

# FROM VALUES TO VALUE DRIVER

## SUSTAINABILITY AS A STRATEGIC OPPORTUNITY FOR WINE COMPANIES

Institutional pressure has stimulated many initiatives in the wine industry, including a demand for policy compliance. Media pressure, gate keepers and distributors' concerns, consumer interests and specific local requests or, in many cases, a voluntary commitment to environmental and social issues has also played a part.

Indeed, many different sustainable wine-growing programmes were developed in the past years through collaborative efforts driven by national institutions and associations.

In the core European producing countries, different initiatives concerning single wine-growing areas resulted in the larger adoption of sustainability standards. Simultaneously, with growing interest in the larger adoption of production protocols that aim to make conventional viticulture and wine-making more sustainable, a relevant growth of sustainable vineyards has developed worldwide

Nowadays we are seeing dramatic stimulus for the wine industry to proceed towards a larger adoption of sustainable practices. From this perspective, sustainability issues will become a crucial element in the development of competitive advantage of wineries and brands.



# Wine & Sustainability

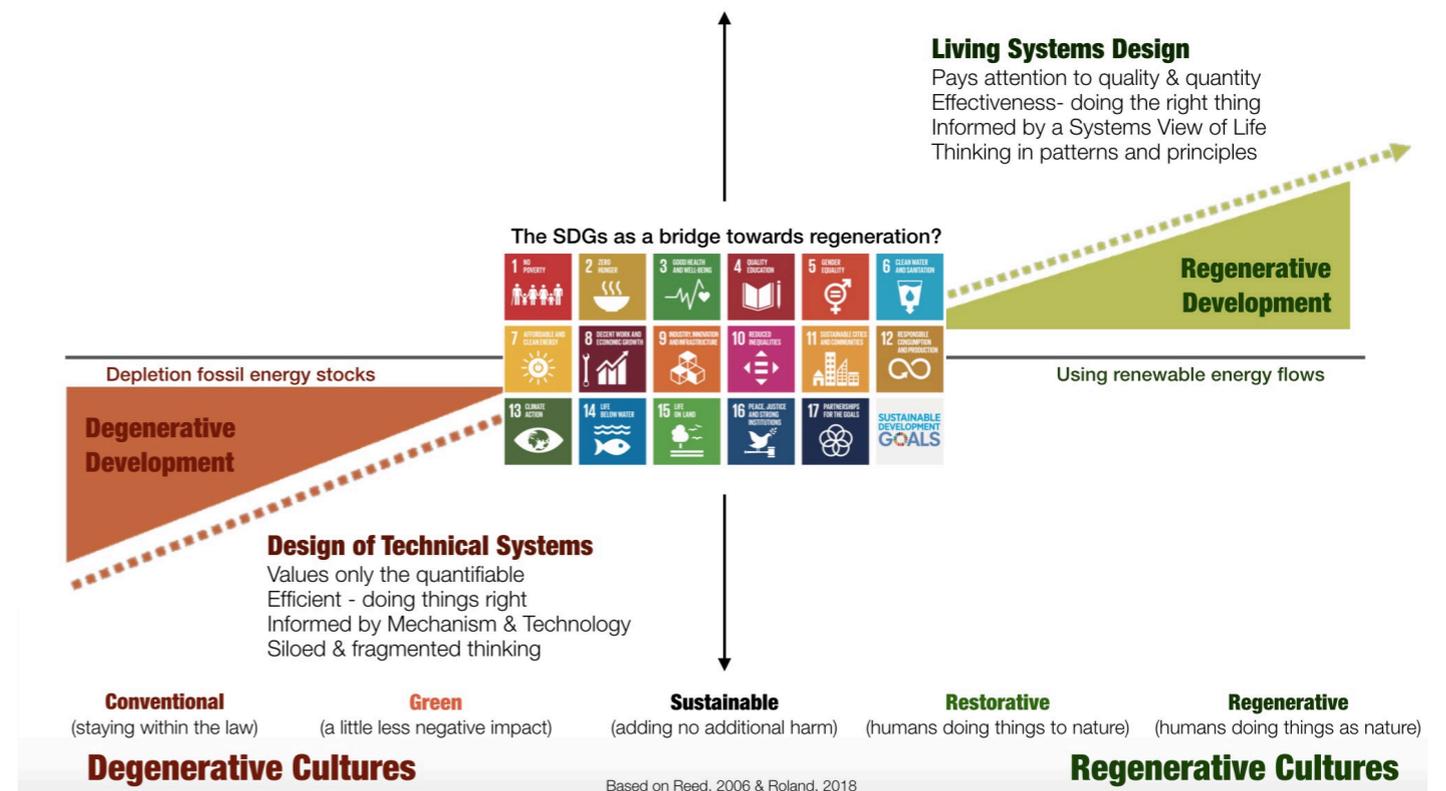
## Thinking beyond sustainability

The word “sustainability” has so many definitions that it holds a shadow of ambiguity. Sustainability can be seen as a concept based on various principles (de Bruyn and van Drunen 2004): economic principles (maximising welfare and improving efficiency), ecological principles (living within carrying capacities and conservation of resources) and equity-principles that concern intragenerational and intergenerational equity.

Ohmart gives an idea of how complex it is to be sustainable in agriculture: “sustainability involves everything you do on the farm, including economics, environmental impacts of everything done on the farm and all aspects of human resources, including not only you and your family but your employees and the surrounding community”

Today, wine makers have an incredible opportunity to include their own approach to sustainability in their long term strategies and anticipate institutional regulations, social behavior and market changes. This will allow wine companies to thrive by building solid brands that are close to their consumer’s values.

These strategies will ultimately allow them to impact in their ecosystem and wine-making landscape, contributing to a transition to more regenerative practices.



Wine companies can choose among various alternatives: it is not only a matter of being sustainable or not, but they can also choose among a multitude of “green nuances”.

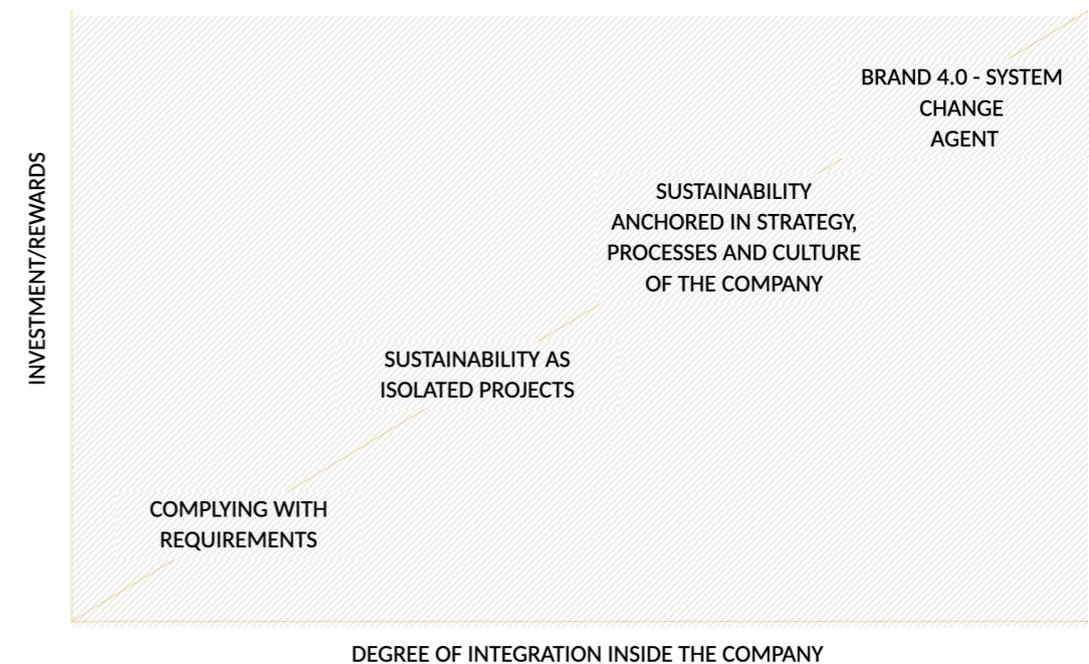
Their compromise with sustainability strategies will be essentially determined by the degree of its integration inside the company. The more the sustainability strategy is embedded in the company’s processes, structure and culture the more rewards the companies get for their investment.

There are 4 different degrees of approaches to corporate sustainability strategy:

- 1. COMPLYING WITH REQUIREMENTS:** The company applies a linear approach to their sustainability strategy with the goal of complying with the basic requirements. This usually means they have designated a Sustainability Manager who will be in charge of compiling information and reporting of the sustainability to comply with the minimum requirements for the industry.
- 2. SUSTAINABILITY AS ISOLATED PROJECTS:** The company makes an effort to comply with the minimum requirements and implements specific sustainability projects such as a waste reduction or carbon footprint calculation. These efforts contribute to the purpose but rewards per investment doesn’t reach the full potential since the projects are not fully integrated with the company as a whole. The sustainability strategy is limited as another vertical of the company.
- 3. SUSTAINABILITY ANCHORED IN THE STRATEGY, PROCESSES AND CULTURE OF THE COMPANY:** At this stage the company has approached sustainability in a 360 degree approach. They see it as a motor of innovation and change that will impact the organisation as a whole: in its global strategy, processes and culture. The sustainability manager collaborates with every areas of the company and every employee is aware of their sustainability policy. Sustainability innovation is promoted at every stage of the process. This approach offers incredible rewards per investment, since it enhances the flexibility and adaptability of the organisation. It sets a purpose at the core of the decision-making, harnessing innovation and personal motivation. As a result the company becomes more efficient and purpose oriented.
- 4. BRAND 4.0: SYSTEM CHANGE AGENT:** At this stage the company has already implemented a 360 strategy for years, achieving the goals they have set themselves in their sustainability strategy. Every process and part of the company tells a story linked to sustainability. This story is reflected in a

purposeful brand that resonates and captures their clients’ attention. The company’s collaborators are highly motivated and young talents wish to work for their company. As a result, the company becomes a leader in their industry, setting an example to its competitors and other companies in the ecosystem.

## Different degrees of sustainability application



# The future of Wine

## Macro trends

There is scarcely a headline today that does not mention ESG, responsible business, or sustainability. The wine industry has an 8,000 year history of adaptation to change, and as such it offers a unique perspective into resilience and lessons that can be broadly applied across sectors and geographies.

To put it in an environmental context, the wine industry is far from the worst emitter. One flight from London to New York city generates almost 1,000kg of CO<sub>2</sub> per passenger whereas the average bottle of wine releases just over 1kg of CO<sub>2</sub> over its lifetime. So taking just carbon into consideration, that's almost three years of having a bottle of wine a day to match the emissions of one cross-Atlantic flight. But as recent frosts and fires have shown, even if itself a low emitter, viticulture is threatened by climate change and with it, potentially a substantial part of this over \$400 billion dollar global business.

External drivers happen outside of the firm and include pressures arising from institutions, customers, communities, associations, environmental groups, activists, regulators and competitors.

According to the last Silicon Valley Bank 2017 Wine Report, Millennials slowly began to replace retiring Baby Boomers as the biggest wine drinkers in the U.S., and will very likely surpass the Gen Xers around 2026, to become the largest wine-consuming demographic.



### Wine industry facts

- **Winemaking is a low-emitting sector – but it's under particular threat from climate change.**
- **Many winemakers today are putting sustainability at the heart of what they do, and are increasingly focusing on fair working practices for employees.**
- **The sector's efforts demonstrate how collective action and responsibility are key to a sustainable future for businesses elsewhere, too.**

### Key drivers

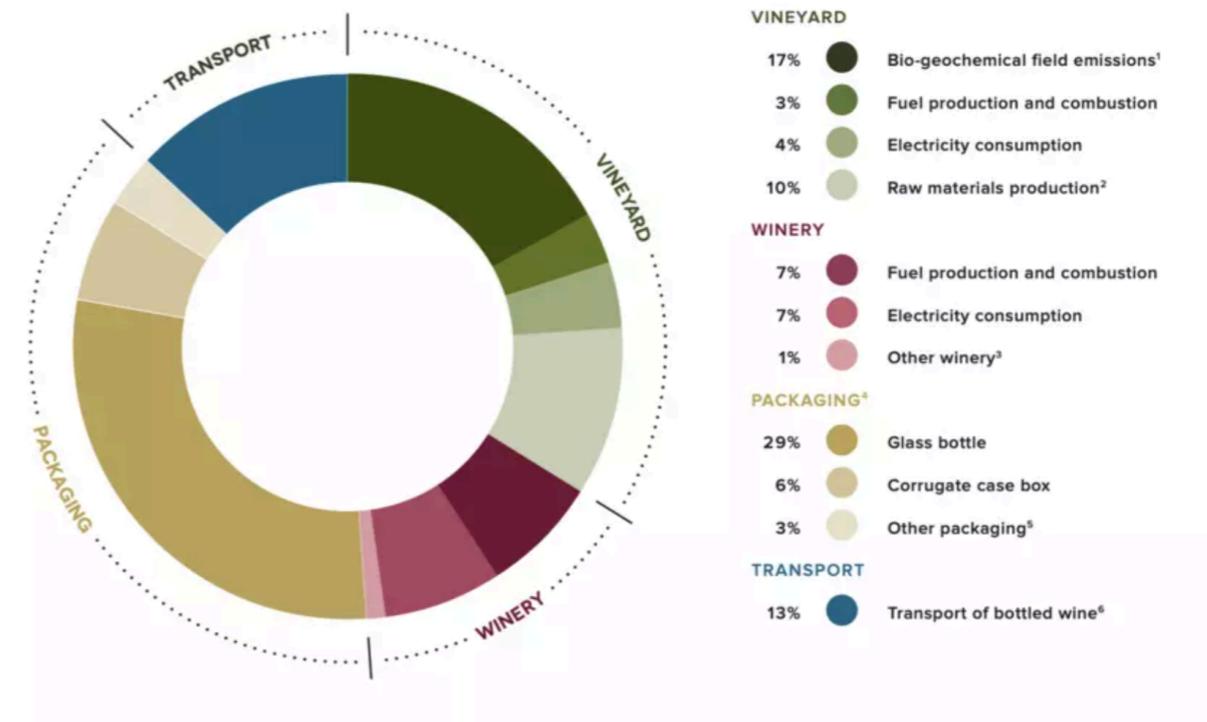
- #1: Technology in the vineyard
- #2: Climate change and the emergence of new wine regions
- #3: Sustainability and the popularity of eco-friendly wines
- #4: New taste trends
- #5: New innovations in packaging and bottling

At its core, winemaking is agriculture. Serendipitously, grapes grow best in environments where they need to be stressed to get to nutrients, so they are not as water-intensive as, for instance, almonds. But vineyard activities still contribute around 40% to the carbon footprint of wine. As a response, many farmers today are adopting regenerative agriculture, use of cover crops, renewable energy sources for vehicles, electricity and water, and are leveraging a variety of tools to minimize their impact on the environment. Others are experimenting with alternative rootstock, heat-resistant grape varieties as well as those that take longer to ripen to combat the already very prevalent impacts of climate change.

In addition, most of the carbon footprint of the wine, anywhere from 40-50%, is actually due to the transport and packaging in the glass bottle. The adoption of boxed and canned wine is growing globally, but glass is by far preferred, especially for high-end wines. To add transparency for the consumer, Jancis Robinson, an influential wine writer and critic, is now including bottle weight in her write-ups.

On the social front, winemaking is labour-intensive, especially in regions of the world where the hilly and rocky terrain does not accommodate machinery well. In the summer of 2020, the natural wine world, one where the processes are ostensibly more sustainable and equitable, was rocked by a scandal in which an Italian winemaker was implicated in accusations of abusive labour practices. In today's world of viral news spread and cancel culture, the winemaker's business took a huge hit. This incident served to stimulate dialogue on what fair labour practices are, and underlined how interconnected the industry is: a labour issue in a brand that stakes its reputation on being more conscious does not remain a local issue.

In response, some importers have begun requesting labour statistics to be reported, one even using a recognizable nutritional facts label (see below) which highlights the size and nationality of the picking crew, total number of hectares owned and bottles produced, length of harvest and workday, housing and meals provided, as well as farming philosophy.



<sup>1</sup> Footprint associated with greenhouse gas emissions that are a result of natural bio-geochemical processes and impacted by local climate, soil conditions, and management practices like the application of nitrogen fertilizers.  
<sup>2</sup> Footprint associated with the manufacture and shipment of materials used at a vineyard such as fertilizers and pesticides.  
<sup>3</sup> Footprint associated with the transport of grapes from vineyard to winery, raw material production, refrigerant losses, and manufacturing waste treatment.  
<sup>4</sup> Footprint associated with the manufacture and shipment of materials used for packaging wine.  
<sup>5</sup> Footprint associated with the natural cork closure with aluminum foil and treatment of waste at packaging manufacture.  
<sup>6</sup> Footprint associated with fuel production and combustion in trucks and trains based on typical distances for the industry when shipping in the United States to retail facilities.

On the other hand, labour abuse and violations are a global issue (California, Champagne, South Africa) and some point out that material change will only come when the larger mainstream producers begin to make changes. And that is only likely to follow when the mass consumer, not the more niche natural market, demands it.

This is where governance standards can also be of great influence. More and more wineries and industry-adjacent companies are attaining B-Corp status, which attests to business practices beyond the vineyard, from ingredients to supply chain, and re-evaluates companies every three years to ensure that the standards are continuously followed. While a mechanism for signalling a baseline of practices, attaining these certifications can be very resource intensive and not an economically viable option for smaller wineries.

Outside of individual companies' activities, the Porto Protocol is a not-for-profit platform for the entire viticultural value chain that aims to be a catalyst of change and provide resources and an avenue for collaboration. Its letters of principles call on the industry to commit to making incremental changes and to work collaboratively in the battle against climate change. The IWCA, founded by Familia Torres (a 150 year-old global wine company based in Spain) and Jackson Family Wines (the ninth-largest wine producer in the US) is a collaborative group of wineries committed to carbon reduction and is the first wine organization to have joined the UN's Race to Zero campaign.

## **Glass half-full**

So why should we take note? And what can we learn from the lessons of the wine industry?

- No industry or region can escape the effects of climate change. As winemakers around the globe are increasingly realising, the cost of insuring their livelihoods is quickly making it unprofitable for insurers to do so. Given the increase in 'once in a century' natural disasters, the higher preponderance of these events might make whole regions and industries uninsurable, completely upending the economics of operation.
- You cannot improve what you do not measure (and report). From understanding the specifics of emissions and identifying the transport and

glass bottle as the main culprits to digging deeper into labour practices, change will not be possible without quantitative analysis and transparent reporting

- Technology implementation and innovation are a vital part of the equation. Wine industry leaders are exploring ways to not just adapt to changes via climate-resistant clones, or reduce carbon impact via renewable energy and electric vehicles, but experimenting with becoming a carbon-negative industry via carbon capture.
- Most importantly, what the wine industry example demonstrates is that both collective action and collective responsibility are necessary to ensure long term sustainability regardless of industry and its individual impact.

## SDG alignment under the new Common Agricultural Policy (EU)

Up until now, the biggest proportion of the CAP has gone towards direct payments, which have a primary objective to ensure an income for farmers. This goal in theory only really aligns with SDGs 1 and 2 of no poverty and zero hunger. However, we have seen how the biggest agricultural producers are the ones which attract most of the Pillar 1 payments, thus in practice neither of these SDGs are directly tackled. In addition to this, we have also seen how the Pillar 2, which funds rural development measures, has failed to address the SDGs related to environmental sustainability. For instance, only 9% of the CAP's budget goes to landscapes and biodiversity preservation, whilst environmental care measures receive only 2%.

The new CAP proposal addresses directly this issue by restructuring the Policy in a way that realigns payments with the fulfilment of the SDGs. This has been done predominantly through the Farm to Fork and Biodiversity Strategy initiatives, a framework which highlights how the EU agri-food system can implement the SDGs. Key targets for 2030 include:

- Reduce by 50% the overall use and risk of synthetic chemical pesticides
- Reduce nutrient losses by at least 50%, while ensuring that there is no deterioration in soil fertility. This will reduce the use of fertilisers by at least 20%
- Reduce by 50% sales of antimicrobials for farmed animals and in aquaculture by 2030
- At least 25% of the EU's agricultural land under organic farming by 2030
- Consider an increased uptake of agroforestry practices.
- Ensuring a fair economic return and improving the position of farmers in the food supply chain

### Social Proposal

- A higher level of support per hectare for small and medium-sized farms;
- Reduce the share of direct payments received above €60,000 per farm and to limit payments at €100,000 per farm, with a view to ensure a fairer distribution of payments;

- A minimum of 2% of direct support payments allocated to each EU country set aside for young farmers, complemented by financial support under rural development and measures facilitating access to land and land transfers;
- EU countries having to ensure that only genuine farmers receive support.

### Environmental Proposals

- Increased environmental conditionality to receive Pillar I direct payments.
- The preservation of soils through requirements to protect carbon-rich wetlands and practice crop rotation;
- An obligatory nutrient management tool, designed to help farmers improve water quality and reduce ammonia and nitrous oxide levels on their farms;
- A new stream of funding from the CAP's direct payments budget for "eco-schemes", which will support and incentivise farmers to undertake agricultural practices beneficial for the climate, biodiversity, and the environment.

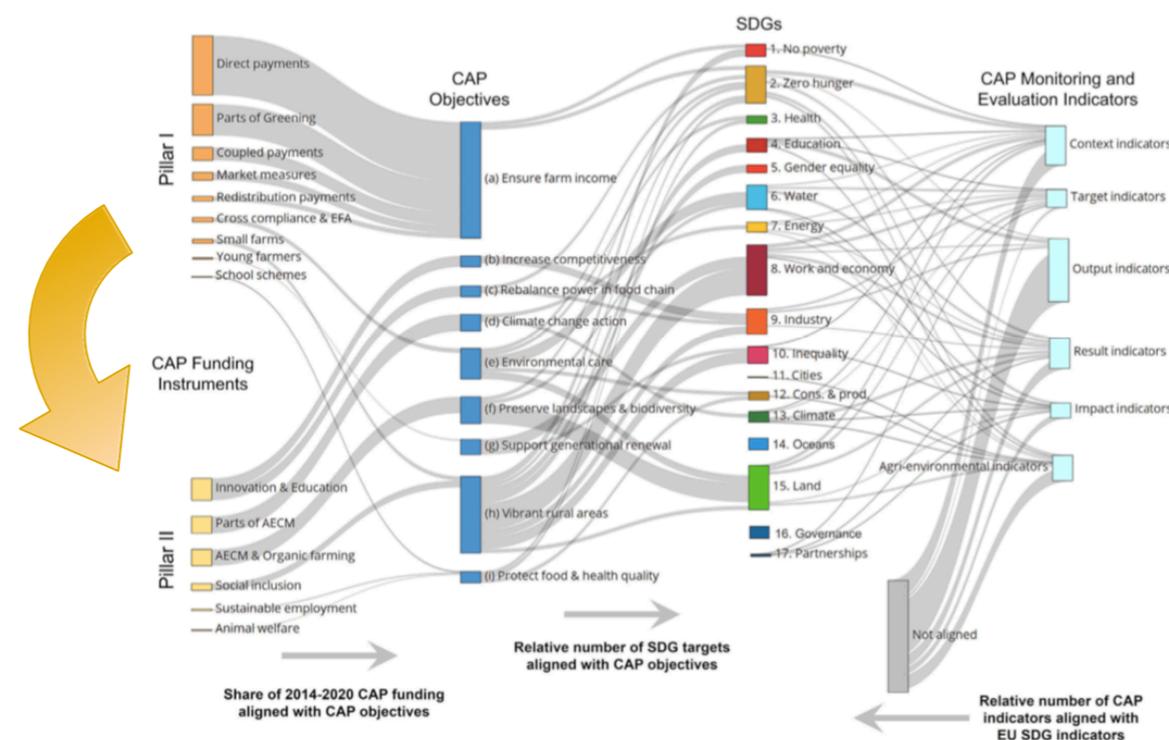


Figure 1. Alignment of CAP Budget, Objectives, SDGs, and CAP Monitoring Indicators

## Wine & Sustainability

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# Luxury & sustainability

## Adding value through purposeful bands

Luxury is often linked to excess and waste, whereas sustainability is associated with ethics and restraint. So how well can the themes of luxury and sustainability harmonize in the wine and spirits market?

According to GlobalData's 2019 Q3 consumer survey, 71% of global consumers consider it 'quite' or 'extremely' important for product packaging to be made from sustainable or renewable sources. Of the consumers surveyed, 25% believed it important for packaging to have a luxury appearance. These statistics have meant, in some cases, less sustainable practices, such as in the whiskey market, which is driven by premiumisation and weightier bottles and packaging with special finishes have become prominent design features.

While other FMCG sectors appear to be embracing sustainable packaging, the wine and spirits sector is often viewed as lagging behind. However, there is new evidence to show that the industry is catching up, not only as a result of pressure from consumers and retailers, but the ways in which wine and spirit brands can embrace sustainability is evolving.

We highlight four ways in which wine and spirits brands are integrating sustainability into their stories while maintaining a position of luxury:

### Water Usage Reductions

Water is a vital ingredient to the production of wine and spirits, which comes at the price of making the industry one of the least sustainable. With about 870 litres of water used to create one litre of wine, and water being considered the number one ingredient for creating vodka, the industry faces an uphill battle when it comes to water conservation. But major brands are taking big steps to reduce their water usage.

### Localised Supply Chain

Whether it's called 'seed-to-spirit' or 'farm-to-flask,' one method luxury brands can employ to enhance their sustainability efforts is ensuring local sourcing and ingredients, which brings a luxurious craftsmanship to their brand.

### Reducing Carbon Emissions

Transport for wine and spirits is a prominent part of the industry, making high carbon emission rates challenging to avoid. The carbon footprint of an average bottle of wine is the equivalent to driving 3 miles in a small car, and a study by the Beverage Industry Environmental Roundtable showed a single 750ml bottle of spirits produces over six pounds of CO<sub>2</sub>.

The solution is not as likely to be found in reducing transport, but in creating lighter packaging innovations.

One of a recent innovation in this sector is the flat wine bottle created for Garçon Wines. Made from recyclable PET, the bottles are said to be 40% more spatially efficient than round bottles and are 87% lighter than glass bottles. In addition, the brand has created a 10-bottle case that it says cuts greenhouse gas emissions and business costs by 60%. A pallet loaded with these cases could hold 1,040 bottles, compared to only 456 conventional bottles.

A more established solution to the weight and transport considerations of glass are aluminium cans. As a result, canned wine is becoming more prevalent, and increasingly accepted by consumers. Sustainability is just one benefit of this format, as it also offers consumers a portable alternative to glass at events and outdoor activities.

### Packaging Alternatives

Reducing the amount of packaging is one approach to sustainability, but another is to make the pack as reusable as possible by giving it a secondary purpose rather than something to be discarded. Being creative with structural design and materials, whilst having an eye on a premium result is key.

### What do luxury wine and spirits brands need to know?

For all brands, be they luxury or mid-market, sustainability is no longer considered optional, but essential. The luxury packaging market must find a way to help their customers align with the sustainability topic, whilst maintaining a premium look and feel.

# Corporate sustainability strategy

## Using a 360 approach

Sustainability has been largely associated with the environment and climate change but the UN Sustainable Development Goals or SDGs include poverty eradication, gender equality, quality education, climate action among others. The human, societal, community and partner ecosystem aspects are equally important within the goals. Therefore, sustainable growth for a better future requires holistic, integrated approaches.

**Sustainable organizations are purpose-led businesses which inspire their people and partners to deliver lasting financial performance, equitable impact, and societal value that earns and retains the trust of all stakeholders.**

To become a sustainable organization, businesses need to define and embed sustainability within their leadership, culture, learning, skilling and the entire operating model. For example, a leading global wine brand has established clear goals and strategies for linking executive compensation to delivering results on inclusion, diversity, environmental and ethical manufacturing across the company as part of their long-range plans initiative.

### Sustainable organizations deliver 360° value

Beyond this being the right thing to do, there is also financial and competitive value in organisations becoming more responsible and sustainable. According to Blackrock, sustainability and financial performance are strongly correlated with ESG stocks significantly outperforming in the market. That said, the business benefits are not limited to better financials alone but a full 360° value to all stakeholders including consumers, employees, societies, communities and the planet.

**Financial Value:** Responsible organizations have 3.1% higher operating profits than industry competitors

**Consumer Loyalty:** 63% of consumers prefer to buy from firms with purpose

**Social and Environmental Impact:** 21% of the world's top 2000 public companies globally (largest by revenue) have committed to meet net zero targets

**Talent Attraction and Retention:** 64% of millennials indicated that the strength of an organization's impact would affect their career decisions

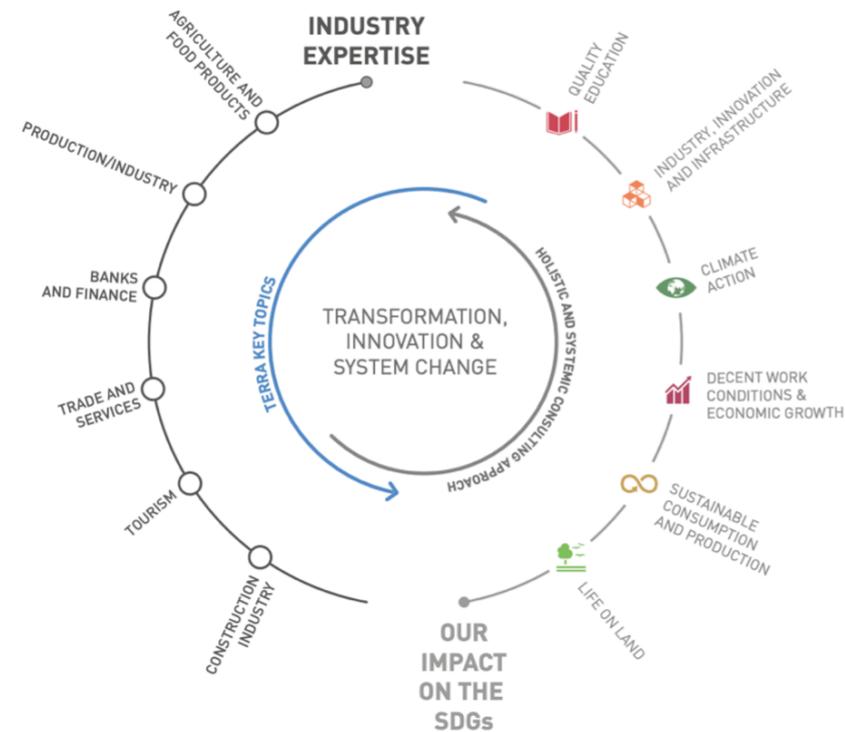
**Diverse Talent:** 95% of employees are satisfied with their job when their workforces are diverse



# About Terra

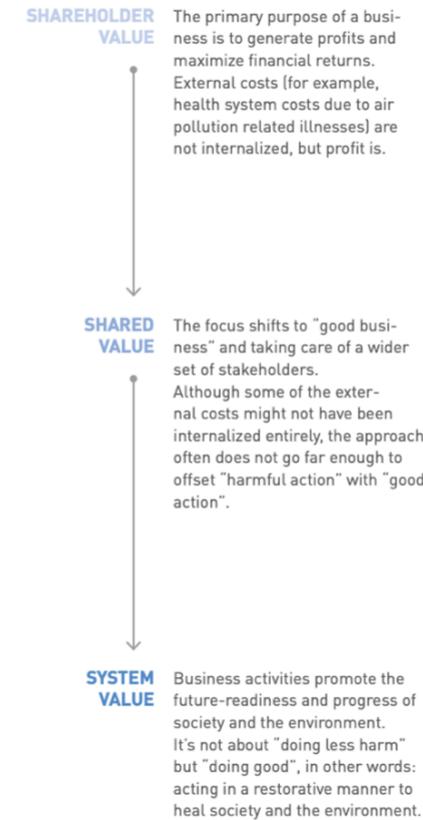
## TERRA BEYOND SUSTAINABILITY

Industry expertise and our contribution to the United Nations' sustainable development goals



## TERRA BEYOND SUSTAINABILITY

Systemic approach



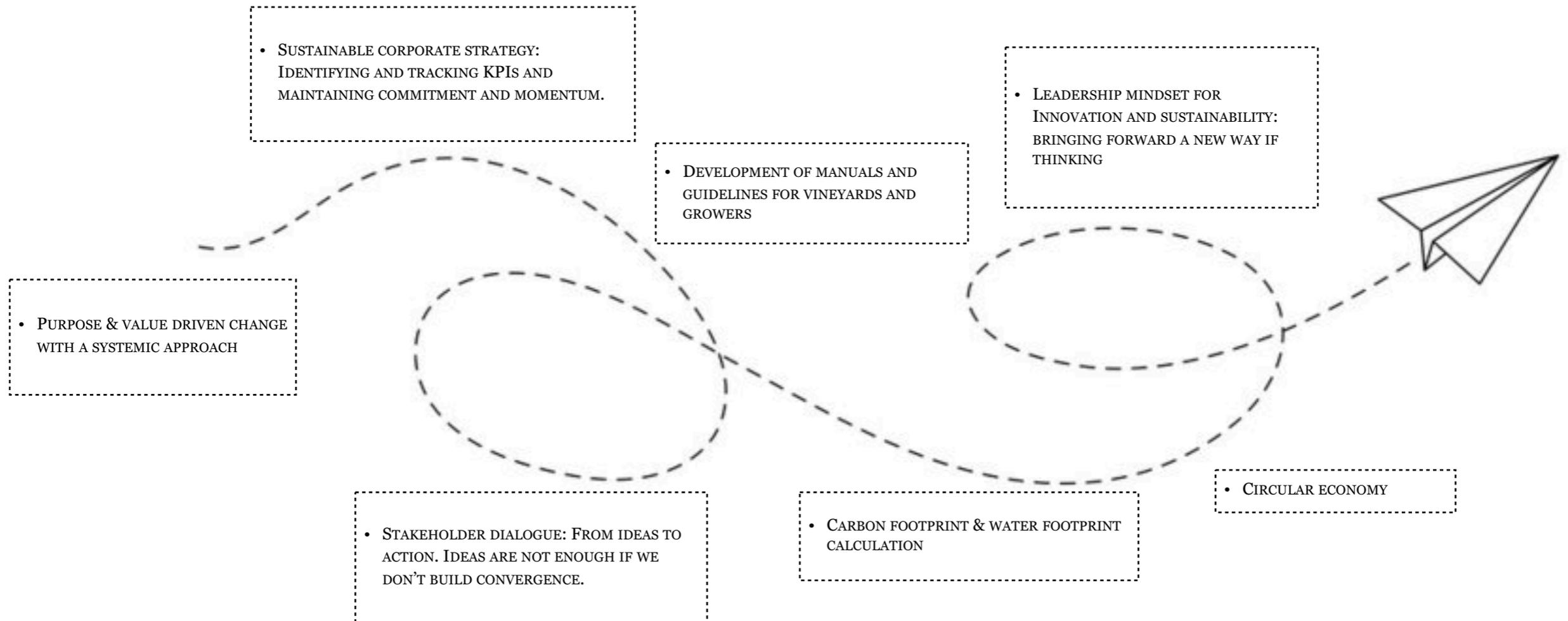
WE WERE FOUNDED IN 2010, FROM A PIONEERING PUSH TOWARDS SUSTAINABILITY, FOSTERING AWARENESS FOR RESPONSIBLE BUSINESS TRANSFORMATION.

WE INSPIRE SUSTAINABLE GROWTH AND DEVELOPMENT MODELS FOR AN INTERCONNECTED SYSTEM. WE HELP COMPANIES ANTICIPATE CHANGE AND CREATE LONG-LASTING VALUE FROM THEIR SUSTAINABLE CORPORATE STRATEGIES.

Since 2010 we are innovative, courageous and empathetic consultants that work on the internal and external growth of individuals and companies. Because sustainability, for us, means first and foremost striving for balance and bringing awareness to the different fields of work. We accompany companies that look for of a sense of purpose and feel the responsibility to transform themselves and contribute to global change

# The journey with Terra

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# Wine & Sustainability

## Stakeholders & key sustainability topics

Stakeholder dialogue plays a key role when wine companies try to define the most relevant sustainability topics for their strategy and reporting.

When we include stakeholders such as wine and grape suppliers, media, clients, collaborators and clients, we are able to draw the key concerns and priorities and the main areas of convergence.

This will allow wine companies to design an efficient sustainability corporate strategy that is aligned to the interests of its main stakeholders.

Hence, the communication and dialogue with these stakeholders is key to a thriving sustainability strategy. Stakeholders will help support and promote the company's efforts to achieve its purpose.



Biodiversity & Wildlife preservation



Energy efficiency



Water preservation



Canopy management



Renewable energy



Fair labor practices



Soil revitalisation



Carbon neutral

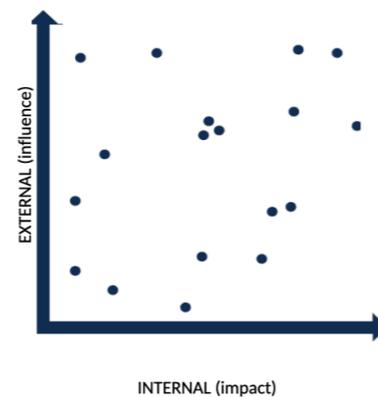


Climate Change Adaptation



Integrated pest management

- Wine producers
- Grape producers
- Opinion leaders
- Authorities
- National sector associations
- Customers
- Community
- Strategic Partners
- Banks
- Experts
- Suppliers
- Trade unions
- Consumers internal market
- NGOs



- Shareholders
- Green Team
- Directors & managers
- Collaborators

# Best practices

## Sustainable innovations

- Initiative to pay producers a premium price to cover the costs of the certification process.
- Facilitation of self-management workshops on sustainable production for producers.
- Power 50% of winemaking operations with on-site renewable energy generation.
- Vineyards surrounded by native trees and riparian corridors that encourage native plant growth and create habitats for animals, including wild predators that naturally control pests.
- Use of cover crops, such as clover, peas and grasses, are used to fix nitrogen deficiencies in the soil, control soil erosion and improve soil quality, while providing habitats for predatory insects.
- Recycling of wash water for barrels
- Plant-sensing irrigation system improves grape composition and reduces water use. Monitors vine sap flow activity level as a determinant of when to water, essentially allowing the plant to communicate when it is thirsty
- Create grower cooperative: helps to increase values of reciprocity, participation and collaboration with growers.
- Introduction of beneficial insects and the technique of "sexual confusion", a biological control system for harmful insects that, through the use of pheromones and male disorientation, limits mating and reproduction.



# Case study

UNLOCKING SUSTAINABLE VALUE FOR ONE THE TOP WINE GROUPS IN THE WORLD

