



Circular Economy For Climate and Environment (CECE 2024)

Sydney Sep 29-2 Oct 2024

Workshop 1: Circular Economy frameworks, standards and matrices (Lisa McLean)

A deep dive into the enabling frameworks, standards and metrics to accelerate the transition to a circular economy. Join Lisa McLean CEO Circular Australia for an informative session on how your organisation can prepare to succeed in the new circular economy. *Organiser: Lisa McLean, Circular Australia, E: lisa@circularaustralia.com.au*



Workshop 2: The Future of Renewable Technology Waste Management



The rapid growth of renewable energy technologies presents a pressing need for effective end-of-life (EOL) management. Unlike traditional energy systems, these technologies require specialized recycling processes to mitigate environmental hazards and ensure sustainable development. This workshop aims to foster collaboration among experts to develop innovative solutions for EOL recycling of renewable energy technologies and promote a circular economy approach. By sharing knowledge and best practices, we can identify actionable strategies to support a sustainable clean energy future. *Organisers: A/Prof Kaveh Khalilpour, UTS (E: Kaveh.Khalilpour@uts.edu.au) and Thomas Gao, NSW Chief Scientist and Engineers Office (E: thomas.gao@chiefscientist.nsw.gov.au)*

Workshop 3: Nutrient recovery

The workshop on "Application of Circular Economy Principles to Water and Nutrient Management in Urban Greenfield Development" aims to explore sustainable practices in urban planning. The session will delve into how circular economy principles can be applied to manage water and nutrients effectively, minimizing waste and promoting resource efficiency. Attendees will learn through a combination of case studies and group activities, offering practical insights into innovative solutions for sustainable urban development. Case studies will highlight successful implementations of circular strategies in real-world Greenfield projects, providing a blueprint for integrating these concepts into future developments. The workshop will also include interactive group activities, encouraging participants to collaborate and apply what they've learned to hypothetical scenarios. By the end of the workshop, participants will be equipped with actionable knowledge and tools to incorporate circular economy practices into urban planning, contributing to more sustainable and resilient cities. *Organisers: Stefano Freguia, University of Melbourne (E: stefano.freguia@unimelb.edu.au), Sanjay Kumarasingham, Ganden Engineers (E: Sanjay.Kumarasingham@ganden.com.au), Dr. Bhakti Devi, Urban Water Doctor (E: drbhaktilata@gmail.com)*



Workshop 4: Retrofitting circularity into wastewater treatment plant (Amit Chanan)



Globally the wastewater treatment plants (WWTPs) are estimated to be responsible for nearly 5% of the non-CO₂ greenhouse gas (GHG) emissions, and this is projected to increase by 22% by 2030 as access to centralised sanitation increases. Many wastewater treatment plants around the world were constructed some 40 to 50 years ago and have now reached the end of their service lives. Utilities across Australia and the Pacific now need to upgrade or replace aging wastewater infrastructure. Retrofitting can be an economical alternative for wastewater treatment plants at the end of their design life, with advancements in science and engineering such retrofitting can only deliver on Circular Economy objectives. The workshop will focus on a real wastewater treatment plant case study from Suva, Fiji and seek to explore circular economy-based retrofitting options. *Organiser: Dr Amit Chanan (Water Authority of Fiji (E: amit.chanan@waf.com.fj))*