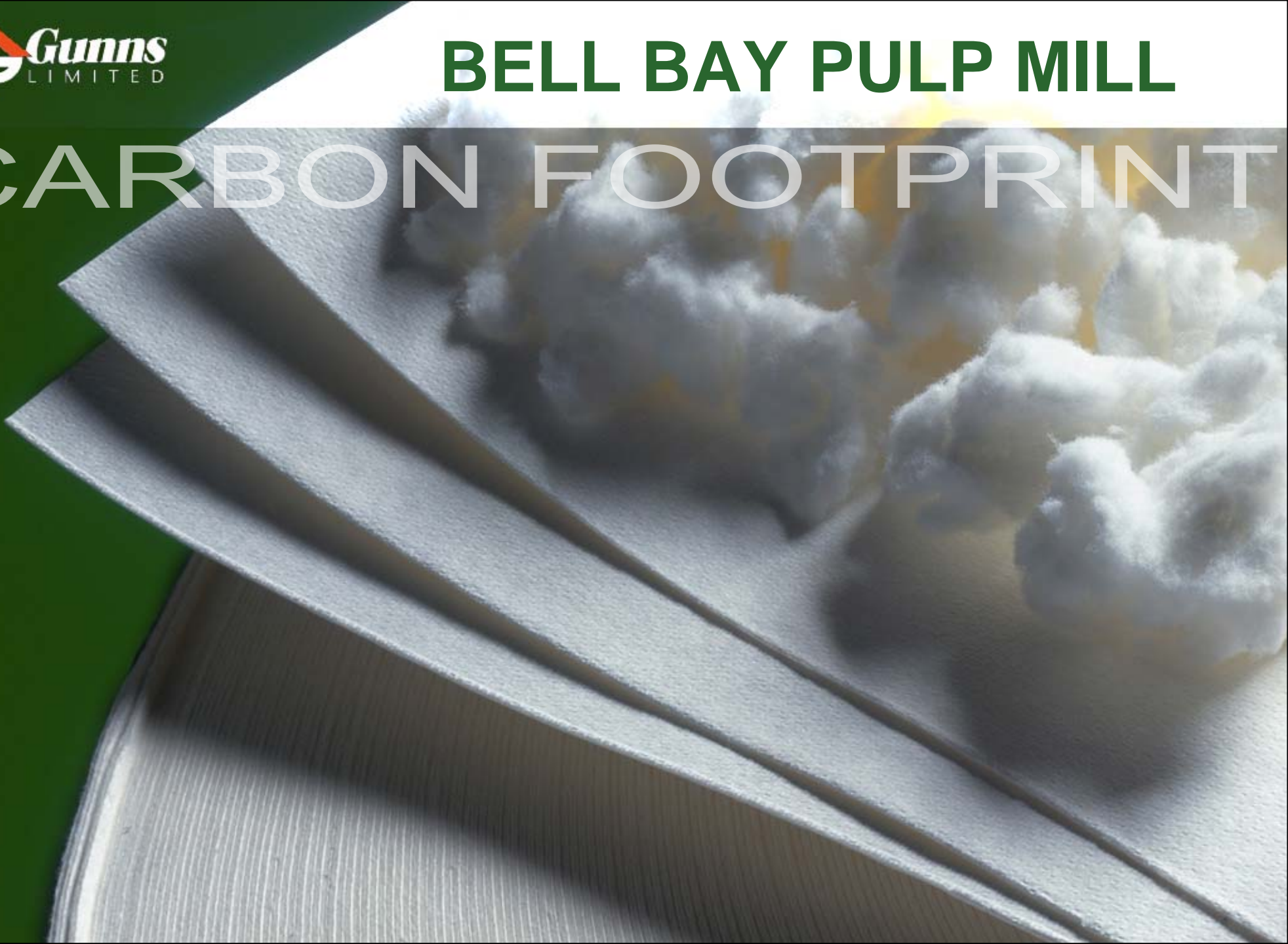


# BELL BAY PULP MILL

# CARBON FOOTPRINT



## Overview of the Bell Bay Pulp Mill Project

- Production capacity: 1.1 million ADt per annum
- Adjacent to existing Gunns woodchip mill
- Central location to access sustainable wood supply
  - Plantation-based project with no supply from old growth forests
- Part of the Bell Bay Industrial Zone
- Proven Best Available Technology
  - Fully designed to comply with Australian regulations and international standards, including those of the EU and World Bank
- Net exporter of electricity to the national grid
- Mill will downstream process woodchips that are currently exported
- Project independently assessed as Climate Change Positive



## **The Pulp Mill's anticipated wood supply is more than sufficiently met by local resource**

- Well established international practices (UN Framework on Climate Change, Intergovernmental Panel on Climate Change) determine that greenhouse gas emission estimates should not include estimate of CO<sub>2</sub> from the combustion of biomass.
- Notwithstanding this, there will be no additional forest harvesting or intensification of existing forestry operations in Tasmania required to support the Pulp Mill – existing woodchip exports will be diverted to the Mill.
- The whole project is based on processing woodchips we currently ship overseas.

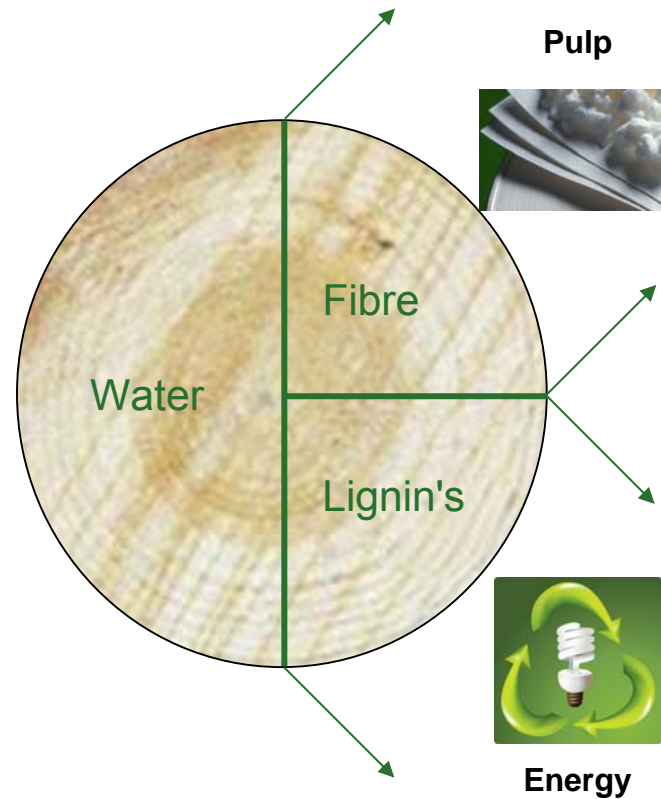
## Current



**Woodchip exports shipped offshore**



## Wood Profile



## Future



**Pulp exported**



**Green energy generation at pulp mill site**

- Modern Pulp Mills are regarded as efficient bio-energy plants
- 80% of power generation from recovery boiler
- 20% of power generation from power boiler utilising:-
  - Woodchip fines and barks currently not utilised from chip mills
  - Sawdust and other sawmilling waste
  - Forest biomass by-products from harvesting currently not utilised and often burnt on the forest floor
- Total production 180MW power: The mill uses approximately ½ with a 90MW surplus
  - more than enough to supply Launceston
- This surplus electricity will replace energy in the national grid which is currently produced from fossil fuels
- Note that the 26gl water diverted to the mill from Hydro Tasmania's Trevallyn Power Station produces only 0.86MW of power. The mill will provide a 100 fold increase.

## Overall net reduction in CO<sub>2</sub> equivalent emissions

- Independent experts, Pacific Air & Environment, have confirmed there will be an overall net reduction in CO<sub>2</sub> equivalent emissions of around 1.1 million tonnes per annum

### Scope 1 and 2 Emissions

Emission Source	Emissions (t CO <sub>2-e</sub> per annum)		
	Scope 1	Scope 2	Total
Power boiler	10,524		10,524
Make-up chemicals	11,051		11,051
Line kiln	90,956		90,956
Recovery boiler	10,949		10,949
NCG incinerator	1,330		1,330
Electricity exports		-416,970	-416,970
Wastewater	21,665		21,665
<b>Total Emissions</b>	<b>146,476</b>	<b>-416,970</b>	<b>-270,494</b>

Source: Pacific Air & Environment

### Scope 3 Emissions

Emission Source	Emissions (t CO <sub>2-e</sub> per annum)
Lime kiln	31,534
Recovery boiler	3,796
NCG incinerator	461
Production of burnt lime	10,800
Resource delivery by rail	95
Waste disposal	19
Final product delivery	150,668
International woodchip exports	-1,117,680
Resource delivery by road	-3,102
Chemical delivery	3,571
Boiler fuel delivery	7,808
Light vehicles	1,488
<b>Total Emissions</b>	<b>-910,543</b>

Source: Pacific Air & Environment

## **The Pulp Mill will have a positive impact on climate change**

- Fibre supply will be sourced from sustainably managed forests
- Project will be plantation-based with no supply from old growth forests
- An independent assessment of the mill's carbon footprint by leading Australian environmental consultants Pacific Air & Environment found the mill would reduce greenhouse emissions by 1.1 million tonnes a year
- Positive impact driven by:-
  - Reduction in shipping movements compared to woodchip export operations
  - Surplus power generation replacing fossil fuel generated power

### **TASMANIAN ISSUES, GLOBAL RESPONSIBILITIES**

The mill will downstream process a sustainable product within Tasmania, leading to a substantial reduction in Gunns Limited's carbon footprint. This is a real opportunity to make a positive contribution to climate change in our own backyard.