Closing the Carbon Loop:

Mineral carbonation as the missing link between capture and circularity

21st April 2026

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MCi Carbon Pty Ltd

Creating economic pathways for permanent carbon removal

MCi CARBON

21 April, 2026

a global cleantech scale-up

>$40m AUD

from Commonwealth & NSW Government investment

>$50m AUD

from global private investors

awarded #1

Global Cleantech Pitch, announced at COP26 in Glasgow

>15 years

of mineral carbonation R&D, now TRL 7

ORICA · RHI MAGNESITA · ITOCHU · MIZUHO · SUMITOMO MITSUI TRUST BANK · MUCC

Our technology is driven by 3 main demand drivers

Economical carbon abatement for emitters

Electrification can decarbonise many industries, but not those with process emissions, including cement, steel, and refractories.

These emitters face rising regulatory, customer, and financial pressure to cut CO_2.

Mineral carbonation offers a scalable, permanent pathway to decarbonisation and carbon dioxide removal (CDR).

Carbon-embodied materials

Construction materials remain highly carbon-intensive.

As regulation and buyer requirements tighten, demand is rising for carbon-embedded materials that enable lower-emissions built environments.

Waste valorisation

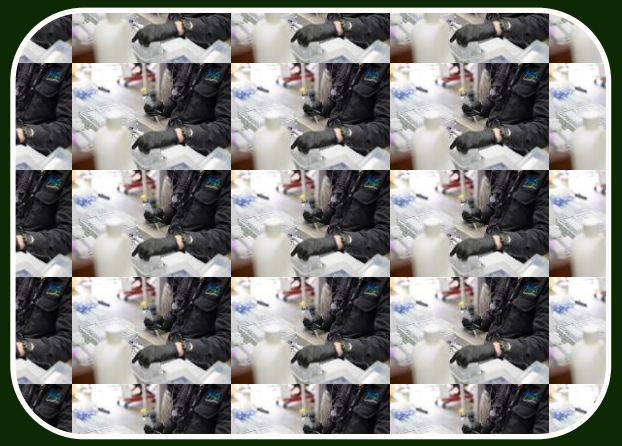
Stricter circular economy regulations are increasing the cost of waste.

Producers are seeking solutions that transform waste streams into valuable inputs; turning liabilities into revenue-generating assets.

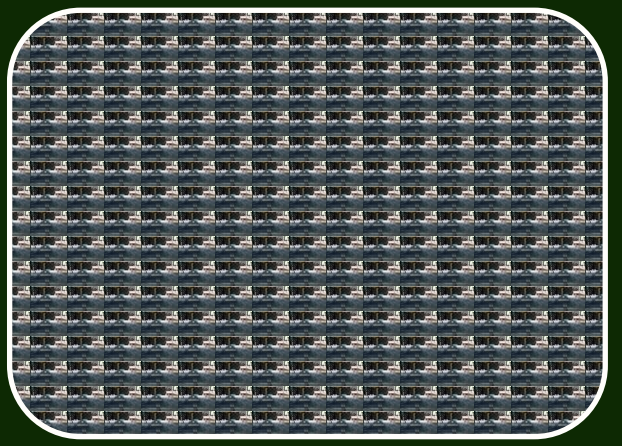
Creating economic pathways for permanent carbon removal

Instead of an industrial waste, we view CO_2 as a valuable resource

Accelerating the Earth's natural process of weathering called mineral carbonation



Capturing and reacting any source of CO_2 with minerals or waste streams



Utilising CO_2 in new Carbon embedded building materials and industrial products.

Transforming CO_2 into products

Powder-like outputs have prospective uses in a range of carbon-embedded materials

Magnesium Carbonate

Customers tested applications in paint, plasterboard, plastics, and green magnesia, with opportunities to replace $CaCO_3$ in existing markets

Silicate

Scaled customer trials, including in-field, of carbon embodied cement & **concrete**

Calcium Carbonate

Customers tested applications in home care, plastics and concrete, with adaptability across the broader $CaCO_3$ market (paper, paint & adhesives)

Carbonated Slag

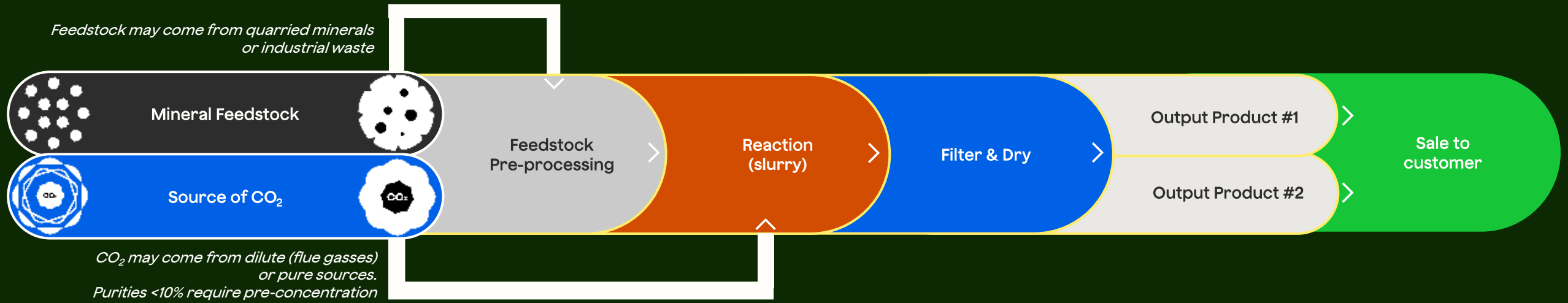
Developed an MVP meeting performance targets for a mineral addition in cement/concrete

Conditioned Residue

Potential application as a carbon-embedded cement kiln feed, construction filler and manufactured sand alternative

MCi Carbon's process takes a mineral-rich feedstock and carbonates it with CO_2

Our mineral carbonation technology speeds up the Earth's natural carbon cycle from millions of years to a matter of minutes



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Mineral Feedstock

Industrial waste feedstocks
(e.g. slags, ashes, tailings)

Abundant mineral feedstocks
(e.g. serpentinite, brucite)

CO_2 Pipeline

MCi Carbon Plant

Output materials

Feedstock Pre-treatment

Disclaimer:
This graphic is a conceptual process illustration intended for informational purposes only. It does not depict the specific equipment, engineering design, layout, operating conditions, or physical scale of any current or planned facility. Final system configuration and equipment selection are subject to detailed engineering and may differ from what is shown.

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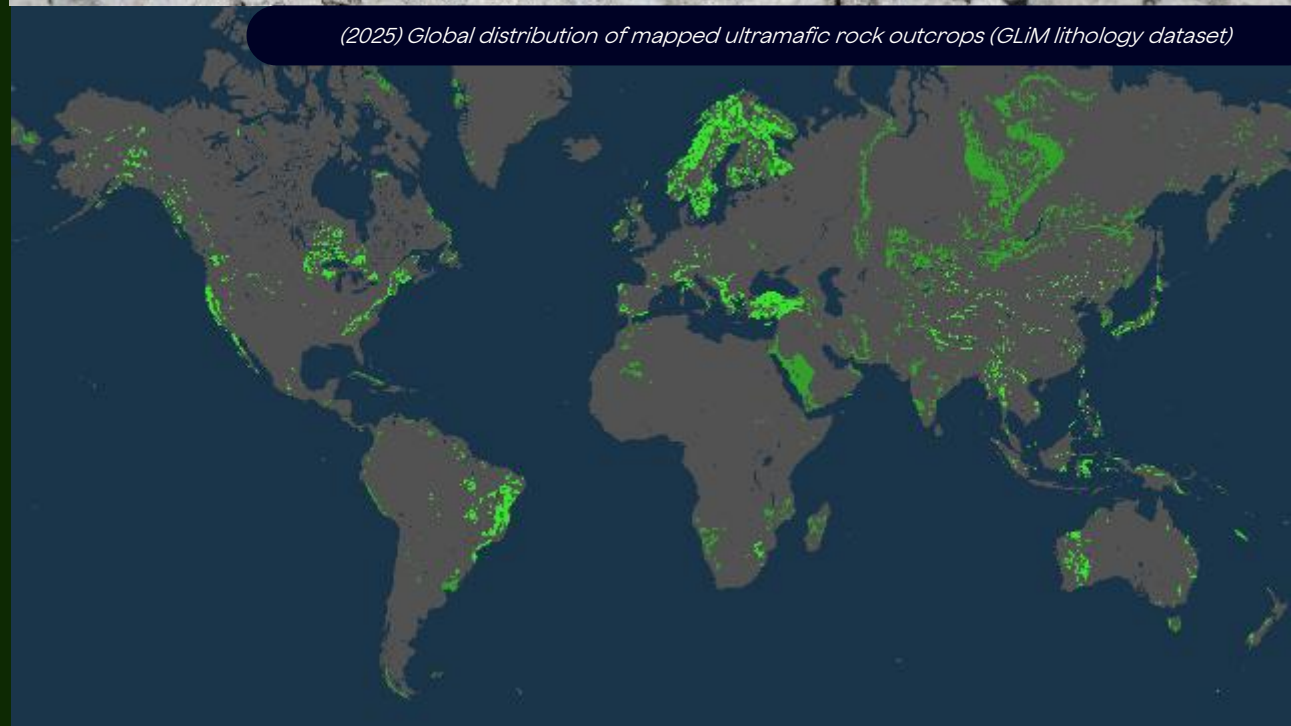
Scalable and deployable across industries and geographies

MCi Carbon has two feedstock options:

1. Industrial waste feedstocks (e.g. slags, ashes, tailings)
- Fastest route to deployment through co-located industrial waste and CO_2 sources.
- Turns liabilities into revenue by converting wastes into saleable carbon-embedded materials.
- Target locations are industrial hubs where access to feedstocks, product markets and logistics align.

2. Abundant mineral feedstocks (e.g. serpentinite, brucite)
- Multi-gigaton scalability enabled by globally abundant ultramafic minerals.
- Widespread deposits support regional project roll out across multiple geographies.

Stockpiled Steel slag



(2025) Global distribution of mapped ultramafic rock outcrops (GLiM lithology dataset)

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Deep Research Foundation

10+ years of technology optimisation has given MCi Carbon the leading global position in mineral carbonation.

The Pilot Plant allows for rapid validation and testing of customer feedstocks before progressing to larger-scale campaigns.

The work programs generates revenue while building out a pipeline of industrial projects.

World-first reference facility **MCi Carbon Pilot Plant /** Newcastle NSW

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Scaling Up

Designed to achieve industrial-scale validation. Capable of processing multiple feedstocks to provide project validation for our global pipeline.

Delivering technical and commercial confidence on projects, allowing progress to FID.

Informing full scale plant design while producing commercial quantities of products.

Australia's CCU Flagship **MCi Carbon 'Myrtle' Demonstration Plant /** Newcastle NSW


Capacity up to 2,500 tonnes CO_2/yr
Capacity up to 10,000 tonnes product/yr

Advantages of our technology

Integrated Carbon Capture and Utilisation (CCU)

Captures CO_2 directly from industrial flue gases, with no need for pre-concentration or purification.

Waste valorisation with new revenue streams

The technology can process customer waste streams (e.g. steel slag), removing a liability.

Separated valuable product streams

Unlike many competitors, MCi Carbon can create two discrete products streams, increasing product application opportunities & sales revenues.

Energy optimised, no chemicals, safety-led

CO_2 capture operates at low pressure and temperature (<90°C / 1–6 bar), enhancing safety and reducing energy demand. Avoids use of harmful chemicals, improving lifecycle sustainability and lowering maintenance costs.

Advantages of our technology

IP strength

Backed by 10 patent families and 15+ years of R&D.
Proprietary know-how in reactor design, slurry handling, and product refinement.

Scalable and globally applicable

Utilises abundant mineral feedstocks available across continents.
Designed for co-location with emissions sources, enabling direct integration with industrial sites and potential remediation of their waste streams.

Market and policy alignment

Targets hard-to-abate sectors (steel, cement, chemicals, etc.), offering a profitable decarbonisation pathway.
Supports generation of high-quality, verifiable carbon credits.

MCi Carbon technology is scaling towards FOAK

Plant	*Research Pilot Plant*	*'Myrtle' Demonstration Plant*	*First Commercial Plant*[2]
Location	Newcastle University, NSW, Australia	Newcastle, Australia	Europe
TRL	TRL 6	TRL 7	TRL 8
Scale	<100 tpa of carbon-embedded materials	Up to 10,000 tpa of carbon-embedded materials[1]	>100,000 tpa of carbon-embedded materials
Completion	2016 (with multiple upgrades over time)	2025	2029-2030
Purpose	Technology development Rapid customer validation	Proof of Technology Industrial-scale customer validation	Full Commercial Operation
Activities	R&D (tech refinement, output material validation) Various customers (feedstock validation)	3-4 customer campaigns per year (large-scale performance assessment) Potential to supply small high-value offtake agreements	

1: Actual output will depend on utilization rate and feedstocks processed. This is a maximum nameplate capacity
2: While demonstration-scale validation materially reduces technical risk, further engineering and operational scale-up work is required prior to first commercial deployment

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Strategic partnership with RHI Magnesita sets a clear pathway to First Commercial Plant (Austria)

RHI Magnesita Overview

- LSE-listed global leader in refractory materials
- £1.3B market cap | £3.5B revenue (2024)
- Supplies high-grade refractory products to steel, cement, non-ferrous metals, and glass industries

Partnership Progress to Date

- MCi Carbon was selected by RHI Magnesita as its priority decarbonisation technology following a global technology review
- 3+ year collaboration focused on deploying MCi Carbon technology across RHI Magnesita and partner sites
- Revenue-generating activities including pilot trials, techno-economic studies, and product validation, with a Myrtle campaign commencing in H1 2026
- Engineering underway for a first-of-a-kind commercial plant at an RHIM site
- Demonstrated strategic value, leading to:
  - ✓ USD $10M+ USD equity investment into MCi Carbon (2023/2024)
  - ✓ EUR 3.8m grant (total) for MCi and RHIM from Australia-Austria Industrial Decarbonisation Program (2025)
  - ✓ Formal collaboration agreement (2026)

L-R: Sophia Hamblin Wang (MCi Carbon COO), **Leonore Gewessler** (Austria's Climate Minister), **Stefan Borgas** (RHI Magnesita CEO), **Rana Ghoneim** (UNIDO Director of Division for Energy & Climate Action), **Constantin Beelitz** (RHIM President Europe & CIS)

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Permanent, cost-effective decarbonisation solutions for hard-to-abate industries

Why do industrial customers choose MCi Carbon?

- Permanent mineralisation means no long-term storage liability
- Lower net cost than traditional CCS (no high-pressure compression, transport, injection wells. MCi cost offset by revenue from product sales)*
- Integrated capture and utilisation in one process
- Flexible feedstocks (virgin ores, alkaline residues & industrial by-products)
- Valuable output products reduce net abatement cost

Offering clear customer value

- ✓ Designed to deliver positive ROI decarbonisation
- ✓ Converts waste liabilities into saleable materials
- ✓ Supports Scope 1, 2 & 3 targets
- ✓ Compatible with existing operations
- ✓ Strengthens ESG positioning and regulatory compliance

*Cost comparisons are based on internal modelling assumptions and may vary materially by site and configuration.

Applying a structured, data-driven method to identify the strongest deployment opportunities

Only opportunities demonstrating compelling economics, technical viability and commercial depth enter active customer engagement

Phases

1. **Global Market Mapping**
   Screen for structural demand
2. **Site & Feedstock Screening**
   Validate technical feasibility
3. **Preliminary Economic Assessment**
   Confirm business case potential

Criteria

- Significant industrial CO_2 emitters
- Regions with carbon pricing or credit tailwinds
- Hard-to-abate industrial clusters
- Policy and regulatory alignment
- Minimum viable residue or mineral volumes
- Long-term feedstock continuity
- CO_2 concentration and integration feasibility
- Infrastructure and logistics compatibility
- High-level techno-economic modelling
- Product offtake market depth
- Waste avoidance revenue potential
- Carbon credit / compliance upside
- Energy pricing sensitivity

Join us on the race to net zero.