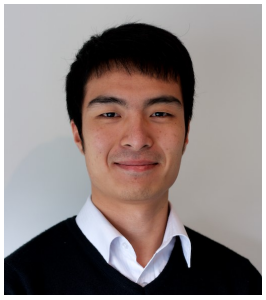
FTMA TECH Talk



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AUGUST 2022 - NO.45

David Zhang - Multinail Lead Structural Engineering Manager

THINK ABOUT FUTURE, THINK TIMBER - NET ZERO 2050

We may have lots knowledge about designing, manufacturing and installing timber truss and frames, but how much do we know about net zero emissions? This article may give some lights about the future of our planet while we are battling with climate changes.

A net-zero asset is one where the whole-life carbon asset-related greenhouse gas emission, plus offsets, equal zero ('A short guide to carbon offsetting' by IStrutE). Australia has reduced emissions by 20% between 2005 and 2020. We will reduce emission by up to 35% by 2030 and by 2050 a whole-of-economy will achieve net zero. Those dates may suggest we have some time, however we don't have years – in fact, for some projects or dwellings in our industry we may already be too late.

Timber stores carbon. We, as part of timber truss and frame supply chain, fully support our industry to recognise the important role we are acting to achieve net zero emission. Every quote that timber frame and truss manufactures provided to their client will have the information about an approximate amount of carbon being stored by the timber components being supplied. It will be shown on the truss and frame layouts as well therefore the building will have the note on plans which bring them as part of our campaign.

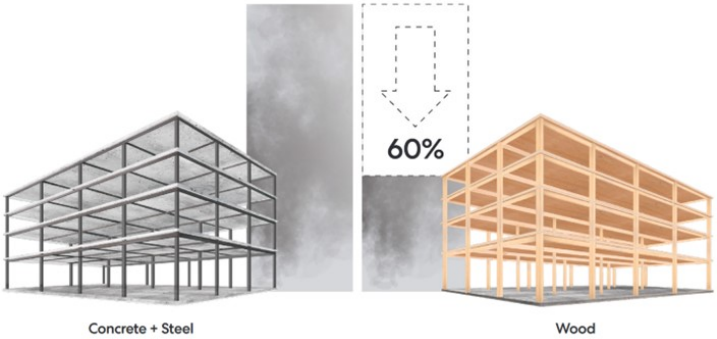

Fig 1 (right): Building with wood can cut carbon emissions *(retrieved from Basics of Wood's Carbon Footprint by Think Wood)*

Fig 2 (below): Typical quote summary sheet generated by Multinail Cornerstone software

SUMMARY QUOTE

PAGE : 1 of 1
JOB NO :
DATE :

Customer :

Site Address:

The Structural Timber products supplied in this building stores approximately 1140 kg of carbon

ROOF SHAPE	: **Standard**	ROOFING	: **Metal Sheet@7kg/m²**	ACC NO :
TIMBER	: **Dry Softwood**	TC Fixing/Rest	: **Metal @ 900c/900c**	
SPACING	: **600 mm**	CEILING	: **Plaster 10mm Supa Span@7.2kg/m**	ORDER NO :
FASCIA TYPE	: **As per AS1720.3-2016**	BC Fixing/Rest	: **Direct fix @ 600c/600c**	
WIND / EXT / INT	: **N3 / 0.6 / 0.2**	STD CHORDS	: **90 TC / 90 BC**	DEL DATE :
	:	STRUCTURE	: **House**	

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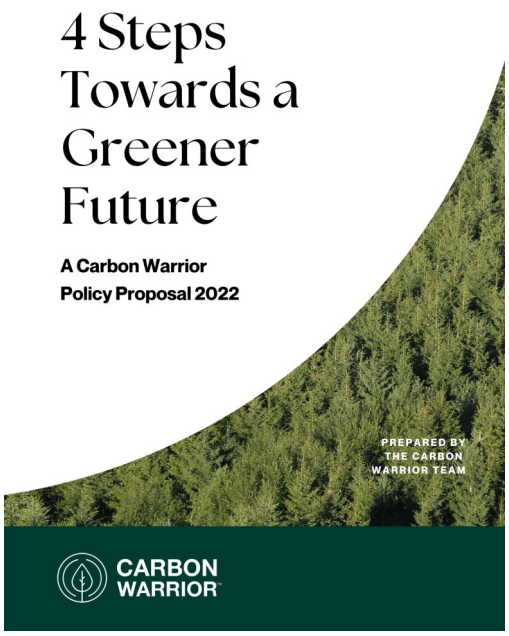
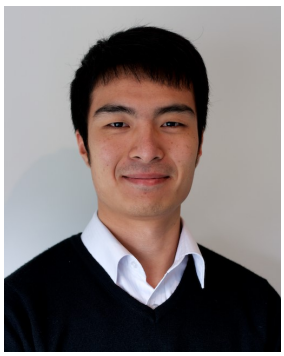
FTMA just released Carbon Warrior policy proposal early August this year alarming people should pay more attention to climate change and be proud to be a true warrior to deliver the message that Australians deserve better and everyone shall help minimise the negative impact working towards a better and greener future.

CARBON WARRIOR®

Most importantly, we are not alone. Just sharing more information here about what other countries are planning and acting on this same topic. As a profession, we need keep ourselves up to date with the world. The Institution of Structural Engineers (IStrutE) published a guide book about how to calculate embodied carbon together with a detailed Excel Spreadsheet. Think Wood in US published a series of factsheets and resources to highlight its advances in timber construction reimagine the future of the built environment, combing strength with sustainability.



If you still don't realise the impact of climate changing, here is another fact we can share here regarding the latest AS/NZS1170.2-2021. This wind code which will be called in new NCC2022 introduces a new factor M_C when deciding the site wind speed, and M_C is named as the "climate change multiplier".



This edition of FTMA Tech Talk was written by David Zhang, Lead Structural Engineering Manager of our Gold Sponsor, Multinail.

If you have any questions for David, please don't hesitate to contact him.

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