

# **Collective intelligence: Value chain collaboration and progress in plastic circularity**

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August 2023

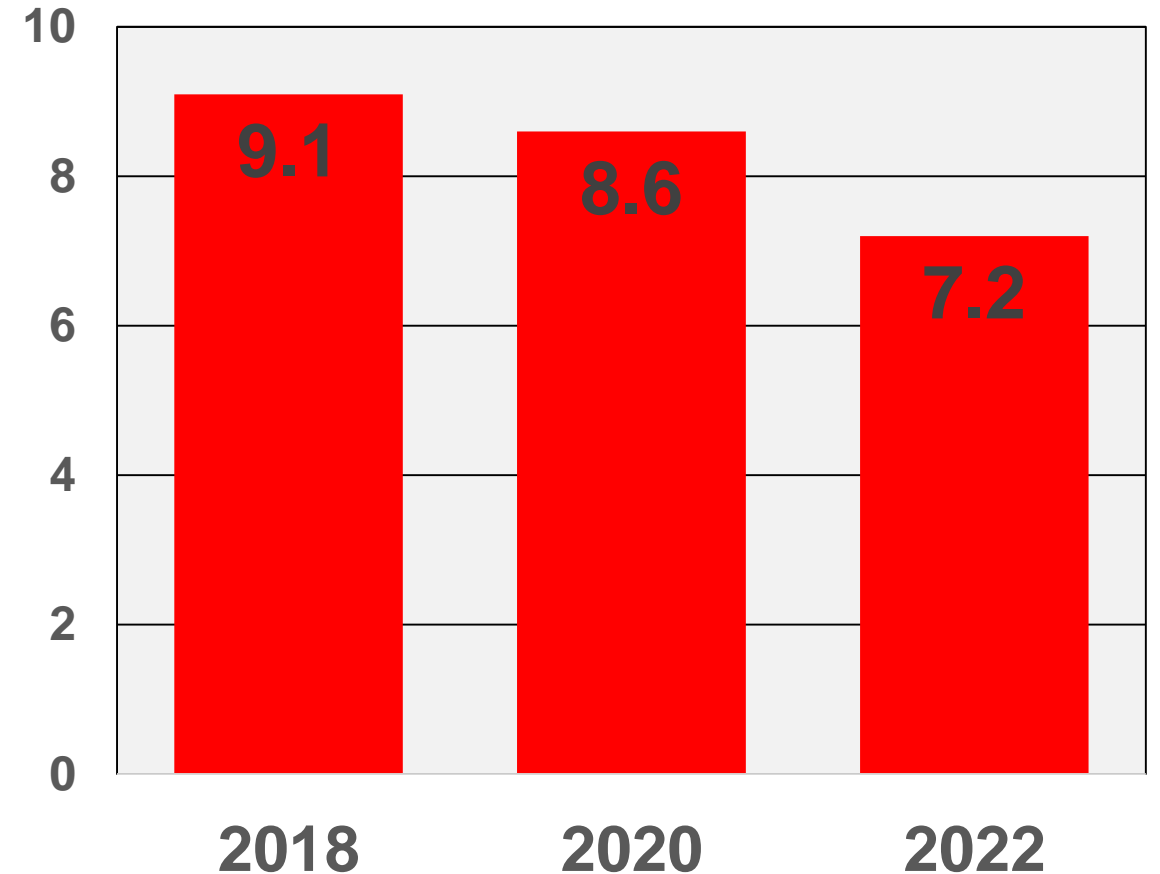
Esha Sar, Alliance to End Plastic Waste

# The world faces a circularity challenge

In 2022, the global economy consumed 100 billion tonnes of materials

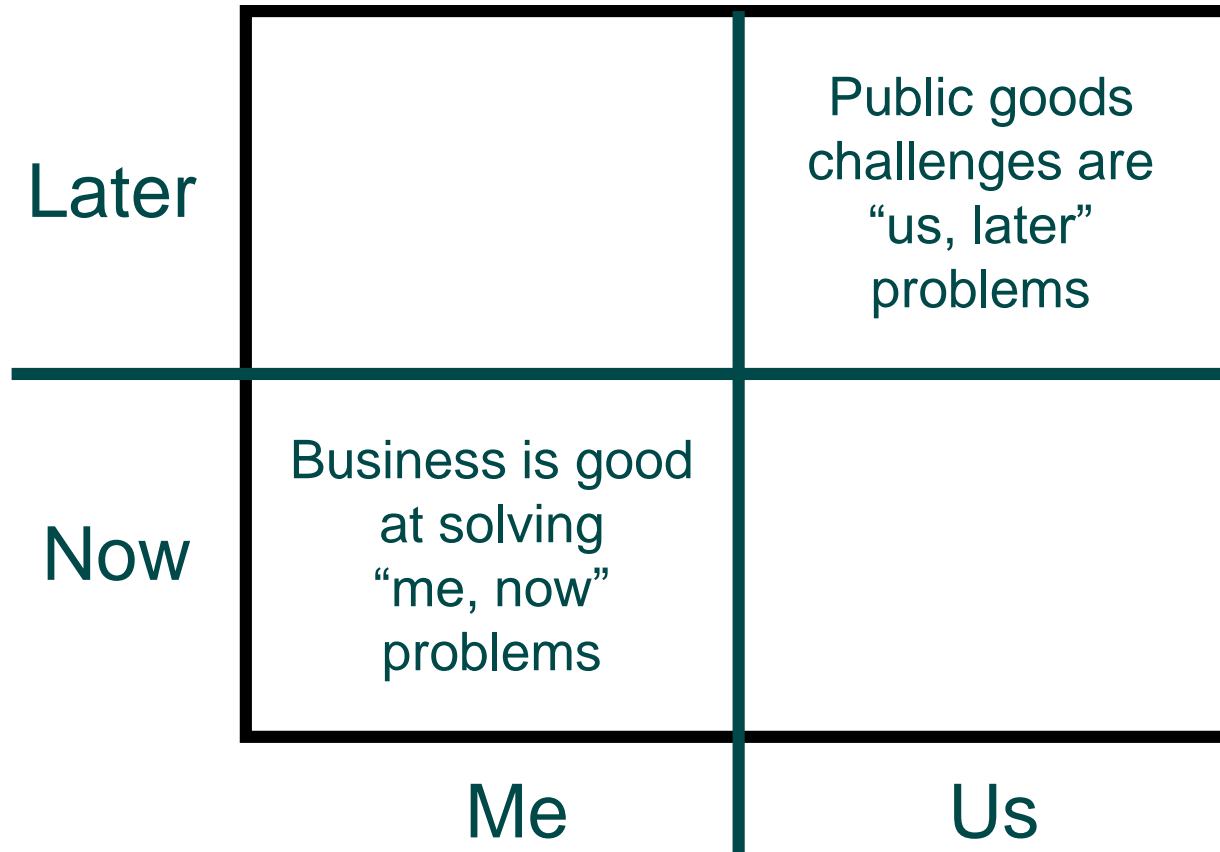
In the past six years, we have consumed more materials than in the entire 20<sup>th</sup> century

## Share of the global economy that is “circular”



*\*Circular materials come from a secondary rather than a primary source*  
Source: Circularity Gap Report 2023

# Quite rare for business to take the lead in addressing “public goods” challenges



# Plastic waste is both a public goods challenge, and an economic opportunity

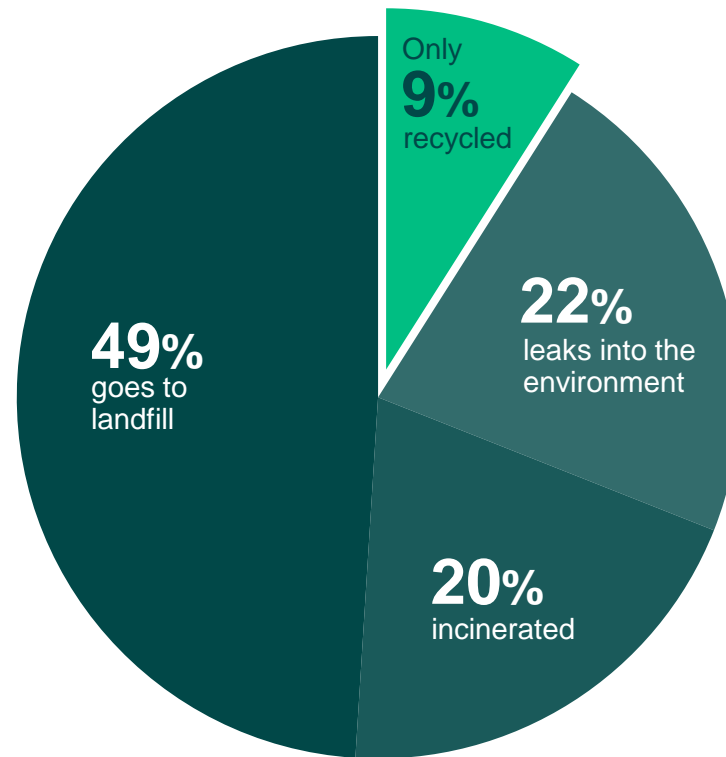


## Environmental challenge

Today, the world produces  
**400 million**  
tons of plastic a year

**Double**  
by 2040

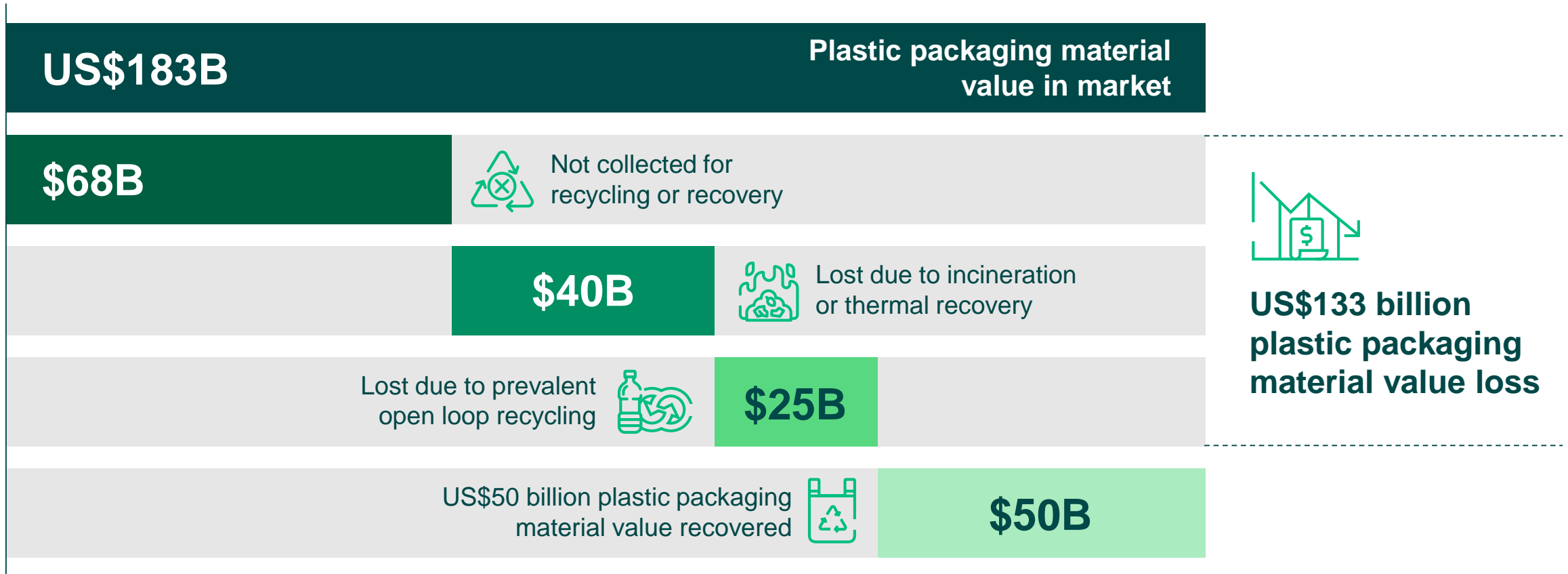
**3 billion**  
people lack access  
to formal waste  
collection systems



## Economic opportunity

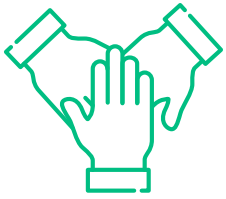
**120**  
billion USD

# Continuing BAU, there will be a plastic packaging material value loss of US\$133 billion by 2030 in India



Source: Accenture

# The Alliance was founded to drive collective intelligence and collective action to solve the plastic waste challenge

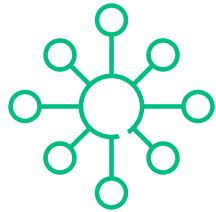


**January 2019**

Founded by

**27**

visionary CEOs



**January 2023**

**77**

member companies



**A community  
of action**

Investing significant capital to demonstrate and de-risk solutions for a circular economy

# The Alliance is a “Do tank” – we focus on Action

We invest  
**real  
money**  
into real projects

We have raised  
**US\$1.2  
billion**

We have funded over  
50 projects

## Geography

## Project capital allocation

Asia Pacific

~60%

Europe

~10%

North America

~10%

South America

~5-10%

Africa & Middle East

~10-15%



# By creating collective intelligence across the plastic value chain

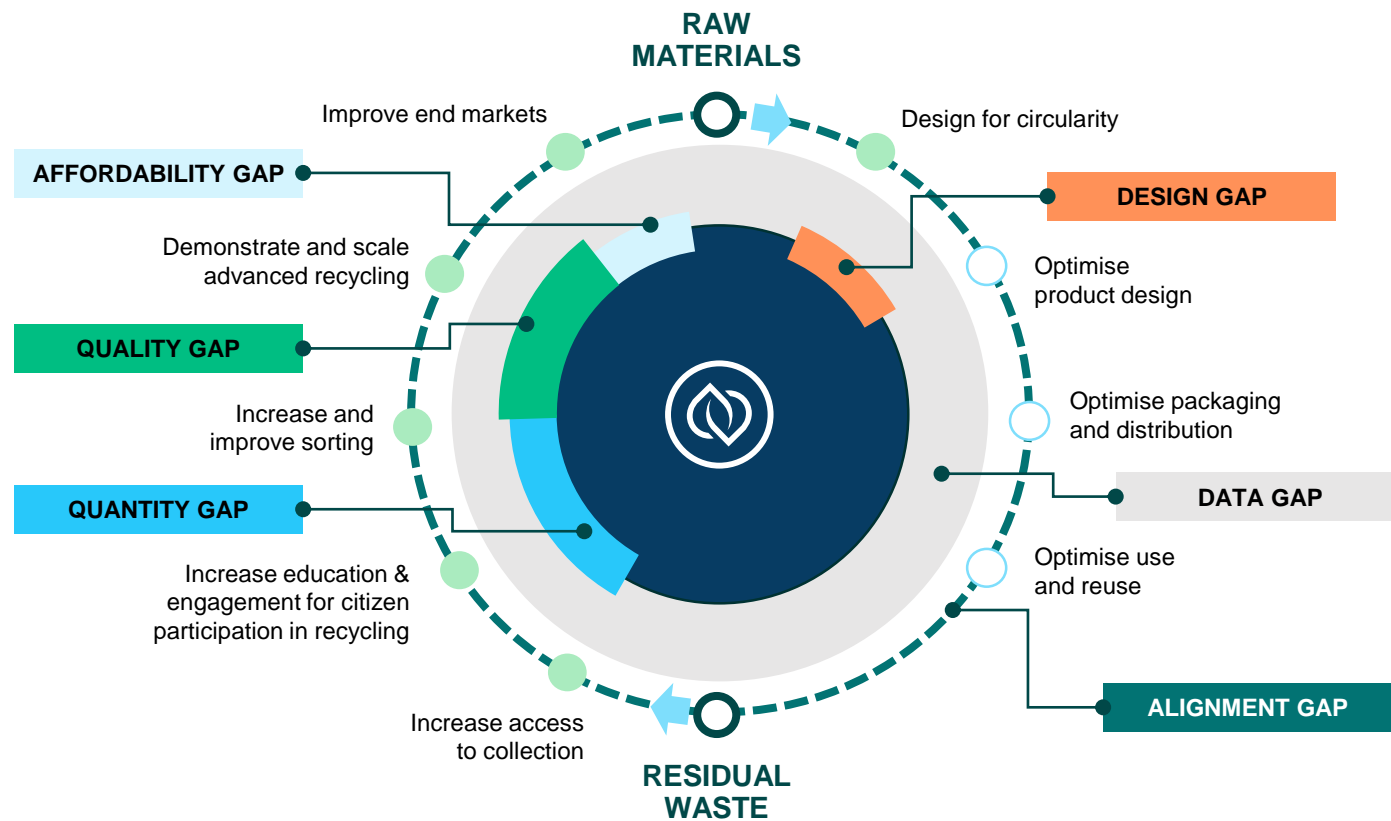


**Supporters**





# Our approach to projects is centred around the Circularity Gaps



## Project Selection

- Every project must address one or more “Circularity Gaps”
- “Flagship Projects”: big impact at national scale
- “Solution Building Blocks”: proving new ideas

## Development and Management

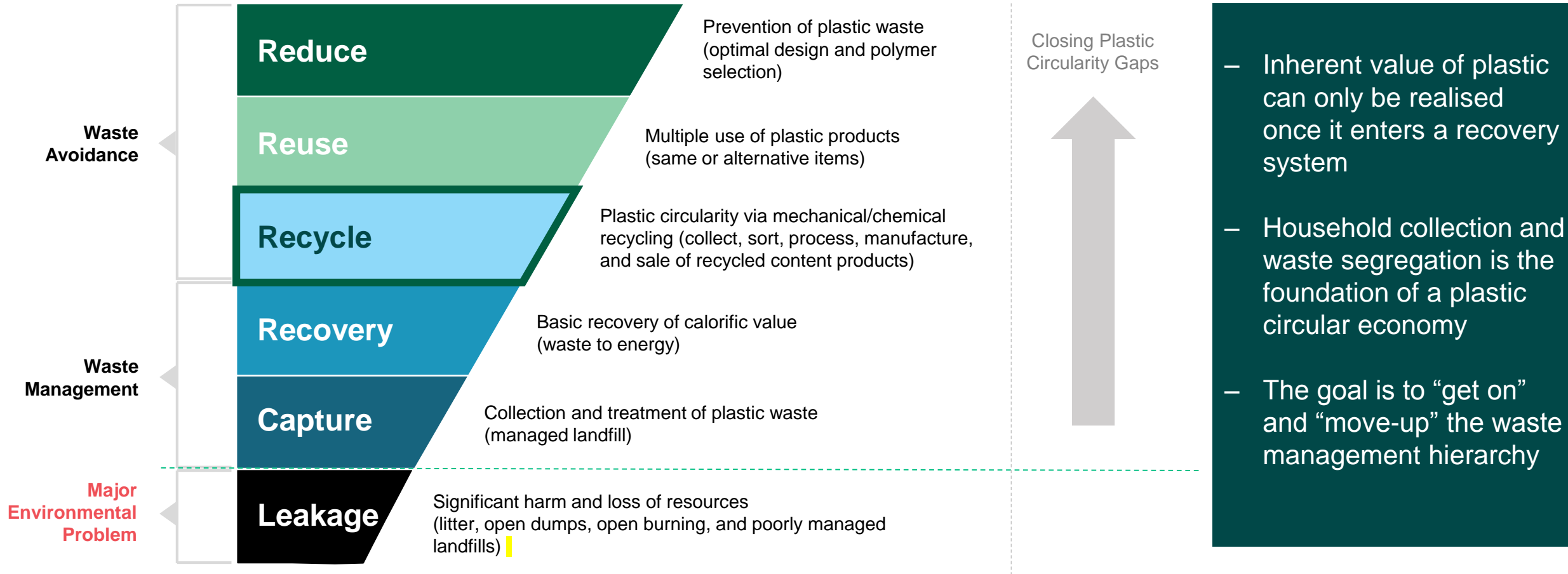
- We develop our own projects
- And we fund third-party projects

## Finance

- The Alliance is not-for-profit
- We fund projects via a mix of grants and loans
- We fund capex not opex – projects must be economically self-sustaining
- We aim to catalyse \$4 from other funders for every \$1 we provide

# A circular economy of plastic must start with collection

Addressing the challenge of plastic waste is dependent on capture and segregation



# City pilots for integrated waste management in India

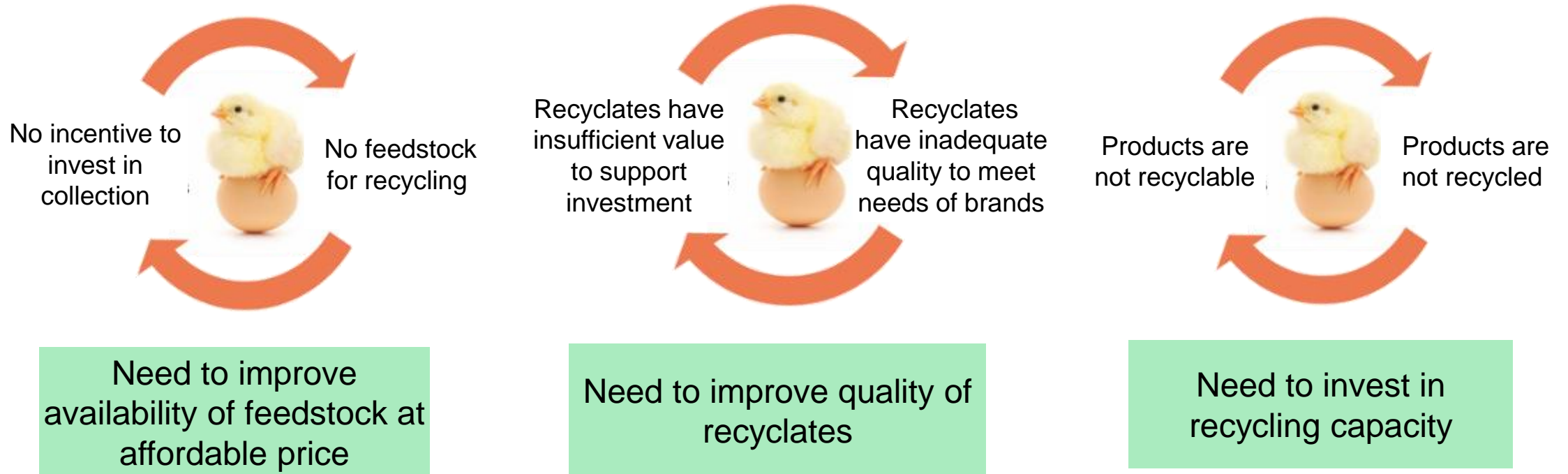
Funding a pilot project that aims to reduce the amount of plastic waste entering the Ganges river

- Demonstrating best practices in the holy cities of Rishikesh and Haridwar:
  - Improving knowledge and resources of municipalities
  - Implementation of source segregation
  - Efficient door to door waste collection
  - Formal inclusion of waste workers in waste economy
  - Enhancement of waste infrastructure through construction of one MRF in Haridwar
  - Create opportunities for local businesses in plastic waste management and recycling



# AVIRAL with GIZ

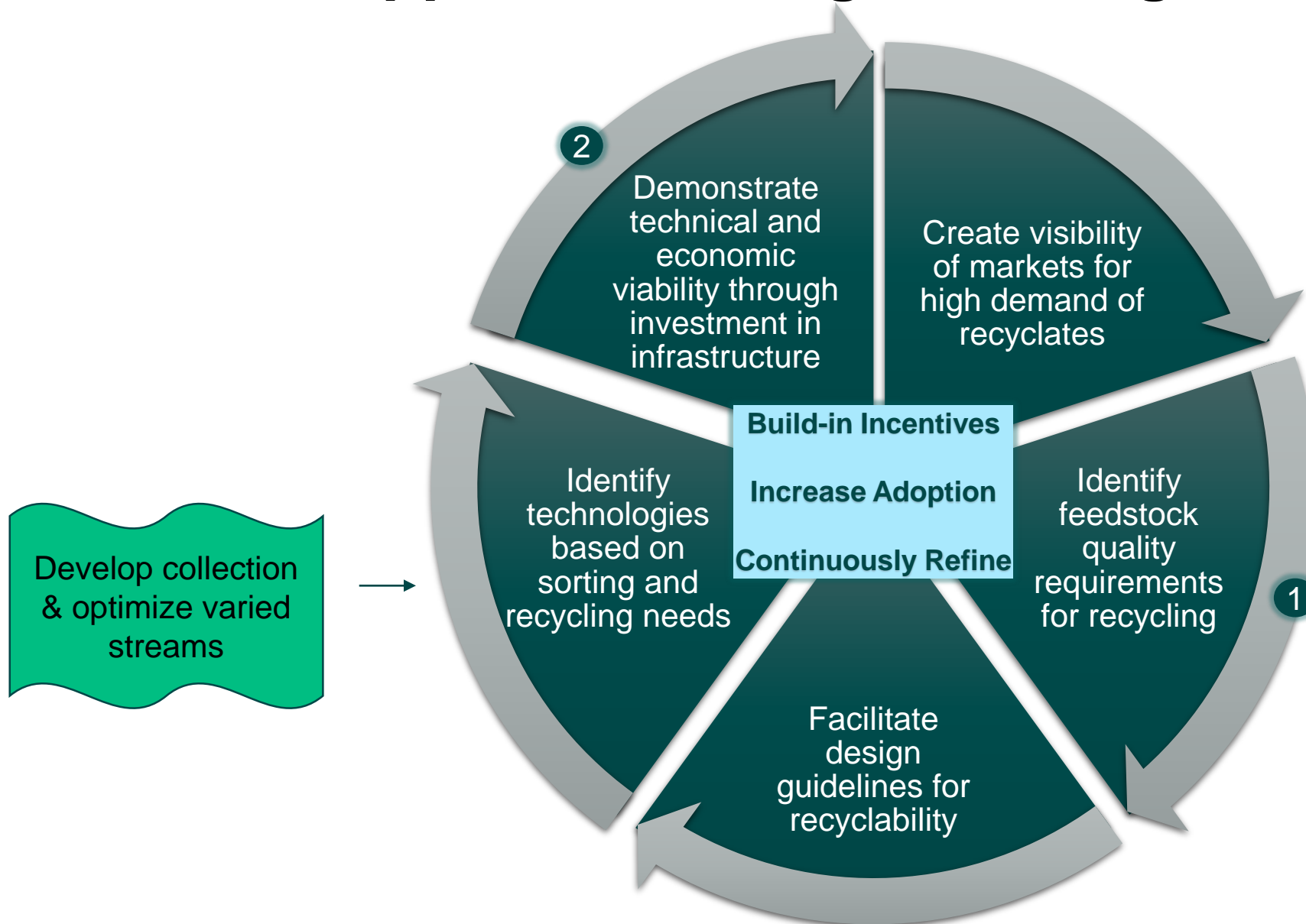
# Unlocking feedstock for recycling faces multiple chicken & egg situations



There is need for economic incentives and broad collaboration across stakeholders

But, where is the trigger point to break this vicious cycle?

# Alliance's approach through creating a value chain pull



*Define, Demonstrate, Adopt*

# 1 Definition and industry alignment on Quality of Recyclates

Mechanical and Chemical recycling

## Quality of Mechanical Recyclates Guidelines for Packaging

Published July 2023



## Feedstock quality guidelines for Pyrolysis Published 2022



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# Demonstrate first-commercial implementation examples of viable technologies to address sorting & recycling needs

## Holy Grail 2.0 – digitalization of packaging



## ValueFlex - produce high-quality recycled flexibles (PE&PP) from household flexibles waste



# Project example: Waste sorting with digital watermarks



## Phase 1

Developing the technology in a lab setting to show it works in principle



## Phase 2

Proving technical performance and commercial viability in an industrial setting with a \$6m grant from the Alliance



## Phase 3

Taking the technology to nationwide deployment in a European country





**ALLIANCE  
TO END  
PLASTIC  
WASTE** 

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