



# Industrial Net Zero 2025 – how the Borg Group is creating demand for products with reduced waste and emission profiles

Andrew Cheah, Head of Group Energy



# Acknowledgement of Country

In the spirit of reconciliation, I would like to acknowledge the Traditional Custodians of Country throughout Australia and their connections to land, sea, and community.

We pay our respects to the Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.



# This is Borg – Who we are

A leading privately-owned, vertically integrated Australian business, with a portfolio spanning forestry, recycling, manufacturing, construction and property development.

- Proudly Australian owned and operated
- Founded in 1988 on the Central Coast
- 9,000 customers
- Regional employer



# Borg Group: Brands and Services



**Supplying Strength,  
Quality and Innovation  
to Australia's  
Construction Industry**

Porta is a leading suppliers of **timber and panel products** for residential and commercial construction.

From structural flooring and panelling, to everyday joinery materials, wall panelling, outdoor timber, and mouldings.

**STRUCTApanel** **STRUCTAflor**

 **easycraft**



**Australia's leading decorative surfaces brand for residential and commercial applications.**

**polytec** renowned for its extensive decorative surfaces offering for both residential and commercial interiors, especially kitchen, bathroom and laundry joinery. It is a favourite among designers and renovators across the country for its style and quality.



Offer circular resource recovery solutions, as part of a streamlined system that ensures excess waste is diverted from landfill.



Australian leader in the recovery and re-manufacture of organic residuals and by-products for resale



Plastic extrusions business specialising in building profiles including formwork, components, general trim, custom fittings, drainage and flooring tongues.



Pallet specialist providing new, recycled and custom-made pallets and crates for local or export use.



Manage and harvest plantation timbers for use in the panel industry of Australia, and deliver the harvested materials for processing



Resin manufacturer for materials in the joinery and construction industry



**CROSSMULLER**

The Space Urban and Crossmuller businesses respectively manage Borg's property portfolio including all new developments. Services include design, construction, installation and commissioning.



Group Energy established in 2021 to provide energy, sustainability and carbon management services.



# No Waste – The Heart of How we Work



Grow our own trees



Timber from PEFC and FSC certified sources



Manufacturing facilities utilise every part of the tree



Utilise renewable energy sources from biomass, solar PV and battery storage



Recover wood waste for recycling to manufacture Particle Board

# Sourcing wood from sustainable plantations and certified supply

- PEFC and FSC Chain of Custody certification demonstrates our commitment to responsible sourcing.
- We prioritise materials from COC certified suppliers, ensuring sustainability standards are met.
- Over 60% of input material for our particleboard comes from recycled sources, reducing demand on virgin forests and supporting circular resource use.
- Recycled content is recognised by PEFC as certified input, contributing directly to our certification.
- As part of the COC management plan, we apply a Due Diligence System to exclude illegal or controversial sources.



# At Borg, every part of the tree has a Purpose

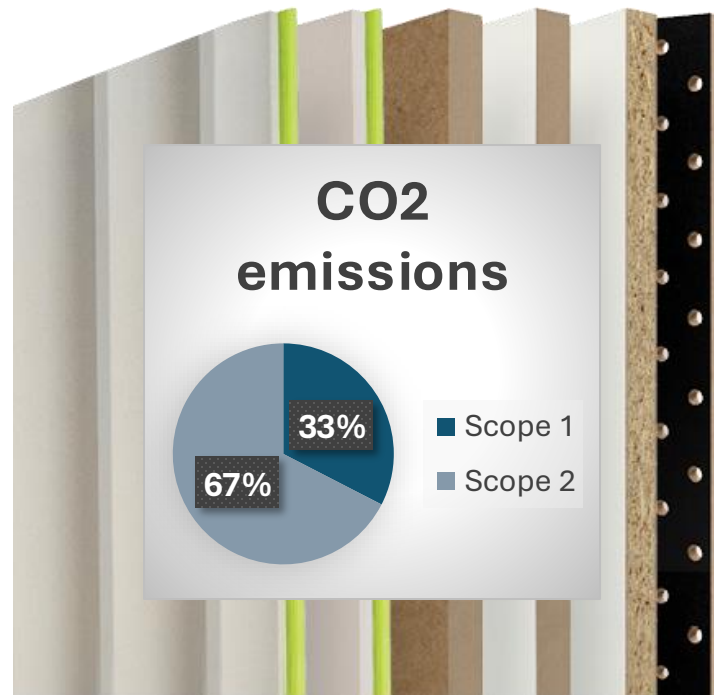
We ensure nothing goes to waste by turning every part of the tree into something of value:

- Bark → Mulch (landscaping & soil improvement)
- Timber → Fibre for Particleboard, MDF and solid timber products
- Saw Dust & Off-cuts → Biomass Fuel
- Off-spec Board → Gluts / Recycled back into process



# Our manufacturing facilities are energy intensive

- Our Porta facilities are required to report under NGER's. Last year, FY24/25 we emitted close to 200,000 tonnes of CO2-e.
- Major sites in Oberon and Mt Gambier consume 4 PJ of energy p.a.
- Group Energy directly supplies gas and electricity to our manufacturing facilities, including power from 16 MW roof-top Solar PV and battery storage units.





# Biomass is a key renewable energy source

- We currently use 150,000 tonnes p.a. of biomass (wood based - solid and dust)
- Supplementary heating is provided by natural gas
- The use of biomass instead of natural gas reduces our direct emissions by 60%
- Plans in place to install new biomass energy plants in Mt Gambier



# Group Energy: Solar and Storage

- Our largest rooftop Solar is at Porta Oberon site with over 27,000 panels. This is about 100 Basketball courts.
- Our rooftop solar PV at Somersby, has 9,438 solar panels on our roof. This can power 840 homes a year
- Group Energy's 1MW/2MWh battery can:
  - It can discharge to the grid or be used onsite during the night and periods of high demand on the electricity grid
  - Power 1 home for over 4 months
  - Equivalent to 148 home batteries systems storage capacity



# Closing the Loop: Waste Wood Recycling

How reDirect Recycling is collecting, processing waste wood to be re-used in the manufacture of particleboard. It collects around 150,000 tonnes from over 1,000 customers each year.



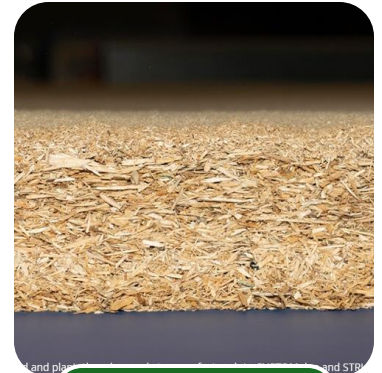
Waste wood  
collected and  
sorting prior to  
shredding



Urban Wood  
Residue (UWR)  
chipped ready  
for loading



Truck loaded  
with material  
for transport to  
Porta Oberon



Mixture of  
recycled and  
plantation pine  
to make  
particleboard



# The Carbon Footprint of a Footprint



12.4 kg for a shoe... but what about a building?

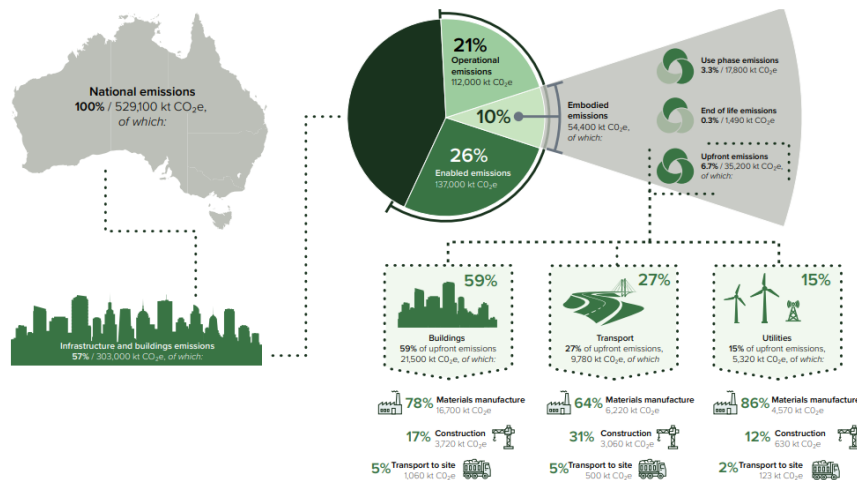


# The hidden footprint of our buildings

- Buildings are responsible for 1/3 **third** of CO<sub>2</sub> emissions in Australia
- Most people think about operational emissions (heating, cooling, lighting)
- But embodied carbon (the emissions from making materials like steel, concrete, glass, timber and panels) is often invisible.

Figure 1: Carbon emission projections for Australian infrastructure and buildings, 2023

Source: Infrastructure Australia (2023).  
Enabled emissions have been defined in this study to exclude primary industry (mining, agriculture, and forestry).



# Making Carbon Footprints visible through EPD's



polytec

Environmental Product  
Declarations (EPDs)

Verified environmental impact data for your projects

Global **GreenTag**  
International EPD Program  
**EPD**  
Environmental Product Declaration

In accordance with  
ISO 14025 and EN15804+A2

ECO PLATFORM  
**EPD**  
VERIFIED

ECO  
PLATFORM

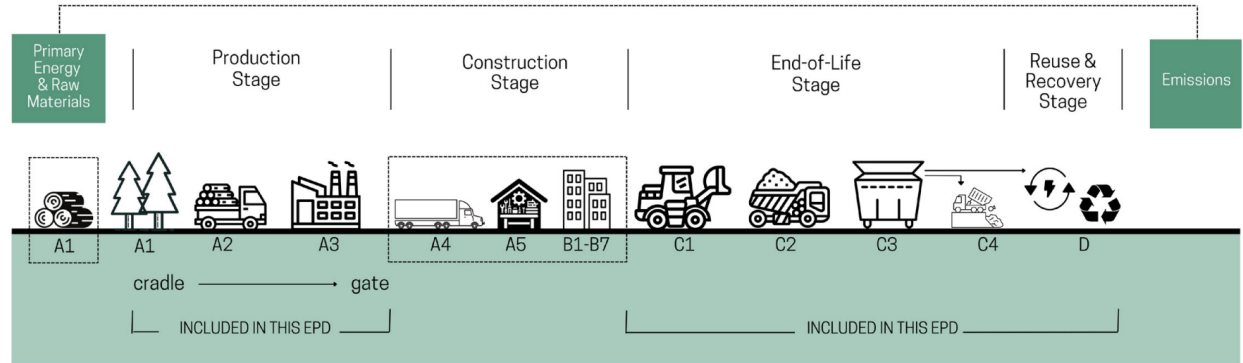
# Our EPD's covering production, end-of-life & recovery



Porta Products Pty Limited  
CUSTOMpine  
Raw Particleboard  
Standard Particleboard  
Moisture Resistant Particleboard

Company Address: 2 Wokar Way, Somersby NSW 2250  
Issue Date: 10th July 2025 Valid To: 10th July 2030  
Registration Number: B08-CP01-2025-EP  
Document Version: 1.0

Figure 3: System Process Flow Chart & Boundaries



This is a 'cradle-to-gate' type EPD with modules C1-C4 and module D added. This means that the production (modules A1-A3), end-of-life (C1-C4) and reuse, recovery and/or recycling potentials (D) are modelled in this EPD. The construction process (modules A4-A5) and use stages (B1-B7) are not modelled.

## Why this matters?

Our engineered wood products **store more carbon than they emit** during production – resulting in **negative upfront embodied carbon value** from cradle-to-gate.

More negative means **better for the environment**.



## Negative Carbon = Good

More carbon absorbed  
than emitted → reduces  
project footprint.

Our negative embodied carbon helps lower your projects footprint.

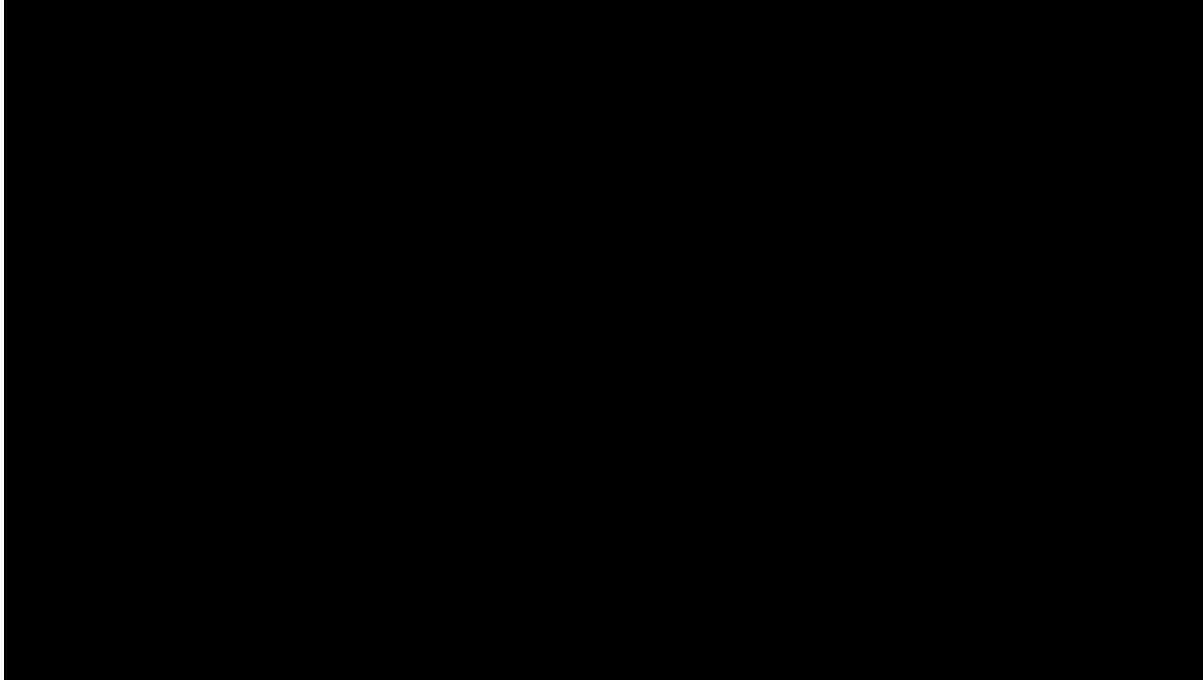
Find out more by scanning the QR code or visit [www.polytec.com.au](http://www.polytec.com.au)

**polytec**, part of Porta Products Pty Limited, A Borg Company.





Polytec is on a sustainability journey towards a circular future and taking steps to reduce its environmental impact



# Thank You

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