

The views expressed in this presentation are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.

Private Sector Perspective on Bankable Projects Supporting Circularity

**Claire Alembik, Investment Specialist
Infrastructure Finance Team, ADB**

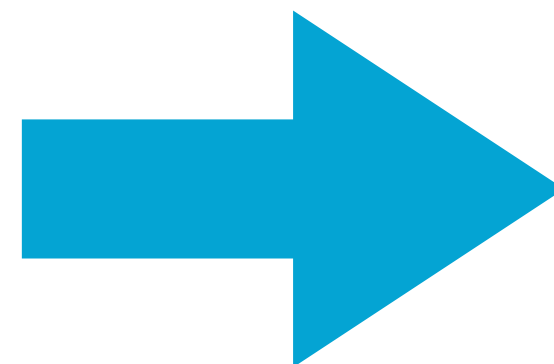
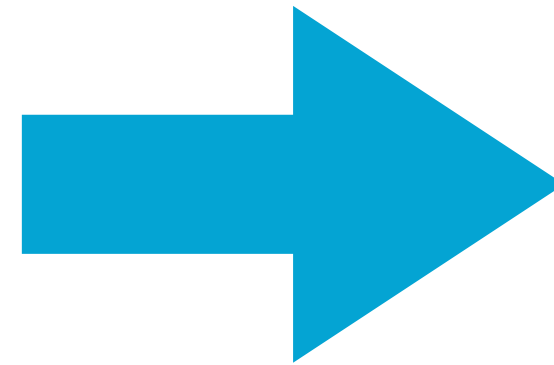


WHY CHOOSE A CIRCULAR ECONOMY?

19 % cut in annual global greenhouse gas emissions

17 % improvement in resource efficiency

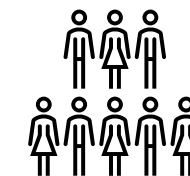
12 % decline in global natural resource use



Boost Asia Pacific GDP by **\$339.6 billion**



Reduce carbon emissions by **1.7 gigatons**



Create **15 million** new jobs



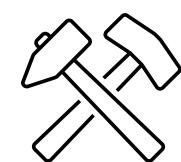
Reduce carbon emissions by **19%** by 2050

CIRCULAR ECONOMY OPPORTUNITIES IN ASIA AND THE PACIFIC

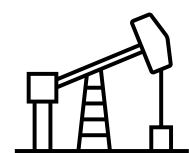
A circular economy transition can **impact more than one-third of the Asia Pacific economy**

Economic potential in – maintenance, repair and operations (MRO) sector; recycling sector; construction sector

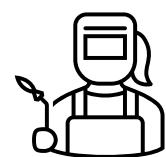
Sectors ripe for disruption by circular economy:



Mining and quarrying



Petrochemicals and non-metallic minerals



Metals and equipment manufacturing

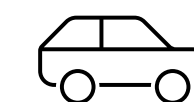


Together, these sectors account for nearly **40% of total baseline carbon emissions** in Asia Pacific

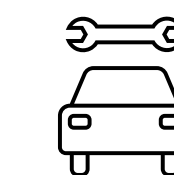
Opportunities:



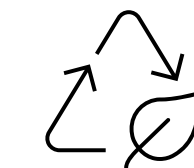
New markets for agricultural waste management



Electric vehicle battery recycling



Repair and reuse of car parts



Recycling of plastic and biowaste



Cooling and heating solutions

ROLE OF PRIVATE INVESTORS IN TRANSITIONING TO A CIRCULAR ECONOMY

2 billion tons – the amount of municipal solid waste generated globally every year... but most of the waste goes unmanaged and into oceans and cities

What's the solution?

Shifting to a circular economy is widely accepted as the **ONLY** long-term solution to this challenge

But what is holding things back?

Transition has been slow, and requires large amounts of investment that are not always available

FINANCING GAPS IN CIRCULAR ECONOMY

\$50B-\$120B

Annual global financing gap for plastic pollution

\$1.64T

Expected global financing gap for plastic pollution by **2040**

8%

Plastic circularity investments in Asia

HOW CAN PRIVATE INVESTORS HELP?



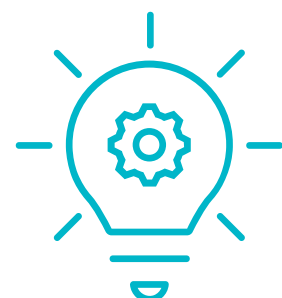
Directly provide services



Invest in sustainable solid waste management businesses



Co-finance waste management projects at scale through public-private partnerships



Find innovative solutions to tackling waste



Redesign value chains to cut resource consumption and waste



Adapt new business models that can help extend the lifespan of products



Focus on collaboration and coordinated action, particularly to identify **bankable projects** in waste management

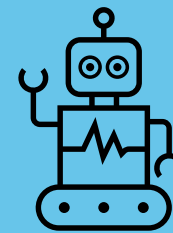
BANKABILITY: WHERE PROJECT READINESS MEETS FINANCIAL COMMITMENT



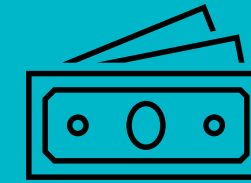
**Has an enabling
legal and
economic
environment**



**Strong
sponsor**



**Commercially
viable technology
with a track
record**



**Predictable cash
flow through clear
revenue streams
ideally
underpinned by
offtake agreements
or long-term
contracts**



**Willingness to
comply with high
environmental
and social
standards**

CHALLENGES IN FINDING BANKABLE CIRCULAR ECONOMY PROJECTS

Collection systems and infrastructure

- Still nascent plastic collection and segregation systems
- Limited availability of high-quality input waste for recycling
- Instability in supply of feedstock for recycling

Offtake risks

- High competition for PET packaging and quality rPET, with virgin PET also competing in some applications
- Not enough demand for recycled materials
- Fluctuations in pricing of recycling materials





CHALLENGES IN FINDING BANKABLE CIRCULAR ECONOMY PROJECTS

Operational and technology risks

- High operational costs and low profit margins due to competition
- Use of outdated, emerging or unproven recycling technology
- Lack of skilled workforce to manage circular business models
- E&S risks from disposal of waste and working conditions

Regulatory and policy roadblocks

- Varying policies across Asia and the Pacific
- Lack of sufficient incentives for circular business models
- Capacity limitations



ADB'S ROLE IN PROJECT FINANCE DEALS



Loans and debt:

Hard currency loans, senior or subordinated debt, mezzanine financing

Equity investment:

Non-controlling stakes in enterprises or via private equity funds

Guarantees:

Partial credit, partial risk, letters of credit or policy-based guarantees are offered for eligible projects that help efficient risk transfer

Loan syndication:

Assist governments and private sector borrowers in securing debt financing on commercial terms

Blended finance:

De-risking projects by marrying concessional capital with ordinary capital

Policy engagement:

Partner with national and local governments on policy and engagement efforts



Key Financing

Client	Indorama Ventures Public Company Limited
Sector	Urban solid waste management
Country	Regional: India, Indonesia, Philippines, Thailand
ADB Financing	\$50 million ADB OCR; \$50 million LEAP
Signing Date	November 2020

Project Features

- This loan is ADB’s first independently verified nonsovereign Blue Loan, following Blue Natural Capital Financing Facility’s Blue Bond Guidelines. It is aligned with ADB’s Action Plan for Healthy Oceans and Sustainable Blue Economies.
- The loan is provided to Indorama Ventures Public Company Limited (IVL), an integrated polyester chain manufacturer and distributor with strong global presence. IVL is the largest producer of 100% recyclable PET in the world.
- Cofinanciers are IFC (\$150 million) and DEG (\$50 million).

ADB’s Value Addition

- ADB assisted independent verification of the loan as a Blue Loan and a Green Loan, which enabled to showcase IVL’s initiative as the first mover for this new asset class in the regional loan market.
- ADB is involved in policy and regulatory development in focus countries through sovereign TA to advise on allowing recycled PET to be used for food packaging.



Key Financing

Client	PT ALBA Tridi Plastics Recycling Indonesia
Sector	Urban solid waste management
Country	Indonesia
ADB Financing	\$22.1 million ADB OCR; \$22.1 million LEAP
Project Sponsors	ALBA Group Asia Limited (AGA) and PT Dhara Daya Sustainea (DDS)
Signing Date	June 2023

Project Features

- First ADB Limited-Recourse Project Finance Loan in the Plastics Recycling Sector.
- Development, construction, and operation of PET recycling facility with an output capacity of 36,000 tons per annum in Central Java, Indonesia.
- The post-consumer PET bottles will be converted into high-quality recycled PET (rPET) flakes and food-grade rPET pellets to be sold to consumer goods companies in Indonesia, other parts of Asia and Europe.

ADB’s Value Addition

- Provide financing otherwise unavailable in the local market given the food-grade rPET production is an emerging and unfamiliar industry.
- Assist in Blue Loan verification and catalyzed private sector funds into an emerging sector and asset class.
- Strengthen the environmental and social standards and capacity of the company. Incorporated measures to promote gender equality through Effective Gender Mainstreaming.

HOW CAN ADB FACILITATE THE TRANSITION TOWARDS A CIRCULAR ECONOMY?

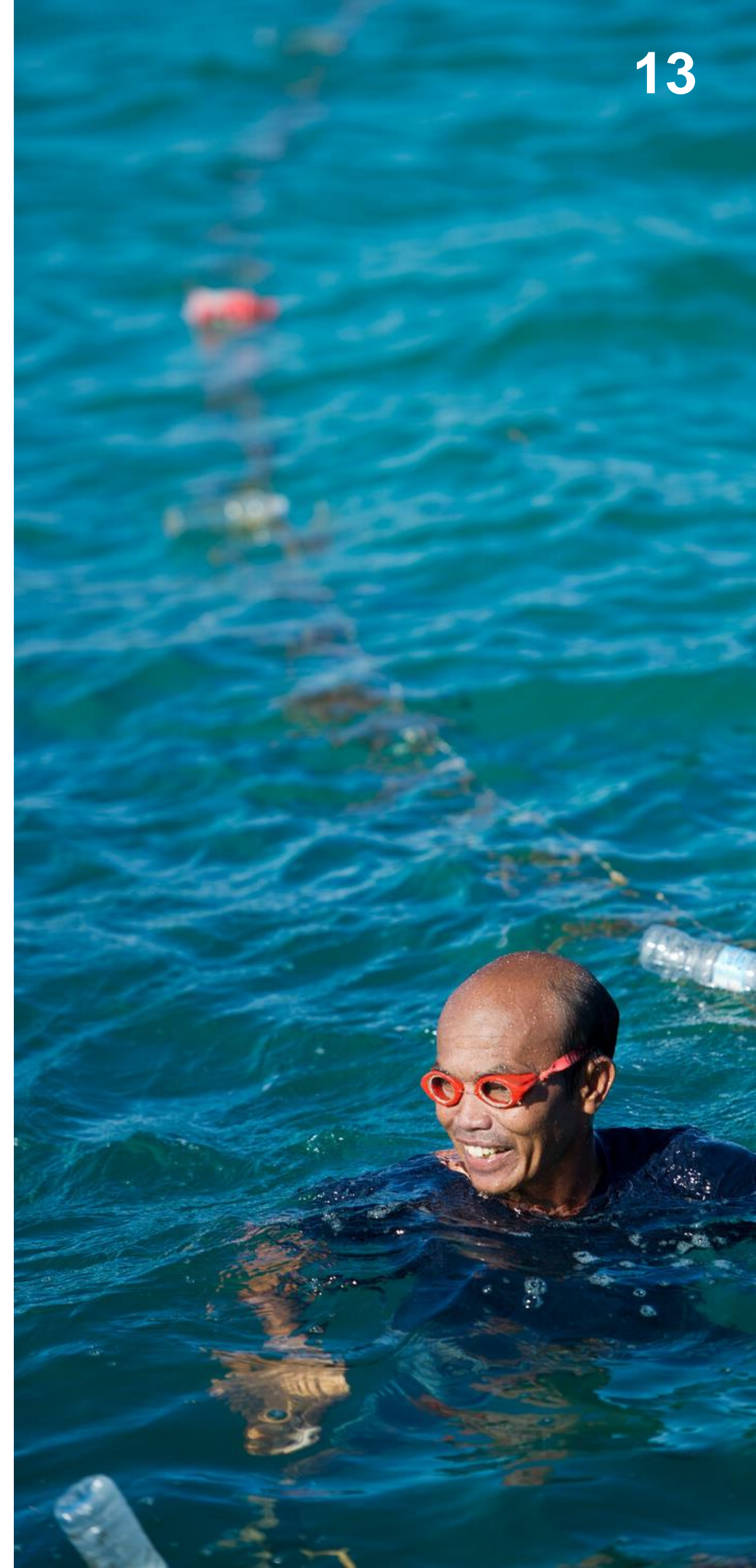


Project Preparation

- ✓ **Market studies** to understand the feedstock
- ✓ **Map value chains** to identify reuse, recycling, and substitution opportunities
- ✓ **Diagnostics tools** to screen for circularity potential
- ✓ Identify **circular opportunities** early in the project cycle to advise on E&S aspects
- ✓ Develop **sectoral benchmarks** and pricing tools tailored to circular mode

De-risking Instruments

- ✓ **Blended finance:** Combining concessional and commercial capital to reduce risk.
- ✓ **Guarantees:** Partial credit or risk guarantees to attract private capital.
- ✓ **Loan syndication:** Helping borrowers secure debt on commercial terms.
- ✓ **Equity investments:** Especially in early-stage or high-impact circular ventures



ADB's private sector department stands ready to support circular economy projects to make them bankable and more mainstream.



■ ■ ■

THANK YOU!

Claire D. Alembik (calembik@adb.org)
Investment Specialist
Infrastructure Finance Division 2
Private Sector Operations Department
Asian Development Bank

▶ ▶ ▶

