Building a low emissions future

CO2CRC

Future Program 2026-35

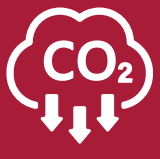
Partnering for a CCS-Ready Australia

As Australia navigates the energy transition, Carbon Capture and Storage (CCS) is a critical enabler for our economic prosperity and national decarbonisation goals, including Australia's legislated 2035 and 2050 targets. CCS is a suite of proven technologies, of which geological storage is a critical component. CO_2 geological storage is not about prolonging fossil fuel use. It is a foundation for Bio Energy and DAC with CCS, clean hydrogen, cement, steel, coal and LNG to meet emerging global emission standards. We are now seeking research, industry and government partners to join us in this vital work to build a CCS-Ready Australia.

October 2025

WORLD-CLASS INFRASTRUCTURE

COLLABORATIVE IMPACT



DE-RISKING DECARBONISATION

CO2CRC

A Global Leader in CCS Research

Established in 2003, CO2CRC is Australia's premier, not-for-profit research organisation dedicated to accelerating the deployment of Carbon Capture and Storage (CCS). For over two decades, CO2CRC have brought together leading experts from industry, research, and government to de-risk CCS, a technology essential for Australia's net-zero transition and the energy security of our Asia-Pacific trading partners.

Our work is anchored by the Otway International Test Centre (OITC), a globally unique A$200 million research facility where we have systematically advanced the science of CO_2 geological storage. Through our collaborative model, we have demonstrated permanent CO_2 storage, developed world-leading monitoring technologies, and been instrumental in training Australia's specialist workforce that is now leading the CCS industry globally.

VISION

To be a globally recognised centre of excellence in Carbon Management Technology research, commercial demonstrations, and strategic analysis.

MISSION

Complement our Members' CCUS capabilities through our unique research infrastructure and our technical and regulatory expertise.

20+ Years

of CCS Research Leadership

A$200M+

Invested in National Research Infrastructure

500+

Peer-Reviewed Publications

The National Imperative

THE OPPORTUNITIES

Integrated CCS for Australian Industries

Australia holds a unique natural advantage in CCS that is directly aligned with our economic strengths and legislated decarbonisation goals. This enables us to support partners across the entire resource value chain, from natural gas and coal to steel, cement, fertiliser, chemicals, and hydrogen, by providing access to world-class geological storage capacity. Integrated CCS creates new decarbonisation pathways for these industries, particularly for hard-to-abate sectors, while underpinning the development of certified low-emissions exports such as LNG, hydrogen, and ammonia.

Proximity-Enabled Infrastructure Advantage

With world-class geological storage close to major industrial and export hubs, Australia can deliver cost-effective CO_2 geological storage across industries while also positioning itself as a regional leader in CO_2 storage services, generating long-term revenue and ensuring our exports remain competitive in a decarbonising global market.

National Emissions Reduction Opportunity

Through CO2CRC's applied R&D, linked to the OITC, Australia can boost economic activity by over A$100 billion and unlock up to A$600 billion in storage hub revenues with regional leadership. These hubs support the Future Made in Australia agenda by anchoring clean industries, strengthening manufacturing supply chains, and creating regional jobs. They also enable BECCS and DAC, positioning Australia to lead in negative emissions technologies.

THE IMPERATIVE: THE CRITICAL NEED FOR ACTION

Despite these advantages, Australia's leadership in CCS is at risk, threatening both our climate targets and our economic future.

Losing Global Competitiveness

While global peers in the US, UK, Canada, and Europe are catalysing CCS with multi-billion-dollar investments and incentives, Australia's support has dwindled. We are now in fierce competition with our near-neighbours, such as Malaysia and Indonesia.

Critical Infrastructure at Risk

Without new investment, planning for the decommissioning of the globally unique, A$200M OITC must begin in 2026. This would represent an irreversible loss of national research capability.

Responsible Exports in a Net-Zero World

Australia's total emissions in 2023 were around 450 million tonnes CO_2-e. However, additional emissions from Australia's exported fossil fuels in 2023 were approximately 1 billion tonnes CO2-e. As a responsible exporter in a net-zero world, it is vital that Australia also offer decarbonisation support for our neighbouring trade partners.

1. GCCSI (2023). Global Status of CCS 2023. Global CCS Institute, Melbourne.
2. EY-Parthenon (2025), Beneath the surface: The economic potential for carbon capture and storage in Australia's eastern states. Commissioned by Low Emission Technology Australia.
3. CSIRO & Global CCS Institute (2023). Western Australia CCUS Hubs Study.
4. Wood Mackenzie (2024). Australian carbon storage hub a $600 billion opportunity.

A Strategic Investment in Australia's Future

"The cost of inaction will always outweigh the costs of action."
- The Hon Chris Bowen MP, Minister for Climate Change and Energy

CO2CRC's Future Research Program 2026-2035 is a direct and necessary response to Australia's legislated climate commitments and economic priorities. It is about providing the proven, practical tools required to secure our nation's prosperity through the energy transition. Without CO_2 geological storage, Australia cannot credibly meet its 2035 and 2050 targets, particularly for safeguard facilities. By investing in this research, Australia can de-risk the pathway to Net Zero, protect the revenue stemming from our critical export industries, and build the sovereign capability to meet **Paris Agreement commitments** and the **Climate Change Act**.

ENABLING THE SAFEGUARD MECHANISM

The Safeguard Mechanism is the Australian Government's primary policy for reducing emissions from our largest industrial facilities. It effectively mandates that new gas fields with reservoir CO_2 must deploy CCS to achieve a net-zero emissions baseline. Our Future Research Program directly enables compliance with this policy by delivering the validated, cost-effective storage and monitoring technologies that industry needs to meet these stringent requirements and invest with confidence.

SECURING THE FUTURE GAS STRATEGY

The Future Gas Strategy makes it clear that natural gas and LNG will remain critical to Australia's economy and the energy security of our Asia-Pacific partners. But their emissions intensity must fall. CO2CRC's research provides the proven pathway to achieve this at scale, keeping LNG competitive and enabling secure, low-emissions exports such as hydrogen and ammonia to a carbon-conscious global market.

MEETING INTERNATIONAL OBLIGATIONS

Australia's international obligations under the **London Protocol** have opened the door for the nation to become a regional leader in providing CO_2 storage services. Our research program builds the technical and regulatory confidence needed to unlock this opportunity. By investing in this capability, we can support the decarbonisation efforts of our trading partners and create new, long-term export revenue streams for the nation.

BUILDING SOVEREIGN CAPABILITY

A successful energy transition requires a highly skilled workforce and sovereign control over critical technologies. For over 20 years, CO2CRC has been the backbone of Australia's CCS expertise, training the professionals who now lead the industry globally. Our Future Research Program will reinvest in that legacy, rebuilding the postgraduate training pipeline and ensuring Australia has the expert workforce required to safely manage a national CCS rollout, independent of foreign expertise.

CO2CRC Future Program
Three Strategic Pillars

DELIVER REGULATORY AND INDUSTRY ASSURANCE FOR PROJECT SUCCESS (THEME 1 - 3)

Objective: Deliver confidence in plume behaviour, containment, and safe injection, while driving down monitoring costs.

Strategic Driver: Commercial CCS projects need validation that CO_2 behaviour is predictable, well-managed, and monitoring is affordable.

National Imperative: This applied research will provide confidence in project approvals, build public and regulator trust, and accelerate CCS project rollout at scale to support Australia's effective pathway to net zero.

- Validated plume predictive capability using real field (OITC) datasets.
- Provide clear attribution of geomechanical changes to risk, removing unnecessary conservatism.
- Develop cost-effective alternatives such as marine vibroseis, gravity, and fibre optics.

DEPLOY NATIONAL CCS HUBS TO ACCELERATE THE LOW-CARBON ECONOMY (THEME 4-5)

Objective: Enable cost-effective national CCS hubs by coordinating multiple storage opportunities and safely reusing existing infrastructure.

Strategic Driver: Large-scale CCS demands regional planning and smarter use of existing wells and pipelines to cut capital costs.

National Imperative: CO2CRC's outcomes will maximise Australia's storage resource, cut costs through reuse, and enable Australian hubs for LNG, hydrogen, ammonia, plus emerging BECCS and DAC.

- Model basin-scale interactions to plan multiple projects.
- Optimise storage fairways to expand capacity.
- Cut costs by reusing pipelines & wells instead of building new.

BUILD SOVEREIGN CAPABILITY AND CRITICAL MASS TO DRIVE INDUSTRY GROWTH FOR CCS (THEME 6-8)

Objective: Lower costs, prove economic value, and equip Australia with the skills and tools for national rollout.

Strategic Driver: CCS must show it can deliver at scale; competitively, transparently, and with a skilled workforce.

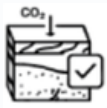
National Imperative: This work will build Australia's sovereign capability, create new jobs and industries, and position Australia as a trusted, contemporary CCS leader in the Asia-Pacific region.

- Apply AI & digital twins for predictive, accelerated evaluation of storage sites and model conformance.
- Identify cost-saving pathways & highlight jobs/export benefits.
- Build skills & public trust via an OITC training hub.

CO2CRC
Future Research Program 2026-2035

CO2CRC's 'Future Research Strategy 2026-2035' provides a clear, industry-aligned pathway to address the next generation of technical challenges. As projects scale up to inject tens of millions of tonnes of CO_2, operators require greater certainty in storage performance, geomechanical stability, and long-term monitoring. Our strategy delivers the practical, field-tested tools needed to de-risk projects and build the sovereign capability required for a national CCS rollout.

THEME 1
ASSURED CO_2 STORAGE PERFORMANCE



Improving CO_2 injection and reservoir response modelling for next-generation projects for effective operation.

THEME 2
GEOMECHANICAL MODELLING & VALIDATION

Enhancing the understanding and predictability of geomechanical processes for long-term storage integrity.

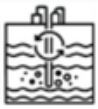
THEME 3
EFFECTIVE MONITORING & VERIFICATION

Developing advanced techniques for monitoring to ensure regulatory compliance and operational integrity.

THEME 4
BASIN-SCALE GCS MODELLING

Developing basin-wide appraisal and management tools to optimise pore space use and mitigate risks.

THEME 5
INFRASTRUCTURE RE-USE & WELL INTEGRITY



Understanding and de-risking technical constraints of re-purposing existing infrastructure for reliable CO_2 storage.

THEME 6
AI-ENABLED STORAGE SOLUTIONS

Embedding AI to enhance model accuracy, optimise monitoring and build sovereign digital capability.

THEME 7
TECHNO-ECONOMICS & REALISING BENEFIT

Analysing the economic viability of CCS technologies to ensure projects deliver financial and environmental benefits.

THEME 8
EDUCATION, TRAINING & COMMUNICATION

Building Australia's specialist CCS workforce and facilitating knowledge sharing to maintain sovereign capability.

Delivering National Impact

Our research program will directly translate into commercial and national benefits, strengthening Australia's position as a leader in low-emissions energy and technology. Our program will advance CCS by:

De-risks Major Investments
Provides the field-validated data and models needed to improve confidence in storage security, optimise injection, and satisfy regulators.

Lowers Project Costs
Delivers cost-effective, low-impact monitoring technologies and best practices for reusing existing infrastructure.

Builds a Skilled Workforce
Re-establishes the postgraduate training pipeline, creating the next generation of highly skilled CCS professionals required by industry.

Strengthens International Partnerships
Enables Australia to co-invest with and lead a global network of field-scale storage laboratories, ensuring our research has a global impact.

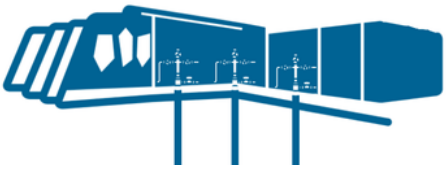
Partnering with CO2CRC

CO2CRC is currently developing the business case for its Future Research Strategy 2026-2035. To ensure this program is built on a strong foundation of collaboration, we are actively seeking partners between September 2025 and January 2026. Your commitment is critical to our success, as it will provide the powerful, unified support needed for our proposal to secure long-term co-investment from the Commonwealth Government in early 2026.

KEY PARTNERSHIP BENEFITS

CO2CRC's collaborative model brings together the world's leading experts from industry, research, and government to solve the critical challenges of commercial-scale CCS. By partnering with us, you join a powerful network dedicated to de-risking decarbonisation investments and shaping the future of Australia's low-emissions economy.

Leverage Your Investment
Participate in high-impact, applied research programs designed to accelerate CCS innovation, with opportunities to co-invest and secure additional funding from other partners.



Access World-Class Infrastructure
Gain preferential access to the globally unique A$200 million Otway International Test Centre for proprietary and collaborative research, technology trials, and workforce training.

Join Collaborative Network
Join a powerful network of industry leaders, government agencies, and global research institutions to shape the national research agenda, tackle real-world CCS challenges and advance industry-ready solutions.

Gain Preferential IP Access
Receive a non-exclusive, royalty-free licence to use Company-owned IP generated from research projects for internal purposes and get the first opportunity to participate in the commercialisation of new technologies.

Partnership Pathway

CO2CRC offers a flexible partnership model to accommodate different types of contributors. We will develop a tailored proposal that outlines the specific terms of our collaboration. This includes defining the appropriate Membership Class (A, B, or C) to match your desired level of engagement and contribution.

Membership Class	Description & Contributions	Contribution	Voting Rights	PAC Rights
Class A (Industry Member)	Full fee-paying corporate or government entities with a significant stake in CCS development.	AUD 330,000 per year (exclusive of GST, indexed annually for CPI)	Yes. Class A Members are the only members entitled to vote at Members Meetings and for the election of Directors.	Yes. Entitled to appoint one representative to the PAC.
Class B (Research Member)	Research institutions that contribute non-cash (in-kind) support through research project participation as defined in Project Agreements.	Non-cash (in-kind) contributions as defined in Project Agreements	No.	No automatic right to a seat. May be invited by the PAC to attend meetings and provide information.
Class C (Associate Member)	Corporate or government entities that contribute a nominal fee.	Nominal fee	No.	As defined in the relevant Subscription Agreement.

A Collaborative, Proven Co-investment Model for National Impact

CO2CRC's Future Research Strategy 2026–2035 will be supported by a proven co-investment model, widely used in Australia's most successful large-scale research initiatives. This model effectively leverages both government and industry funding, ensuring national impact and enabling collaborative, high-value outcomes. Our objective is to establish a government and industry-backed research program with a total investment of over $240 million in cash funding over the next ten years, delivering significant value and long-term returns for all partners involved.

INPUTS

$12m p.a.
Commonwealth Government
(50% of cash)

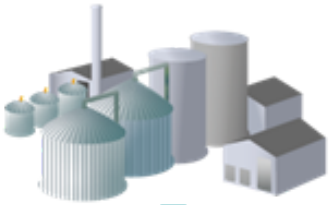
$4m p.a.
Research Partners
(16.7% of cash)

$8m p.a.
Industry Partners
(33.3% of cash)

In-Kind Contributions
(Matching cash)

CENTRAL POOL

Over $24m cash p.a.
+ Matched in-kind



OUTPUTS

Applied, Industry-Driven Research
(66.7% of funding)

Operations, Governance & Capability
(33.3% of funding)

$12m p.a.
Seeking from Commonwealth Government

4:1
Research Leverage

2:1
Industry Leverage

66.7%
Focus on Applied Research

Impact-Driven
Value from the broader national and international impacts

Governance and Leadership

CO2CRC is governed by a robust framework that ensures scientific rigour, financial discipline, and **strategic alignment with industry needs and national priorities**. Our leadership team and Board of Directors bring decades of experience from across the energy, research, and government sectors, providing the expert oversight required to guide Australia's premier CCS research organisation.

GOVERNANCE STRUCTURE

CO2CRC is a non-profit company limited by guarantee, governed by its Constitution.

- **The Board of Directors**: Appointed by our members, the Board is responsible for the overall strategic direction, financial health, and performance of the company. It comprises between seven and twelve Directors, including the Chairperson and CEO.

The Board is supported by three Expert Board Sub-Committees:

- **Program Advisory Committee (PAC):** Ensures our research is aligned with industry needs. Composed of representatives from our industry and government members, the PAC reviews research activities and advises the Board on program priorities.
- **Finance, Risk and Audit Committee (FRAC):** Oversees financial management, risk and compliance.
- **Operations Safety and Environment Committee (OSEC):** Governs all operational activities, with a primary focus on Health, Safety, and Environment (HSE).

LEADERSHIP TEAM

Martin Ferguson AM
Chairman

Mr. Ferguson brings decades of high-level experience in the resources sector from both government and industry. As the former Australian Government Minister for Resources, he oversaw the largest investments in the nation's oil, gas, and mining sectors. His extensive background provides CO2CRC with invaluable strategic guidance and a deep understanding of the national policy landscape.

Dr Matthias Raab
Chief Executive Officer

Dr. Raab is a leader in the energy and resources sectors with over 30 years of international experience spanning academia, government, and industry. Having served as CO2CRC's COO since 2015, he possesses deep strategic and operational knowledge of the organisation's research programs and facilities. Dr. Raab is committed to advancing Australia's energy transition by delivering innovative solutions to complex climate and energy challenges.

Our Board of Directors

Our Board is comprised of senior leaders from across the global energy and research sectors, representing organisations including Low Emission Technology Australia (LETA), Shell, Chevron, Eni, and Curtin University. This wealth of experience ensures our strategy is grounded in deep commercial, technical, and governance expertise.

co2crc

Building a low emissions future

Begin the Conversation Today

Contact us to schedule a confidential, no-obligation discussion on how your organisation can participate in our high-impact, high-value future program and help build a CCS-Ready Australia.

Dr. Matthias Raab, CEO

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