



RECARB

ARC Research Hub for
Carbon Utilisation & Recycling



WELCOME TO THE OFFICIAL LAUNCH OF RECARB HUB

ARC Research Hub for Carbon Utilisation and Recycling



Australian Government
Australian Research Council



MONASH
University

ABOUT

Established in 2023, the Recarb Hub aims to develop technologies to transform carbon dioxide emissions from our energy and manufacturing sectors into valuable products and create pathways to market to drive industry transformation.

The comprehensive five-year program, led by Professor Paul Webley, is focussed on developing low-cost, scalable and sustainable methods for CO₂ conversion and direct air capture, while also developing integrated processes and equipment for adoption by industry. These will be demonstrated through a pilot to show applicability, scalability and assessment by industry. Another element of the program is training to deepen the available workforce with understanding of carbon-to-products technology and commercialisation expertise.

The hub is supported by \$5 million of funding by the ARC, \$5.8 million cash funding from Universities and Industry, and \$11.8 million in-kind contribution.

Participants of the Hub include:

- 5 National Universities (Monash, Curtin, UQ, QUT & ANU)
- 3 International Universities (Imperial College London, University of Michigan and The Pennsylvania State University)
- 18 Industry Partners
 - Woodside Energy Technologies Pty Ltd
 - Wesfarmers Chemicals, Energy & Fertilisers Limited
 - Hydrobe Pty Ltd
 - GrapheneX Pty Ltd
 - Bondi Bio Pty Ltd
 - Others

There is a total of 18 research projects across five themes:

- Electro & Photo-chemical conversion of CO₂ to products
- Biochemical conversion
- Thermochemical conversion of CO₂ to products
- Carbon Recycling by Direct Air Capture
- Market Activation



AGENDA

Lab tour sessions

Groups A&B

Groups C&D

10:00 - 10:30

Tours

Green Chemical Futures
& Monash Smart
Manufacturing Hub

Morning Tea

Main Foyer,
Woodside Building for
Technology and Design

10:30 - 11:00

Morning Tea

Main Foyer,
Woodside Building for
Technology and Design

Tours

Green Chemical Futures
& Monash Smart
Manufacturing Hub

11:00 - 12:00

Official Proceeding

Main Foyer, Woodside Building for
Technology and Design

12:00 - 13:00

Lunch

13:00

Event Concludes





Ms Cassandra Fernando MP

Ms Cassandra Fernando is a member of the Australian Labor Party (ALP), she has been the MP for the Division of Holt since the 2022 federal election. Fernando worked at Woolworths in Dandenong Plaza for almost 15 years, including as a pastry chef. She became a delegate to the Shop, Distributive and Allied Employees Association (SDA) and subsequently worked as an SDA organiser for five years.

In March 2022, Fernando won ALP preselection for the seat of Holt at the 2022 federal election, following the retirement of incumbent MP Anthony Byrne. She is the first Sri Lankan born woman to take a seat in the Australian parliament.



Dr Richard Johnson

Dr Richard Johnson is the Deputy Chief Executive Officer of the Australian Research Council. He has a broad range of policy and program delivery experience as a senior executive in the Commonwealth Government, spanning both domestic and international fields.

Prior to taking up the position with the ARC, Richard was First Assistant Secretary, Social Cohesion and Multicultural Affairs, in the Department of Home Affairs. He has also represented the Australian Government, as Minister Counsellor (Home Affairs) at Australia's Permanent Mission to the United Nations in Geneva, Switzerland, and provided foreign policy advice to the Prime Minister, while working in the Department of the Prime Minister and Cabinet. Richard has a PhD in the history of political philosophy.





Professor Doron Ben-Meir

Professor Doron Ben-Meir has been appointed Monash University's next Deputy Vice-Chancellor (Enterprise and Engagement) and Senior Vice-President. Professor Ben-Meir has held a range of senior executive roles focused on enterprise, innovation, venture capital and commercialisation, working across a range of sectors including higher education, government and private industry.

Some of his achievements included: founding BioCurate Pty Ltd as a joint venture with Monash University to support the translation of biopharmaceutical research; the establishment of seed funding (and down-stream venture capital) mechanisms for start-up and spin out opportunities and the introduction of data analytics initiatives focused on visibility and productivity across the research and business development portfolios.



Professor Yiannis Ventikos

Professor Yiannis Ventikos FREng MA PhD is the Dean of Engineering at Monash University. He has worked or studied in Greece, France, the USA, Switzerland and the UK. He has published about 150 papers in peer-reviewed scientific journals, has contributed chapters in 10 books, has presented more than 300 papers in international conferences and workshops and has filed 9 international patents to date.

He has substantial involvement in tech transfer and entrepreneurship, for example among others, he is the senior academic co-founder of a spin-out company active in the development of technologies for clean and sustainable baseload power generation and consults internationally in topics of his expertise.





Professor Paul Webley

Prof Paul Webley is a Professor of Chemical Engineering at Monash University and the Director of the Woodside Monash Energy Partnership. He received his BSc and MScEng and PhD degrees in chemical engineering from MIT in 1986 and 1989.

The underlying theme of Webley's research is technology for environmental and energy applications including: CO₂ capture and utilization systems for the industrial and energy sectors, hydrogen generation, storage and utilization technologies, design of energy efficient thermodynamic systems, and negative emissions technologies. Over the 25 years Prof Webley has had a major impact on the design, and implementation of adsorption based carbon capture technologies which he is now applying to CO₂ conversion.

