Franzia in a 5L bag-in-box. Continuing that legacy, partnering with Free Flow Wines was a natural next step. When considering environmental impact, stainless steel kegs were the clear choice. Today, we proudly offer six of our wines in keg.

Chris Benziger of the Benziger Family has been making wines, using the most eco-responsible means necessary since before it was cool. I remember him saying, "Instead of kicking nature out, invite it in." That friendly approach to nature has always stuck with me. I think it's funny how some folks talk about being sustainable: they do all the right things in the vineyard, have photos of sheep on their tasting room walls, give talks about sustainability, then negate it all by putting their wine in the heaviest bottles. We have moved to lighter weight glass for all our bottled categories.

In fact, you don't think about bag-in-box as being sustainable, but our Franzia labels deliver wine with a far lower carbon footprint than any bottle. Kegging takes it one step further: it ditches consumable packaging all together, and I think the wine on tap tastes fresher, especially when compared to a wine bottle that has been open longer than a day. While this may not be as much of



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an issue for the home drinker, for on-premise venues with a huge BTG wine list, it can be quite a headache.

How did you select which wines to keg? Why those?

Roemer: We currently offer a selection of California Cabernet Sauvignon, Chardonnay, Pinot Noir, two Sauvignon Blancs, including one from New Zealand, and recently, a carbonated Brut-style sparkling wine in keg. While we've experimented with other varietals in the past, these six have proven to generate the strongest traction and meet the highest demand from our retail accounts.

How did you approach the transition from bottle to stainless steel keg or did you design this program specifically for the keg?

Roemer: All the wines we offer in keg are the flagship varietals within their respective brands. Each selection represents the leading expression of its brand portfolio in bottle, so only the varietal that has proven to be the strongest performer in both sales and consumer recognition gets to go into kegs. By focusing on these lead offerings, we ensure that the wines delivered in keg format meet the highest expectations for quality, popularity and brand alignment. This strategy allows us to not only maintain consistency and trust with our retail and on-premise partners, but also to maximize consumer satisfaction by offering familiar, well-loved options in a more sustainable and efficient package.

Foster: From a production standpoint, from Chloe to Cupcake to Imagery, we've been keggering for quite some time. More recently, Silvergate has been well received and is taking off like wildfire. We used to ship our wines to Free Flow in 550s, but now we ship in tanker quantities. This program has really taken off. The keggering process at Free Flow Wines is just an extension of what we are doing in our own winery. When the wines leave TWG facilities, they are bottle ready. They're already heat- and cold stable, and SO₂ has already been added before the tanker leaves the winery. If some small SO₂ adjustments need to be made, they can do it for us.

The chemistry behind transitioning a corked bottle to keg is not too different than the transition from cork to screw cap. It's a more reductive environment, so we must be careful not to overuse sulfites. We pay close attention to the wine's pH and hit it with molecular SO₂ additions. Maintaining a low pH in the wines, until bottling, means that we can use lower amounts of sulfites to achieve our goals.

Sanitation is also very important. When I checked out Free Flow Wines many years ago, I wanted to make sure their sanitation practices were up to our standard as we would with any contract bottler. Their facilities were super clean. The residence time in their winery is short, which is great. Bulk wine tankers go in and are usually in kegs within 48 hours. They have their own QC department, and we also do random audits to make sure everything is tidy and that nothing slips through the cracks. We pull our own samples and do our own platings in-house once the keggering is complete.

Which quality parameters do you monitor to ensure that kegs deliver the same quality as in bottle?

Roemer: We use the exact same wines in our kegs that we bottle in our 750ml formats, ensuring the same high quality our customers know and expect. Every keggering run undergoes rigorous testing by both our internal quality control team and the experts at Free Flow Wines. Together, we closely monitor and validate each batch to guarantee that our standards for consistency, integrity and overall excellence are met without compromise.

Foster: As far as the post-keg microbial stability checks go, we run our micro tracks and check for yeast or bacteria growth. I can't remember the last time I put anything on hold. I think SO₂ plays a key factor too. We don't want the wines to be reductive, so we use molecular SO₂ to make sure that sulfite levels are optimal. Full kegs are heavy, so we don't want a recall, and fortunately, we have a long record of not having anything coming back. In general, we shoot for a pH range for whites around 3.2 to 3.3 and 3.55 to 3.6 for reds. Most importantly, we try to keep free SO₂ levels below 40 ppm. Fortunately, the keg environment is superior, and lots of bars are already working with nitrogen or argon, so we don't have to worry about oxygen in the headspace. Matt does a great job providing me with feedback from a winemaking perspective. Regarding sanitation, we are pretty hands-on. We look for general cleanliness and how rigorous their sanitation systems are. For example, we monitor how steady their sanitizing temperatures are to ensure keg sterility. Any visual gaps in sanitation, such as microbial build-ups anywhere, would trigger an audit by our QC team, but we've never had that issue with Free Flow.

Who else worked with you on scaling your keg program? What were your team's initial hypotheses before beginning the experiment?

Roemer: To ensure we were meeting market needs, we engaged both customers and key leaders from the distributor community. We gathered input on which brands, styles and price points were in high demand. Their feedback played a crucial role in shaping our keg portfolio. This outreach helped us focus on selections that not only resonate with consumers but also align with the needs of our retail and on-premise partners. We talked to our distributors, "How does this fit into your product mix?" We asked our sales reps, "Can you sell this?" and "How do you see this performing?"

Having this open dialogue with your customers is so important. Some accounts came to us and said, "Have you ever talked about doing a sparkling in a keg?" Without foundational retailers, it's hard to build out a new brand without a demand for it. Having a few retailers that were willing to try this out with us was pivotal. We let them decide whether the bubbles were enough. After all, have you ever tried opening case after case of sparkling wines for mimosas on a Sunday brunch rush? Imagine skipping all that by simply pulling a tap.

Did you encounter any quality or technical issues preparing wine to go into keg versus going into bottle? If so, how did you address them?

Roemer: By the time we began our partnership with Free Flow, they had already resolved most of the challenges associated with still wine in kegs. However, when it came to sparkling wine, we worked closely with their team to fine-tune the process. Our goal was to maximize carbonation while avoiding excessive foaming. There's a delicate balance that required extensive back-and-forth collaboration. We also incorporated valuable feedback from our customers throughout the process, ultimately achieving the perfect level of bubbles without compromising the drinking experience. When we get email complaints about the number of bubbles coming out of the tap, 99 times out of 100, it has to do with the gas regulator settings or the lines. There is a natural inclination that if the bubbles in the keg are too low, then you can just turn up the gas pressure, and there should be more bubbles, but that's not always how it works. At any given temperature there is an optimum level of bubbles; and once you exceed that, the bubbles just gush out, leaving the wine flat. That's when we'd get the frustrated emails and we start walking on eggshells. When folks are upset, it's not really a good idea

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to tell them their problem is operator error. Free Flow helped us by making the technical details more user friendly by creating training docs and videos to educate the end user on proper set-up.

Folks are also not too familiar with how long wines can “age” in a keg. Most people are used to working with beer, which they say remains fresh for up to six months when untapped. Free Flow says keged wines can keep forever untapped, and we tell our customers that once tapped, it will stay fresh for about six weeks. That said, we had a 2013 Chardonnay that a customer had hiding in their cooler. They sent it back because they said that it was just too old. We swapped it out for a fresh one; and when we tried the returned keg, it still tasted fresh! It was reassuring to see just how well that wine held up in an extreme condition.

Foster: As far as the bubble dosage rate goes for our keged sparkling wine program, we wanted the wine to be on par with a standard sparkling wine bottle. This is especially important because we know that a lot of our sparkling gets used for mimosas where half of the wine volume is diluted with orange juice. The dissolved carbon dioxide (DCO₂) levels we want to be higher for our sparkling kegs are above 0.392 grams of DCO₂ per 100ml. While this puts us in the sparkling wine tax class with the TTB, it ensures the right amount of bubbles for our customers. We give Free Flow our specifications for this, and they make these adjustments to the wine in a pressure tank before keging.

How did the trial go? Were the results as you predicted or did anything unexpected occur?

Roemer: Coming from a sales and marketing background, I initially didn't anticipate the level of chemistry and technical precision involved in the process. Fortunately, the Free Flow team worked together with our winemakers, collaborating closely to make the necessary adjustments and fine-tune every detail. Their expertise ensured that the wines not only met our high-quality standards but also closely aligned with what our customers were asking for, delivering the best possible keg wines without compromise.

We're finding that we are at the tip of the iceberg with this keging business. It is surprising how successful this program has been. Even though beer has been on tap for over 200 years, convincing people to try it with wine is not easy, not just from our own buyers but even our own winemaking staff. It's a different experience that takes getting used to with wine. Now that we are getting into the right accounts—brunch, airport, concessionaires, etc.—the volumes can be so much bigger than what people are used to. It makes wine way more accessible, and putting quality wine in the keg really helps set the hook for new consumers.

What were the most important learning outcomes vintners and winemakers can use?

Roemer: Shelf life: One aspect I hadn't fully anticipated was just how well the wines would maintain their freshness over time. While we officially recommend a shelf life of around 18 months for untapped kegs and up to six weeks once tapped, we've consistently observed that many kegs hold their quality far beyond these guidelines.

Front-line problem solving is a big deal, not just for the distributors and sales reps that get the sale but also for the people directly interfacing with the consumer, like small business operators and bartenders. Just knowing that someone is listening and will respond to their needs goes a long way. There are common issues across the board, like being short-handed, lack of space in the bar and speed of service. The people working on the front lines are always looking for creative solutions to common business barriers. How can I do more with less? How can I maximize my space? During peak

service hours, when stock runs out at the bar, the barback is the one that must take out the trash every 15 minutes, pull cases from the stock room and try to get them to temp ASAP. Kegs require less labor, take up less space and you don't have to find a spot to chill the wine quickly.

For us, we sell more wine, deal with less packaging and, of course, get the feel-goods from knowing that we are reducing one of wine's major carbon footprints. From a logistical standpoint, compared to bottling, we also don't have to spend a massive amount of time packaging details from design to logistics required to ensure that everything from the bottle, label, closure and capsules are accurate and ready for bottle. Kegs are so much easier!

Unless I buy a bottle of wine at a restaurant, I rarely see the bottle anymore. BTG sellers want their bottled product to be screw cap. Crack and go. That's the person who is interacting with the consumer, so that's the person we want to please. This means we have more time to deliver on the product.

What was your impression of the resulting wines from keg versus bottle? Did they taste different?

Roemer: In the same way that a draft beer often tastes fresher, wine-on-tap tastes fresher too, in my opinion. Still wines show little to no difference in taste or style compared to their bottled counterparts. While the sparkling wine exhibits slightly softer carbonation, it holds up exceptionally well, especially when used for brunch service or in mixed cocktails. The bubbles remain lively enough to deliver a great drinking experience without compromising the overall experience. I also feel like wines are fresher out of a keg. There's often a slight effervescence. James will probably tell you that the wine is identical, but I think the flavors are a little more alive and vibrant as compared to the same in bottle.

Do you plan to further optimize the kegging process for this particular wine or perhaps try different varieties?

Roemer: We are always actively assessing market needs and staying in close alignment with the requests of our field sales organization. Currently, we are exploring several new product opportunities that will help fill existing gaps and better meet consumer demand.

It's important to put this option on people's radar before they design and build out their bars. We would love to see more business with national chains, but retrofits can be too expensive. That said, we have certainly taken on a regional focus and caught the attention of bartenders and F&B managers so that when it's time to build out their wine service capabilities, they will keep us in mind.

Last year, we went to the Vibe Conference in San Diego for on-premise beverages. We just poured mimosas for the attendees to grab their attention and plant seeds for the folks attending the tradeshow and show people how it works. We pitched our brands, and Free Flow Wines pitched the technology. The more people that invest in this infrastructure, the more accounts there will be to serve our kegged wine brands, making wine more approachable in the process [and] exposing the next generations of consumers to wine on their terms and where they find it is good for the industry. We look to provide them (consumers) with wine options, whether they get it on tap at a bar, in a can on the lake or in cups at the stadium. Once you set the hook, there will be more people interested in pulling the cork on a 750 over a romantic dinner.

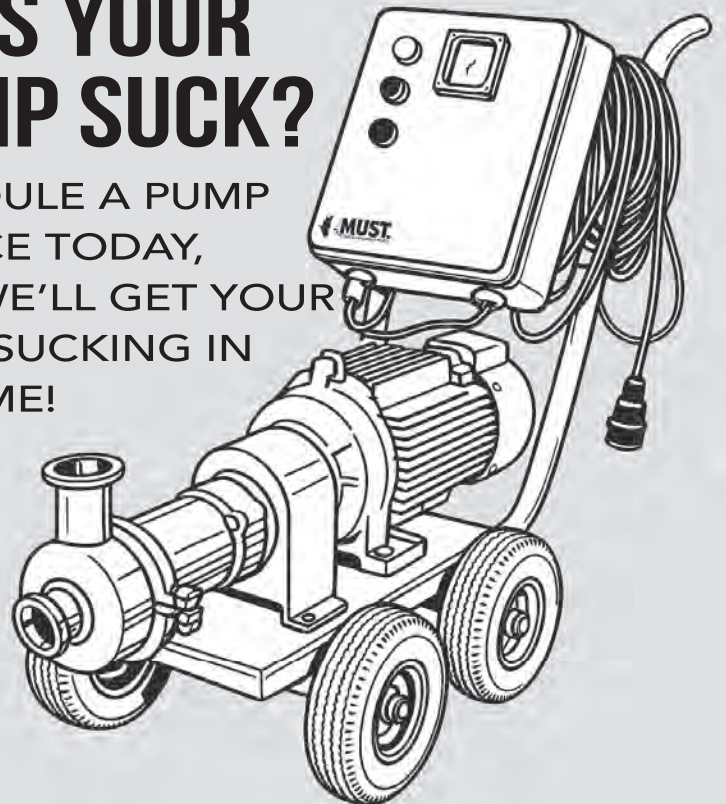
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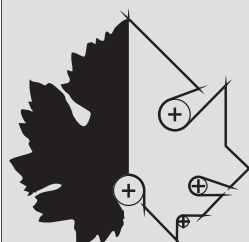
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