



GREEN GROWERS

Our ‘green grower’ brands included in this piece all have current, outside third party certifications that meet, or exceed, the qualifications specified for each of the following three categories. Overall, these produces share an approach to viticulture and winemaking that involves the use of grapes grown without synthetic inputs, and winemaking with no additives, other than minimal amounts of sulfites.

SUSTAINABLE

Our sustainable grape growers and vintners are committed to the continued stewardship of natural resources and are taking action to protect the long-term soil health and high fruit quality of their regions. Specifically, these growers demonstrate a commitment to conserving water and energy, reducing waste, preventing pollution, and encouraging natural habitats for wildlife. The sustainable philosophy extends into the winery as well where environmentally-friendly considerations are aimed at reducing the carbon footprint of both wine production and transport to market, paying employees living wages, and reducing runoff to protect the watershed. The main tenets of sustainability are:

- Integrated pest management.
- Water conservation.
- Protecting local flora and fauna.
- Low intervention winemaking: small-batch, no additives, low or no SO₂.

ORGANIC

Organic viticulture and winemaking cover all aspects of the supply chain from farming to packaging. The core principle of organic viticulture is farming without genetically modified organisms or synthetic chemicals (e.g. fertilizers, pesticides and fungicides). Extending the logic from vineyard to winery, many organic (and biodynamic) producers adopt minimal intervention techniques in the winery, aiming for a pure expression of fruit and terroir. Growers farming USDA certified organic grapes must pass a certification inspection every year. No synthetic pesticides or chemical herbicides are used to produce

wine certified organic. No sulfites are added. Native yeasts can be used but are not mandatory. Genetically modified organisms (GMOs) may not be used.

What’s the deal with sulfur (SO₂) additions?

- Sulfites help preserve wine, stop bad bacteria along with other yeasts from growing, and slow chemical reactions which cause the wine to go bad. The process of using sulfites in wine has been around for as far back as ancient Rome.
- The United States is one of the only countries (along with Australia) that require bottles to label sulfite contents.
- Sulfites in wine are surprisingly much lower than many processed foods such as french fries, canned soup, and dried fruits.
- Wine ranges from about 5 mg/L (5 parts per million) to about 200 mg/L. The maximum legal limit in the United States is 350 mg/l. Well-made dry red wines typically have about 50 mg/l sulfites.
- Under the USDA National Organic Program, wines labeled as Organic Wine can have no added sulfites. Only those wines can display the USDA Organic Seal. This is unique to the US and is not a criterion for certified organic wines that hail from the EU, AU or NZ.

Limits by category:

- Organic Wine: Under 10 ppm naturally occurring sulfites. The label can include phrases such as “Contains No Detectable Sulfites” or “No Preservatives Added.”
- “Made with Organic Grapes” and Biodynamic wine: Up to 100 ppm added sulfites.

- Conventional wine: Up to 350 ppm added sulfites.

BIODYNAMIC

Biodynamics builds upon organic farming by working on the energetic level as well as the physical level to make all organic processes work more efficiently and effectively. It began in the 1920s with an Austrian philosopher, Rudolph Steiner, and is the oldest anti-chemical agricultural movement that predates the creation of organic farming by about twenty years. Put simply, biodynamic viticulture combines the maintenance of sustainable soil fertility and the recognition of the link between plant growth and the rhythms of the cosmos. Biodynamics relies on a series of preparations based in mineral, plant and animal substances rather than the traditional potentially toxic chemicals and sprays. Moon rhythms are another integral part of biodynamics. As tides rise and fall in a pulsing rhythm, so does the sap of plants and all other liquids including those within the earth’s mantle. Those who use biodynamics believe it results in the truest expression of terroir.

The basic pillars of biodynamics include:

- The creation of homeopathic preparations applied holistically in accordance with bio-rhythms linked to plant growth.
- The recycling of farm and wine residues back into the vineyards, such as composting.
- Use of the earth’s energy (biodynamic calendar) to dictate picking, pruning, irrigating and racking.

BIODYNAMIC



CULLEN WINES

Margaret River, Western Australia (AU)

A founding winery of Margaret River, Cullen Wines was established in 1971 by pioneering winemakers Kevin and Diana Cullen. Since then, an unrelenting commitment to quality, integrity, and biodynamics has positioned Cullen as one of Australia's greatest estates. Vanya Cullen, the founders' daughter and chief winemaker for more than 30 years is one of the region's trailblazers leading the way in not only biodynamics but also as Australia's first certified carbon neutral winery. Cullen started this journey in 1998 with a commitment to organic viticulture followed by its vineyards being certified biodynamic in 2003 and then the winery in 2008 by the Biological Farmers Association (BFA) of Australia. The winery also farms a biodynamic vegetable garden, which supplements the organic and biodynamic produce in the Cullen Restaurant.

BIODYNAMIC PRACTICES: Firstly Cullen prioritizes the enhancement of the soil structure through the addition of homeopathic preparations, specially prepared composts and various fish and other emulsions and also the use of nitrogen-enhancing cover crops. The resulting increase in humus in the soil leads to greater microbial activity and improved aeration and retention of moisture around the roots of the vines. Under-vine weeding, together with a remounding of the soil under the vines, disturbs the garden weevil's breeding cycle, keeping this pest population in check. Grapes are hand-harvested and a minimal winemaking approach is taken such as indigenous yeast ferments, no additions, maturation in biodynamic oak barrels and only slight fining and filtration when absolutely necessary.



JASPER HILL Heathcote, Victoria (AU)

Established in 1975 by Ron and Elva Laughton, Jasper Hill produces some of Australia's most individual and compelling Shirazes. Situated on ancient Cambrian soils in the Heathcote region of Central Victoria, the 60 acres of dry-farmed, biodynamic vineyards have been largely responsible for establishing the area as one of Australia's greatest red wine regions.

BIODYNAMIC PRACTICES: All wines are produced entirely on the estate using organic and biodynamic principles. The Laughtons produce their own organic compost and, since the vineyards were planted in 1975, have never used synthetic chemicals. All vines are planted on their own roots, rather than grafted onto Phylloxera-resistant American non-vinifera rootstock, to retain purity of style. The vineyards rely on natural rainfall only, and during uncommon prolonged wet conditions fungal disease is combated by spraying with diluted cow's milk. The grapes at harvest are flavor ripe, regardless of sugar ripeness. There is minimal

intervention during fermentation and maturation, allowing the terroir of each of the individual three paddocks to shine. All fermentations are carried out by indigenous yeasts and malolactic fermentations occur naturally. There is no racking, fining or filtration until right before bottling.

ORGANIC



d'ARENBERG McLaren Vale, South Australia (AU)

d'Arenberg is one of the undisputed kings of Australian Shiraz and other Rhone varieties that have historically defined the region. A century on, under the stewardship of fourth-generation winemaker Chester Osborn, in terms of winemaking, not much has changed—all the wines are basket-pressed, the reds foot-trodden during fermentation; everything is done in small batches, leading to an impressive array of bottlings every year. From the Stump Jumps through to the highly regarded Icons, these wines offer value, individuality and a true taste of McLaren Vale. The winery is doing its bit for the environment as well – all the 200 hectares of vines used to make d'Arenberg's wines (both estate and leased vineyards) are either certified organic or biodynamic making d'Arenberg the largest biodynamic grower in Australia. The winery was certified organic in 2019 by the National Association for Sustainable Agriculture of Australia. Harmony between environmental sustainability and wine industry practice is a strong commitment upheld at d'Arenberg, with the aim to pass on a sustainable and thriving business to the next generation.

ORGANIC/BIODYNAMIC PRACTICES: d'Arenberg's viticultural team farms biodynamically, and Chester chooses to focus on the more common-sense principles such as picking on a waxing moon and/or on a fruit or flower day. He believes strongly in the science behind the influence of the moon on grapes on the vine, and wine in the cellar. Throughout the winter months of May, June, July and August weed growth is managed with 200 agisted sheep in the vineyards, with the added benefit of the sheep providing manure to feed the vineyard area. Installation of a solar PV generator has resulted in a 30% reduction in greenhouse gas emissions. Pests and diseases are managed with careful monitoring and by reducing canopy and crop densities to minimize the use of organic fungicides and pesticides. Recycling 100% of wastewater on-site, reducing fuel by utilizing horse and sheep in the vineyards instead of tractors, and setting aside expansive areas for biodiversity are other examples of d'Arenberg's commitment to sustainability.

POGGIOTONDO



POGGIOTONDO Tuscany (IT)

Established in 1968, Poggiotondo is located in the western part of the Chianti region, on the hills that

connect the Montalbano with the Arno valley between Florence and Pisa. Alberto Antonini is the 2nd generation owner and winemaker who began farming his estate vineyards organically in 2011. Antonini was compelled to practice organic and biodynamic viticulture initially because of his firm belief that to make wines with a sense of place, one must first and foremost do everything to preserve it. The official organic certification was awarded for both Poggiotondo's vineyards and wine by the EU accredited Suolo e Salute in 2014.

The Antonini family intends to leave the smallest footprint possible on the environment. Major differences between conventional and organic viticulture became quite evident at Poggiotondo. When Antonini dug a hole in two different sections of vineyard they revealed that the conventionally managed soil was significantly more compact (resulting in less drainage which is bad for the root system development) as opposed to the organically-farmed soil which is showing better drainage, a more expansive root system, and plenty of life. This is an important point stresses Antonini because, "what we call the 'soul' of a terroir isn't in the topsoil but deep down, and if you can encourage the root system to go deep down you can then catch the terroir's soul and make wines with more character and personality."

ORGANIC PRACTICES: Poggiotondo's strategy is to create a healthy environment with healthy vines that can grow in a balanced way with no stress or excess vigor. The vines will grow stronger without the reliance on chemical substances which alter the balance of the natural organisms. Just like human beings, if we eat well, we will develop our natural defenses. To achieve this natural environment Poggiotondo focuses on the following practices: cane pruning, lateral shoot removal and shoot positioning, cover crops, and integrated pest management. Planting cover crops prevents soil erosion while also providing organic matter which is essential in creating a good soil structure. As a result, the soils get better water and air penetration and the intake of a whole range of nutrients. The main tenet of Antonini's winemaking is simple - avoid any aggressive techniques which may alter the expression of Poggiotondo's terroir. These practices include the use of native yeasts, open-top oak and concrete vats (with no epoxy inside) instead of stainless steel tanks, gravity-flow via 500L rolling barrels for skin contact and less integration (no pumps are involved until bottling), and only cleaning with hot water and sulphur (no strong cleaning agents). "The more I know the less I do, but to do less you have to know more." - Alberto Antonini

SUSTAINABLE

BROKENWOOD

AUSTRALIAN CRAFT AT ITS FINEST

BROKENWOOD Hunter Valley, New South Wales (AU)

A benchmark Australian winery founded in 1970 by Sydney trio Tony Albert, John Beeston and Australia's leading wine critic, James Halliday, Brokenwood evolved from a weekend venture for these self-professed hobby winemakers into one of Australia's most reputable wine labels. Forty years later, Brokenwood is known for producing some of Australia's most long-lived Semillons, and one of the nation's most iconic single vineyard

wines, the Graveyard Shiraz.

SUSTAINABLE PRACTICES: For more than 10 years, Brokenwood has been developing and implementing sustainable viticulture and winemaking practices. The winery is a signatory to the Australian Packaging Covenant, an initiative to reduce the environmental impact of packaging. The winery minimizes the amount of recyclable waste sent to landfill. In addition, Brokenwood harvests rain water across the entire winery site and all vineyards, relying solely on deficit drip irrigation (soil monitoring) with reclaimed winery waste water. The planting of cover crops and on-site composting is standard, as well as the use of solar power for vineyard pumps and heating water.



CHAPTER 24

CHAPTER 24 VINEYARDS Willamette Valley, Oregon (USA)

Chapter 24 Vineyards, a nod to Homer's epic poem, *The Odyssey*, explores Willamette Valley's soils, revealing new facets of the region's terroir in pursuit of some of Oregon's most quietly expressive and seamless Pinot Noirs. The team includes Burgundy legend Louis-Michel Liger-Belair, terroir expert Pedro Parra, winemaker Felipe Ramirez and deep thinker Mark Tarlov. The three signature cuvées are 'Fire' (volcanic soils), 'Flood' (sedimentary soils), and the best lots from both soil types are selected for 'The Last Chapter', its top bottling. Unearthing the complex patterns of the Willamette Valley landscape gave birth to a new project rooted in the exploration of basalt permutations named Rose & Arrow. The boundaries of these very specific vineyard sites are seven volcanic ribbon-like parcels, not blocks, drawn to follow these particular edges of lava flows that hold soils that share similar basalt and rock-erosion characteristics. The Rose & Arrow range has three designates of wines modeled after the French cru system: Villages, Articulates, and 1st Expressions.

SUSTAINABLE PRACTICES: Chapter 24 sources and owns fruit from vineyards throughout the Willamette Valley. Born of old-world philosophies, Chapter 24 gears heavily towards organic and biodynamic regimes, with a strict mindset of growing Pinot Noir rather than farming grapes. The aim is to promote vineyard biodiversity and foster a natural, balanced ecosystem that allows the vines and fruit to express themselves in the most authentic way possible. This extends into winemaking as well where the fruit is fermented with indigenous yeasts and an 'infusion' winemaking approach involving steeping whole berries without punchdowns, and feeding oxygen to the must through gentle, carefully timed pumpovers. Liger-Belair and Ramirez believe that infusion results in more color, flavor intensity and textural richness at lower conversion rates for sugars than extractive fermentation techniques do.

DOMAINE DE
NIZAS

DOMAINE DE NIZAS
Languedoc (FR)

Domaine de Nizas uses sustainable viticulture to craft award-winning wine from its terroirs situated

between Pézenas and the Mediterranean, in the heart of the Languedoc region. The winery was established in 1998 and its Estate is a unique mosaic of three soil types. Limestone Clay (Marne Calcaire) are white soils that make powerful wines. The Basalt soils are volcanic based, unique within the Languedoc region, and rare throughout the world. River gravel (Villafranchien) is a blend of river pebbles and red clay. It is the soil type often found in the Chateauneuf du Pape area of the Southern Rhone Valley. A deep and strict respect for the land, along with the people they depend on to work it, create a balanced biodiversity that undeniably comes through in Domaine de Nizas' range of wines.

SUSTAINABLE PRACTICES: Nurture and nourish the vines is the cornerstone of Domaine de Nizas' winemaking philosophy that supports its long-term view regarding soil conservation and hosting an environment that promotes the coexistence of native plants and animals. Domaine de Nizas has been certified sustainable by the Bureau Veritas since 2007, holds the highest (strictest) level of Diplôme HEV (High Environmental Value) overseen by the National Commission for Environmental Certification, and is moving towards being certified organic by 2020. HEV covers four key areas: biodiversity conservation, plant protection strategy, fertilizer use, and management of water.



GIANT STEPS Yarra Valley, Victoria (AU)

Established in 1998, Giant Steps explores the relationship between vineyard site, the Yarra Valley's cool climate, and different grape clones, to finely fingerprint the personality and character of each vineyard. The Sexton Vineyard, at the heart of the property, is a beautiful 75-acre, north facing hillside site located in the relatively cool foothills of the Warramate ranges, rising from 425 to nearly 700 feet above the valley floor.

SUSTAINABLE PRACTICES: Produced fastidiously in the vineyard and vinified with minimal intervention, each wine is a faithful expression of site, vintage and culture. Vineyard management is intensive, with tasks such as shoot thinning, crop thinning and harvesting all carefully done by hand. The vineyard is introducing biodynamic principles with the express purpose of further distinguishing the site, and improving grape and wine quality. A particular objective is to enhance the natural microflora for the facilitation of indigenous fermentations in the winery.

GREYWACKE

Kevin Judd

GREYWACKE
Marlborough (NZ)

Named after New Zealand's prolific bedrock, Greywacke (pronounced Gray-wacky) is led by one of Marlborough's pioneering winemakers, Kevin Judd. Kevin's appreciable career is

intrinsically linked with the global path of New Zealand Sauvignon Blanc. Sourcing prime fruit from mature vineyards within the central Wairau and Southern Valleys, Kevin uses low-intervention winemaking to create wines hallmarked by their concentration, elegance, and individuality. Alongside winemaking, Kevin's talent for photography has seen his evocative images appear in countless publications worldwide, and inevitably, take pride of place on the labels of his solo winemaking venture -- the synthesis of his dual passions.

SUSTAINABLE PRACTICES: All Greywacke fruit is sourced from vineyards that are accredited to the Sustainable Winegrowing New Zealand (SWNZ) program, and most of the vineyards are in conversion to become certified organic. Native trees and shrubs have been widely planted around the vineyards to encourage diversity in insects and native birds which have little impact on grapes. The carefully selected cover crops have a variety of rooting depths which ensures access to a wide range of nutrients for the cycling process and increases soil carbon levels while the flowering plants attract and feed beneficial insects. Mechanical under-vine weeding is carried out to control weeds, add to soil organic matter, and to minimize erosion. Greywacke also makes its own composts for mulching from grape skins and winery wastes. Compost teas are sprayed in the vineyards to maximize overall soil and vine health.



LEEUWIN ESTATE
THE ART OF FINE WINE

LEEUWIN ESTATE Margaret River, Western Australia (AU)

After an extensive search in 1972 for the most suitable premium viticultural area in Australia, Robert Mondavi singled out the future site of Leeuwin Estate. Thrust into the international spotlight when their 1980 Art Series Chardonnay was awarded Decanter's highest recommendation, the Estate has since performed with stellar consistency, the Horgan family defending their position as one of Australia's leading wineries.

SUSTAINABLE PRACTICES: Leeuwin Estate has undergone independent environmental auditing towards membership of ENTWINE Australia, a formal environmental certification of vineyard and winery practices according to recognized standards. The winery is also a signatory to the Australian Packaging Covenant, reducing environmental impacts of packaging through design, re-use and recycling. Estate vineyards are managed with minimal inputs, and soil fertility sampling ensures that valuable fertilizer inputs are tailored to each site and not lost to local water ways. Extensive use of site-made compost and mulching of cover crop increases soil organic carbon, biodiversity and water-holding capacity. As part of a whole farm management strategy, degraded creek lines have been replanted with local species to stabilize banks, maintain water quality and enhance local biodiversity and habitat.

SPARKLING

- d'Arenberg The Peppermint Paddock Chambourcin \$28

RIESLING

- d'Arenberg The Stump Jump Riesling \$13
- d'Arenberg The Dry Dam \$17
- Leeuwin Estate Art Series Riesling \$22
- Jasper Hill Georgia's Paddock Riesling \$37

SAUVIGNON BLANC

- d'Arenberg The Stump Jump Sauvignon Blanc \$13
- d'Arenberg The Broken Fishplate \$17
- Leeuwin Estate Siblings \$20
- Greywacke Wild Sauvignon \$29
- Cullen Amber \$35

SEMILLON

- Brokenwood Hunter Valley Semillon \$20
- Brokenwood Oakey Creek Vineyard \$34
- Brokenwood ILR Reserve \$48

SEM/SAUV BLANC BLENDS

- Cullen Dancing in the Sun \$20
- Cullen Ephraim Clarke \$35

CHARDONNAY

- Giant Steps Yarra Valley Chardonnay \$30
- Leeuwin Estate Prelude Vineyards Chardonnay \$36
- Greywacke Chardonnay \$39
- Giant Steps Tarraford Vineyard Chardonnay \$42
- Leeuwin Estate Art Series Chardonnay \$89
- Cullen Kevin John Chardonnay \$109

OTHER WHITES

- Poggiofondo Bianco IGT \$11
- d'Arenberg The Stump Jump White \$13
- d'Arenberg The Hermit Crab Marsanne Viognier \$17
- Domaine de Nizas Les Terres Blanc AOC \$17
- Greywacke Pinot Gris \$25

ROSÉ

- Domaine de Nizas Rosé \$17

PINOT NOIR

- Brokenwood Pinot Noir \$22
- Giant Steps Yarra Valley Pinot Noir \$30
- Greywacke Pinot Noir \$39
- Giant Steps Applejack Vineyard Pinot Noir \$42
- Chapter 24 The Fire \$61
- Chapter 24 The Flood \$61
- Chapter 24 The Last Chapter \$91
- Rose + Arrow Worden Hill \$100
- Rose + Arrow Yamhill Close \$100
- Rose + Arrow Hopewell Hills \$100
- Rose + Arrow Black Walnut \$120
- Rose + Arrow Gathered Stones \$120
- Rose + Arrow Stonecreek \$150
- Rose + Arrow Highland Close \$150
- Rose + Arrow The Point \$150
- Rose + Arrow Red Dust \$150

RED RHONE VARIETALS & BLENDS

- d'Arenberg The Stump Jump Red GSM \$13
- Domaine de Nizas Le Clos \$20
- d'Arenberg d'Arry's Original Shiraz Grenache \$20
- d'Arenberg The Custodian Grenache \$20
- d'Arenberg The Sticks & Stones Tempranillo Grenache Souzao \$29
- d'Arenberg The Derelict Vineyard Grenache \$29
- d'Arenberg The Bonsai Vine GSM \$29
- d'Arenberg The Ironstone Pressings GSM \$65

SANGIOVESE & BLENDS

- Poggiofondo Rosso IGT \$11
- Poggiofondo Chianti DOCG \$17
- Poggiofondo Vigna Delle Conchiglie DOCG \$80

BORDEAUX VARIETALS & BLENDS

- d'Arenberg The Stump Jump Cabernet Sauvignon \$13
- d'Arenberg The High Trellis Cabernet Sauvignon \$20
- d'Arenberg The Galvo Garage (Bordeaux blend) \$29
- Leeuwin Estate Prelude Vineyards Cabernet Sauvignon \$29
- Cullen Red Moon (Bordeaux blend) \$29

- Leeuwin Estate Art Series Cabernet Sauvignon \$60
- d'Arenberg The Coppermine Road Cabernet Sauvignon \$65
- Cullen Diana Madeline (Bordeaux blend) \$109
- Cullen Vanya Cabernet Sauvignon \$299

OTHER REDS

- Domaine de Nizas Les Galets \$17
- Domaine de Nizas Le Mazet Rouge \$17
- Domaine de Nizas Le Carignan \$20

SHIRAZ

- d'Arenberg The Stump Jump Shiraz \$13
- d'Arenberg The Footbolt \$20
- d'Arenberg The Love Grass \$20
- Leeuwin Estate Siblings Shiraz \$20
- d'Arenberg The Wild Pixie \$29
- d'Arenberg The Laughing Magpie Shiraz Viognier \$29
- Leeuwin Estate Art Series Shiraz \$35
- Brokenwood Hunter Valley Shiraz \$36
- Giant Steps Tarraford Vineyard Syrah \$42
- Jasper Hill Occam's Razor \$62
- d'Arenberg The Dead Arm \$65
- Poggiofondo Marmoreccia IGT \$79
- Jasper Hill Georgia's Paddock \$85
- Jasper Hill Emily's Paddock \$125
- Brokenwood Graveyard Shiraz \$200

FORTIFIEDS

- d'Arenberg Nostalgia Tawny Port (NV) (375 ml) \$37
- d'Arenberg Daddy Long Legs Tawny Port (375ml) \$280

STICKIES

- d'Arenberg The Noble Botryotinia Fuckeliana (375 ml) \$20
- d'Arenberg The Noble Mud Pie (375ml) \$20
- d'Arenberg The Noble Wrinkled (375ml) \$20

BIODYNAMIC**ORGANIC****SUSTAINABLE**