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CAWTHRON MARLBOROUGH ENVIRONMENT AWARDS

2019

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JUDGES' REPORT

WINE INDUSTRY

PERNOD RICARD WINEMAKERS

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INTRODUCTION

PRW is the winemaking division of French company Pernod Ricard with operations in six countries around the world. Their brands in Marlborough include Brancott Estate, Stoneleigh and Deutz.

As winners of the 2015 Wine Industry Innovation Award, PRW impressed with the company-wide approach to continuous improvement. Four years on that strategy is strongly embedded.

PRW has a vision to achieve Zero Waste to landfill by 2020. Staff are striving to achieve this through auditing waste and implementing solutions. These include converting to steel vineyard posts, influencing suppliers to provide recyclable or reusable packaging, and developing alternative uses for grape marc.



The judges were also impressed by the expanding biodiversity projects, carbon accounting and the creation of several focus teams to look ahead and develop solutions to environmental challenges.

The understanding and commitment of PRW staff to continually improve environmental management sets a strong example for other wine companies in Marlborough.

GENERAL INFORMATION

In 2005 Pernod Ricard bought Allied Domecq, formerly Montana Wines, the early pioneers in Marlborough winegrowing. That spirit of innovation continues under the French owners with initiatives to reduce waste, improve biodiversity and reduce carbon emissions.

Zero waste to landfill: PWR has been proactive in its efforts to achieve zero waste to landfill at all of its international affiliates. Measures in Marlborough include:

- Audits to identify and measure the different types of waste in the winery and vineyard.
- Improved recovery and recycling facilities to make it easier to separate the waste streams.
- Based on waste audit results, have influenced suppliers to change to reusable or recyclable packaging.
- Replace broken CCA-treated vineyard posts with steel posts.
- All new vineyard plantings to have steel posts (long life and recyclable).
- Repurposed damaged winery catwalks from the 2016 earthquake for use on wetland track extension.
- Reused earthquake-damaged concrete plinths in winery redevelopment, including roading and tank foundations.
- Reuse oak chips as ground mulch.
- Grape Marc project team focused on managing grape marc as a resource rather than a waste product.
- Appointed “Waste Champions” to keep staff informed and motivated about zero waste.

Vineyard biodiversity: The showcase project is the long-term restoration of the Kaituna Wetland under the faultline terrace at Renwick. Areas of invasive weeds are being tackled in stages – a good example of the company culture of taking small but consistent steps to reach the desired outcome.

The wetland was cleared of crack willow, hawthorn and gorse 12 years ago. Since then a combination of regeneration and restoration plantings has seen the return of flax, raupo and toi toi, along with fish and insect life. The vision is to transform the area into its original natural state, including podocarp species.



Progress includes:

- Signage highlighting the significance of the wetland to Maori and information about the plants and animal life.
- Survey of aquatic life showing presence of short-finned eels, inanga and koura.
- A programme to monitor the health of the water, soil and aquatic species.
- Development of an annual maintenance plan with dedicated budget.
- Extension of the walking track to a viewing area at the top of the terrace, improving access for school and community groups by appointment.
- Approximately 1000-1500 more plants ordered for May 2019.
- Wetland has become a case study for the Marlborough Girls College Environmental Sustainability Course.
- Showcased to PRW staff from around the world.

Planting projects throughout the vineyards aim to connect pockets of biodiversity and create corridors for native birds across the Wairau Plain. The concept of planting “Forgotten Corners” in the vineyard is well understood and being put in action.

Further riparian plantings along the stream below the Brancott Estate Visitor Centre are now established and two new tui-to-town plantings have been approved with funding from the Marlborough District Council. These include native plantings along an ephemeral creek through the Fairhall vineyard. This creek restoration is in early stages, with 500 plants planted by 15 staff in the Quality Assurance team, with another 80m of creek to go. Temporary fencing will keep sheep out of the waterway over the winter, which helps improve water quality of the Taylor River system.

PRW staff also take part in a community sustainability day once a year, helping voluntary projects including Te Whanau Hou Grovetown Lagoon, Para Wetland and the RSA olive grove.

Carbon accounting: PRW carries out an annual carbon inventory which is independently verified.

- There has been a 40 per cent reduction in Greenhouse Gas emissions since 2010. A significant factor was changing to lighter-weight glass bottles.
- The production of steel posts increases the carbon footprint initially but there is a longer term benefit due to their durability and potential for recycling.
- Concerns about methane emissions from composting grape marc are being considered by the project group.

Water efficiency: Progress has been made since 2015 to continue to improve water conservation measures in the vineyard. Galcon precision irrigation uses computer monitoring of soil moisture to determine how much water to irrigate based on soil type and grape variety. It also alerts vineyard staff to leaks or burst pipes. Precision irrigation conserves water, saves power (less pumping) and provides tailored growing conditions for each variety. There is a systematic approach to installing soil probes and Galcon on all vineyards.

Earthquake recovery: After suffering damage in the 2016 earthquake at the Riverlands winery, the opportunity was taken to incorporate environmental initiatives in the redesign. These include placing tanks together to reduce pumping and energy use, more efficient insulation, reusing concrete for new tank foundations, and recycling catwalks to extend the Kaituna wetland walkway.

PROBLEMS AND HOW THEY HAVE BEEN TACKLED

The approach to problems in the vineyard and winery is to break down each issue and take small consistent steps towards a solution. This can be done by small teams, or at a larger scale referred to improvement teams where lead thinkers look ahead to come up with innovative solutions. An example of this is a team focused on using new technology to make efficiency and environmental gains.

Zero Waste to Landfill is a big challenge due to the lack of recycling options in New Zealand. PRW has been applying pressure to suppliers to provide recyclable packaging. It has negotiated with BASF, the producers of Kumulus sulphur, the need to collect the empty bags for recycling and this initiative could be rolled out to other wine companies.

The disposal of broken CCA-treated vineyard posts is a serious issue for the whole industry. PRW's response is to use steel posts for replacements and new vineyards. Benefits of steel posts include:

- Lighter and easier to install (less strain on workers).
- Preloaded standardised clips for wires means no decision-making required.
- No waste disposal cost – posts are reusable and recyclable.
- As demand increases, costs are coming down: \$12.50 for a steel post, or approximately \$9 for CCA-treated.

Grape Marc disposal is part of the work of a viticulture focus team alongside attempts to solve this at a regional level. Ideally grape marc needs to be managed as a resource, e.g. ingredient for compost, rather than a waste product. The main problem is contained storage after pressing. There are also concerns about methane emissions from the decomposing marc. Following harvest in 2019 all grape marc will be spread back on to PRW vineyards.

Weed control is an ongoing issue at the Kaituna wetland, where staff are taking a staged approach to clearance of gorse, elderberry, strangling muehlenbeckia, willows and other plant pests. The wetland has been divided into sectors for weed removal, replanting with natives, and maintenance. Uncertainty over funding for this work has been managed by removing it from the Vineyard Budget and placing it with Sustainability spending.

SUMMARY

There is no such thing as “business as usual” at Pernod Ricard Winemakers – the company culture is to seek continual improvements.

The judges were impressed with the breadth of the entry and the can-do approach to solving issues step by step with incremental changes. This is based on monitoring and record-keeping that show improvement over time, whether it's measuring waste or monitoring species in the wetland.

Continuous improvement works best from the bottom up, rather than an edict from management.



The progress at PRW over the past four years is testament to the buy-in from staff backed up with corporate support.

The aspiration of Zero Waste to Landfill is commendable, especially where PWR can influence suppliers to manage waste and improve recycling options for the company and the wider industry.

The effort for more biodiversity in the vineyard shows the value of small planting projects that connect and create corridors across the region. This benefits native ecosystems, enhances the work environment for staff and helps to visually soften the landscape from the rows of vines.

PWR is a large multi-national company that shows genuine concern for the environment they are operating in. It is using its scale to make significant improvements in the environment and developing initiatives that all wineries could adopt. The judges praised their commitment to being a good corporate citizen and noted that this sets the bar for others to aim for.

SUGGESTIONS

- Set up a trial to make grape marc compost (including prunings, mowings and sheep droppings) on site at one vineyard rather than trucking in from a centralised facility. This would bring benefits in fuel savings, reduced fertilizer use, and carbon sequestration. Depending on success, create a management template for other sites. (Concern about methane emissions should not over-ride the benefits of grape marc compost).
- Continue to support organic vineyards to future-proof the company as restrictions on chemical use increase through customer demand and wider environmental concerns.
- Covenant the Kaituna wetland.
- Discuss a pond restoration and planting plan with the landowner of ponds above the Forgotten Vineyard (Brancott Estate Visitor Centre).
- Join Council's Taylor River Improvement Project as a corporate partner (Council funding available for plantings of tributaries to Taylor River).
- Reduce herbicide use by decreasing the width of spray strips under vine. Consider an under-row cultivation trial to gradually reduce use of herbicide and allow more efficient absorption of water by vines. This could significantly reduce irrigation and encourage soil microbes to regenerate.
- Institute soil quality monitoring on vineyards including porosity and chemical residue. Council could facilitate: contact matt.oliver@marlborough.govt.nz
- Harvest Flax at Kaituna – approach iwi to use flax for weaving kete as grocery bags. This would deepen community connections and provide an alternative to plastic bags.
- Consider buying or leasing land to grow eucalypts as a source of non-chemically treated vineyard posts and offset for carbon emissions. www.nzdfi.org.nz
- As part of zero waste to landfill, investigate alternatives to milk carton vine protectors. e.g. Waxed cardboard that could be shredded and composted.
- Consider buying sulphur in bulk and using a forklift to avoid packaging.
- Test soils after stockpiles of broken CCA-treated vineyard posts are removed. Look at creating bunding or a plastic layer for future stockpiles to prevent chemicals leaching into the soil.
- The focus improvement teams are leading the way with innovation and problem solving. Work with Council and Wine Marlborough to share their experience and demonstrate to the rest of the industry what sustainability actually looks like.