

# EPDS AND THEIR ROLE AT FLETCHER BUILDING

*LCANZ SUMMIT*

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# TODAY

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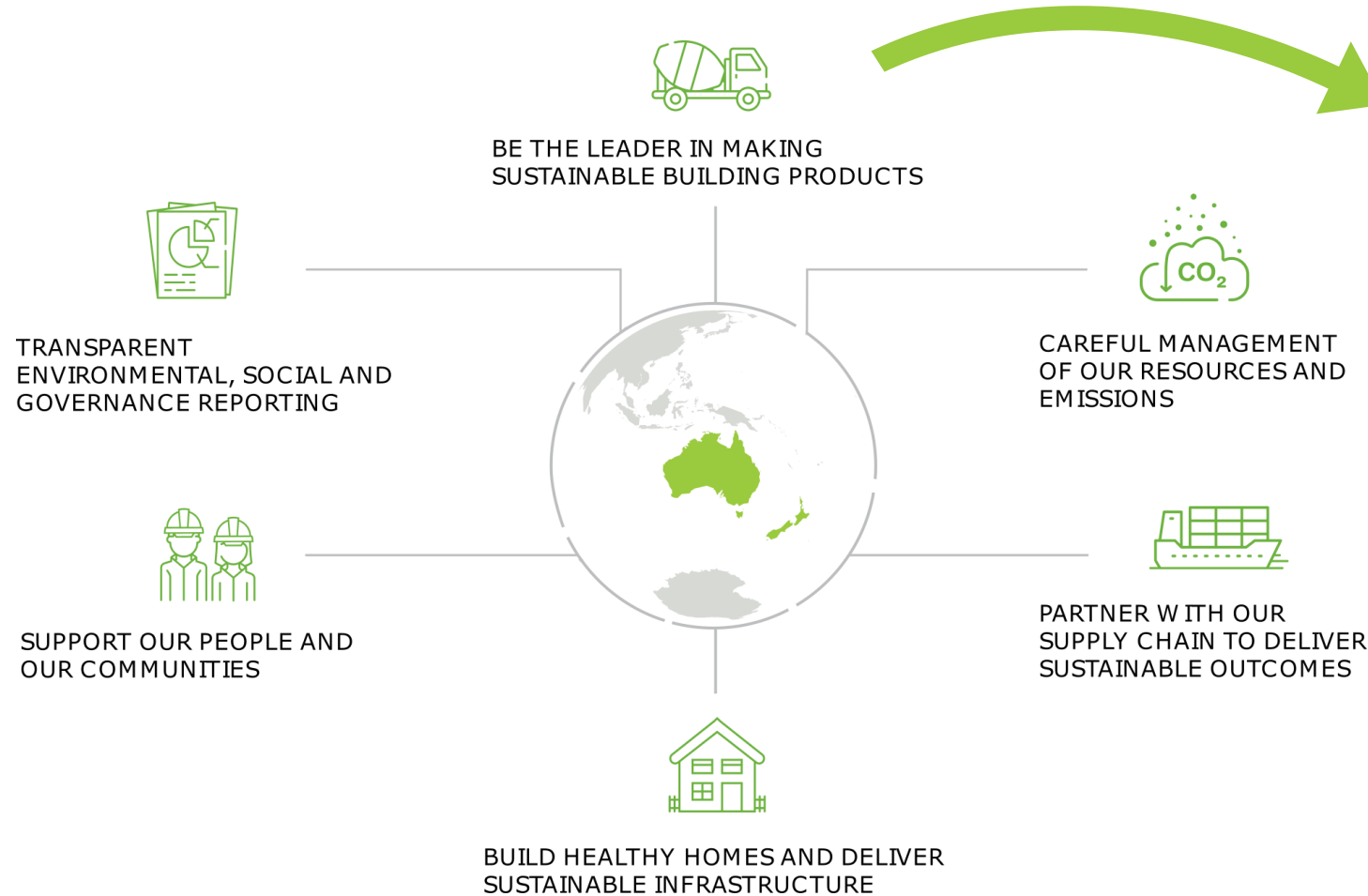


**EPDs within our strategy**

**Benefits of EPDs**

**Learnings**

# EPD WITHIN OUR STRATEGY



- **Reduce the environmental impact of our products**
- **Gain sustainability product certifications**

# BENEFITS OF EPDS



... for 1m<sup>2</sup> of ColorCote® used in ...

**Gard™ 0.90mm**

Environmental Impact	Unit	Production			End-of-life		
		A1-A3	C3	C4	D	E	F
Global warming potential (total)	kg CO2-eq.	42.6	0.0201	0.0130	-32.3		
Acidification potential of the stratospheric ozone layer	kg CFC11-eq.	1.98E-12	4.93E-17	3.44E-15	-2.56E-11		
Acidification potential of land and water	kg SO2-eq.	0.139	6.40E-05	3.61E-05	-0.174		
Eutrophication potential	kg PO43--eq.	0.0147	8.23E-06	4.54E-06	-0.0106		
Photochemical ozone creation potential	kg C2H4-eq.	0.00922	4.55E-06	3.25E-06	-0.0124		
Abiotic depletion potential - elements	kg Sb-eq.	2.16E-05	1.09E-08	1.40E-09	-2.61E-06		
Abiotic depletion potential - fossil fuels	MJ	630	0.248	0.188	-305		

Resource use	Unit	A1-A3	C3	C4	D
Renewable primary energy as energy carrier	MJ	12.3	0.754	0.0144	-37.6
Renewable primary energy resources as material utilisation	MJ	0	0	0	0
Total use of renewable primary energy resources	MJ	12.3	0.754	0.0144	-37.6
Non-renewable primary energy as energy carrier	MJ	635	0.248	0.195	-309
Non-renewable primary energy as material utilisation	MJ	0	0	0	0
Total use of non-renewable primary energy resources	MJ	635	0.248	0.195	-309
Renewable secondary material	kg	0	0	0	0
Non-renewable secondary fuels	MJ	4.18E-10	0	1.10E-24	-3.1
Renewable secondary fuels	MJ	4.91E-09	0	1.29E-23	
Water	m3	0.0614	0.00196	2.06E-05	

Output flows	Unit	A1-A3	C3	C4
	kg	2.01E-07	2.12E-10	
	kg	7.39		
	kg	0.00171		



Environmental  
Product Declaration  
for Tasman Insulation:  
Pink® Batts® glass wool  
insulation: segments,  
blankets and boards

In accordance with ISO 14025 and EN 15804

**30% reduction in global warming potential**

**50% reduction in acidification potential of  
land and water**

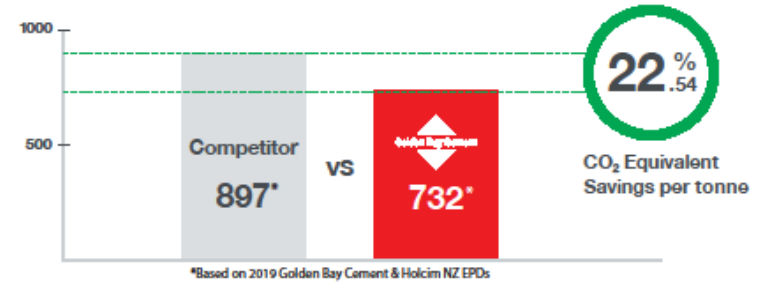
**65% reduction in Eutrophication potential**

**55% reduction in photochemical ozone  
creation potential**



# Carbon savings at a glance

CO<sub>2</sub> Emissions Equivalent kg/T (GWP) Global Warming Potential



### How are we more environmentally friendly?

We have a smaller footprint because of our ongoing use of alternative fuel sources, access to renewable electricity and our current product formulation. We're committed to reducing our use of fossil fuels and CO<sub>2</sub> emissions.

GBC saves **165 kg** CO<sub>2</sub> equivalent/tonne of cement used

### USING GOLDEN BAY CEMENT WILL SAVE

GBC CO<sub>2</sub> SAVINGS:

**132,000t of CO<sub>2</sub>e\***

Equivalent savings to:



1 passenger

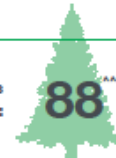


**19,700\*\***

return flights from Auckland to London

\*\*Saving calculated using [www.Co2.myclimate.org](http://www.Co2.myclimate.org)  
\*Based on annual supply of 800kt of cement

Hectares of Pinus Radiata trees planted:



+

Number of years:



=

GBC CO<sub>2</sub> EQUIVALENT SAVED: **132,000t CO<sub>2</sub>e**





**MINISTRY OF BUSINESS,  
INNOVATION & EMPLOYMENT**  
HIKINA WHAKATUTUKI

### **Reducing whole of life embodied carbon**

This framework will set mandatory reporting requirements as well as targets that will need to be kept under to gain consent.

The framework will consider the allowed level of greenhouse gas emissions from:

- › the materials used in construction
- › the construction process
- › disposing of construction waste, and
- › disposal of the building at the end of its life.

# LEARNINGS

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**Just start. Get guidance by an EPD provider, and team commitment.**

**Data, data, data**

**Some at your finger tips**

**Some difficult to find – especially from external suppliers**

**Some you need to measure**

**Insights are more powerful than you think**

**How are you going to communicate to your customers**