



New Zealand Wine

Altogether Unique.

NEW ZEALAND WINEGROWERS SUBMISSION ON NEW ZEALAND'S ENERGY TRANSITION

November 2023

Introduction

1. New Zealand Winegrowers (NZW) provides strategic leadership for the wine industry and is the body that represents the interests of all of New Zealand's grape growers and wine makers. Established in 2002, NZW is funded by compulsory levies under the Commodity Levies Act and the Wine Act and has approximately 1,400 members. New Zealand is the only major wine producing country to have a single, unified industry body that represents both grape growers and winemakers. The value to New Zealand's economy is reflected in the \$2.4 billion of wine value exported in the past year.
2. The New Zealand wine industry is well placed to be a global leader in the production of low-emission wine, even with the distances our wine needs to travel. Our industry goal of being carbon neutral by 2050 has us firmly committed to a low-emissions pathway, and exciting developments in vineyards and in wineries are already well underway. Our goal is to continue leading the way as an industry of choice. It's the level of 'above and beyond' action from companies and individuals that is helping to deliver lasting change.
3. As an industry we take our climate responsibilities seriously and have consistently converted energy efficient approaches and emissions reductions into practice over decades. Our flagship sustainability certification programme 'Sustainable Winegrowing New Zealand'¹ (SWNZ) ensures members meet best practice guidelines for sustainability in the vineyard and winery. Today 96% of all producing vineyard area in New Zealand is SWNZ-certified and approximately 90% of wine produced in New Zealand is made in a SWNZ-certified facility.
4. Climate change is foundation of the SWNZ programme. Every vineyard and winery member is provided with their own personalised GHG emissions reports based on data they are required to submit, allowing them to compare performance against regional benchmarks, and identify areas for improvement.

¹ Over 96% of New Zealand's vineyard area is certified sustainable by the SWNZ programme. Certification enables producers to bare the SWNZ logo on their wine label, approximately 1,840 vineyards and 310 wineries are certified.

5. Since 2012 SWNZ-certified winery members have voluntarily reported energy-related emissions data annually, which has provided the foundation for our annual National Energy Reports. This creates a decade of data to form multi-year observations of our industry's energy profile. Since 2020, emissions data collected through the SWNZ programme has expanded, including the requirement for vineyards to submit data on their key sources of emissions, as well as expanded emissions reporting requirements for winery members. This culminates in a published industry National Greenhouse Gas Emissions Report.
6. These activities are the backdrop that inform our input into this consultation. As an industry we know that progress in our energy transition *not only makes good environmental sense, it can make good business sense too, it is not a 'nice to have' rather it is key to meeting our consumer's growing expectations of sustainably produced wine.*
7. We welcome the opportunity to submit on this suite of papers, and focus on the most relevant areas to our industry, a Gas Transition Plan and Interim Hydrogen Roadmap.

Key Submission Points

- Sustainably produced wine is a key differentiator for New Zealand's wine industry. It is a key contributor to our international reputation and helps to drive the value of the product we export to the world.
- New Zealand's wine industry has long placed the climate at the forefront of our practice, through sustainability measures, industry reporting, benchmarking and tracking of emissions and energy use.
- **NZW Support** the overarching intent of 'Advancing New Zealand's Energy Transition', specifically:
 - implementing a Gas transition plan that ensures access to reliable and affordable energy whilst transitioning to renewable energy sources.
 - exploring a hydrogen market within New Zealand that enables and incentivises uptake of hydrogen based transport options.
- **NZW Recommend** transitional timeframes for the Gas Plan and adoption of new practices must be realistic, enabling, complementary to support uptake and investment certainty.
- **NZW Recommend** the establishment of a Government facilitated, primary sector energy group to consider the breadth of issues for which there are shared interest and challenges.

New Zealand's Wine Industry and Energy

8. Producing wine consists of two interrelated functions, growing practices on vineyard and winemaking within the winery. Wine businesses in New Zealand will choose to either undertake both, contract a set of responsibilities to others, or focus their business on one function, such as grape production.

Industry reporting

9. As an industry we know the main contributors to our GHG profile are through our carbon accounting programme that collects emissions data for approximately 80% of the carbon footprint of wine, primarily scope 1 and 2 emissions. In the future we intend to expand our comprehensive collection to include scope 3 that provides a more complete picture of our carbon footprint.
10. What our data has shown is that GHG emissions from vineyards are lesser on average than other primary land uses such as dairy and sheep/beef farming, wine has lower emission intensity metrics and emissions per \$ export revenue are also lower. This illustrates the high value, low footprint industry that we continue to build.
11. Currently, activities on vineyard contributing to our GHG profile are driven by the use of liquid fuels for operating heavy machinery (24%), spraying equipment and through agrichemical application. Vineyard activities accounted for 41% of the industry's total GHG emissions in 2022.
12. A winery's profile differs with packaging of wine products (44%) being the largest emitter while other energy uses include winery electricity (7%), winery fuel (4%) and transport between vineyard and winery and between wineries (4%).

Energy sources and reducing our footprint

13. The major energy sources used in wineries are diesel, petrol, natural gas, and LPG. In 2022 emissions from fossil fuels were reported on for the first time in the individualised winery energy & GHG benchmarking reports and were on average 15 g CO₂ e/L wine. Based on a national average, electricity accounts for 61% of winery energy source emissions, while diesel and LPG account for 21% and 16%.
14. In 2022, 21% of wineries had energy efficiency initiatives in place. When surveyed, our members have told us the most popular initiative to improve energy efficiency is through upgrade production equipment to improve efficiency and therefore reduce fuel use (28%), followed by energy efficiency initiatives such as sensors, timers, staff training (22%). 16% of vineyards have also instituted energy management plans. Renewable energy is utilised by a small portion of vineyards, with the most popular type being solar panels (7%), followed by wind turbines (2%).

Decarbonisation Pathway

15. To reaffirm our commitment, wine is one of only eight industries in New Zealand to develop a tailored decarbonisation pathway with the Energy Efficiency and Conservation Authority (EECA). Wine's pathway consists of five steps:

- Engage
- Measure & Target
- Optimise and Improve
- Demand reduction technology
- Fuel switch

16. This pathway reflects the importance we place in Government-Industry partnerships, and will produce meaningful resources and direction for our members to build their decarbonization toolkit and complement our existing industry activities.

Comment: Gas Transition Plan and Interim Hydrogen Roadmap

17. The Gas Transition plan aims to set fossil gas transition pathways across the first 3 Government emissions budgets to 2035 and develop a cohesive view on renewable gas market developments, including how New Zealand could effectively reduce emissions and lower transition costs for fossil gas consumers.

18. We support the plan's aspirational intent. As technologies emerge, our industry has begun to see a move to renewable electricity and electrification of vehicle fleets, but this will take time and effort for businesses with already significant overhead costs and capital investment in wine production.

19. Any future Gas transition must retain the confidence of having an interim supply of gas and without a burdensome cost impact. Despite falling demand, investment in gas assets and infrastructure remains critical to ensure constant and affordable grape and wine production for our members.

Exploring Hydrogen Options

20. NZW support development of a hydrogen map that promotes establishment of a market in New Zealand. As an exporter of over 315 million litres of wine in 2022-2023 we take seriously our carbon footprint on-site but also in transporting our products to market. Enabling settings for targeted investment in this space will make a substantive impact on our industry and our ability to be carbon neutral by 2050.

21. We agree hydrogen can be advantageous for long-distance and heavy vehicles as hydrogen fuel cell electric vehicles have higher energy density, enable faster refueling times and longer driving ranges, and are more efficient on undulating terrain. We support investment in development of green hydrogen heavy duty vehicle and transport options. The 'Hydrogen Roadmap' outlines the following initiatives that we agree provide specific incentives for transitioning to hydrogen use, with the support of a functioning market settings:

- A hydrogen consumer rebate.
- A clean heavy vehicle grant scheme.

22. Acknowledging its limits, NZW also support exploration of green hydrogen's application to agrichemical production. As identified in the consultation there is potential for efficient use when accompanied by co-located cheap sources of carbon such as biomass production.

The role of Government in an energy transition

23. Success in advancing New Zealand's Energy Transition will be determined by the Government's supporting settings. A key aim of the Energy Strategy is ensuring "an energy system that supports economic development and productivity growth aligned with the transition". NZW endorses Government as a setting enabler providing an incentive-based environment for businesses, big and small, avoiding application of a 'one size fits all' approach to innovation, investment or regulation.
24. We support an all of Government approach as the best means of achieving a just transition. Noting many interrelated aspects do not sit within one regulatory regime or departmental work programme, where unaligned approaches create inefficiency, uncertainty and regulatory hurdles.
25. Our producers operate across a variety of legislative frameworks while seeking to improve environmental and climate outcomes. It is important that various regulatory regimes are cohesive to enable behaviour change and better environmental outcomes. E.g. interrelationship between the Emissions Trading Scheme, previous Resource Management Act, Hazardous Substances and New Organisms Act. This dictates a burdensome administrative and reporting environment in many areas where our industry already excels.
26. If the underlying regulatory settings aren't cohesive at a national and regional level then development of supporting infrastructure or uptake of practices can be hindered or create uncertainty for businesses 'wanting to do the right thing'.
27. To complement this approach, we recommend the establishment of Government facilitated cross sector groups, including a primary sector based forum that considers and advises on the impact of proposals, and applicability of investment/regulatory approaches that have shared relevancy to our sector. Establishment acts to increase legitimacy of the work programme, creates an important avenue for sector specific technical feedback, and facilitates discussion on highlighting opportunities and good practice through a transition.
28. Finally, we wish to reiterate our support for this important work. Thank you for the opportunity to submit. We would be happy to discuss any of the points raised in this submission and look forward to understanding in greater detail the next steps for this significant work programme.