



COLLABORATION FOR CHANGE

Case Study: Jobsite Carbon App

Embodied CO₂e reduction
(tCO₂e)

N/A

CATEGORY

PRODUCT	SYSTEM	PROJECT	CONCEPT
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SUPPLY CHAIN

MANUFACTURING	PROCESSING	TRANSPORTATION	CONSTRUCTION
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REGION

WA	NT	SA	QLD
NSW	ACT	VIC	TAS

Profile

Organisation: Grenville
Architectural Construction
Website:

<http://www.gaconstruct.com.au>

About: We are a residential building company specializing in low carbon, bespoke architectural construction

Grenville

Architectural Construction
Low Carbon Bespoke Construction

Section 1: Opportunity

Grenville wanted to document in real time, the materials delivered to site, to develop a data-set which could calculate embodied carbon emissions. This could be used by the client to offset the project emissions, as well as quantify the carbon-intensive aspects of the project to inform future work.

Section 2: Solution

Grenville developed an app connected to a cloud platform, which allows for all deliveries to be uploaded with a photo of the delivery. The EPIC coefficients are used to formulate the carbon footprint. This is then downloaded to an LED site sign, which displays the real-time footprint of the project.



Section 3: Lessons

During this development, it became apparent that the key objective should not be in establishing the embodied value, but in generating a widespread 'carbon conversation'. The LED site sign became the crux of the exercise – sparking questions from the design team, site contractors and passer-by's.

Section 4 : Impact measurement

There is very fine data resolution as result of the app function, resulting in project insights for future work. Importantly, the site sign has sparked conversations with many people not connected to the project, extending the concept of embodied carbon into the wider public domain.

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