PROJECT NOTIFICATION

Reference No.: 546

Date of Issue	20 March 2025
Project Code	25-CP-19-GE-WSP-A
Title	Workshop on the Circular Economy through Digital Solutions
Timing	15 July 2025–18 July 2025
Hosting Country(ies)	Republic of China
Venue City(ies)	Taipei
Modality	Face-to-face
Implementing Organization(s)	Not Applicable
Participating Country(ies)	All Member Countries
Overseas Participants	19
Local Participants	6
Closing Date	20 May 2025
Remarks	Not Applicable

Objectives	Explore the role of digital technologies in supporting the transition to a resource-efficient circular economy (CE); identify strategies for leveraging digital solutions like AI, the IoT, blockchains, and big data for sustainable production and consumption; and evaluate potential risks and unintended consequences associated with digital CE adoption.
Rationale	Rapid material consumption and environmental challenges demand sustainable practices. Digital technologies enable decoupling economic growth from environmental harm. By merging innovation with Green Productivity (GP), economies can advance circular models, boost resource efficiency, and cut waste. This supports the APO Vision 2025, which promotes tech-driven sustainability for lasting development.
Background	A CE decouples growth from resource consumption by keeping materials in use, reducing waste, and regenerating natural systems. The World Economic Forum predicts significant challenges from the current linear economic model over the next 20 years. However, digital technologies like IoT sensors, blockchains, AI/ML, high-performance computing, additive manufacturing, and big data analytics have enabled innovative methods to maximize CE potential, as seen in projects like Plastics Recovery Insights Steering Model (PRISM) by the Alliance to End Plastic Waste and Kabadiwalla Connect in India. While digitalization offers opportunities for resource efficiency, challenges include high initial costs, data security concerns, and digital waste risks. Success requires collaboration among policymakers, businesses, and communities to ensure equitable digital infrastructure access, develop regulations, and integrate CE principles into digital transformation strategies.
Topics	Digital technologies for the CE; Leveraging technologies for resource efficiency; Policy frameworks and regulatory considerations; Case studies of digital CE initiatives; and Inclusive CE solutions for all stakeholders.
Outcome	Enhanced knowledge of digital technologies' role in CEs, increased understanding of implementation strategies and challenges, developing frameworks for digital CE adoption, and identifying solutions for sustainable resource management aligned with GP.
Qualifications	Government officials and policy research officers, representatives of industrial associations, practitioners, and manufacturing executives working on sustainability and industrial and environmental policies. Preference for participant selection will be given to nominees who have completed the APO e-learning course on Circular Economy Implementation and Strategies for the Public Sector.

Please refer to the implementation procedures circulated with this document for further details.

Dr. Indra Pradana Singawinata
Secretary-General