

Summary of carboNZero certification: Wairau River Wines Limited



Wairau River Wines meets the requirements of the carboNZero^{Cert™} certification having measured its greenhouse gas emissions in compliance with ISO 14064-1, committed to managing and reducing its emissions and neutralised its remaining unavoidable emissions in respect of its organisation and selected wine products



WAIRAU RIVER WINES
FAMILY ESTATE SINCE 1978

Introduction¹ – Wairau River Wines is a privately owned family wine estate established in 1978 by Phil & Chris Rose. The estate is located in the Rapaura district of the Wairau Valley in Marlborough, New Zealand. Wairau River Wines owns five estate vineyards, a winery that was built in 2002, and a restaurant/cellar door. Wairau River Wines has 11 brands². Their flagship wine is Sauvignon Blanc, while the rest of the portfolio comprises Pinot Gris, Riesling, Gewürztraminer, Chardonnay and Pinot Noir. They employ 18 full-time staff.

Boundary – Figure 1 (over page) shows the organisational boundary used for describing Wairau River Wines' greenhouse gas (GHG) emissions inventory, and what business units were included in the carboNZero certification. Figure 2 (over page) shows what has been included in this inventory for the wine product measurement, in the context of the generic life cycle of wine products. The life cycle stages in yellow were not included in inventory.

Consolidation approach – operational control

Base year – 01/07/2006 to 30/6/2007

Measurement period – 01/07/2007 to 30/6/2008. This is the measurement period for recertification.

GHG emissions source inclusions – The Wairau River Wines inventory reports use of diesel, petrol and LPG as Scope 1 operational emissions, electricity as Scope 2 operational emissions, and freight (international air, international and domestic shipping, rail and road), domestic and international air travel, and embodied emissions associated with the use of packaging as Scope 3 operational emissions. Embodied emissions associated with the acquisition of new plant for the winery are reported as Scope 3 one-time (non-operational) emissions.

¹ **Disclaimer:** This Disclosure Statement is a summary of the verified information considered for certification and the certification decision. It should not be taken to represent the full submission for certification. While every effort has been made to ensure that the information in this Disclosure Statement is accurate and complete, Landcare Research does not, to the maximum extent permitted by law, give any warranty or guarantee relating to the accuracy or reliability of the information.

² Wairau River Wines, Sunshine Bay, Plane Tree Estate, Longbend, Vintage Cellars, Robinsons, Three Kings, Martins Rake, Origin Reserve, Dyed In the Wool, Australian Wine Society.

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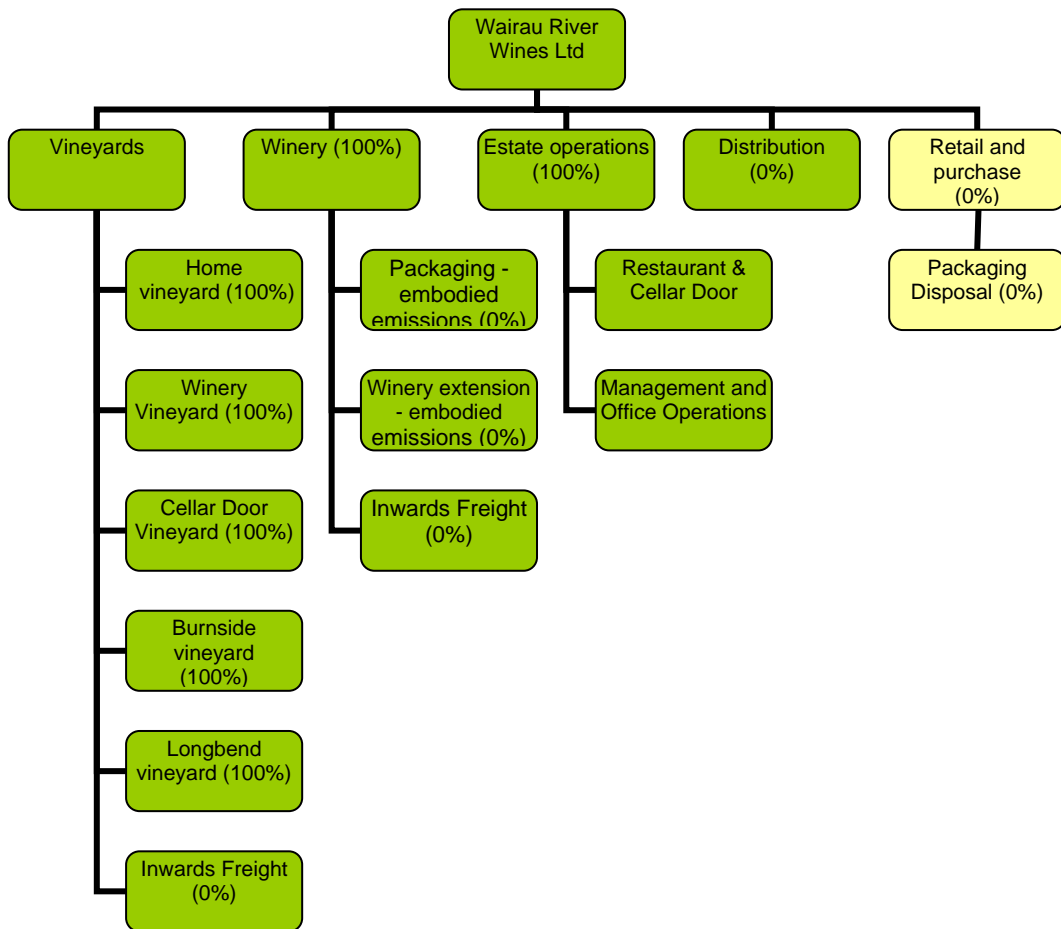


Figure 1: The organisational boundary for Wairau River Wines. Yellow business units were excluded from the GHG inventory.

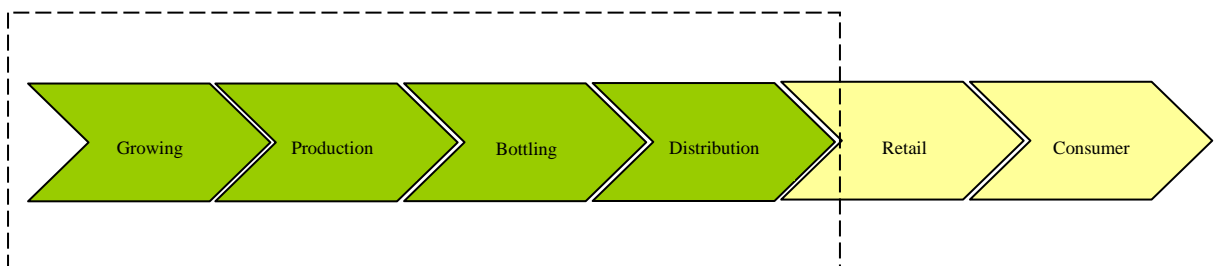


Figure 2: The life cycle product boundary for Wairau River Wines. Yellow life cycle stages were excluded from the GHG inventory.

GHG emissions profile – Wairau River Wines’ total emissions for this period were 1193.97 tonnes carbon dioxide equivalents (CO₂e) comprising 899.95 tonnes of CO₂e operational emissions, and 294.02 tonnes of CO₂e Scope 3 one-time emissions embodied in significant materials used in the construction of an extension to the

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winery. The operational emissions of Wairau River Wines comprised 200.14 tonnes CO₂e Scope 1, 212.11 tonnes CO₂e Scope 2 and 487.70 tonnes CO₂e Scope 3 emissions. Figure 3 below shows operational GHG emissions for Wairau River Wines by business activity, expressed in terms of tonnes carbon dioxide equivalents (CO₂e) and the percentage of total emissions.

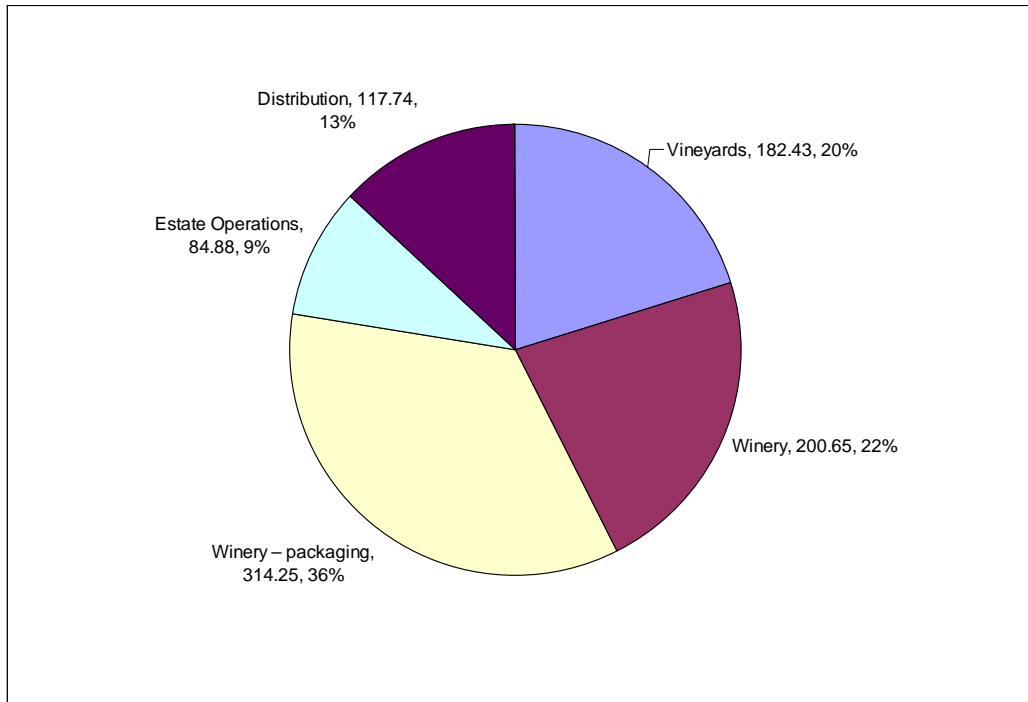


Figure 3: The profile of operational GHG emissions for Wairau River Wines by business activity.

GHG emissions source exclusions – The following emissions sources were excluded from the inventory:

- embodied emissions in fertiliser, due to lack of activity data
- embodied emissions in machinery and plant purchased for the vineyards and winery (other than fermentation vessels), due to lack of component-specific activity data
- fermentation emissions, in line with international best practice
- winery gases, as they are likely to be of limited significance with respect to the total inventory
- embodied emissions of dry goods used in winemaking, due to lack of activity data and they are likely to be of limited significance with respect to the total inventory
- Waste to landfill, as these emissions are likely to be of limited significance with respect to the total inventory
- Freight (road transport) for transport of goods to the estate restaurant, due to lack of activity data
- Emissions associated with the retail, customer use and waste disposal at the end of life of the product, in line with international best practice

GHG emissions reduction commitments – Wairau River Wines has developed a GHG emissions reduction plan. Some projects in this plan include:

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- To reduce the weight of glass bottles in future bottling
- To reduce winery electricity intensity, by considering efficiency of the refrigeration and hot water systems
- To reduce diesel use in the vineyards by considering the efficiency of both the use of and the type of machinery used

GHG emissions reduction report against last year's plan – This is Wairau River Wines' second emissions inventory report. The boundary for this emissions inventory has been expanded to include Scope 3 one-time emissions associated with the acquisition of new plant for the winery, which occurred during this reporting period. A comparison of operational emissions for the two years shows that there was an overall increase (26%, 184.88 tonnes CO₂e) in total operational emissions. There were increases for all scopes, but were highest for Scope 2 and Scope 1 emissions sources. The most significant increases for comparable emissions sources were for emissions associated with electricity, diesel use, and international air travel, although a significant proportion of the increase in electricity emissions (and almost the entire proportion for international air travel) was due to an increase in the respective emissions factor. The most significant decreases were seen in the emissions sources associated with petrol, shipping freight and helicopter use.

The increase in emissions can be attributed partly to a large increase in production; on a "per tonne of grapes harvested" basis, emissions for the vineyards business activity decreased by 41% for comparable emissions sources across both reporting periods; on the same basis, emissions for the winery business activity decreased by 30%.

Offset – 900 tonnes CO₂e VERs³ from PRE⁴ TrustPower wind farm projects. Serial numbers 333292-334191 have been cancelled on the carboNZero programme registry. Scope 3 one-time embodied emissions associated with the construction of the extension to the winery were excluded from the offset required for certification.

Verified by – Verification NZ.

Threshold of materiality – excluded emissions do not exceed 5% of the total footprint for organisation and product boundary stated.

Level of assurance – Reasonable assurance for organisation, limited assurance for product. No assurance is provided over the one-time construction activities.

Certification status – carboNZero certified "organisation" and wine "products"

Certificate number – 2009053J

Valid until – 30 September 2009.

Wairau River Wines, Giffords Road, Blenheim.

Tel: +64 3 572 7950. Email: lparkinson@wairauriverwines.com, Web: www.wairauriverwines.com

³ VERs are created by eligible projects for emissions reductions achieved up to the end of 2007.

⁴ PRE - Projects to Reduce Emissions is a New Zealand government scheme for projects that are eligible under the Joint Implementation initiative of the Kyoto Protocol – see www.mfe.govt.nz