



MARLBOROUGH  
RESEARCH  
CENTRE  
Te Rito Hiranga o Wairau

Funded by



**Agriculture & Investment Services**  
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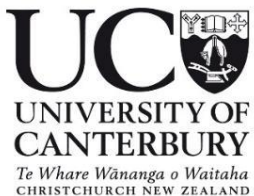
# MARLBOROUGH REGIONAL DURABLE EUCALYPT FORESTRY AND BIOMASS CASE STUDY

**MPI SLMACC PROJECT 406896**

**Workshop**  
**Marlborough Research Centre**  
**Budge St, Blenheim**

**Friday 16<sup>th</sup> February 2024**

**Welcome: Gerald Hope**



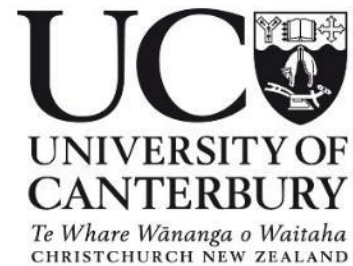
*‘Established in 1984, Marlborough Research Centre works alongside the productive sector to build a strong, resilient economy through innovation, new technology and collaborative research’*

**The Trust supports the vision and goals of NZDFI**



Connecting Research & Business in Marlborough, New Zealand & Beyond

# NZDFI Partners (since 2008)



## Why is NZDFI undertaking this Marlborough Regional Case study?

‘To evaluate how naturally durable hardwood forests could contribute to sustainability and reduce greenhouse gas (GHG) emissions in Marlborough’s wine industry through a sustainable supply of’

- naturally durable posts
- sawn timber
- biomass for bioenergy.



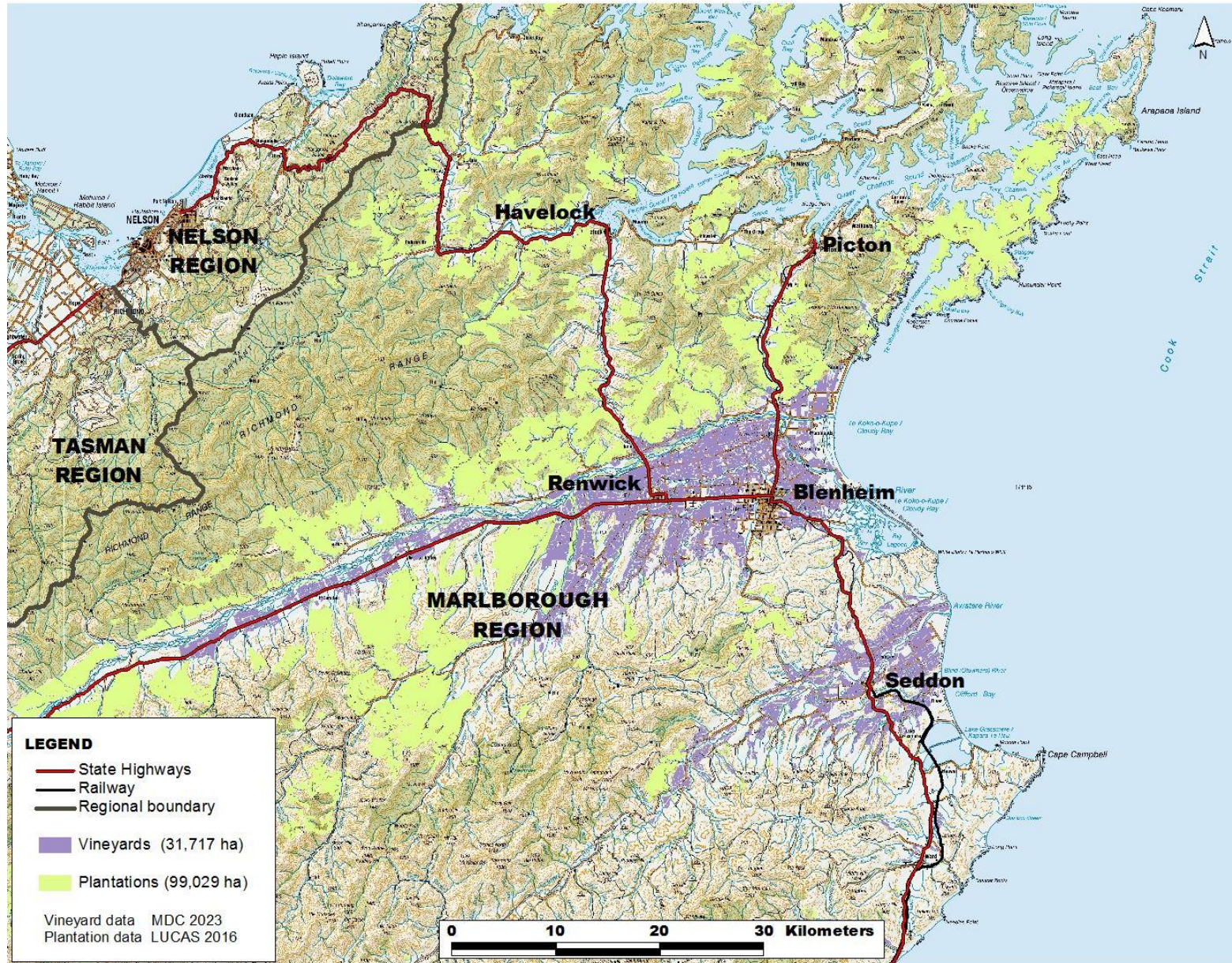
# Marlborough's wine and forest industries

Vineyard area 31,717 ha

266 million litres of wine (in 2023) with total sales value \$2.1 billion.

Plantation forest area 76,625ha (in 2018)

Log export sales from Picton 783,000 tonnes (in 2022) with total sales value \$115 million.





# Innovative mechanisation in vineyard operations has increased productivity

Machine harvesting, mechanised pruning, leaf plucking



## 3% to 5% of posts break annually

>95% of vineyards use CCA pine posts that are broken during mechanical harvesting and pruning.



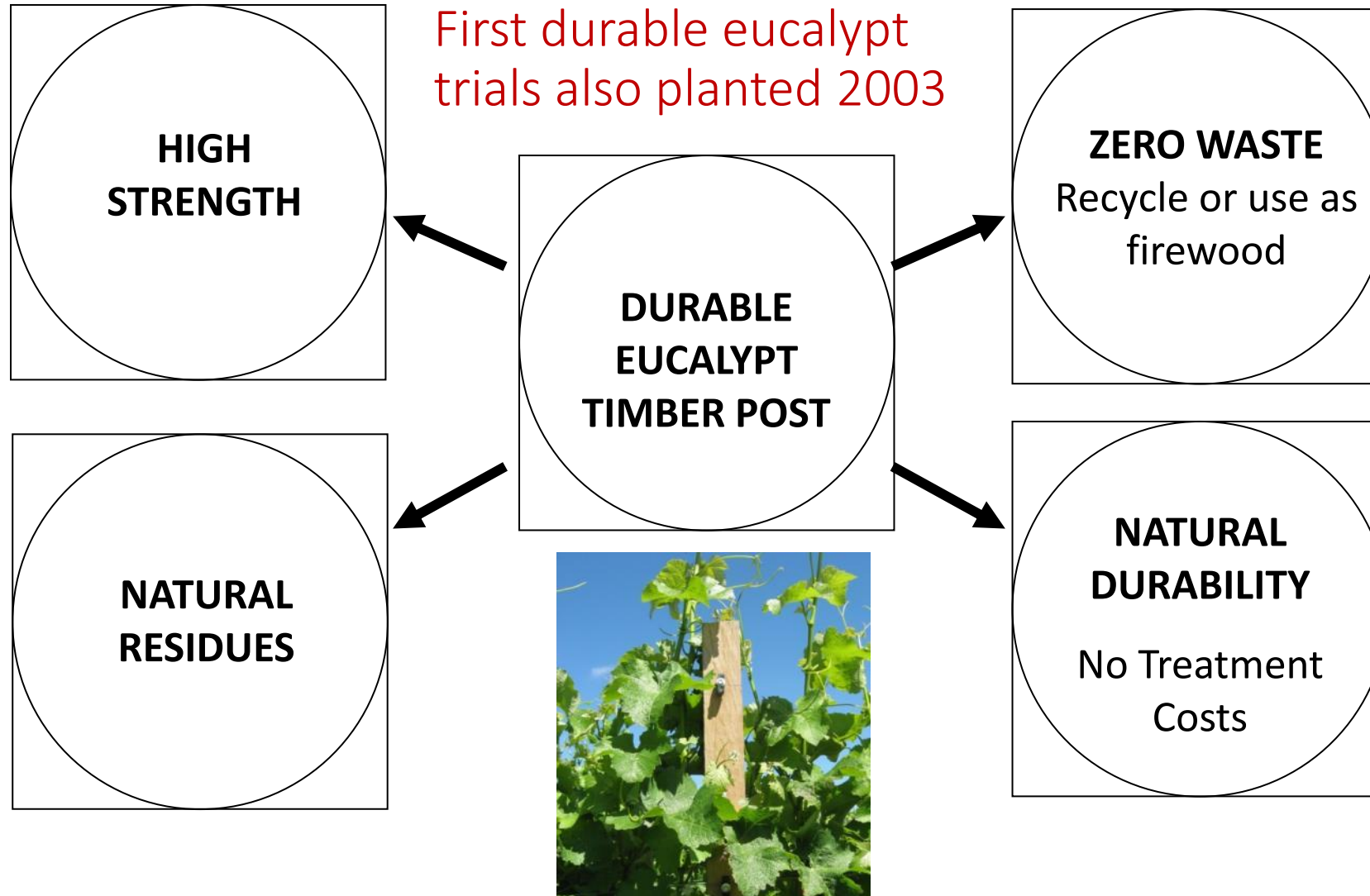


# Demand for Vineyard Posts in Marlborough

- In 2023 31,717 ha vineyards in Marlborough (approx. 10,000 ha 2003).
- Vineyards have average 600 posts / ha.
- Total existing posts = 19 million.
- Broken post replacement @ 3% p.a. = 570,000 posts per year.
- Broken post replacement @ 5% p.a. = 950,000 posts per year.
- Sustainable Winegrowers New Zealand aim is to achieve zero waste to landfill by 2050.







# NZDFI's 2019 strategy

Developing sustainable regional industries based on high-value durable hardwood forests

## Focus Areas

<b>Identifying markets for durable hardwoods</b>	<b>Modelling forest productivity and economic feasibility</b>	<b>Working regionally to encourage new forests</b>	<b>NZDFI's durable eucalypt forestry research plan</b>	<b>Educating growers on durable hardwood forest management</b>	<b>Industry partnerships to build support and capability</b>
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# NZDFI's 2050 vision and goals

## The vision:

New Zealand will be home to a multi-regional sustainable durable hardwood industry worth over \$1 billion annually by 2050.

## The goals:

- Twelve durable eucalypt wood supply catchments planted by 2050 to start producing a sustainable log supply for a future network of strategically located regional sawmills and wood processing businesses.
- New Zealand's forest industry is recognised internationally for improving durable eucalypts by breeding and producing high-value hardwood timbers and products.



# Workshop programme

<b>10.00am – 12.30pm</b>	<b>A durable eucalypt forestry and biomass industry for Marlborough: outcomes from our regional case study</b>	
10.00 – 10.10	Marlborough’s Future is Durable: Welcome and introduction	Gerald Hope, Chief Executive, Marlborough Research Centre
10.10 - 10.20	Opportunities for a durable hardwood industry in Marlborough	Robert Holdaway – Marlborough vineyard and forest owner
10.20 – 10.40	Durable eucalypt forestry for heartwood, biomass and for carbon sequestration	Prof Euan Mason, University of Canterbury School of Forestry
10.40 – 10.55	Using UAVs with LiDAR to measure durable eucalypt biomass in Marlborough	Ning Ye, University of Canterbury School of Forestry
10.55 – 11.15	Durable hardwood processing, products and markets	Assoc Prof Clemens Altaner, University of Canterbury School of Forestry
11.15 – 11.45	NZDFI’s vision and regional development case study for a future durable hardwood industry in Marlborough.	Paul Millen, Manager, NZDFI
11.45 – 12.00	MPI’s Climate Emergency Response Fund (CERF) and research related to the Marlborough regional case study	James Gorrie, MPI
12.00 - 12.30	Discussion	
<b>12.30 – 1.15pm</b>	<b>Lunch - Marlborough Research Centre</b>	
<b>1.15 - 4.00pm</b>	<b>Field visits and demonstrations</b>	
7.30am-12.30pm	Saturday 17 <sup>th</sup> February - Optional field trip to NZDFI trial sites in south Marlborough	