

# Sustainability in wine, the planet will thank you

By Marcelo Copello

(opening picture Rocca delle Macie, credit: dissemination )

**Sustainability. This is the keyword. It's what can really make a difference for the planet.**

But what is sustainability in wine? Is it related to organic, biodynamic or natural wines? Is it related to the economy and the community? All that and more.

To better understand the subject and what is being done about it in the world of wine, I went to talk with representatives of four companies, references in sustainability for four countries: **Elena Carretero**, Manager of Corporate and Sustainability Matters **Viña Santa Rita** (Chile, [www.santarita.com](http://www.santarita.com)), **Sergio Zingarelli**, owner of **Rocca delle Macie** (Italy, [www.roccadellemacie.com](http://www.roccadellemacie.com)), **Christian Wylie**, General Manager of **Bodega Garzon** (Uruguay, [bodegagarzon.com](http://bodegagarzon.com)) and **Valter José Pötter**, owner of **Estância Guatambu** (Brazil, [estanciaguatambu.com.br](http://estanciaguatambu.com.br)). In Portugal, I also talked to **Frederico Falcão**, president of the **Instituto da Vinha e do Vinho – IVV** ([www.ivv.gov.pt](http://www.ivv.gov.pt)).

## CONCEPT

What is Sustainability in wine? Sustainability doesn't just involve the environmental aspect, but also economic and social factors, acting in all the phases of the process, from the production of wine (in wine cultivation and wine making) to its bottling, commercialisation, marketing, human resources, etc., and the entire relationship of the company with the economy and society.

It is worthwhile emphasising that organic/biodynamic/natural methods (OBN) aren't always sustainable. Although the OBN are clearly a trend and a highly positive one, these methods should always be reserved for small producers with high quality / added value. In my opinion, with current technology, I don't see the possibility of a substantial percentage of the planet's wine production converting to OBN in the near future. Therefore, the positive environmental impact of this type of production is not significant. I know that the OBN militants will not like hearing this, but this category of wines still lacks the scale to truly make a difference.

OBN are currently in the spotlight, but much more relevant and important for the planet - for producers and consumers, for our health and for nature - is SUSTAINABLE production.

**SUSTAINABILITY** - which is more economically viable, is bringing a REAL positive impact, because its mass adoption by companies, large and small, is feasible.

## PRACTICES and EXAMPLES

The concept of sustainability is very broad and covers numerous stages in the whole process of a wine, from the vineyard to the consumer.

### IN THE VINEYARDS

Sustainability in the vineyards does not just involve the aspect of maintaining the quality of the soil or environmentally friendly pest control (avoiding the use of agrochemicals - which is the banner of organic enthusiasts). It also embodies the efficient use of energy and the reduction of gas emissions, as well as biological pest control (in the case of pests the introduction of their natural enemies, whether their predators or diseases that attack them) and the reduction of the use of water and its reuse.

**Sergio Zingarelli**, of **Rocca delle Macie**, told me he employs a technique frequently used today, which well illustrates the sustainable approach to pest control. It is "Sexual Confusion" which consists of spraying pheromones in the vineyards to confuse male insects (pests), which then cannot find the females and reproduce.



Photo: Bodegas Garzon, credit: distribution

**Further reading: Preservatives (SO<sub>2</sub>), friend or foe of wine?**

### **IN THE WINERY**

A winery consumes a lot of water and electricity, besides the additives used directly in wines (the focus of natural wines), like preservatives, yeasts, etc. The use of renewable energy, and the reduction, recycling and reuse of waste are fundamental practices for sustainability.

In Brazil, a pioneering winery for clean energy is **Estância Guatambu**. “We are a new company, already built on the basis of sustainability, from the vineyards to its architecture, decoration and industrial component”, affirms **Valter José Pötter**, the owner. 100% of Guatambu’s energy has come from solar sources since 2016. After much research and two years of testing, the company installed 600 solar panels to generate 185 thousand kilowatts/year. The project, which took around 3 years and an investment of R\$ 1.5 million, today generates income, as there is a 20% surplus of energy produced. Guatambu doesn’t stop there, refrigeration (an important and expensive element in a winery), has also been provided sustainably. “We tried wind-based energy. With the PUC-RS, we studied the possibility of installing wind turbines, but concluded there wasn’t enough wind, and in the end, the solution was simple”, says Pötter. “We built the winery in an “L” shape to catch the southern wind, which is cold, and in combination with the EcoTelha tiled roof, we achieved natural thermal insulation”. In addition to this, Guatambú has its own water, treats and recycles waste, and uses natural illumination for a good deal of the building.



Photo: Estância Guatambú, credit: distribution

### **IN MARKETING, TRANSPORT AND PACKAGING**

Marketing and particularly transport, the forgotten links in the wine chain when it comes to the environment, are maybe the biggest culprits. Carbon emissions, which aren't the focus of the OBN producers, are actually the villains of the piece here, as aircraft, trucks, and ships are big emitters of CO<sub>2</sub>.

For the transport of wine, the most common and environmentally-friendly route is by sea, 5 times less harmful than by land, and 11 times better than by air. It is more ecological to buy a wine in Brazil that came from Australia by sea (15 thousand km) than one that came by plane from neighbouring Argentina (3 thousand km).

The same formula can be applied to marketing, although at a much lesser scale. Air travel for promotion, publicity, events, etc, has to be reasonable.

Another significant culprit is wine packaging, in which glass has a major role. Of all the carbon emitted in the manufacture of a wine bottle, 85% comes from the glass, 9% from the cardboard box of the packaging, 4% from the cork stopper, 1% from the paper label, and 1% from the plastic capsule. A clear global trend is increasingly lighter bottles, although in Brazil the heavier ones still positively attract consumers' attention. Note: traditional bottles weigh around 500g, the heavier ones can reach 1kg, while the glass of innovative and environmentally-friendly ones can weigh as little as 200g.

### **IN HUMAN RESOURCES**

Also under the umbrella of sustainability, is the implementation of security, health, well-being, education and training programmes; encouraging an inclusive organisational culture, open to dialogue, with ethical standards of conduct, which commit its employees to the company's philosophy and success, as well as strengthening the family and its ties to the company.

### **IN THE COMMUNITY**

Collaborative company-community programmes; developing the business together with the community, so that it too prospers; identifying synergies between the company's value chain and the needs of the community - are all sustainable practices.

The Chilean **Viña Santa Rita**, which is in the vanguard of sustainability, goes beyond the various environmental and industrial actions, and even reaches the children of the communities in which it operates. "We develop cultural projects with the community, with children at local schools, teaching about the biodiversity of the area where they live", says **Elena Carretero**.



### IN THE SURROUNDINGS

It's not enough to preserve the soil of the vineyards, we also need to worry about the ground around it, through the conservation of biodiversity and the preservation of natural resources. Sometimes, certain benefits of sustainability come where they are least expected. Guatambu reuses wine waste (the skin and seeds of the grapes) for feeding cattle (the main family business). With 20% of grapes in the diet, the animals emit 25% less methane, which is considered one of the main gases of the "greenhouse effect".

**Further reading:** [Brett, defect or quality?](#)

### CERTIFICATIONS

Sustainability goes far beyond what is proposed by the organic/biodynamic/natural trend, with a much broader vision and impact, which also makes it harder to define and certify this work. Sustainability, certified on a scientific basis may take various names, such as IPM = Integrated Pest Management, *Lutte Raisonnée*, or *Viticulture Raisonnée*. There are a great number of certification programmes for sustainability. Here are a few of them (the following suggested links go straight to sustainability pages):

ISO 14001/14004, Certified Sustainable Wine of Chile ([www.sustentavid.org](http://www.sustentavid.org)), Sustainable Winegrowing New Zealand ([www.nzwine.com](http://www.nzwine.com)), Integrity & Sustainability Certified, of South Africa ([www.wosa.co.za](http://www.wosa.co.za)), Sustainable Australia Winegrowing ([www.sustainableaustralia.info](http://www.sustainableaustralia.info)), Bodegas de Argentina Sustainability Protocol, Certified California Sustainable Vineyard and Winery (CCSW, [www.sustainablewinegrowing.org](http://www.sustainablewinegrowing.org)), Sustainability in Practice SIP - California ([www.sipc Certified.org](http://www.sipc Certified.org)).

Maybe the most important sustainability certification is the Leadership in Energy and Environmental Design - LEED ([download PDF](#)), more connected to architecture than to wine. The **Bodega Garzon** in Uruguay is LEED certified. "We are the first winery outside the USA certified by LEED", boasts **Christian Wylie**, the company's CEO. "Our 20 thousand m<sup>2</sup> building built on granite, would correspond to a 60-storey building if it was stood on its end. With LEED we have to have a predominant percentage of local materials and a green roof - We have 7 thousand m<sup>2</sup> of green roof, using local plants to mitigate its impact on the landscape and cool the building, reducing the need for refrigeration. There is also an optimal use of natural light in all the spaces, the winery operates by gravity and all the energy will come from wind power", adds Wylie, who concludes: "The construction cost double what it would have cost if it wasn't sustainable. Instead of US\$ 40 million, we spent 80, but it was a long-term investment. The building uses half the energy of a normal building, and in 50 years it will have paid for itself". Garzon is also sustainable in every other aspect of its design. The vineyards, for example, were planted without changing the location's topography at all. It is curious to see that, in photos, it looks like a mosaic.

Unfortunately, in Brazil we still don't have any specific certification of this kind. In other countries, such as Portugal, there are also no sustainability protocols, although there are many environmental rules for the production of wines.

"We don't have any specific protocols or orientations on sustainability, but we have a lot of environmental regulations (from the Ministry of the Environment) regarding, for example, the treatment of water and waste, such as lees and marcs, There are many rules to follow and rules to obtain a licence to produce wine", states **Frederico Falcão**, president of the **Instituto da Vinha e do Vinho - IVV** (Portugal). "Our work is to enhance the Portugal brand, so that viticulture become more sustainable"



Lastly, in view of all I have explained above, I think it is worth choosing to consume wines from sustainable companies. The Planet will thank you. And, it's always worth remembering that if you don't want to harm the planet, you should start by not harming yourself: drink in moderation.