

**PROGRAM**

# CCS Symposium 2026

**THE ROLE OF CCS IN CONFRONTING ENERGY REALITIES**

**23–25 February**

**MELBOURNE**

**CO2CRC**

Building a low emissions future

# PROGRAM



12.30pm–4.30pm

## CO2CRC WORKSHOP

Bourke Rooms 1 & 2, Level 2

Optimised CO<sub>2</sub> storage monitoring:

Pathways to performance, confidence and closure

**From compliance to confidence: rethinking CO<sub>2</sub> storage monitoring for deriving added value through performance, assurance, and closure.**

This workshop explores how monitoring can shift from a compliance cost to a performance enabler for CCS. Drawing on international field experience and regulatory perspectives, participants will engage with experts from CO2CRC and our R&D partners to identify practical pathways for designing monitoring programs that build confidence, sustain performance, and enable timely closure.

Lunch and afternoon tea provided.

If you wish to attend, contact your Symposium organiser on [symposium@co2crc.com.au](mailto:symposium@co2crc.com.au).

6.30pm–9.30pm

## INPEX WELCOME DRINKS

Club Pavilion, Level 2

Kick off the 2026 Symposium in style at the

**INPEX Welcome Drinks** — a vibrant evening that sets the tone for the days ahead and celebrates over 20 years of CO2CRC's groundbreaking work.

**Held in an award-winning venue renowned for its atmosphere and elegance, this special event combines exceptional networking opportunities with live entertainment, great food, and premium drinks. Reconnect with friends, colleagues, and peers in a relaxed yet lively setting as we raise a glass to innovation, collaboration, and the future of carbon capture and storage.**

If you wish to attend, contact your Symposium organiser on [symposium@co2crc.com.au](mailto:symposium@co2crc.com.au).



<b>9.00am</b>	<b>OPENING SESSION</b>		<b>Plenary Room, Level 17</b>
9.00am	<b>Chairman Address</b>   <b>Martin Ferguson AM</b> CO2CRC Chairman		
9.10am	<b>CEO Address</b>   <b>Dr Matthias Raab</b> CO2CRC CEO		
9.20am	<b>CCS: Reflections, perceptions and projections</b> <b>Professor Peter Cook AC</b> CO2CRC Distinguished Scientist		
9.40am	<b>Government Keynote</b> <b>Hon Madeleine King MP</b> Minister for Resources and Minister for Northern Australia, Australian Government		
<b>10.00am</b>	<b>MORNING TEA</b>		
<b>10.30am</b>	<b>PLENARY 1: CONFRONTING ENERGY REALITIES</b>		<b>Plenary Room, Level 17</b>
	SESSION CHAIR: DR MATTHIAS RAAB (CO2CRC)		
10.30am	<b>Confronting new realities: the shift to energy evolution, emerging technology pathways, and the CCUS imperative</b> <b>David Brown</b> Director of our Energy Transition Practice, Wood Mackenzie		
10.50am	<b>Speed bumps on the road to net zero Australia</b> <b>Professor Rick Wilkinson</b> Chief Executive Officer, EnergyQuest		
11.10am	<b>Natural gas export and CO<sub>2</sub> import opportunity: unlocking Australia's potential</b> <b>Bill Townsend</b> Senior Vice President Corporate, INPEX		
11.30am	<b>PANEL: Making CCS commercially viable – what needs to change?</b> <b>David Brown</b> Director, Energy Transition Practice, Wood Mackenzie <b>Yvette Manolas</b> Strategic Advisor, CO2CRC <b>David Fallon</b> General Manager of Energy Transition, Chevron <b>Cameron McPhie</b> General Manager Decarbonisation, Commercial & Energy Transition, INPEX		FACILITATED BY PERRY WILSON, HEAD OF ADVISORY ANZ, RYSTAD ENERGY
<b>12.30pm</b>	<b>LUNCH</b>		
<b>1.30pm</b>	<b>TECHNICAL SESSION 1A</b>	<b>TECHNICAL SESSION 1B</b>	
	<b>Plenary Room, Level 17</b>	<b>Club Pavilion, Level 2</b>	
	<b>Advancing capture: pathways to deployment</b> CHAIRS: KWONG SOON CHAN & PROFESSOR PAUL WEBLEY	<b>Understanding scale in reservoir characterisation</b> CHAIRS: PROFESSOR SALLY M. BENSON & LAURA GOMEZ	
1.30pm	<b>Deployment challenges across the spectrum— from lab to field</b> <b>Professor Paul Webley</b> Director, Monash University	<b>Integrating digital core analysis and upscaling for improved reservoir characterisation and CO<sub>2</sub> plume simulation in the Otway formation</b> <b>Dr Masoud Aslannezhad</b> Research fellow, Edith Cowan University	
1.45pm	<b>Carbon management starts with cost-effective CO<sub>2</sub> capture</b> <b>Dr Paul Feron</b> CO <sub>2</sub> -Capture Science Leader, CSIRO	<b>Visualisation of CO<sub>2</sub>-water-rock interactions and their impact on injectivity and relative permeability measurements</b> <b>Associate Professor Furqan Hussain</b> Minerals and Energy Resources Engineering, UNSW Sydney	
2.00pm	<b>Airhive's direct air capture (DAC) demonstration at Deep Sky Alpha</b> <b>Jasper Wong</b> Chief Technical Officer and Founder, Airhive	<b>The impact of small-scale geological heterogeneities on CO<sub>2</sub> plume migration: insights from the Otway GeoCquest Field Validation Experiment</b> <b>Aman Raizada</b> Presented by Sally M. Benson, Stanford University	
2.15pm	<b>The UNO MK3 journey – from concept to reality</b> <b>Barry Hooper</b> Executive Director, KC8	<b>Well, well, well...where do we put it?</b> <b>Andres Bracho</b> Senior Reservoir Engineer, Rock Flow Dynamics	
2.30pm	<b>Prospective roles for CCUS in the net-zero transition for heavy industry</b> <b>Professor Gus Nathan</b> Research Director, HILT CRC	<b>Multi-scale data fusion for porosity and permeability prediction in tight sandstone reservoirs</b> <b>Dr Ping Lu</b> Huairou Laboratory	
2.45pm	<b>Facilitated Q&amp;A</b>	<b>Geological controls on CO<sub>2</sub> plume migration: characterising heterogeneities and low permeability zones to reduce uncertainty in static modelling</b> <b>Laura Gomez</b> Senior Geoscientist, CO2CRC	
<b>3.00pm</b>	<b>AFTERNOON TEA</b>		

## 3.30pm TECHNICAL SESSION 2A

Plenary Room, Level 17

### Flash talks

CHAIRS: PROFESSOR CLAUS OTTO & SAW HONG LIM

3.30pm

**The Poster Flash Talks provide selected presenters with an engaging platform to highlight their research.**

3.45pm

Poster presenters will deliver a 3-minute individual flash talk on stage, while their e-poster is displayed on the main screen, offering a concise and visually supported snapshot of their work.

4.00pm

To support clarity and thematic focus, flash talks will be organised into three themed mini sessions, each aligned with a core conference theme:

- Modelling and prediction
- CCS technology development
- CCS field demonstration

4.15pm

Each mini session will include:

4.30pm

- a 3-minute on-stage presentation from each speaker, with their poster shown on screen

4.45pm

- a shared 10-minute Q&A at the end of the session
- e-posters available in advance on the symposium website for pre-reading and question development.

## TECHNICAL SESSION 2B

Club Pavilion, Level 2

### Unlocking new storage potential through optimisation

CHAIRS: DR ZIQIU XUE & DAVID TANG

#### CO<sub>2</sub> microbubbles for enhancing sweep, trapping, and storage security in the Otway Basin

**Associate Professor Alireza Keshavarz** Edith Cowan University

#### Mitigation of fines migration using silica nanoparticles during CO<sub>2</sub> storage into aquifers

**Masaya Kashiara** Research Chemist, Nissan Chemical Corporation

#### Temperature propagation and hydrate risk modelling for safe CO<sub>2</sub> injection in CCS projects

**Christina Chesnokov** PhD Candidate, The University of Adelaide

#### Sand tank visualisation of the effect of CO<sub>2</sub> microbubble injection on plume migration and trapping

**Dr Hailun Ni** Research Associate, The University of Texas at Austin

#### Degradation of polymers and steels in supercritical CO<sub>2</sub>

**Associate Professor Kod Pojtanabuntoeng** Curtin University

#### Characterisation of small-scale heterogeneity and its impact on saturation, relative permeability and trapping of CO<sub>2</sub>: Case study from the Otway International Test Centre

**Dr Catherine Spurin** Post Doctoral Researcher, Stanford University

## 7.30pm SANTOS GALA AWARDS DINNER

Level 17 Ballroom

The Santos Gala Awards Dinner will be a signature event of the symposium, recognising and celebrating excellence in the field of carbon capture and storage (CCS).

This distinguished evening brings together leaders from across the sector to honour outstanding achievements and contributions to the advancement of CCS technologies and practices. Set within a sophisticated venue, the evening features a refined dining experience, accompanied by exceptional entertainment.

The Awards Dinner provides a unique opportunity to network with peers, acknowledge industry leadership, and reflect on the progress and innovation shaping the future of CCS.

It is a highlight of the program and an evening not to be missed.

If you wish to attend, contact your Symposium organiser on [symposium@co2crc.com.au](mailto:symposium@co2crc.com.au).




## 9.00am PLENARY 2: BEYOND AUSTRALIA – CCS IN ASIA-PACIFIC Plenary Room, Level 17

SESSION CHAIR: MARK McCALLUM (LETA)

- 9.00am **Cleaner ways to mine, make and build:  
Aligning industry, technology, projects and policy in Australia and the region for CCS at scale**  
**Mark McCallum** Chief Executive Officer, Low Emission Technology Australia (LETA)
- 9.20am **CCS in the Asia-Pacific**  
**Dr David Kearns** Country Manager Australia and New Zealand – Strategic Advocacy, Growth and Engagement, Global CCS Institute
- 9.35am **Indonesia’s CCS landscape: Progress, opportunities, and way forward**  
**Dr Anggit Raksajati** Lecturer at the Faculty of Industrial Technology, Institut Teknologi Bandung – Indonesia Center of Excellence (CoE) for CCS-CCUS, Institut Teknologi Bandung
- 9.50am **London Protocol and Paris Agreement Article 6.4 – how these support transboundary CO<sub>2</sub> imports**  
**Tim Dixon** Director and General Manager, IEAGHG
- 10.05am **Australia’s carbon dioxide storage potential as an asset for regional emissions reduction**  
**Dr David Robinson** Branch Head of the Basin Systems Branch, Geoscience Australia
- 10.20am **Is Australia losing its competitive edge in CCS?**  
**Emeritus Professor Andrew Garnett** The University of Queensland, Australian Gas Industry Trust & UQ

### 10.35pm MORNING TEA

## 11.10am TECHNICAL SESSION 3A TECHNICAL SESSION 3B

	Plenary Room, Level 17	Club Pavilion, Level 2
	<b>Verifying storage: Established and emerging monitoring</b> CHAIRS: FIONA ELMER & DR HADI NOUROLLAH	<b>Australian onshore CCS: Progress and perspectives</b> CHAIRS: DAMIAN DWYER & PAUL BARRACLOUGH
11.10am	<b>Tracking 10 kt of CO<sub>2</sub> in the subsurface: Results from stage 4 time-lapse seismic monitoring</b> <b>Professor Roman Pevzner</b> Curtin University	<b>From projects to pathways: Lessons from Australian onshore CCS</b> <b>Damian Dwyer</b> Director External Affairs, LETA
11.25am	<b>Distance-based PU learning for scalable event detection in distributed acoustic sensing</b> <b>Ilgiz Almukhametov</b> Research Associate, Curtin University	<b>Facts, fear and the future of CCS – key learnings from Queensland’s CTSCo project</b> <b>Nikki Accornero</b> Strategic Stakeholder Engagement and Corporate Affairs Advisor, Accornero Advisory
11.40am	<b>Monitoring reservoir temperature and strain with distributed fibre-optic sensing during CO<sub>2</sub> injection</b> <b>Professor Roman Pevzner</b> Curtin University	<b>Moomba CCS Project – first year lookback</b> <b>Dr Rachel Kieft</b> Staff Development Geologist, Santos
11.55am	<b>Application of distributed fiber optic strain sensing in CO<sub>2</sub> storage monitoring</b> <b>Dr Ziqiu Xue</b> Group Leader, Chief Researcher, Dr Eng, Research Institute of Innovative Technology for the Earth (RITE)	<b>Carbon sequestration in the Arckaringa Basin: Who, how and why?</b> <b>Greg Channon</b> Chief Technical Officer, Australian Carbon Vault
12.10pm	<b>Joint inversion of timelapse crosswell pressure tests and seismic for Otway Stage 3</b> <b>Dr James Gunning</b> Principal Research Scientist, CSIRO	<b>CO<sub>2</sub> and geothermal assessment in the Darling Basin, NSW</b> <b>Dr James Knight</b> Senior Project Officer–Science, Coal Innovation NSW, NSW Department of Primary Industries & Regional Development
12.25pm	<b>Facilitated Q&amp;A</b>	<b>Facilitated Q&amp;A – Panel</b>

### 12.40pm LUNCH

1.40pm TECHNICAL SESSION 4A		TECHNICAL SESSION 4B	
	<b>Plenary Room, Level 17</b> <b>Delivering scalable CO<sub>2</sub> storage for the energy transition</b> CHAIRS: DR MAX WATSON & SIMON MCMAHON		<b>Club Pavilion, Level 2</b> <b>Deriving value from fault studies and field experiments</b> CHAIRS: GENNA PETHO & TOMY SEMAN
1.40pm	<b>Ensuring integrity: The role of independent certification in geological CO<sub>2</sub> storage</b> <b>Diane Labregere</b> Principal Consultant—CO <sub>2</sub> Storage, DNV		<b>Subsurface flow analysis with distributed strain monitoring and coupled flow–deformation simulation during the Otway shallow injection test</b> <b>Dr Hiroki Goto</b> Senior Researcher, AIST
1.55pm	<b>The big picture: A CO<sub>2</sub> storage resources atlas for Australia</b> <b>Dr Rami Eid</b> Energy and Storage Basin Analyst, Geoscience Australia		<b>Geophysical monitoring of CO<sub>2</sub> migration behaviour through the shallow fault: Otway Project case study</b> <b>Professor Roman Pevzner</b> Curtin University
2.10pm	<b>CCS activities in ASEAN: An update</b> <b>Emeritus Professor John Kaldi</b> Director, CO2CRC, CO2Tech & Adelaide University		<b>The Otway Shallow Fault Experiment: An integrated assessment of CO<sub>2</sub> migration within a fault zone</b> <b>Dr Andrew Feitz</b> Director of Energy Initiatives and Advice, Geoscience Australia
2.25pm	<b>CO2CRC's Future R&amp;D Program: Building confidence, cutting costs, creating global opportunity</b> <b>Dr Max Watson</b> Senior Manager Technology, CO2CRC		<b>Fault leakage risk: the role of field experiments</b> <b>Dr Ludovic Ricard</b> Principal Research Engineer, CSIRO
2.40pm AFTERNOON TEA			
3.10pm		<b>PLENARY 3: WHO IS DELIVERING THE CCS FUTURE?</b> <b>Plenary Room, Level 17</b>	
SESSION CHAIRS: DR SIMONE DE MORTON (CO2CRC) & SCOTT BAILEY (CARBONNET)			
3.10pm	<b>The importance of CCS</b> <b>Professor Sally M. Benson</b> Energy Science & Engineering, Stanford University & Woods Institute for the Environment		
3.25pm	<b>Project update: Moomba CCS</b> <b>Matt Densley</b> General Manager CCS Subsurface, Santos		
3.40pm	<b>The opportunity for CCS in Australia and beyond</b> <b>David Fallon</b> General Manager of Energy Transition, Chevron		
3.55pm	<b>Cygnus CCS and international CCS portfolio development</b> <b>Joe Ariyaratnam</b> Vice President, Mitsui E&P Australia		
4.10pm	<b>PANEL: Are we confronting energy reality?</b> <b>Emeritus Professor Andrew Garnett</b> The University of Queensland, Australian Gas Industry Trust & UQ <b>Mark McCallum</b> Chief Executive Officer, Low Emission Technology Australia <b>Professor Sally M. Benson</b> Energy Science & Engineering, Stanford University & Woods Institute for the Environment <b>Brendan Beck</b> General Manager Policy, Australian Energy Producers		FACILITATED BY <b>DAVID BYERS</b> DIRECTOR, CO2CRC
4.50pm	<b>End Session Address</b> <b>Dr Matthias Raab</b> Chief Executive Officer, CO2CRC		
5.00pm	CLOSE		

7.30am–7.00pm\* FIELD TRIP

Otway International Test Centre

## Otway International Test Centre field trip

Experience first-hand the only fully operating CCS test facility in the APAC region. This world class centre is the centrepiece of CCS technology advancement in Australia and internationally for more than 15 years.

CO2CRC uses projects at the research facility to understand the impact of CCUS solutions in a global, economic, environmental, and societal context. We demonstrate CO<sub>2</sub> being securely separated, transported, stored and monitored. This enables project partners, political leaders, government officials, regulators and community to see and learn about CCUS in action. Come and see for yourself.

What you'll experience:

- World-first CCS research in action: tour Australia's leading CCS research facility and witness cutting-edge carbon storage experiments up close.
- Insight into real CCS infrastructure: explore injection and monitoring wells, advanced seismic monitoring systems, and active demonstration zones.
- Engage with experts in CCS innovation: Meet the scientists, engineers, and project leads (where possible) behind some of the most advanced emissions reduction research in the world.

For safety reasons, visitors are requested to wear long pants and long-sleeved shirts of natural fibres and sturdy covered shoes. High vis vests, helmets and safety glasses will be available for tour participants to borrow during the OITC visit.

The field trip is fully catered. A specially chartered bus will take you 3.5 hours west of Melbourne to the OITC and back within the day (leave 7.30am and return 6pm\*). You'll enjoy a tour of the facility, presentations, Q&A, and lunch.

Don't miss your chance to visit this unique and leading scientific centre.

**\* Participants may opt to return directly to Melbourne (estimated arrival by 6pm) or return via The Great Ocean Road and The Twelve Apostles (estimated arrival by 7pm). Please indicate your preference on your registration.**

Note: This field trip is NOT included in your conference registration.



# LETA

Low Emission Technology Australia

WE'RE DRIVING  
CLEANER  
WAYS TO

**MINE  
MAKE  
BUILD**

We're investing in technologies that could help reduce emissions from essential industries like **mining, steel-making, and cement manufacturing.**

LOW  
EMISSION  
TECHNOLOGIES  
**LETs**

**MAKE INDUSTRY CLEANER**

Learn more at [letaaustralia.com.au](http://letaaustralia.com.au)

PLATINUM SPONSOR

---

# LETA

Low Emission Technology Australia

GALA AWARDS DINNER SPONSOR

---

# Santos

WELCOME DRINKS SPONSOR

---

# INPEX

GOLD SPONSOR

---

# SILIXA

A LUNA company

PARTNER SPONSORS

---



**Australian Government**  
**Geoscience Australia**



**CarbonNet**  
Project  
Enabling a Net Zero Future



**GR**  
**GR PRODUCTION SERVICES**  
OPERATIONS – MAINTENANCE – PROJECTS – ADVISORY

**Woodside**  
**Energy**