

WINNER: ANZAM CASE WRITING COMPETITION – 2016

Case Study: ‘Tr[E]Ading’ Grapes And Footprints: Yealands Wine Group Holdings Limited¹

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“Think boldly, tread lightly, and never say it can’t be done” (Peter Yealands).

“So, how’s it going?” mused Peter.

“It’s looking good, but there’s still a long way to go” replied Jason.

Peter Yealands (founder) and Jason Judkins (CEO) were discussing their dream of becoming the first winery to be fully energy self-sufficient, but they also knew their environmental sustainability plans had to be stepped up yet again. As a primary producer, Yealands was vulnerable to the impacts of climate change and they wanted to lead and contribute to a decarbonised sustainable economy. The industry had come a long way from the days when grapes were tread and stomped to release their juices as part of the traditional wine making process, but not all the changes were good. The industry was known for unsustainable environmental practices – the overuse of dangerous chemicals, inappropriate water use and energy intensive production². These were significant issues that would impact on the long term viability of the Yealands business. And boy, did they have big plans for the future. By

¹ Information in this case study has been collected from interviews with Peter Yealands and Jason Judkins, along with substantial detail from their website: <http://www.yealands.co.nz/>

² Storchmann, K. (2016). Introduction to the issue. *Journal of Wine Economics*, 11 (1): 1–4.

2020 they wanted to lift sales from one to two million cases a year, wine processing capacity from 20,000 tonnes to 30,000 tonnes and turnover from \$100million to \$150million, while at the same time, not compromising their sustainability ethos. This growth trajectory along with minimal footprint clearly needed forward thinking initiatives.

In 2016, Yealands Wine Group Holdings Limited (Yealands) was New Zealand's 6th largest wine exporter to over 80 countries. They employed 155 people in New Zealand and off-shore. They operated primarily from a single site in Marlborough, and had an integrated value chain from grape growing, wine production and domestic and international sales and distribution. Yealands produced 15 different varieties of wine, with Sauvignon Blanc comprising 70% of revenues. Pinot Gris and Pinot Noir made up a further 22%, with only 8% 'other'. 81% of the grapes used in production were from their own grape canopy and the rest were from contract growers in Marlborough, Nelson, Central Otago and Hawkes Bay. Alongside key decisions on how to grow, Peter and Jason knew that innovating green technologies were critical to their long term success.



Source: <http://www.yealands.co.nz/>

A green future

A sustainability ethos has underpinned Yealands since the vineyard's inception in 2001, when Peter Yealands began purchasing 1,113 hectares of farmland on the Seaview peninsula in the Awatere Valley in Marlborough. His goal was to develop a sustainable, New Zealand showcase vineyard. In 2008, a state of the art winery was completed, winning two architectural awards and also certified CarboNZero, the first winery in the world to receive this award. Sales and distribution (NZ and Asia) began in 2010, and Peter Yealands received the first of many awards³ (currently 12 trophies and 850 medals), as producer of the World's Best Sauvignon Blanc. His logo, "Think boldly, tread lightly, and never say it can't be done" represented his advocacy of sustainable business. Peter stated,

I never used to be an environmentalist; in fact I was exactly the opposite. I was the typical farmer who cut down trees and churned up the land and burned the diesel and never worried. But I woke up one morning and changed my ways. A number of things made me aware that we have got to do something better to look after this environment.

³ <http://www.yealands.co.nz/awards>
<http://www.yealands.co.nz/pages/yealands-estate/sustainability-awards>



Source: <http://www.yealands.co.nz/>

Emission reduction⁴

Yealands had many energy efficiency initiatives in place as part of their continuing effort to reduce emissions. In 2016, they had one of the largest **solar panel installations** in the country, producing 133,000 kW per year, enough to power 17 households. However, they were increasing their 91 solar panels on the winery roof to 400, which would supply 20% of Yealands' energy needs. They also had three **wind turbines**, that generated approximately 75,000kWh of energy. Peter had always been known for his innovative no. 8 wire mentality that characterised Kiwi blokes, and he put his mind to solving the use of LPG that was being consumed for water heating. He was also scratching his head about the wasted vine prunings each winter. Ahha... he put two and two together, and came up with vine bales. When burnt, each of the 2500 **vine bales** produced the equivalent energy of 60kg of LPG. This innovation saved the company \$200,000 a year, and eliminated 180 tonnes of greenhouse gas emissions from the environment. Yealands is also believed to be the first vineyard to switch to **bio-diesel**, using cooking fat to operate vineyard machinery.



Source: <http://www.yealands.co.nz/>

Working with nature had been an important part of the Yealands story. Yealands introduced **miniature sheep, Babydoll**. "Think of them as lawnmowers you can pat," says Peter. The sheep were small enough that they could not reach the juicy grapes and reduced the need for mowing (at roughly \$100,000 a mow). This meant they reduced fossil fuel usage, provided natural fertiliser, and reduced spraying costs. Yealands has also worked to develop natural pest controls whenever possible. They adopted over 100 **ex-battery hens** to run free-range and act as a natural pest control that reduced the need for chemical sprays. The

⁴ <http://www.yealands.co.nz/pages/yealands-estate/emission-reduction>

eggs were used in the winemaking process or given to staff. Yealands developed other innovative ideas, like installing **solar lights** in the wetlands to attract grass grub away from the vines, and they trialled the use of an endophytic grass between the vines to **reduce grass grub** in the soil, again reducing the need for chemicals and pesticides. One of the many intriguing additions has been the playing of classical music (using solar power) in the vines to promote vine health, although Peter also believed that *“the chickens lay bigger eggs.”*

Transport is another big cost for wineries, so reducing the **weight of bottles** has helped to reduce costs. Peter said, *“I always got annoyed when I put glass in the back of the car and all I could hear was rattle rattle rattle.”* Hence, Yealands reduced the average glass weight for bottles which meant an 11.5% reduction in CO2 in transport to customers. Further, they developed an eco 750ml PET bottle that had a 54% smaller carbon footprint, and was 89% lighter than standard glass bottles. But Peter had bigger plans. He explained, *“We got into bed with a company that was going to make a compostable PLA bottle from kiwifruit skins. It was pretty clever, and it was going to be square – you could put 40% more bottles into a container, and the labels didn’t scuff off. It hasn’t quite worked yet. But I don’t see failing as a big thing; how will you ever learn if you don’t give it a go?”*

Landcare⁵

Landcare is a second area that Yealands focused on. Soil and vine health were sustained through wetlands, compost and biochar. Two hundred hectares were cultivated in **wetlands** along with more than 200,000 native shrubs and flaxes, providing an alternative source of storage for water. This attracted many more native birds into the vineyard, building up a greater level of diversity. **Crop diversity** was also important, and they consciously planted a mix of lupins, buckwheat, mustard and phacella to attract bees and other good bugs, while also being easy to mulch back into the soil. The design of the winery building’s roof considered the use of **rainwater** and was sloped to collect the water for future use⁶. Yealands also made its own **compost** – up to 50,000 tonnes per year - using both grape marc, as well as waste from other industries (bark, seaweed, mussel shells, and lime) that would otherwise go into landfill. The compost improved soil fertility and water retention. Yealands also experimented with a **biochar unit** to convert vine prunings and grape marc into a high carbon residue that could store greenhouse gases in the ground. This could also be added to the compost mix.

Sustaining the vision into the future

As Yealands carefully managed its dual concern of producing quality wine and reducing its carbon footprint, it knew it could not rest on its past achievements. To remain competitive and successful, they needed to continue to reduce their carbon footprint by finding new and innovative processes. *“We believe that sustainability is a self-renewing process of continual improvement, bounded only by the limits of our imagination”⁷.* This raised the question of how could Yealands tread lightly within Earth’s limited resources? And was it enough for

⁵ <http://www.yealands.co.nz/pages/yealands-estate/landcare>

⁶ <http://sustainable.org.nz/sustainable-business-directory/national/all/all/yealands-family-wines>

⁷ <http://www.yealands.co.nz/>

one company to go it alone? What were the impacts of sustainability for the wine industry and greater environment?

Teaching Note

The case can be used to supplement learning modules on firm-level climate change strategy and environmental innovation. We recommend instructors and students read: Howard-Grenville, J., Buckle, S.J., Hoskins, B.J., & George, G. (2015). Climate change and management. *Academy of Management Journal*, 57(3), 615-623.

Questions:

1. *How do industry factors impact on climate change?*

On one hand, climate change is having a volatile impact on wine making, with even slight movements having an effect on the terroir: Cooler climates mean increased opportunities for winemaking, but also increased unpredictability such as spring frosts, heavy rainfall, and droughts. Warmer areas traditionally known for great vintages face shifts in sugar levels, cooked (stewed) wines, toughened tannins, and poor aging of wines when bottled⁸. On the other hand, the production of wine itself has contributed to climate change through inappropriate use of chemicals and pesticides, intensive quantity and quality of water use, detrimental impact on ecosystems, excessive waste products, and increased energy use and carbon emissions.

2. *How has Yealands incorporated climate change into its strategic decision making?*

Yealands' strategy starts with its vision (Think boldly, tread lightly, and never say it can't be done) and is operationalised in its strategic intent (the first winery to be fully energy self-sufficient). The focus to recover and reuse energy and materials increases its resilience, and growth objectives are tied to its sustainability ethos encouraging innovation. Strategic goals and objectives include specific targets related energy, land use and transport. Critically for climate change strategy, the company has third-party certification through CarboNZero, increasing the credibility of their carbon claims. Yealands environmental awards can be used in marketing to the growing segment of green consumers⁹. A strategic vulnerability is the carbon exposure of being located a long way from overseas markets, which they are trying to mitigate through innovative packaging.

3. *How has environmental innovation led to competitive advantage for Yealands?*

Environmental innovation (e.g. emission reduction or pollution prevention) have been achieved at Yealands through circular economy initiatives, and mimicking natural ecosystems through the recovery and reuse of energy, water and materials. These have led to reduced costs, increased differentiation leading to increased market share. In addition, Yealands has enjoyed the competitive advantage of being a first mover (first winery to achieve Carbon Zero, largest solar panel installation in the country, vine bales as an energy source, utilisation of biodiesel and pest reduction).

⁸ Storchmann, K. (2016). Introduction to the issue. *Journal of Wine Economics*, 11 (1): 1–4.

⁹ Farrow, G. (2015). The rise of the conscious consumer. *New Zealand Herald*, accessed: http://www.nzherald.co.nz/element-magazine/news/article.cfm?c_id=1503340&objectid=11382530

4. *What climate change strategies would you recommend Yealands do in the future (short-term and long-term)?*

This open-ended question can lead to a broad ranging discussion about strategies and the strategic fit with Yealands, along with innovative system-shift thinking. Clearly an opportunity for Yealands is to pursue the PLA packaging mentioned in the case. In addition, more could be done around transport, not only transport of its product, but employee transport to work.