



COLLABORATION FOR CHANGE

Case Study: FEIT Workplace in Melbourne Connect

Embodied CO2e reduction
(tCO2e)

0.65

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: Aurecon

Website:

<https://www.aurecongroup.com/>

About: Aurecon is an engineering, design, and advisory company, voted by AFR as Australasia's most innovative company.

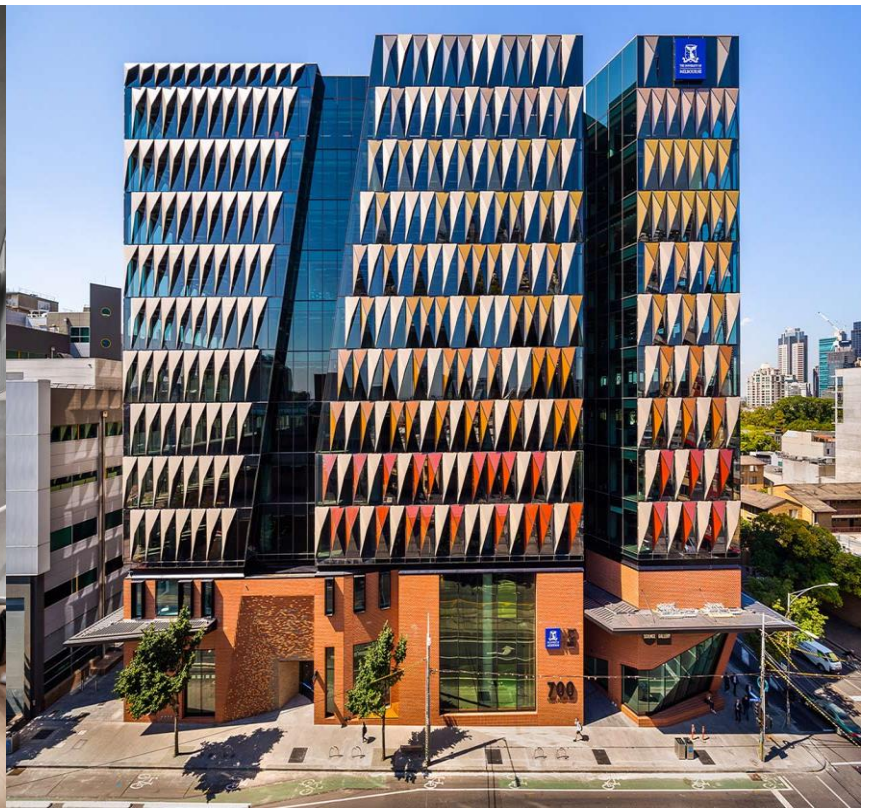


Section 1: Opportunity

Melbourne Connect is Australia's newest purpose-built innovation precinct, home to many of the staff and activities of Melbourne University's Faculty of Engineering and Information Technology (FEIT). Their workspace reflects the values of the organisation and is an exemplar for sustainable and healthy buildings with a 6 Star Green Star rating and a Platinum WELL rating. The University of Melbourne has set a commitment to be net zero carbon before 2030 and the building and workplace were designed to minimise both operational and embodied carbon. The design of the workspace was informed by undertaking a lifecycle assessment (LCA).

Section 2: Solution

Sustainable products and product transparency were key priorities for the project. Transparency in the selection of products can be difficult, and this pushed uptake of third-party certifications and transparency schemes including Environmental Product Declarations to drive low emissions product selection. Third party schemes and transparency targets gave designers greater confidence in product selections that directly contributed to the low carbon fitout.



Section 3: Lessons

Through the use of products within verified certification schemes, a reduction in embodied carbon could clearly be demonstrated. Not only were these reductions clearly demonstrated but they were able to be calculated to a precise level that would not have been otherwise possible. The transparency of product data assists the industry to move to more sustainable practices. It provides confidence that a product manufacturer has completed their due diligence. When products create an EPD for a single project, the EPD may be re-used in the future, not to mention helps to provide manufacturers valuable information to improve their efficiencies and find innovative ways the share their sustainability story.

Section 4 : Impact measurement

The lifecycle assessment demonstrated a 26% reduction of CO₂e through the decisions made within the project design process. Modelling results indicate the fit-out also has 83% cumulative environmental impact reduction reported across a variety of impact categories including ozone depletion, acidification, eutrophication, photochemical ozone creation, mineral depletion, and fossil fuel depletion.

The embodied reduction is the equivalent to over 10 seedlings grown for 10 years or the 24 incandescent lamps switched to LEDs.

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