



COLLABORATION FOR CHANGE

Case Study: One Sydney Harbour

Embodied CO2e reduction
(tCO2e)

13501.5

CATEGORY

PRODUCT	SYSTEM	PROJECT	CONCEPT
---------	--------	---------	---------

SUPPLY CHAIN

MANUFACTURING	PROCESSING	TRANSPORTATION	CONSTRUCTION
---------------	------------	----------------	--------------

REGION

WA	NT	SA	QLD
NSW	ACT	VIC	TAS

Profile

Organisation: Lendlease

Website: <https://www.lendlease.com/au/>

About: Lendlease is a globally integrated real estate group with expertise in shaping cities and creating strong, connected communities.



Section 1: Opportunity

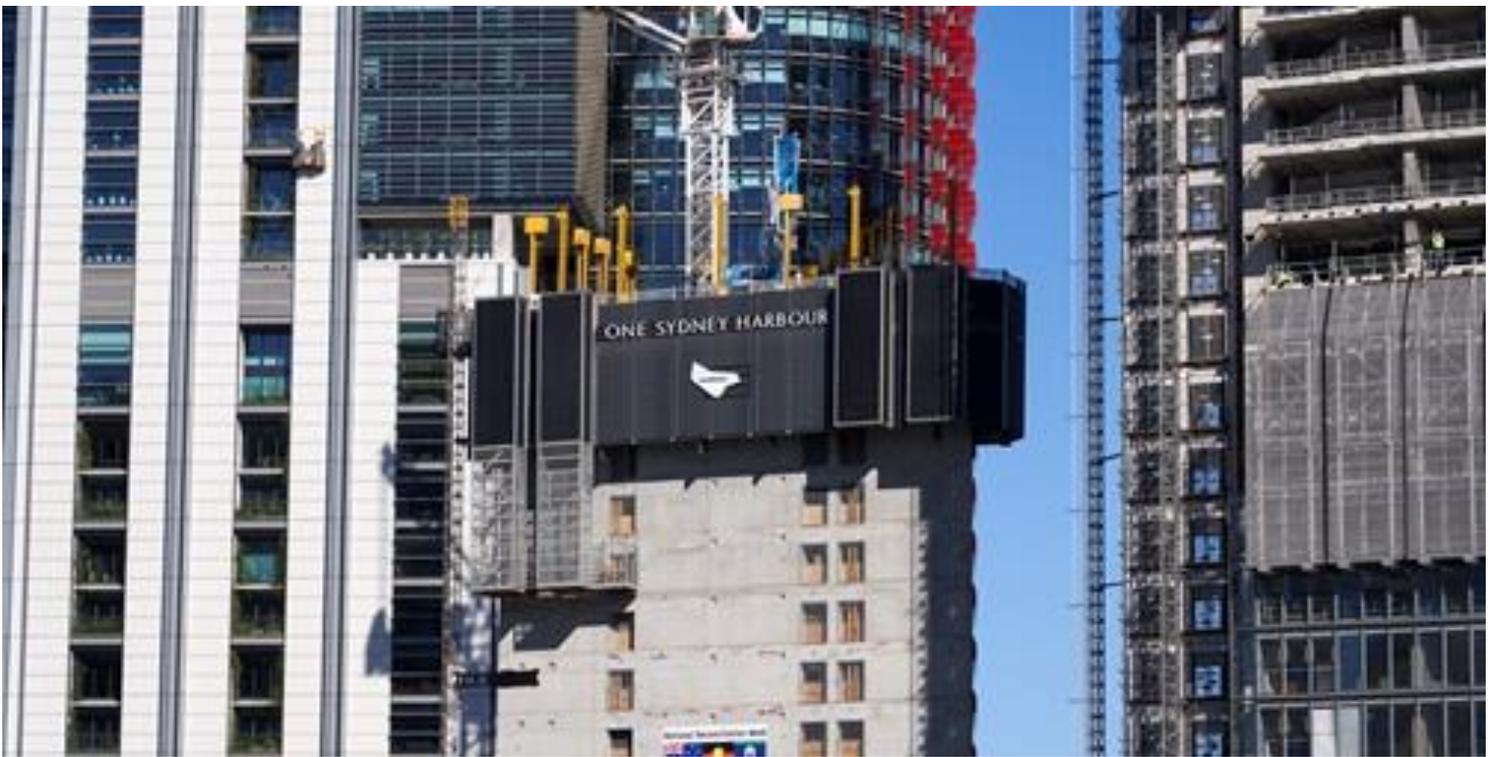
The project is comprised of three residential towers situated over a shared Basement and Public Domain. The first residential tower (R1) had a contractual obligation to achieve a 20% reduction in embodied carbon. The second tower, R2, is staged approximately six months after R1. The R1 tower was able to achieve their 20% reduction target through design and procurement measures. The opportunity arose to take lessons learned from R1 and set a stretch target on R2, that exceeds the achievements of R1, based on 'hands-on' engagement with the supply chain to achieve leading best practice.

Section 2: Solution

New solutions were created as an offering to meet project ambitious sustainability criterion. To exceed the achievements of the first tower, the team placed sustainability at the centre of their concrete procurement discussions.

The team specified the use of an average 40% replacement of Portland cement for concrete that was be Climate Active certified.

To determine how best to achieve absolute reductions in embodied carbon and subsequent net reductions, the team worked with the three preferred concrete suppliers and established a strenuous approach to supply chain education.



Section 3: Lessons

The team worked with three preferred concrete suppliers and established a strenuous approach to supply chain education to determine how best to achieve absolute reductions in embodied carbon and subsequent net reductions.

Tender discussions narrowed field down to two contractors who were able to provide a commercially viable product.

Neither tenderer had any experience with Climate Active certification prior to the discussions at R2. As a result of sustainability playing a feature role in procurement at OSH, by the end of 2021 both tenderers will have a Climate Active concrete offerings.

Section 4 : Impact measurement

Supplier #2 are about to complete their Environmental Product Declaration, are pursuing a 40% replacement of Portland cement for absolute carbon reduction and have purchased offsets for the remaining net carbon reduction. Supplier #2 have committed to getting a Climate Active certification and bringing their certified product to market in September 2021.

Because Supplier #1 had already brought their carbon neutral (Climate Active) product to market, it is available for the entire construction industry throughout NSW/ACT. There is a small cost premium for this product.

Disclaimer

The Materials Embodied Carbon Leaders Alliance (MECLA) has dedicated the work to the public domain by waiving all of his or her rights to the work worldwide under copyright law, including all related and neighboring rights, to the extent allowed by law. You can copy and distribute even for commercial purposes, without asking permission. In no way are the patent or trademark rights of any person affected by this nor are the rights that other persons may have in the work or in how the work is used, such as publicity or privacy rights. Unless expressly stated otherwise, MECLA makes no warranties about the work, and disclaims liability for all uses of the work, to the fullest extent permitted by applicable law. When using or citing the work, you should not imply endorsement by the author or the affirmer.

The views expressed in this publication may not reflect the combined opinion of MECLA or any of its affiliated organisations. Whilst care has been taken to present the most accurate information, none of the authors, contributors, administrators, or anyone else connected with MECLA, in any way whatsoever, can be held responsible for any errors, omissions, or use of the information contained in or linked from this publication. All information is provided 'as is', with no guarantee of completeness, accuracy, timeliness or the results obtained from the use of this information. Information is intended for general informational purposes and users should obtain specific independent advice from professionals.