Accelerating the Circular Economy: Integrating Circularity into Programs, Projects, and Policies

Financing the Circular Economy

2 and 9 July 2024
Q3 Online Sessions

KEY TAKEAWAYS REPORT

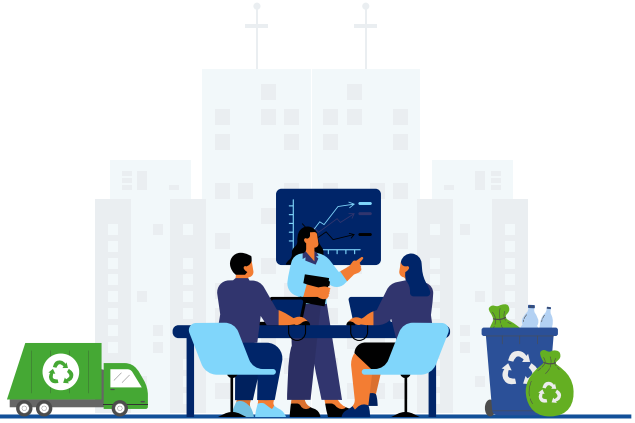
Key insights and resources from the Q3 ADB Circular Economy Training Program

ABOUT THE TRAINING PROGRAM

"Accelerating the Circular Economy: Integrating Circularity into Programs, Projects, and Policies" is a capacity-building program for Asian Development Bank (ADB) staff and participating developing member countries (DMCs) of the TA-6669 REG: Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific - Prioritizing and Implementing Actions to Reduce Marine Plastic Pollution. It focuses on circular economy (CE) principles, policies, project design, and the upcoming Global Plastics Treaty (GPT) opportunities to scale up investments supporting plastics circularity. It will run throughout 2024, with four sessions (one per quarter). The third leg of the four-part series, "Financing the Circular Economy," was conducted online on 2 and 9 July 2024.

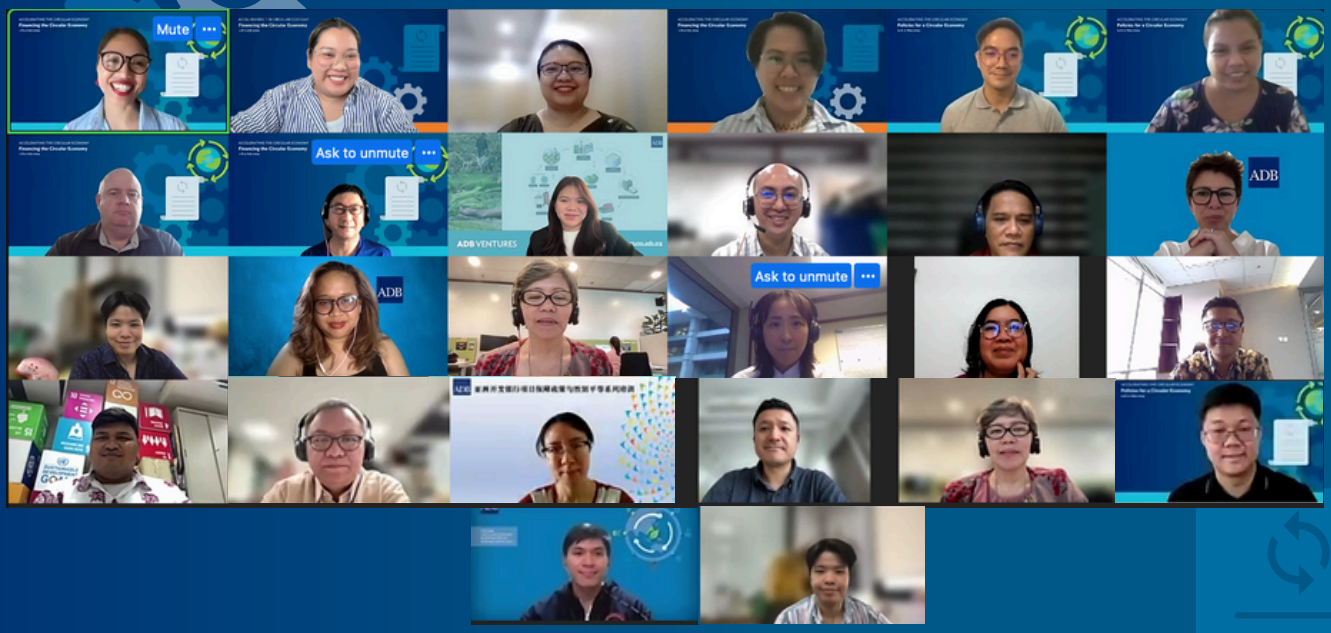
THE Q3 SESSION AIMED TO:

- Deepen understanding of existing and potential finance mechanisms to close the CE funding gap.
- Share case studies of finance mechanisms being implemented in Asia and the Pacific.



ABOUT THE KEY TAKEAWAYS REPORT

This key takeaways report covers highlights from Part 3 of the training series, "Financing the Circular Economy." The key takeaways from the training include CE finance mechanisms and economic instruments for CE and how these relate to sustainable development and are done in practice.



PROGRAM OVERVIEW

Financing the Circular Economy

2 July 2024

3.1 Financing the Circular Economy

9 July 2024

3.2 Finance Mechanisms in Practice

SESSION 3.1
FINANCING THE CIRCULAR ECONOMY

The session discussed how ADB's venture capital arm could support early-stage tech startups through financial mechanisms to drive solutions for climate impacts in Asia. The session also shared a case study on how existing finance mechanisms enabled a company to innovate solutions toward a CE.

RESOURCE SPEAKER

Thitirat "Pang" Sittakaradej
Principal, ADB Ventures

Introduction to ADB Ventures

ADB Ventures is ADB's venture capital arm that invests in early-stage tech startups that drive solutions to climate impacts in developing Asia. These solutions include clean energy, climate-smart financing, and sustainable supply chains.

ADB Ventures has supported over 50 impact technology startups, over a quarter of which are women-led.

EXAMPLES OF TECHNOLOGICAL SOLUTIONS THAT ADB VENTURES SUPPORTS

Clean Tech Solutions
Green power, green infrastructure, smart construction, and energy efficiency

Agritech solutions
Climate-smart farming, sustainable inputs, food production, and more connected agricultural supply chains

Sustainable supply chain solutions
Sustainable mobility and the circular economy

ASSESSING STARTUPS FOR INVESTMENT

ADB Ventures considers the following criteria to arrive at an investment decision.

Market potential
This includes identifying market pain points, evaluating market demand and size, and identifying target customers.

Team
Strong background and prior experience in the focused industry, capable of adapting to market conditions, and making necessary changes to the business model.

Impact creation
Clear impact thesis and strong climate impact generation.

POST-INVESTMENT SUPPORT

After investment, ADB Ventures provides additional support in several areas.

Building networks
ADB Ventures connects portfolio companies with co-investors, financiers, business partners, production facilities, clients, and regulators as needed.

Impact management
ADB Ventures acts as a thought partner, helping companies monitor and manage impact.

Communication support
ADB Ventures assists portfolio companies in amplifying their impact messaging to broader audiences.

CASE STUDY:
Ananas Anam - Natural textiles from pineapple waste

Ananas Anam produces alternative leather and textiles from pineapple waste in the Philippines under the Piñatex and Piñayarn brands. Traditionally, pineapple leaves were discarded or burned after harvesting. Ananas Anam's technology transforms these fibers into valuable products to reduce environmental impacts associated with traditional leather or polyvinyl chloride (PVC) leather production. The company also provides an additional income stream to pineapple farming communities in the Philippines.

Source: ADB Ventures (n.d.). "Ananas Anam"

DISCUSSION INSIGHTS

Key points from the session's question and answer discussion are outlined below:

1. The range of financing amounts provided by ADB Ventures:

ADB Ventures provides equity and quasi-equity financing to startups from US$100,000 to US$4 million.

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2. The countries supported by ADB Ventures:

ADB Ventures covers 17 DMCs across the region, with approximately 30-40% in Southeast Asia, 30-40% in South Asia, and the remainder in other parts of Asia.

SESSION 3.2
FINANCE MECHANISMS IN PRACTICE

This session provided an overview of the CE financing landscape in Asia, the types of financing and economic instruments available to speed up the transition to CE, and how some of these mechanisms are practiced through plastic credits.

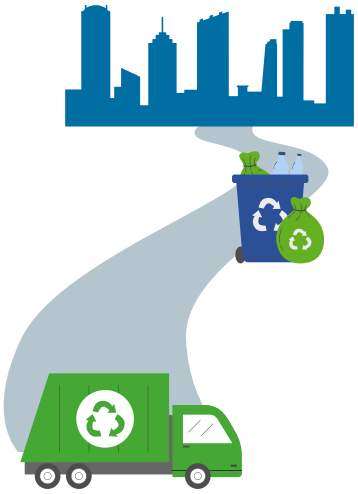
RESOURCE SPEAKERS

James Baker
Senior Circular Economy Specialist (Plastic Wastes),
Climate Change and Sustainable Development Department, ADB

Komal Sinha
Senior Director, Plastic and Sustainable Development Policy and Markets, Verra

Asst. Prof. Panate Manomaivibool (PhD)
Circular Economy for Waste-free Thailand (CEWT) Research Center,
the School of Science, Mae Fah Luang University

Financing Circularity in Asia



Asia is recognized as a global hotspot for plastic pollution. However, the region only accounted for a small percentage of plastic circularity investments. These investments mostly focused on downstream measures such as waste management, plastic recovery, and recycling.

Addressing the plastic issue requires that upstream measures, such as substitution and avoidance activities, receive substantial investments. These investments could be supported by public and private financing.

PUBLIC AND PRIVATE FINANCING

The financing available to drive CE could be supported by public and private financing. Complex CE projects could also explore blended loans and public-private partnerships.

Public Finance

Money is generated within the country and is disbursed through government ministries and national budgets.

Consideration

Projects, depending on their scale and timelines, must be planned years before implementation to align with the government's procurement and disbursement processes.

Private Finance

Money that is more flexible, agile, quicker to disburse, and can come from various sources, typically disbursed from a fund manager or a bank consortium.

Consideration

Sources typically use high interest rates while looking for high returns.

Verra: Plastic Credits in Practice

WHAT ARE PLASTIC CREDITS?

One plastic credit is defined as one additional ton of plastic waste that is collected from nature or recycled. All seven types of plastic, plus composite materials containing plastic, are eligible for receiving plastic credit benefits from Verra.

Plastic credit schemes can be considered as a form of private financing.

Verra is a non-profit corporation founded in 2007, dedicated to developing leading standards for climate action and sustainable development. In 2021, Verra established its Plastic Waste Reduction Program, known as the Plastic Program, to catalyze effective local plastic waste management globally, focusing on developing countries, island nations, and less developed countries where this finance is more urgent.

The program enabled consistent accounting and crediting of activities related to plastic collection and recycling. Through the program's plastic crediting mechanism, Verra issues credits based on the amount of plastic waste collected and recycled. This provides financing for plastic waste management activities such as extended producer responsibility (EPR) schemes, outcome-based bonds, multilateral and other funds, loan-based models, and voluntary contributions.
Source: Verra

Example of verified projects supported by Verra's Plastic Program

Since 2021, the Plastic Program supported 14 certified projects and more than 50 projects requesting certification, mostly concentrated in the global south. Some of the examples are:

- **Project STOP, Indonesia**
  Project STOP partners with the government to design and implement low-cost waste management systems to eliminate plastic leakage into the ocean. It scales operations alongside existing initiatives and informal waste workers, resulting in the issuance of more than 3,800 collection credits.
- **Second Life, Thailand**
  Second Life recovers and recycles ocean, ocean-bound, and land plastic waste. The program incentivizes waste collectors from hard-to-reach islands across the country, resulting in the issuance of both collection credits (3,876) and recycling credits (306) for its activities.

Source: Verra Registry (n.d.). "Project Stop" and "Second Life Thailand".

LINK TO PRESENTATIONS

- **Overview of Finance Mechanisms in Sustainable Development**
  by James Baker
- **Plastic Credits in Practice**
  by Komal Sinha
- **Economic Instruments for a Circular Economy**
  by Panate Manomaivibool

ECONOMIC INSTRUMENTS FOR A CIRCULAR ECONOMY

Economic instruments are tools or mechanisms designed to influence economic behavior in support of existing policies or framework goals. Here are some instruments that can drive the transition to a CE:

Creation of taxes on virgin plastics and benefits for recycled plastic

Tax will be added to petrochemical companies supplying virgin plastic, and benefits and subsidies can be given to industries using packaging with recycled plastic content.

Provision of tax incentives for recycling investments

The government can provide tax incentives for recycling investment to cover the upfront investment and the operating costs of recycling activities.

Introduction of deposit and return schemes

The schemes can finance collection by offering economic incentives to return plastic packaging.

Implementation of single-use plastic packaging levies and rebate schemes

Levies can be added to single-use plastics, and the revenue can be earmarked by governments to finance waste management activities as part of a rebate scheme.

Collection of advanced recycling fees (ARF)

ARFs can be charged to producer responsibility organizations in the EPR programs to finance take-back and recycling operations.

Establishment of green public procurement

Governments need to create a market for green products and define what constitutes a green product through green public procurement policies and guidelines.

CONSIDERATIONS FOR AN ECONOMIC INSTRUMENT'S POLICY ADOPTION

Effectiveness
Will the instrument lead to intended outcomes and impacts?

Efficiency
Are the costs justified given the outcomes achieved?

Equity
Is the intrument reaching certain beneficiaries and addressing needs?

Enforcement
Do authorities have enough resources to enforce policies?

DISCUSSION INSIGHTS

Key point from the session's question and answer discussion are outlined below:

1. The transparency mechanisms on EPR and upstream plastic waste management

In Verra, there are accredited validation/verification bodies for specific programs, including plastics. These organizations must be ISO 1406 accredited, a member of the International Accreditation Forum, and able to demonstrate significant expertise in the domain.

2. How plastic credits support EPR

Plastic credits would help in enhancing the transparency of EPR initiatives by maximizing the available third-party auditing and verification systems in place. Additionally, plastic credits can complement EPR by serving as a compliance mechanism to the EPR schemes.

CIRCULAR ECONOMY FINANCING GLOSSARY

Circular economy
CE is a system where materials never become waste, and nature is regenerated. In CE, products and materials are circulated through maintenance, reuse, refurbishment, remanufacture, recycling, and composting.

Climate-smart financing/climate finance
This refers to local, national, or transnational financing that aims to support climate change mitigation and adaptation actions. The financing is drawn from public, private, and alternative sources.

Extended producer responsibility
A policy in which financial or physical liability for end-of-life handling is placed on the producer or manufacturer

Financing mechanisms
A mechanism for the provision of financial resources on a grant or concessional basis, including for the transfer of technology

Green public procurement
The procurement of goods and services with reduced environmental impacts throughout their life cycle by public authorities

Green technologies
This term refers to environment-friendly technology used in production processes or supply chains. It can also refer to clean energy production, the use of renewable energy sources, and technologies that have less negative impacts relative to fossil fuels.

Polyvinyl chloride (PVC)
Polymers are used in various applications, from piping and siding to blood bags and tubing, wire and cable insulation, windshield system components, and more.

Portfolio company
A company that a private equity firm invests in and continues to hold an interest in

Validation/verification bodies (VBB)
Qualified, independent third-party auditors (VVBs) are approved by Verra and are experts in the program, sectoral scope, or technical area they audit.

Sources:
Ellen MacArthur Foundation. (n.d.). "What is a circular economy?"
European Commission (n.d.). "Green Public Procurement"
Indeed (n.d.). "What is a portfolio company? What to include in a portfolio?"
Investopedia (n.d.). "What Is Green Tech? How It Works, Types, Adoption, and Examples"
Organisation for Economic Co-operation and Development (OECD). (n.d.). "Extended Producer Responsibility."
United Nations Climate Change (n.d.). "Introduction to Climate Finance"
United Nations Environment Programme. (n.d.). "Financial mechanism."
Verra (n.d.). "Validation and Verification"

FURTHER READING
RESOURCES ON FINANCING CIRCULARITY

PROGRAM EVENT PAGE

ADB Circular Economy Training Series: Accelerating the Circular Economy: Integrating Circularity into Programs, Projects, and Policies

The designated event page for the CE Training Series outlines the program's overview, training schedule, topics, and related resources.

LINK TO RESOURCE

Financing the Circular economy | Capturing the Opportunity

The Ellen MacArthur Foundation

This report outlines investing, banking, and insurance opportunities in financing CE. It also calls on the financial sector to seize its full potential by scaling CE in collaboration with governments and private corporations.

LINK TO RESOURCE

Financing Circularity: Demystifying Finance for Circular Economies

The United Nations Environment Programme Finance Initiative

The report highlights practical approaches to financing circularity, such as the use of sectoral metrics in decision-making and urging financial institutions to formalize programs for transitioning to a circular economy.

LINK TO RESOURCE

Extended Producer Responsibility | Basic Facts and Key Principles

Organisation for Economic Co-operation and Development

This paper aims to foster a common understanding of the EPR approach and to provide guiding principles for its successful implementation.

LINK TO RESOURCE