

Frequently Asked Questions

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This document contains frequently asked questions to the Plastics Circularity Investment Tracker.

- I. General Information
- II. Research Database



I. General Information

1. What is the Plastics Circularity Investment Tracker?

The Circulate Initiative's Plastics Circularity Investment Tracker provides insights into private investments in plastics circularity globally. Leveraging deal-level information on private investments between January 1, 2018 and December 31, 2023, the Investment Tracker provides unique insights into the investments channeled to different solutions across the plastics value chain, their scale, and the regions where there is investment activity.

2. What is the objective of the Plastics Circularity Investment Tracker?

The Plastics Circularity Investment Tracker aims to explore the role of finance in tackling the plastic pollution challenge by tracking investments taking place globally, and to move the needle on the scale of private investments in the plastics circular economy.

3. Why did The Circulate Initiative embark on this project?

Investment of private capital in plastics circularity is critically needed to tackle the plastic pollution challenge and to build inclusive, circular economies for plastics. As Circulate Capital identified in its "Financing Plastic Action in Emerging Markets – Addressing Barriers to Investment" report, there are few financial investment vehicles in the recycling and circular economy space, and limited transparency around financial returns; as a result, investors lack a visible pipeline and track record of deals to evaluate opportunities. When reported, the focus is on broader ESG or sustainability themes, without particular attention paid to plastics circularity-related financing. This lack of visibility constrains the flow of capital into addressing the plastic pollution challenge.

The Circulate Initiative's Plastics Circularity Investment Tracker tool and the accompanying document, "The Private Investment Landscape for a Global Circular Economy for Plastics: Insights from the Plastics Circularity Investment Tracker", are one of the first resources of their kind to measure and characterize global investments made to drive a circular economy for plastics.

4. What are the future plans for the Plastics Circularity Investment Tracker?

An annual update of the Plastics Circularity Investment Tracker is planned, with regular updates planned for the data and coverage.

Function

5. Who can use the Plastics Circularity Investment Tracker?

Corporates, banks and financial institutions, entrepreneurs, and investors in the circular economy can leverage the insights derived from the Plastics Circularity Investment Tracker for their investment considerations.

The Plastics Circularity Investment Tracker tool and accompanying document, "<u>The Private Investment Landscape for a Global Circular Economy for Plastics: Insights from the Plastics Circularity Investment Tracker</u>", also provide a baseline understanding of the investment landscape for other stakeholders taking on the plastic pollution challenge.



6. What can I use the Plastics Circularity Investment Tracker for?

The Plastics Circularity Investment Tracker can be used to track the amount of private capital that has been deployed across a range of markets globally and along the plastics value chain. It can also be used to identify trends and opportunities in the plastics circularity space. Data has been compiled on the regions and countries where these investments have taken place, the plastics circularity archetypes receiving investments, and the investment financing sources. The Plastics Circularity Investment Tracker also profiles 24 leading investors in plastics circularity.

7. How do I use the Plastics Circularity Investment Tracker?

On the Plastics Circularity Investment Tracker, users can filter the data by geography, archetypes, and investment categories to reveal previously hard-to-determine insights about private investment activity in plastics circularity. Cross-country comparisons can also be made using the "Compare Countries" function. Users will be able to compare the data of individual countries by total values, archetypes, or by investment categories.

For example, the tool can be used to identify the private equity investments in recycling made in India, Indonesia, and Thailand for the years 2019, 2020, and 2021.

The investor profile module will also allow users to view the profiles of 24 leading investors in plastics circularity. The insights are designed to drive greater investment in the sector, by spotlighting the potential of investing in a circular economy for plastics and offering opportunities to connect potential capital seekers with investors.

8. What are the conditions of use of the tool and the key findings document?

The information in the Plastics Circularity Investment Tracker tool and the accompanying documents is provided for general informational purposes only and should not be construed as professional, investment, financial or other advice.

The investor profiles have been put together based on The Circulate Initiative's research and after consulting multiple databases. Kindly note that not all profiles have been confirmed by the organizations and users are requested to verify the information independently.

9. Can I provide feedback on the Plastics Circularity Investment Tracker?

Yes! We recognize that this is the first attempt to consolidate data on plastics circularity investments globally, and information on some deals may not be published or picked up by the databases due to the confidential nature of the transaction. We invite stakeholders to share their feedback and perspectives on this work to help us improve future versions of the Plastics Circularity Investment Tracker. You can submit your feedback through the link available on the Investment Tracker page.

10. Can I cite data from the Plastics Circularity Investment Tracker?

Yes, please attribute all data citations to "Source: The Circulate Initiative's Plastics Circularity Investment Tracker" and direct audiences back to the website.



II. Research Database

11. Which geographies does the Plastics Circularity Investment Tracker cover?

The Investment Tracker tracks plastics circularity-related private investments globally. Information on deals was recorded in 100 countries and these are included in the Investment Tracker. This consists of 59 emerging markets and 41 high-income economies. Emerging markets are those defined as low-income economies, lower-middle-income economies, and upper-middle-income economies, as identified by the World Bank, with a GNI per capita of less than US\$13,846, and high-income economies are those with a GNI per capita of more than US\$14,005, following the World Bank categorization.

12. When did the deals captured by the Plastics Circularity Investment Tracker occur?

Data provided is for the period January 1, 2018 to December 31, 2023.

13. What are the types of plastics circularity solutions covered by the Plastics Circularity Investment Tracker?

Eight archetypes or solutions were identified as driving a circular economy for plastics. These include: (1) Materials, (2) Redesign, (3) Refill/Reuse, (4) Services (driving plastics circularity or plastic waste management), (5) Operational Platforms enabling plastics circularity, (6) Digital Mapping, (7) Recovery, and (8) Recycling.

Please refer to the <u>Supplementary Material</u> document for definitions of the archetypes.

14. What was the research methodology for collecting the data?

Building on data already included in the Investment Tracker, The Circulate Initiative consulted various databases covering private market investment transactions and filtered data for third-party investments made in plastics circularity solutions for the period of January 2018 to December 2023. Each transaction was reviewed for its relevance and applicability to plastics circularity, with more than 20,000 transactions as the starting point. The information compiled from these databases was cross-checked against publicly available information where possible. In addition, where possible, information was collected and validated in discussions with investors, although this was not a core component of the research approach. Investments were categorized according to investment type and archetypes, and the data was aggregated to generate insights while maintaining the transactions' anonymity.

Transactions included in the Investment Tracker were screened to meet one or more of the following criteria:

- Plastics circularity is a core function of the business operations of the investee company. For example, a company that is involved in producing bioplastics.
- Where plastics circularity is not a core function of the investee company, the investment should be directly attributed to a plastics circularity-linked purpose. For example, an investment in a fast-moving consumer goods company for the collection of polyethylene terephthalate (PET) bottles for recycling.
- The use of proceeds of the investment fall within one of the eight solution archetypes tackling the plastic pollution challenge defined above.



For companies where plastics circularity is not the core function, we conducted additional reviews of the company's business and the relevant transaction to ascertain suitability for inclusion in the Investment Tracker. Details of reviews undertaken for various sectors are available in question no. 16 of this document.

The following additional considerations apply to debt financing, including loans, sustainability-linked bonds, green bonds, and blue bonds:

- Loans, syndicated or otherwise, for which information is not available in the public domain or through the databases accessed are excluded.
- Sustainability-linked bonds:
 - Issued by plastics circularity-focused companies are included in their entirety.
 - Issued by other companies are excluded. Proceeds from sustainability-linked bonds are intended to be used for general purposes and information on the exact quantum of money applied to plastics circularity is typically unavailable. For example, a US\$ 100 million sustainability-linked bond issued by a fast-moving consumer goods company is excluded even if one of the key performance indicators relates to recycling.
- Use of proceeds bonds (e.g., green bonds, blue bonds, sustainability bonds):
 - Issued by plastics circularity-focused companies are included in their entirety.
 - Issued by other companies, and where a part of the use of proceeds is allocated for plastics circularity, are included as the use of proceeds for these bonds are more specific. For these transactions, the total quantum of the investment is divided into equal proportions among the various use of proceeds indicated by the issuer. For example, US\$ 25 million is included in the year of issue from a US\$ 100 million green bond issued by a fast-moving consumer goods company that has reported four types of use of proceeds, one of which relates to recycling.

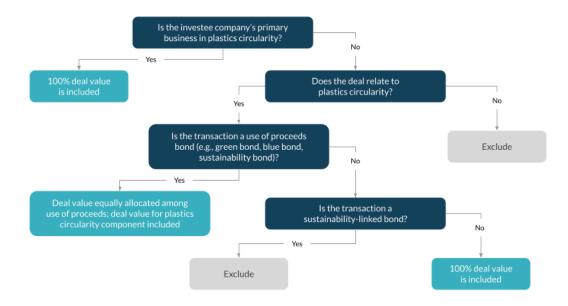
The Investment Tracker excluded the following data:

- Public funding; e.g., local government investment in waste management services.
- Paycheck Protection Program in the US: a loan backed by the U.S. Small Business Administration, provided to small businesses during the Covid-19 pandemic.
- Transactions involving spin-off, debt conversion, debt repayment, internal company projects, sale-leaseback facility, and share repurchase.
- Investments in alternative materials if the products were not primarily intended to replace plastics; e.g., investments in firms producing glass bottles for alcoholic beverages without the intention of replacing plastic.
- Deals where the investee's primary business is not in plastics circularity or instances where the amount of financing received for such purposes was unavailable.
- General debt transactions for which information was unavailable in the public domain or through the databases accessed for the study.



- Money collected in a pool of funds or bonds raised in a collective manner by development finance institutions, where allocation of funds to specific companies is unavailable.
- Proceeds from the purchase or sale of plastic credits.

Figure 1: Decision Tree for Screening Plastics Circularity Deals and Deal Value



15. Why is there a difference between the deal values and deal counts for the historic period between editions?

We make every effort to ensure that the latest data is available and included in each update of the Investment Tracker. However, information on deals may become available after our publication dates. As access to data sources and reporting transparency improves, we expect these occurrences to become minimal.

16. What are the data exclusions?

To provide comprehensive and accurate coverage of plastics circularity deals, the following data were excluded from the Investment Tracker:

- Public funding; e.g., local government investment in waste management services.
- Paycheck Protection Program in the US: a loan backed by the U.S. Small Business Administration, provided to small businesses during the Covid-19 pandemic.



- Transactions involving spin-off, debt conversion, debt repayment, internal company projects, sale-leaseback facility, and share repurchase.
- Investments in alternative materials if the products were not primarily intended to replace plastics; e.g., investments in firms producing glass bottles for alcoholic beverages without the intention of replacing plastic.
- Deals where the investee's primary business is not in plastics circularity or instances where the amount of financing received for such purposes was unavailable.
- General debt transactions for which information was unavailable in the public domain or through the databases accessed for the study.
- Money collected in a pool of funds or bonds raised in a collective manner by development finance institutions, where allocation of funds to specific companies is unavailable.
- Proceeds from the purchase or sale of plastic credits.

17. Are there cases where there is a lack of clarity on whether the company and/or deal should be included? How are they considered in the database?

There are a few types of companies and transactions where there is a lack of clarity around whether their operations do in fact contribute to plastics circularity. We have compiled a list of these cases below, along with our guidance on whether to include them or not. Companies are grouped according to: (i) whether their operations are waste-related, (ii) whether the product has a plastics circularity-related component, and (iii) if they are refill programs, (iv) recycling companies, and/or (v) online/digital platforms.

Company's Operations	Inclusion in Database
Waste-related	
Conventional plastic company producing plastic products, where the primary business is not related to recycling	To include if there is a reference to producing or using recycled content on their website or from other sources.
Conventional plastic company that does not use recycled components, but participates in waste management programs (e.g., cleanup initiative, local waste management program)	To exclude, as this most likely relates to corporate social responsibility (CSR).
Waste-to-Energy companies	To exclude, as plastic waste is incinerated and there is no element of plastics circularity.
Plastic waste converted to fuel	To exclude, unless there is clear reference to the fuel being used for the production of plastic.



Company's Operations	Inclusion in Database
Waste management companies in general	To include if they explicitly state waste collection or material recovery for the purposes of recycling. To exclude where the collection is only intended for disposal. If they do explicitly state a recycling purpose but plastic is not listed among the materials collected or sorted (e.g., if they only collect metals), the company is excluded.
Products with plastics circularity-related components	
Companies that produce products where the main product is not made from plastic, but uses recycled plastic as packaging (e.g., skincare packaged in recyclable plastic)	To exclude, as their primary business is not in plastics circularity and it is not clear how the investment will be used.
Solar panel/roof that uses recyclable plastic	To exclude, as this is an application of recycled material and plastic is not the most important part of the product.
Sale or rental of waste containers/bins	To exclude, considering their minimal role in contributing to plastics circularity.
Refill programs	
Refillable glass/aluminum bottle program	To include if it is explicitly mentioned that the material is used to replace plastic.
Recycling companies	
Product is designed to contribute to easier recycling of the plastic component at the end of life	To include only if the primary business of the organization is to drive a circular economy for plastics.
Clothing/textile recycling	To include if the material is made of polyester, nylon or acrylic. To exclude if this is not specified.



Company's Operations	Inclusion in Database	
Tire recycling	Transactions involving the circularity of tires are guided by the End-of-Life Tire (ELT) Management Toolkit published by the World Business Council for Sustainable Development. Companies and transactions that involve reuse, recycling, and other material recovery as their recovery route hierarchy are included. Companies and transactions that involve other waste and recovery route hierarchies, such as recovery hybrid, energy recovery, and disposal are excluded.	
Online/digital platforms		
Online marketplace that lets people sell their second-hand materials	To exclude, as it does not necessarily increase plastics circularity; investments in these platforms are likely purely to grow the business.	
Digital hub promoting circularity	To include if there is a plastics focus.	
Engineering consulting services	To exclude, as the focus is on businesses that play a more direct role in driving plastics circularity.	
Environmental services	To include if there is a reference to providing services specifically for plastics circularity.	

18. How are the investments in the Plastics Circularity Investment Tracker categorized?

The Plastics Circularity Investment Tracker reports on the total value of private, third-party investment deals. Investment categories include: (1) Accelerator/Incubator Investments, (2) Corporate Investments, (3) Financing by Banks, (4) Individual/Crowdfunding/Philanthropic Investments, (5) Private Equity, (6) Initial Public Offering (IPO), and (7) Venture Capital. There are a few deals for which deal type information is unavailable and which have been categorized accordingly.

Please refer to the <u>Supplementary Material</u> document for definitions of the investment categories.

19. How were the investors in the Investment Tracker selected for profiling?

The Plastics Circularity Investment Tracker profiles 24 leading investors in plastics circularity. The centrality of plastics circularity to their overall investments was the primary criterion for selection of these investors for profiling. While information on the exact quantum of investment or of the assets under management was not always available, company documents, publicly available materials, and conversations with various stakeholders provided useful guidance to evaluate the relative importance of plastics circularity to each investor's operations.

The value of investments and the number of deals were considered when shortlisting investors. However, it must be



noted that the investors profiled are not necessarily those who have invested the largest amounts or made the most deals. Several other considerations, such as having a variety of investors (corporates, venture capital providers, non-profits, etc.), including providers of different types of capital (equity and debt), and the spread of investors across different geographies, were all considered when selecting the investors to be profiled.

20. What are the limitations of the Plastics Circularity Investment Tracker?

The following limitations apply when utilizing the Plastics Circularity Investment Tracker:

- The database is composed entirely of private transactions reported in verified databases, the public domain, and through The Circulate Initiative's own research. For confidentiality reasons, details of certain deals may not be accessible and are not incorporated in the tool.
- Deals with an undisclosed deal value are included in the deal count but excluded from deal value calculations.
 An estimated 43% of recorded transactions did not have available deal value information.

While the Plastics Circularity Investment Tracker is not intended to be exhaustive in its coverage of all plastics circularity transactions, it provides a starting point for investors seeking a better understanding of private capital flow and opportunities within the sector.

21. How are the emerging markets and high-income economies classified?

From the <u>World Bank's classification of countries</u>, emerging economies considered for the purpose of the Investment Tracker include the countries categorized as "Low-income economies", "Lower-middle-income economies" and "Upper-middle-income economies" as described in the table below.

Group	Gross National Income Per Capita	Example Countries
Low-income economies	≤US\$1,145	Afghanistan, Burundi, Yemen
Lower-middle-income economies	US\$1,146-US\$4,515	India, Kenya, Viet Nam
Upper-middle-income economies	US\$4,516-US\$14,005	Argentina, Brazil, China, Malaysia, Thailand, South Africa
High-income economies	>US\$14,005	Australia, Chile, Germany, Netherlands, UK, USA

22. Which databases were consulted for the study?

We consulted the following databases: Crunchbase, Environmental Finance, Net Zero Insights, PitchBook Data Inc.*, and Tracxn.

*Data has not been reviewed by PitchBook analysts.