

# World Bank Outcome Bond Mobilizes Private Capital for Projects that Tackle Plastic Pollution.

In January 2024, the World Bank issued the \$100 million **Plastic Waste Reduction-Linked Bond**. The bond raised \$14 million to finance two plastic waste collection and recycling projects in Indonesia and Ghana, providing investors with a return linked to plastic and carbon credits generated by the projects.

In addition to collecting approximately 230,000 tons of plastic waste, out of which 180,000 tons will be recycled, this initiative will help abate over 100,000 tons of CO<sub>2</sub>e emissions over the next ten years. Moreover, it is anticipated that the project will, improve health and sanitation in local communities, protect marine life by preventing plastic waste from leaking into the ocean, and provide employment opportunities for women microentrepreneurs to build their own plastic waste collection businesses.

## Background

Every year, between 19 and 23 million tons of plastic waste leaks into aquatic ecosystems, polluting lakes, rivers, and seas. According to UNEP, plastic pollution can alter habitats and natural processes and reduce ecosystems' ability to adapt to climate change, thus directly affect millions of people's lives, food security, and social well-being.

The World Bank Treasury has been exploring innovative ways to raise private capital to tackle global development problems such as plastic pollution. Developers of projects that address excess plastic waste often face challenges in raising the necessary financing required to implement their initiatives. This outcome bond solves the timing mismatch between the costs incurred by project developers and the future revenues from the sale of plastic and carbon credits.

## Transaction Objectives

The transaction aims to raise \$14 million for two projects that tackle plastic pollution by securitizing expected future plastic and carbon credits generated by the projects.

The transaction mobilizes international bond investors to both fund the projects and to share in the development outcome risks. This innovative structure allows high grade fixed income investors to take exposure to projects that fight plastic pollution and support the development of a plastic-credit market.



Source: SEArcular by GREENCORE Project

## Projects

The two projects were selected by Plastic Collective, a private company founded to address mismanaged plastic waste, who manages the project's plastic and carbon credit programs.

### ASASE Foundation, Accra (Ghana)

The ASASE project starts small recycling plants as social enterprises in vulnerable communities across Ghana where plastic pollution is most severe. It empowers women entrepreneurs to build their own plastic waste collection businesses as a sustainable source of income and employment. Funding from the bond will be used to finance the expansion of plastic collection and recycling sites operated by the ASASE foundation to increase their processing capacity.

### SEArcular, Surabaya (Indonesia)

The SEArcular project is a plastic waste collection and recycling project that empowers coastal communities by providing training, employment and price premiums for the ocean bound plastic they collect. The project focuses on providing an appropriate end of life for the more difficult to recycle plastic types. Financing from the bond will be used to install a food grade PET1 recycling production line in Surabaya Indonesia.

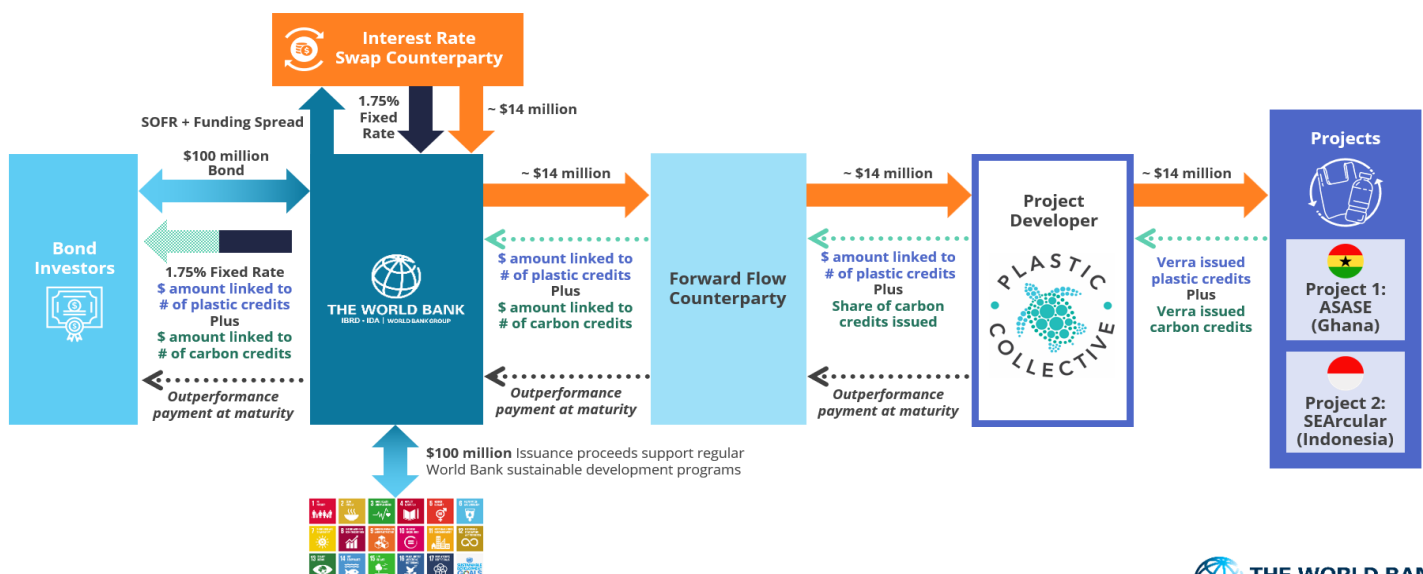
<sup>1</sup> Polyethylene Terephthalate

## Financial Solution

The World Bank issued a seven-year \$100 million, principal protected Plastic Waste Reduction-Linked Bond with 100% of the proceeds used to finance the World Bank's sustainable development projects and activities globally. Bond investors forego a portion of ordinary World Bank coupon payments, which are instead front-loaded and channeled to the two projects through a hedge transaction with Citi. In return, bond investors will receive annual coupons composed of amounts linked to a portion of the plastic and carbon credits generated by the projects plus a smaller than ordinary World Bank fixed rate amount. In addition to the return of principal at maturity, investors may receive an outperformance payment linked to the achieved plastic credit sales prices.

In return for receiving approximately \$14 million up-front financing (from bond investors foregone coupons), Plastic Collective commits to pay Citi a fixed price per plastic credit issued by the projects (based on an agreed number of plastic credits) and to deliver to Citi a portion of the carbon credits issued by the projects. Citi commits to pay the World Bank the plastic credit linked amount received from Plastic Collective plus a fixed price per carbon credit received from Plastic Collective. The maximum potential plastic and carbon credit linked interest amount for investors is approximately \$20 million. In addition, at bond maturity, Plastic Collective commits to make a plastic credit sales price outperformance payment for the benefit of bond investors. The outperformance payment is based on the difference between the average sales price of plastic credits sold by Plastic Collective and the agreed fixed price per plastic credit paid by Plastic Collective.

## Transaction Structure



## Outcome

This transaction mobilized much-needed up-front capital for the two projects and in addition has the potential to promote the growth of carbon and plastic markets.

The bond was issued at par and provides investors with a minimum guaranteed return of 1.75% (the fixed rate). It offers potential yield enhancement compared to regular World Bank bonds of similar maturity if the projects and sales of plastic and carbon credits by Plastic Collective perform as expected.

## Key Terms

<b>Size / Maturity</b>	USD 100 million / 7-year
<b>Issue Price</b>	100%
<b>Specified Denomination</b>	USD 100,000
<b>Redemption Amount</b>	Redemption at Par + Additional Redemption Amount (Outperformance Payment) based on the average price of the plastic credits sold by Plastic Collective.
<b>Issue Date</b>	January 31, 2024
<b>Maturity Date</b>	January 31, 2031
<b>Plastic Credit linked Interest</b>	Linked to the number of plastic credits from the projects, subject to a cap of \$19,468.25 per specified denomination
<b>VCU Linked Interest</b>	Linked to the number of carbon credits from the projects, subject to a cap of \$532.99 per specified denomination