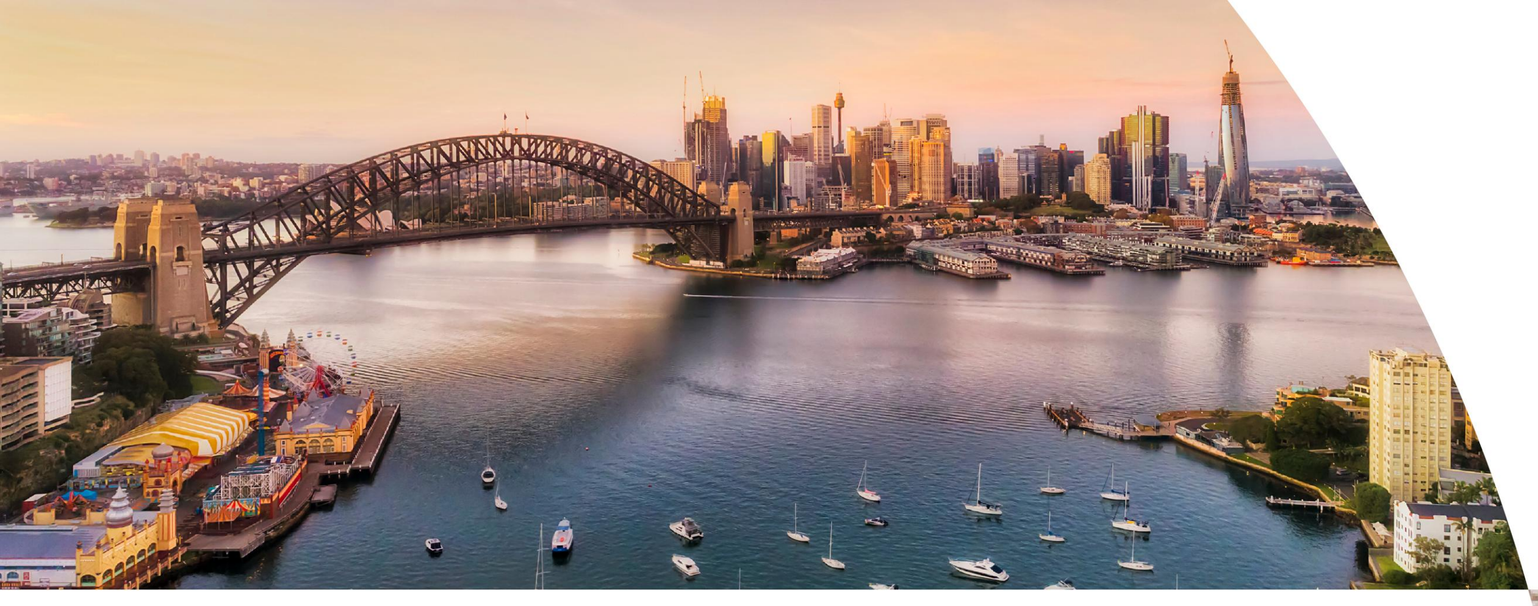

CEMENT CONCRETE & AGGREGATES AUSTRALIA

Affordable & Sustainable Infrastructure for NSW

15th Annual NSW Major Projects Conference | ICC Sydney | 3–4 Sept 2025

Michael Kilgariff | Chief Executive Officer
Cement Concrete & Aggregates Australia

About CCAA

Cement Concrete & Aggregates Australia is the voice of the heavy construction materials industry in Australia.

CCAA membership supply around 90% Australia's cement, concrete & aggregates used to build infrastructure.

The industry generates approximately $15 Billion in annual revenues and employs approximately 30,000 Australians directly and a further 80,000 indirectly.

Foundation Members

Members


ADBRI Quarries
ALSAFE PRE-MIX CONCRETE
B&J Catalano
BAROSSA QUARRIES
BARRO GROUP
BAXTERS
BENEDICT
BRACALBA QUARRY
Broadway & Frame
BYRNE BROS. CONCRETE
CAMM GROUP
CCS GROUP
CQ
CLAY & MINERAL
CB CLEARY BROS
CoastalSands
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DUGGANS
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ENTIRE CONCRETE
EZIWAY CONCRETE
flyash AUSTRALIA
Fulton Hogan
GADTECH
Quarry - Concrete - Crush - Haul
GUNLAKE CONCRETE
HALLETT GROUP
hazellbros
HILLVIEW QUARRIES
Hymix
HY-TEC
Independent Cement
KAYASAND
LRM Lachlan Readymix
LIME INDUSTRIES The Lime Professionals
MANTINA QUARRIES MANTINA CONCRETE
Get Exposed with... Mentone PRE MIX
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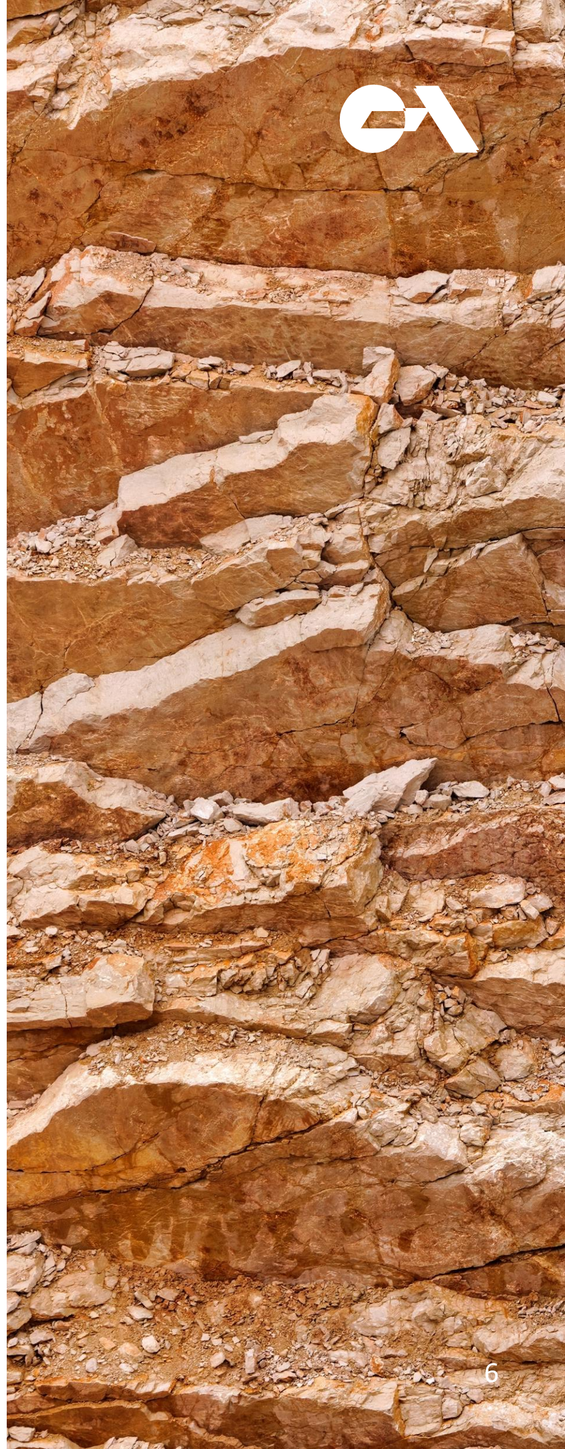
MSD CONSTRUCTIONS PTY LTD
THE NEILSEN GROUP
NEWCASTLE SAND
NUCRUSH GROUP Together We Grow
PARKESREADYMIXED CONCRETE
P.E. FORMATION
Pilatti Bros Transport Concrete Italia Plant Hire
PILCHERS CONCRETE For professional service.....
PNQ Pioneer North Queensland Pty Ltd
Q-crete pronto
QUARRICO
Queanbeyan PRE-MIX CONCRETE
RIVERSIDE INDUSTRIAL SANDS
RNB TRADING PTY LTD
rmc SANTOS READY MIXED CONCRETE
southern cross cement
Southern Pacific Sands QUALITY SANDS & CONCRETE
STONEY PINCH QUARRY & EARTHMOVING
Sunstate Cement ltd
SMC CONCRETE QUARRIES
SUPERMIX CONCRETE & QUARRIES
Sydney MINICRETE 9624 4900
Tandy GROUP
TEGRA
THE HOLT ESTATE 1861
TRELOAR
Urban Resources
W.A. LIMESTONE
W.A. PREMIX
WAGNERS
CONTRACTING WALLAROO
WSC WESTERN SUBURBS CONCRETE

Associate Members


Summary

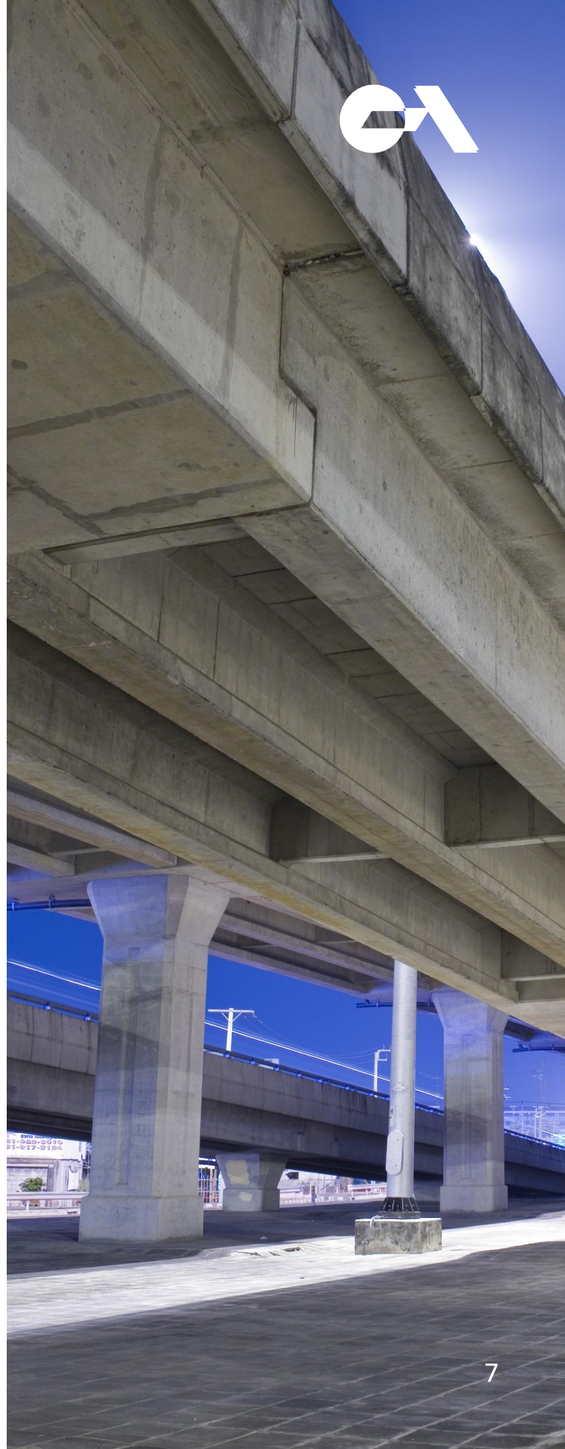
The Australian Cement and Concrete Sector – Key Facts

5	Integrated cement plants in Australia which produce clinker and cement as a continuous process.
60%	of the cement manufactured in Australia is produced in integrated manufacturing plants
40%	of cement involves the use of clinker which is imported and manufactured into cement at grinding facilities located around Australia's coastline
30 million m^3	ready-mixed concrete produced annually in more than 1,500 batching plants across Australia
40%	of all concrete is used for infrastructure projects
30%	of all concrete is used for commercial and non-residential buildings
30%	of all concrete is used for housing
80,000	people are indirectly employed in the whole cement, concrete and aggregate sector, compared to 30,000 who are directly employed
A$15 billion	revenue is generated by the cement and concrete sector



Infrastructure Australia Market Capacity Report

- “demand for building materials, skills, and labour is at a historic high”
- “increasingly difficult to source key building materials and workers”
- “limited access to local steel and cement, as well as localised shortages of quarry products is contributing to price uncertainty in the supply chain, leading to delays and cost overruns”
- “acute quarry shortages loom in Melbourne, NSW’s Mid North Coast and South East Queensland”



Extractives are critical to affordability…

EVERY AUSTRALIAN
needs **8 TONNES** per year of stone, sand, gravel and cement to build the roads, houses and other infrastructure

HIGH RISE BUILDINGS
use up to **1,000 TONNES** of aggregate per floor

HIGHWAYS use **14,000 TONNES** of aggregate per km

WIND FARMS
use up to **1000m3** of concrete per tower

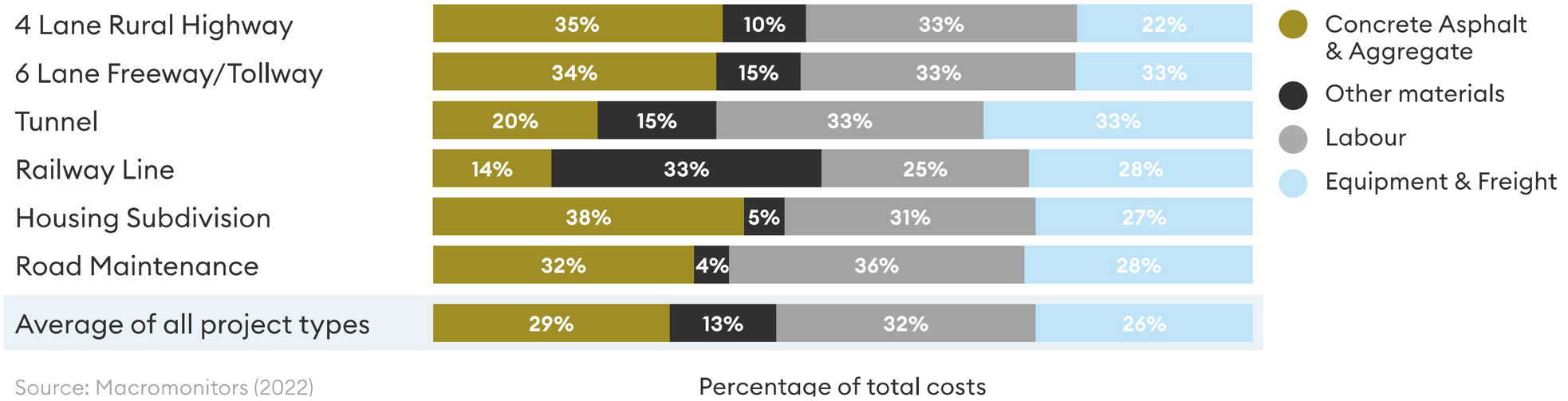
AVERAGE NEW HOME uses **110 TONNES** of aggregate and over **50m3** of concrete.

CAPABLE LOCAL SUPPLY CHAIN
Local industry, supporting local jobs on local projects in their local communities.

HEAVY CONSTRUCTION MATERIALS average **29% OF PROJECT COST**

Extractives are critical to affordability…

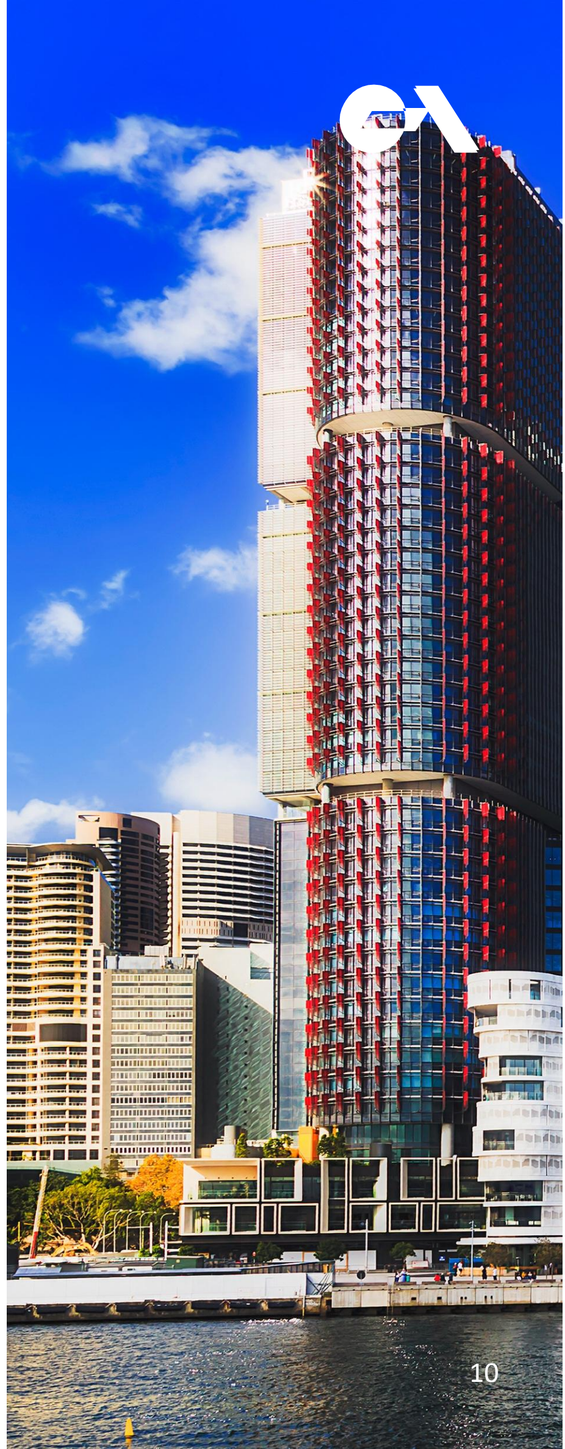
ESTIMATED PROPORTIONS OF TOTAL PROJECT COSTS BY TYPE OF PROJECT



Source: Macromonitors (2022)

NSW Infrastructure Outlook

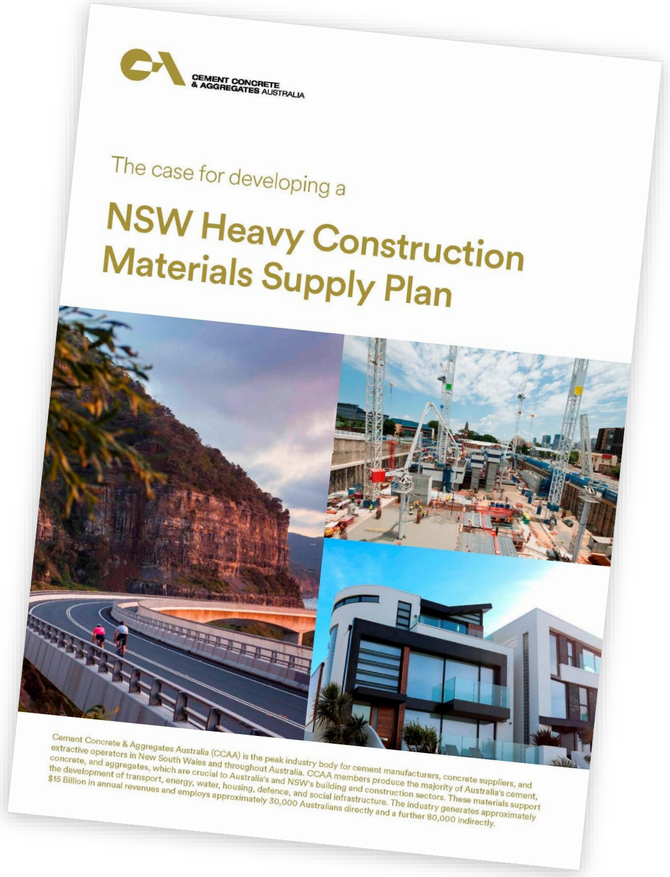
- $119.4 billion infrastructure commitment by NSW Government
- Major pipeline: housing, health, transport, energy, urban renewal
- Rising demand for building materials, skills, and labour
- Shortages emerging in key inputs – cement, quarry products, sand



NSW needs a Heavy Construction Materials Plan

Why?

- A plan for infrastructure, housing, energy, transport, etc…..but no plan for the building blocks needed to deliver these essential projects that drive our economy
- Natural sand reserves set to run out around 2030
- Travel distances growing…. Increasing costs, embedded carbon & requiring more trucks and drivers
- Shortages of quarry products in NSW mid north coast
- Housing development around quarries and transport corridors restricts approvals



What Should a Heavy Construction Materials Plan Include?

- Protect extractive resources from urban encroachment
- Map and safeguard key freight routes for materials
- Review quarry licensing and approvals for efficiency
- Provide industrial land for concrete batch plants
- Facilitate circular economy – End of Waste Codes for concrete
- Commit to deliver plan by end of 2025

NSW Biodiversity Regulation & Federal Nature Positive Reforms

NSW Biodiversity Regulation: Context

- NSW reviewing Biodiversity Conservation Regulation 2017
- Aim: strengthen 'avoid, minimise, offset' framework
- Considers *Serious and Irreversable Impacts (SAII)*
- Quarry approvals hampered by offset costs & regulatory complexity

Key Issues for Extractive Industries

- Rehabilitation often not recognised as offsets → industry 'pays twice'
- Limited offset credit availability makes new quarries unviable
- CCAA members face critical sand shortages in Greater Sydney (reserves depleted ~2030)
- Offset land costs ($1–2m/ha) make Sydney Basin projects prohibitive
- Risk: insufficient supply for housing, transport & energy infrastructure

CCAA Recommendations for NSW

- Recognise quarry rehabilitation as valid offsets
- Apply flexible offset rules in strategic growth corridors
- Enable equivalence & broaden offset trading groups
- Support precinct-based offsets for clustered quarries
- Allow unrestricted use of Biodiversity Conservation Fund

Serious and Irreversible Impacts Reform

- NSW committed to 377,000 new homes by 2029
  - Material supply at risk without regulatory reform
- SAII Draft Guidance issues:
  - Inconsistent application across agencies
- CCAA calls for:
  - Clearer definitions of SAII
  - Alignment with Biodiversity Conservation Regulation
  - Balanced approach to protect biodiversity & enable housing delivery

Federal 'Nature Positive' Reforms

- EPBC Act reforms underway under Nature Positive agenda
- Introduction of National Environmental Standards for biodiversity & offsets
- CCAA warns of regulatory duplication with state schemes
- Risks: longer approvals, uncertainty, higher costs

CCAA’s Approach to Federal EPBC

1. Deliver reforms as a complete package (protection + faster approvals)
2. Keep approvals with elected Ministers; EPA focuses on compliance/enforcement
3. No new ‘Nature Positive’ trigger duplicating state schemes
4. Open consultation on National Environmental Standards (objective, measurable)
5. Single-desk state accreditation – one coordinated approval process
6. Grandfather current EPBC approvals for certainty
7. Recognise low-carbon/recycled materials and rehabilitation
8. Regional planning to secure access to essential quarry resources

Integrating NSW & Federal Reform

- NSW Biodiversity Regulation + Federal Nature Positive must align
- Priorities:
  - Streamlined approvals
  - Recognition of rehabilitation
  - Clear offset pathways
  - Proximate supply of construction materials
- Goal: affordable infrastructure & housing + credible biodiversity gains

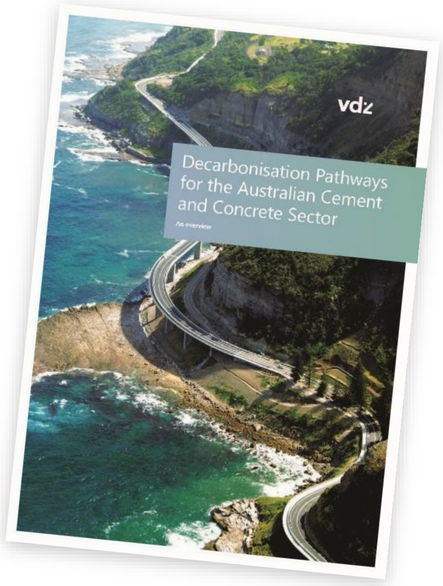
Decarbonisation

Key Ingredients:

- Cement & Concrete Industry Decarbonisation Plan
- NSW Govt. Sustainable Procurement Policies
- Changes to Australian Standards and agency specifications

Decarbonisation

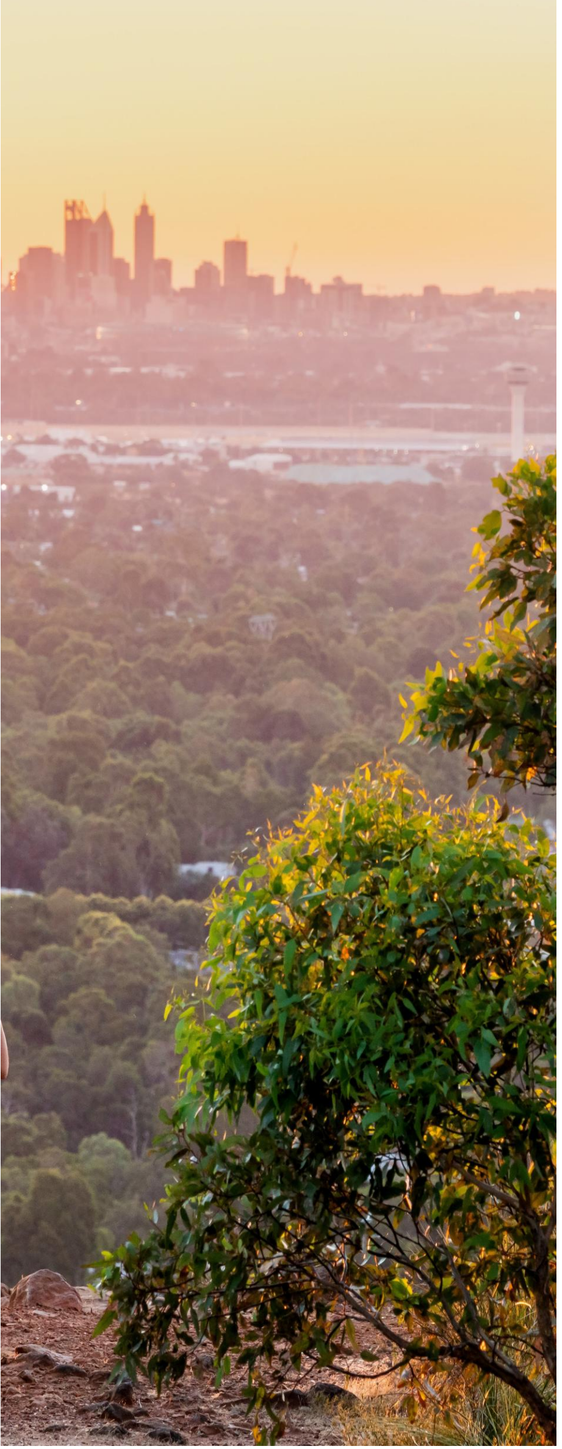
Cement & Concrete Industry Decarbonisation Pathways Report



7%	7%	21%	10%	3%	7%	6%	6%	33%
ZERO EMISSION ELECTRICITY AND TRANSPORT		INNOVATION THROUGH DESIGN AND CONSTRUCTION	CONTINUE TO FURTHER INNOVATE CONCRETE	USE OF SUPPLEMENTARY CEMENTITIOUS MATERIALS IN CONCRETE	NEW CO_2-EFFICIENT CEMENTS	USE ALTERNATIVE FUELS AND GREEN HYDROGEN	ACCOUNT FOR CONCRETE TO UPTAKE CO_2	CAPTURE REMAINING CO_2

This independent report was released in 2021, following the Australian cement and concrete industry declaring its ambition to deliver net zero carbon cement & concrete by 2050.

The new report enables a better understanding of the technologies and practices necessary to decarbonise Australian cement and concrete, and identifies eight decarbonisation pathways and key future research requirements.



Decarbonisation

INSW & TfNSW Sustainable Procurement Policies:

- Lifecycle carbon approach strongly supported
- Recognition of need to change specifications
- Metrics to recognise EPDs

Decarbonisation

Changing Australian Standards and TfNSW Concrete Specifications

- Time to change is years….. Must prioritise this work NOW!
- Many specs limit use of SCMs through testing regimes etc.
- Cement Standard AS3972, significantly limits lower carbon cement options for cement and cementitious materials.
- …. Opportunity for TfNSW to adopt international standards & lead other state and territory infrastructure agencies.

Turning policy into practice: Delivering sustainable infrastructure through low-carbon concrete.

Australian Adaptation of GCCA Low Carbon Concrete Rating System

- Based on Global Cement and Concrete Association (GCCA) AA–G embodied carbon banding scale
- Calibrated for Australian standards, data & practice
- Transparent carbon rating (kg CO_2-e/m^3)
- Built on verified Environmental Product Declarations (EPDs)
- Recognises the Materials & Embodied Carbon Leaders' Alliance (MECLA) model as industry precursor

Policy Alignment & Procurement Impact

- Supports:
  - National Sustainable Procurement in Infrastructure Guideline
  - Embodied Carbon Measurement for Infrastructure: Technical Guidance
- From Jan 2025: Major projects >$100m must apply carbon valuation
- Aligns with ITMM & ITSOC decarbonisation agenda

Key Messages

Collaboration is key to decarbonising the built environment and achieving our industry's climate ambition

- NSW must have a Heavy construction Materials Plan
- Sustainable Procurement Policies help industry
- Must always measure lifecycle carbon
- We must act now on Australian Standards & Specifications

Thank you!

Michael Kilgariff | CEO, CCAA
ccaa.com.au