



# 2024 AUSTRALIA & SOUTHEAST ASIA FORUM ON CCS

THE AGENDA | 10 - 13 MARCH 2024

## DAY 1 - MONDAY 11 MARCH 2024 - CCS IN AUSTRALIA

	TIME (CEST)	SPEAKER
OPENING	8:45 - 8:55	Welcome to Country
	8:55 - 9:10	<b>Ian Havercroft, General Manager, Knowledge &amp; Analysis - Global CCS Institute</b> Australian Domestic CCS in the Global Context Status of global CCS deployment. How does Australia and the wider Southeast Asia Region compare?
	9:10 - 9:20	<b>Hon Reece Whitby MP, Minister for Energy, Environment, Climate Action - Western Australia State Government</b>
	9:20 - 9:35	<b>Peta Ashworth OAM, Director - Curtin Institute for Energy Transition</b> Does social license for CCUS exist? Will examine an overview of latest public perception research. What are the factors that constitute achieving a social license for CCUS and how might the industry/government accelerate this.
	9:35 - 9:50	<b>Bronwyn Ray, Assistant Secretary [Branch Head], Decarbonisation Initiatives Branch - Department of Climate Change, Energy, the Environment and Water (DCCEEW)</b> Australia's domestic CCUS policy landscape Bronwyn Ray is the Head of the Decarbonisation Initiatives Branch, in the Net Zero Industries Division of the Department of Climate Change, Energy, the Environment and Water, with responsibilities for domestic and international CCUS policy and programs, Regional Hydrogen Hubs programs, and the Powering the Regions Program. Bronwyn will provide an update on developments in Australia's CCUS policy landscape.
	9:35 - 10:05	<b>Kara Peach, Manager, Offshore CCS - Department of Industry, Science and Resources (DISR)</b> Regulating CCS projects in Australian Commonwealth waters An overview of how the Australian Government regulates offshore CCS projects, including an update of new developments and future perspectives.
	10:05 - 10:25	<b>Will Howard, Lead Scientist - Climate Change Authority</b> Carbon Sequestration in Australia's Climate Policy Toolkit Carbon sequestration is a necessary part of any feasible rapid, urgent decarbonisation. Sequestration represents an industry opportunity for Australia if we get it right. With careful management, carbon sequestration can contribute to accelerating decarbonisation in the near term, and achieving and sustaining net-negative global emissions, to keep global temperatures within safe limits in the long-term.
	10:25 - 10:45	MORNING TEA - SPONSORED BY MITSUI E&P AUSTRALIA
DOMESTIC CCS	10:45 - 11:00	<b>David Fallon, Chevron Energy Transition General Manager - Chevron</b> Chevron Australia's carbon capture and storage (CCS) system The Chevron-operated Gorgon CCS system remains the world's largest CCS system designed for greenhouse gas abatement. We present the latest on performance of the system, which has now captured and stored more than 9 million tonnes of CO <sub>2</sub> .
	10:45 - 11:00	<b>Eric Williams, Principal Economist, Knowledge &amp; Analysis - Global CCS Institute</b> CCS: A Key Enabler for Australia's Net Zero Goal This presentation delves into how Carbon Capture and Storage (CCS) can significantly contribute to Australia's journey towards achieving net zero emissions. We'll explore the cost-saving benefits of CCS deployment and its crucial role in reducing overall net zero costs for the energy system. Additionally, we'll examine how these savings extend to all final energy end-use sectors – including industry, transport, buildings, and agriculture – even those not directly involved in CCS implementation.

DOMESTIC CCS	11:20 - 12:15	<p><b>Panel Discussion: Future of CCS in Australia</b></p> <p>Join us for a stimulating discussion on the burgeoning landscape of CCS in Australia. With a sharp focus on the dynamic shifts in the domestic natural gas sector and other industries and burgeoning international prospects, our panel dives deep into the rapid expansion of Australian CCS deployment. Initially exploring key CCS facilities, the panel will dissect their innovative business models and unearth the vast array of opportunities awaiting them in the wider region. Don't miss out on this insightful journey into the forefront of CCS development in Australia.</p> <p>Panelists Include:</p> <ul style="list-style-type: none"> <li>• Joe Ariyaratnam, VP Developments - Mitsui E&amp;P Australia</li> <li>• Richard Hinkley, VP Northern Australia &amp; Timor-Leste - Santos</li> <li>• Steven Ovenden, Vice President Growth - INPEX</li> <li>• Scott Baily, Technical Director - The CarbonNet Project</li> <li>• Dmitry Kosyak, Woodside Angel CCS Development Manager - Woodside</li> </ul>
	12:15 - 12:30	<p><b>Lucia Lombardo, LNG Jobs Taskforce Technology &amp; Decarbonisation/Emissions Reduction Working Group</b></p> <p>Key findings from the WA LNG Jobs Taskforce CCUS Hubs study – Opportunities and Challenges for CCUS in Western Australia</p> <p>We present the key findings from the joint industry and WA Government WA LNG Jobs Taskforce CCUS Hubs Study on opportunities and challenges for CCUS in Western Australia as announced by the Premier Roger Cook in November 2023.</p>
	12:30 - 13:30	LUNCH - SPONSORED BY WOODSIDE
HARD-TO-ABATE SECTOR - SPONSORED BY PILOT ENERGY	13:30 - 13:45	<p><b>Laurent Trost, General Manager, Yara Pilbara</b></p> <p>Advancing Australia's Climate Goals: The Role of CCS in the Pilbara From Northern Lights to Pilbara's Skies - Learn how Yara's plans for CCS technology advances Australia's climate goals</p>
	13:45 - 14:00	<p><b>Mussaret Nagree, General Manager, Climate Opportunities - WesCEF</b></p> <p>Unlocking Ammonia's potential as a transition fuel</p> <p>CCS has an essential role to play in decarbonising Ammonia production and enabling the adoption of Ammonia as a low emissions fuel in new applications.</p>
	14:00 - 14:20	<p><b>Chris Fay, Commercial Manager Business Development - AGIG</b></p> <p>Common Infrastructure</p> <p>Linking multiple emitters to minimise unit cost per tonne and encourage primary and secondary adoption.</p>
	14:20 - 15:20	<p><b>Panel Discussion: Hubs in WA</b></p> <p>There are 219 facilities across Australia that are covered by the Safeguard Mechanism, of these, 69 facilities are located in Western Australia. How do the identified facilities utilise CCS in their strategy to meet targets?</p> <p>Panelists Include:</p> <ul style="list-style-type: none"> <li>• Rosie Johnston, Head of CCS Solutions - Geovault</li> <li>• Ross Weiter, Principal Consultant - Worley</li> <li>• Alex King, Executive Director, Strategic Policy - Invest and Trade Western Australia</li> <li>• Nils Hay, CEO - Mid West Development Commission</li> </ul>
	15:20 - 15:40	<p><b>Oscar Schily, Climate Policy Manager - Climeworks</b></p> <p>Direct Air Capture and Storage: Enabling Net Zero</p> <p>Removing CO2 from the air is needed for net zero and a net negative world, addressing residual emissions from hard-to-abate sectors and historical emissions to reverse a likely temperature overshoot.</p>
	15:40 - 16:00	AFTERNOON TEA - SPONSORED BY MID WEST DEVELOPMENT COUNCIL
TECHNOLOGY ROADSHOW	16:00 - 16:10	<b>Hon Chris Bowen MP, Minister for Climate Change and Energy</b>
	16:10 - 16:20	<p><b>Paul Feron, Science Leader - CSIRO</b></p> <p>Amine-solution-based CO2-capture</p>
	16:20 - 16:30	<p><b>Khairul Rostani, Manager (Technology Program) - Petronas</b></p> <p>Modularised co2 capture technology - Membrane Contactor (MBC)</p>
	16:30 - 16:40	<p><b>Sejoung Yong, General Manager - CarbonCo</b></p> <p>Post-combustion carbon capture using amine-based solvents</p>
	16:40 - 16:50	<p><b>Lalit Kumar, Low Carbon Solutions - CCS Strategy Lead - ExxonMobil</b></p> <p>End-to-end CCS solutions</p>
	16:50 - 17:00	<p><b>Damian Dwyer, Director Policy and International Relations - LETA</b></p> <p>LETA's low emission technology investment portfolio</p>
	17:00 - 17:05	<p><b>Matt Loughrey, Principal Carbon Capture Technologies - Global CCS Institute</b></p> <p>Closing Remarks</p>
	17:30 - 18:00	<p><b>TECHNOLOGY SPEED DATING - SPONSORED BY LETA - VENUE: THE RAFT</b></p> <p>TENDER VESSEL DEPARTING 5PM @ JETT NO. 5 BARRACK ST, THEREAFTER EVERY 15MINS</p>

TECHNOLOGY SPEED DATING	<b>TECHNOLOGY SPEED DATING</b>
	<p><b>Capture</b> Climeworks, ION Clean Energy, Capture6, CSIRO, Green Gas &amp; Liquids, Indian Institute of Technology Jodhpur, SUMITOMO SHI, Technip Energies, PETRONAS, NGLTech Pte Ltd, 8Rivers, CarbonCo, LEILAC, Dotz Nano, KC8, Svante, Honeywell UOP, AspiradAC, KBR</p> <p><b>Monitoring</b> Nomad Atomics, PGS, Reach Subsea, RESMAN, Halliburton, TGS</p> <p><b>Storage</b> GeoVault, DeepCStore, Pilot Energy</p> <p><b>Transport</b> GHD</p> <p><b>Other</b> Sea_Quester Offshore Pty Ltd, Baltimore Aircoil, Kanin Energy, Quorum Software, Norther Territory, ExxonMobil, Asian Development Bank, LETA</p> <p><b>Details</b> 5.30pm onwards - Boarding The Raft 6.15 - 6.45pm - 3 Speed dates, 10min each 6.45 - 7.15pm - Food &amp; drinks 7.15 - 7.45pm - 3 Speed dates, 10min each 7.45 - 8.15pm - Food &amp; drinks 8.15 - 8.45pm - 3 Speed dates, 10min each 8.45pm - Onward networking</p>

**DAY 2 - TUESDAY 12 MARCH 2024 - INTERNATIONAL CCS, FOCUS ON ASIA**

TIME (CEST)	SPEAKER
OPENING	<p><b>8:30 - 8:40</b></p> <p><b>Alex Zapantis, General Manager External Affairs - Global CCS Insitute</b> CCS in Asia Asia is extremely diverse, including developed economies and rapidly growing emerging economies. Asia hosts a significant proportion of global emissions-intense industry, making the successful deployment of CCS in Asia essential to meeting global climate targets.</p>
	<p><b>8:40 - 9:00</b></p> <p><b>Kenta Asahina, Specialist for Research and Development, Oil and Gas Division, Agency for Natural Resources and Energy - Ministry of Economy, Trade and Industry (METI), The Government of Japan</b> Current status in 2023/2024 for the launching of CCS business in Japan. In March 2023, Japan established a CCS long-term roadmap aiming at launching the CCS business by 2030. This presentation will describe Japanese Government’s efforts to develop a legal framework, and to promote international collaboration over the past year.</p>
	<p><b>9:00 - 9:20</b></p> <p><b>Mark Ackiewicz, Deputy Assistant Secretary for Carbon Management - US Department of Energy</b> Current Status of U.S. Carbon Management Activities Over two years into the Bipartisan Infrastructure Law and approaching two years into the Inflation Reduction Act, this presentation will highlight the current status of U.S. Carbon Management Activities. The presentation will focus on current implementation of these two key pieces of legislation, highlighting the key technology, policy, investment, and regulatory frameworks in the United States.</p>
	<p><b>9:20 - 9:40</b></p> <p><b>Claude Loréa, Cement, Innovation and ESG Director - Global Cement and Concrete Association (GCCA)</b> CCUS Deployment in Cement : State of play and future outlook **Virtual Presentation** Claude leads all aspects of GCCA work related to cement and works to continuously improve the sustainability performance of the industry through innovation and developing and sharing good practices and global guidelines. She has over the las years developed a specific knowledge of CCUS both from a technological and a policy perspective.</p>
	<p><b>9:40 - 9:55</b></p> <p><b>Jocelyn Taylor, Director, CCUS &amp; Hydrogen Collaboration - Department of Climate Change, Energy, the Environment and Water (DCCEEW)</b> How Australia contributes to policy and regulatory certainty for CCUS deployment in the region Jocelyn Tylor is a Director in the Net Zero Industries Division of the Department of Climate Change, Energy, the Environment and Water, and heads up the team working closely with likeminded countries on CCUS and Hydrogen matters. Jocelyn will provide an update on how Australia’s is contributing to the global deployment on CCUS through developing regulatory and policy settings on the movement of CO2 between countries and through our international engagement with others.</p>
	<p><b>9:55 - 10.10</b></p> <p><b>Tore Moe, Senior Energy Advisor - Norwegian Energy Partners</b> Norway’s role in the global CCS value chain Norway’s investment in CO2 capture, transport and storage includes a host of activities, from research and development to full-scale demonstration and international advancement of CCS. This session will give an overview of the CCS history in Norway and the current status of the Northern Lights and Longship projects.</p>
<b>10:10 - 10:30</b>	<b>MORNING TEA</b>

RISK & INSURANCE WORKSHOP - SPONSORED BY HOWDEN INSURANCE BROKERS	10:30 - 10:45	<b>Rowan Douglas, CEO, Climate Risk and Resilience - Risk &amp; Insurance - Howden Insurance Brokers</b> The role of insurance to de-risk the transition to net zero Whilst often viewed as a mere procurement function to many businesses and project teams, the insurance market has an important role to play in derisking the enormous capital stack needed to deliver net zero. Rowan will share his insights into the unique role insurance can play to help CCS be delivered at speed and scale.
	10:45 - 11:00	<b>Glenn O'Halloran, Executive Director, Environmental &amp; Climate Risk, Climate Risk and Resilience - Risk &amp; Insurance - Howden Insurance Brokers</b> Insuring leakage liabilities through innovative risk transfer solutions Howden recently announced a first-of-its-kind insurance facility to insure liabilities arising due to leakage of CCS sites. This interactive workshop will discuss some of the innovative insurance solutions being developed around the world to derisk CCS projects and enhance bankability.
	11:00 - 12:15	<b>Panel Discussion: De-risking the CCS value chain to encourage further investments</b> Exploring how are financial institutions and insurance companies adapting to support carbon capture and storage projects. How can financial institutions and insurance companies adapting to collaborate with businesses in an ever-evolving regulation landscape? Panellists Include: <ul style="list-style-type: none"> <li>Atsumasa Sakai, Senior Energy Specialist - Asian Development Bank</li> <li>David Gibbs, State Manager, Western Region - HDI Global SE, Australia</li> <li>Vipul Shetty, Director, Energy Transition - Howden Insurance Brokers</li> <li>Anthony Prindiville, Underwriting Manager, WA - Berkshire Hathaway Specialty Insurance</li> </ul>
12:15 - 13:15	<b>LUNCH - SPONSORED BY VICTORIA GOVERNMENT</b>	
JAPAN	13:15 - 13:25	<b>Hiroshi Nambo, Branch Representative Japan - Global CCS Insitute</b> CCS Development in Japan CCS deployment in Japan has recently gained momentum, with both the government and the private sector taking concrete steps toward the goal of CCS commercial deployment by 2030. In this forum session, experts will discuss the current status and future prospects of government-led CCS support measures, private sector investment cases, and technology development.
	13:25 - 13:40	<b>Satoru Takahashi, Director, Global Coordination Division, Hydrogen and CCS Project Department - Japan Organization for Metals and Energy Security (JOGMEC)</b> JOGMEC's CCUS Activities towards Carbon Neutrality Carbon dioxide Capture, Utilization and Storage (CCUS) plays an important role in achieving carbon neutrality. JOGMEC has launched various initiatives of CCUS projects with the aim of ensuring energy security and contributing to a decarbonized society. This presentation explains JOGMEC's CCUS activities and moving forward to promote and implement CCUS projects in Japan.
	13:40 - 13:55	<b>Satoshi Kanamori, Managing Executive Officer In charge of LNG, Carbon-Neutral Promotion - K-line (Kawasaki Kisen Kaisha, Ltd.)</b> "K" Line's Initiative to LCO2 Transportation for CCS Introducing "K" Line's Initiative in implementation of world first LCO2 Transportation for CCS.
	13:55 - 14:10	<b>Shigeru Takahata, Business Development Manager, CCUS Team, Energy Innovation Initiative - Sumitomo Corporation</b> Sumitomo Corporation's CCUS business initiatives Introduction of the CCUS business that Sumitomo Corporation is currently challenging. In particular, I would like to touch on the cross-border CCS between Japan and Australia that we are developing with our partner companies.
	14:10 - 14:25	<b>Yoshihiro Toyoda, Head of Turbo Machinery Engineering Section, Engineering Division, Machinery Business - Kobe Steel, Ltd. (KOBELCO)</b> Compressors for CCUS Projects Kobe Steel, Ltd. (KOBELCO) is a unique company to supply three major types of gas compressors: centrifugal, reciprocating and screw and has been involved in CCUS project through demonstration / commercial projects using these technologies. Introduction of KOBELCO's CCUS projects and the latest compressor technology will be the focus of this session.
	14:25 - 14:45	<b>AFTERNOON TEA</b>
SOUTHEAST ASIA SPONSORED BY EXXON MOBIL	14:45 - 15:05	<b>Belladonna Maulianda, Director - Indonesia CCS Centre</b> Indonesia's Bold Vision as the Asia Pacific Regional Hub Leveraging its numerous competitive advantages, including expansive storage capacity, strategic location proximity, and a sophisticated downstream industry, Indonesia is swiftly advancing towards becoming the regional CCS Hub. Our aspiration is to pioneer the market-driven deployment of CCS, marked by significant achievements such as the launch of Presidential Regulations facilitating cross-border activities between Indonesia and neighboring countries.
	15:05 - 15:25	<b>Vikram Vishal, Director - India National Centre of Excellence for CCU</b> Can CCUS accelerate India's efforts toward net-zero emissions? Achieving net-zero GHG emissions targets for India is expected to necessitate significant deployment of CO2 capture and storage (CCS) technologies. This talk shall discuss the early opportunities for CCS in India, its relevance to net-zero emission goals and the scale of carbon sequestration in different geological sinks in the country.
	15:25 - 15:40	<b>Vikram Pandit, Managing Director - Tubacex</b> Corrosion Resistant Alloys for CCS/CCUS Regardless of the chosen technology being employed, there are challenges for materials design and corrosion control techniques that need to be considered as a means to design a system that is safe, reliable and cost-effective in the CCS/CCUS segment. Choosing the right kind of alloy/material is key for unplanned maintenance free operations of the asset. Some key developments within the stainless steel segment which can be useful for the CCS/CCUS segment.

SOUTHEAST ASIA SPONSORED BY EXXON MOBIL	15:40 - 16:55	<b>Panel Discussion: Hubs across Southeast Asia</b> This forum session will bring together leading experts to discuss the most recent project updates and critical enablers of successful CCS implementation, such as policy, regulatory, and the transboundary opportunities and challenges of regional CCS deployment. Panellists will delve into the complexity of CCS market growth in Southeast Asia, providing insights into how we can expedite CCS adoption, contributing to the region's sustainable energy future and climate goals. Panellists Include: <ul style="list-style-type: none"> <li>• Danuwas Lambasara, VP, CCS - PTTEP</li> <li>• Lalit Kumar, Low Carbon Solutions CCS Strategy Lead - ExxonMobil</li> <li>• Noraziah Binti Muda, Head of Research - TNB</li> <li>• Chris Park, Project leader of CCS Shepherd - Samsung Engineering</li> </ul>
	16:55 - 17:00	<b>Alex Zapantis, General Manager External Affairs - Global CCS Institute</b> Closing Remarks
14:25 - 14:45	<b>GALA DINNER SPONSORED BY INPEX - VENUE: FRASER'S RESTAURANT, KINGS PARK COACHES DEPART DOUBLETREE HILTON AT 6.15PM</b>  <b>SPEAKERS INCLUDE PETER KLINKEN, CHIEF SCIENTIST OF WESTERN AUSTRALIA AND STEVEN OVENDEN, VICE PRESIDENT GROWTH - INPEX</b>	

### DAY 3 - WEDNESDAY 13 MARCH 2024

#### INDUSTRY CONSULTATION LED BY DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER (DCCEEW)

	TIME (CEST)	SPEAKER
INDUSTRY CONSULTATION - INFORMATION ONLY	9:20 - 9:30	<b>Bernardene Smith, Principal Policy, Regulation and Commercial - Global CCS Institute</b> Opening Remarks
	9:30 - 10:30	<b>Bronwyn Ray, Assistant Secretary [Branch Head], Decarbonisation Initiatives Branch - DCCEEW</b> <b>Jocelyn Taylor, Director, CCUS &amp; Hydrogen Collaboration - DCCEEW</b> Setting the scene - Challenges & issues relating to transboundary movement of CO2
	10:30 - 11:00	MORNING TEA
AUSTRALIAN DOMESTIC INDUSTRY CONSULTATION *INVITE ONLY*	11:00 - 11:45	<b>DCCEEW to Industry</b> Q&A Session - DCCEEW Fact Finding
	11:45 - 12:30	<b>Industry consultation led by Bronwyn Ray &amp; Jocelyn Taylor</b> Industry to DCCEEW
	12:30 - 12:35	<b>Q&amp;A Session - Industry Fact Finding Industry consultation led by Bronwyn Ray &amp; Jocelyn Taylor</b> Bernardene Smith, Principal Policy, Regulation and Commercial - Global CCS Institute Closing Remarks
	12:35 - 13:30	LUNCH