



Plastic Credit: Innovative Financing for Circular Solutions



Vigil Yangjinqi Yu

Senior Program Officer,
Plastic Policy and Markets
Verra

Agenda

- Introduction to Verra's Plastic Program
- The Role of Plastic Credits
 - In the voluntary market
 - Under the potential Global Plastic Treaty
 - To complement EPR (especially for ASEAN governments)



Non-profit organization
founded in 2007

Registered nonprofit organization
under Section 501(c)(3) of the U.S.
Internal Revenue Code

Headquartered in Washington, DC
(with a global staff presence)



Verified Carbon
Standard



Plastic Waste
Reduction Standard



Climate, Community
& Biodiversity Standards



Sustainable Development
Verified Impact Standard

KEY STRENGTHS

Convening a diverse range of stakeholders,
developing workable frameworks to drive finance
to high-performing projects/policies/actions

Project experience
> 2,400 registered projects worldwide

Overview of Verra's Plastic Program



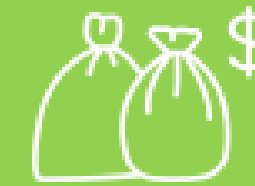
Plastic Waste Reduction Standard

The Plastic Standard and its supporting methodologies provide a uniform framework for measuring and monitoring project impacts, and incorporate social and environmental safeguards.

Plastic Credits

Plastic Credits are issued to third party audited projects certified with Verra's Plastic Program.

1 Plastic Credit
=
1 tonne of additional plastic waste
*collected from nature
and/or recycled*



Waste Collection Credits (WCC)

Issued based on the amount of plastic waste **collected and appropriately managed above what would have happened** in the absence of a Plastic Program project



Waste Recycling Credits (WRCs)

Issued based on the amount of plastic waste **recycled above what would have happened** in the absence of a Plastic Program project

How Does Verra's Plastic Program Catalyze and Scale Plastic Waste Collection and Recycling?

Credible investment scales the impact of plastic waste collection and recycling projects.

Businesses purchase Plastic Credits to make **credible investments** in plastic waste management.

Verra certification gives businesses confidence that they are contributing to verifiable and traceable collection and recycling outcomes.

Verra sets the standard for **collection and recycling projects**.

Projects certified with Verra's Plastic Program reduce the amount of plastic waste that ends up in nature, remediate legacy waste, develop collection and recycling infrastructure, and support dignified livelihoods.

Compliance with Plastic Program requirements is assessed via third-party auditors.

Accredited auditors assess compliance with Verra's Plastic Program requirements and verify collection/recycling outcomes.

Verra issues **Plastic Credits**, which are transparently displayed on the Verra Registry.

Verra reviews the project documents, audits reports, and issues one Plastic Credit for each tonne collected/recycled above baseline rates.



Plastic Program Projects at a Glance

Program
Launched In

Feb
2021

Total Listed
Projects

60+

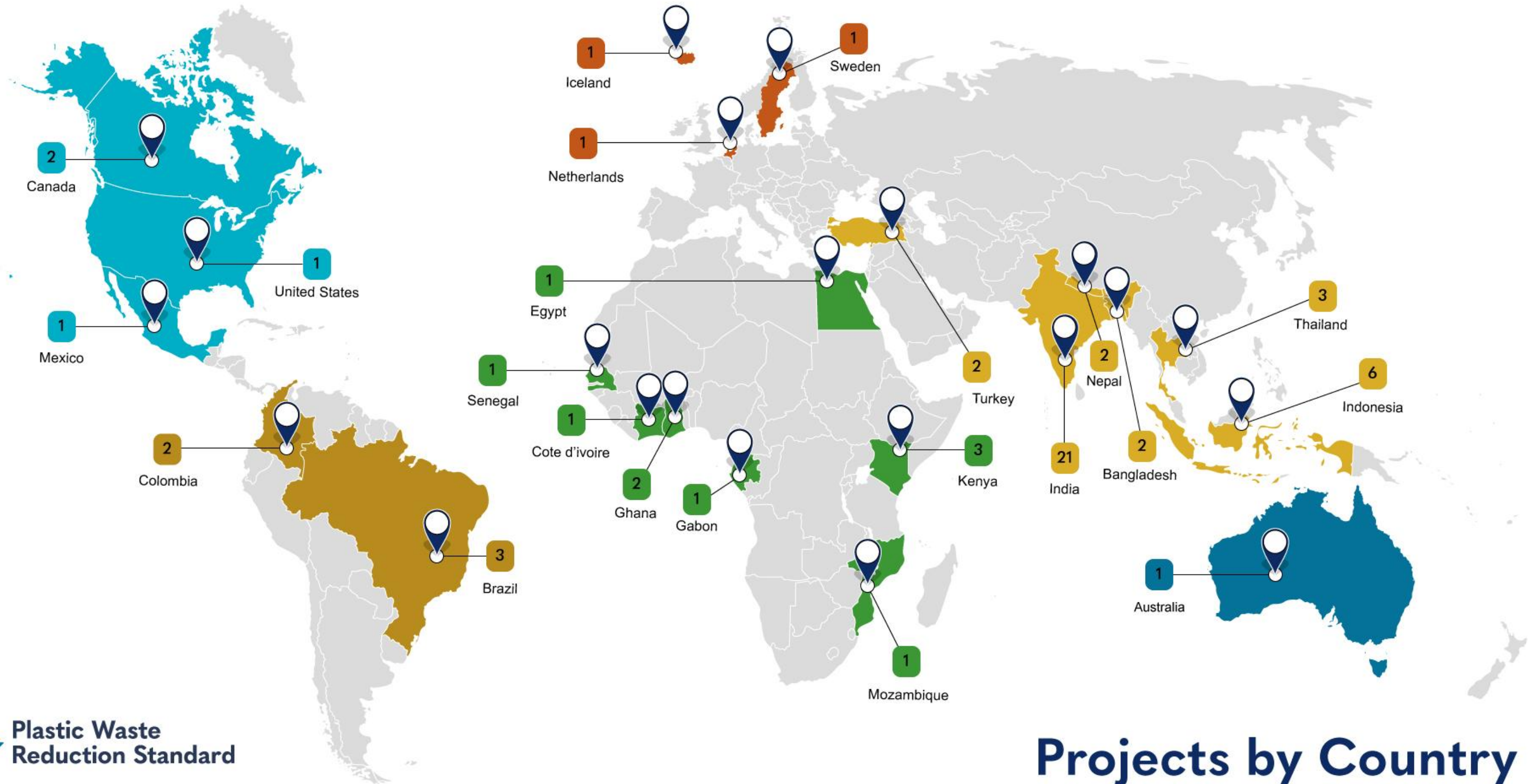
Total
Registered
Projects

32

Data as of
Jul 29th 2025



Plastic Waste
Reduction Standard



Projects by Country

Plastic Program Projects at a Glance

Program Launched In	Feb 2021
Total Listed Projects	60+
Total Registered Projects	32

10 Projects are
in ASEAN
7 of them have
registered

Data as of
Jul 29th 2025



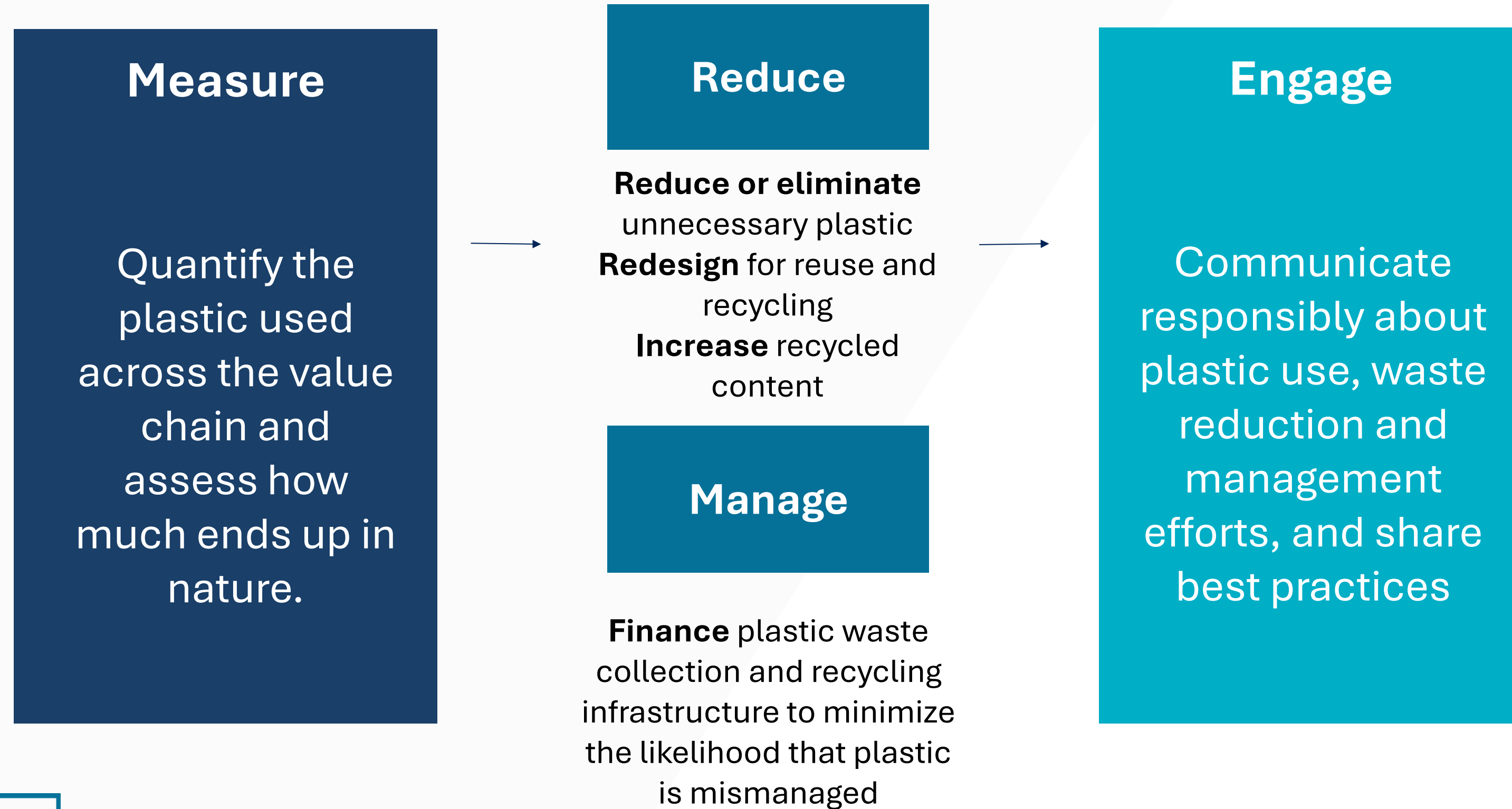
Projects by Country



Plastic Credits In the voluntary market

Photo : Secondlife Thailand.

Integrated Approach to Corporate Plastic Stewardship



Outcome Based Bond

World Bank's recently announced Plastic Waste Reduction Linked Bond will Leverage Verra's Plastic Credits to provide returns to its investors

- 7-year, \$100 million
- Two projects in Verra's Plastic Program are recipients of this funding and are expected to generate Plastic Credits

Credibility of Verra's Plastic Program and robustness of its requirements provides confidence to a broad range of investors to support plastic waste management projects in their key regions



World Bank unveils groundbreaking \$100M bond

(DGB Group)

World Bank and Citi launch \$100mn plastic credits bond

(FINANCIAL TIMES)

Tackling the Plastics Pollution Crisis by Channeling Private Capital to Projects that Reduce Plastic Waste

World Bank's New Outcome Bond Helps Communities Remove and Recycle Plastic Waste

(World Bank)

World Bank Sustainable Development Bond Addresses Plastics in Oceans

(SDG KNOWLEDGE HUB)



Verra Projects in the Outcome Based Bond



Community-based Collection and Recycling Project (ID [3964](#))

- Located in Ghana, the project establishes small recycling plants as social enterprises in communities where plastic pollution is most severe
- Empowers women entrepreneurs to build their own plastic waste collection businesses as a sustainable source of income
- Has collected 2297 tonnes of plastic waste and recycled 594 tonnes of plastic waste during its first monitoring period



SEArcular Indonesia Collection and Recycling Project (ID [4805](#))

- located in Indonesia, the project empowers coastal communities by providing training and employment and offers price premiums for the ocean-bound plastic they collect and recycle.
- The project has collected 1399 tonnes and recycled 818 tonnes of plastic waste during its first monitoring period



Prospective mandatory market for Plastic Credits

- Under the potential Global Plastic Treaty
- Complement EPR (especially for ASEAN governments)

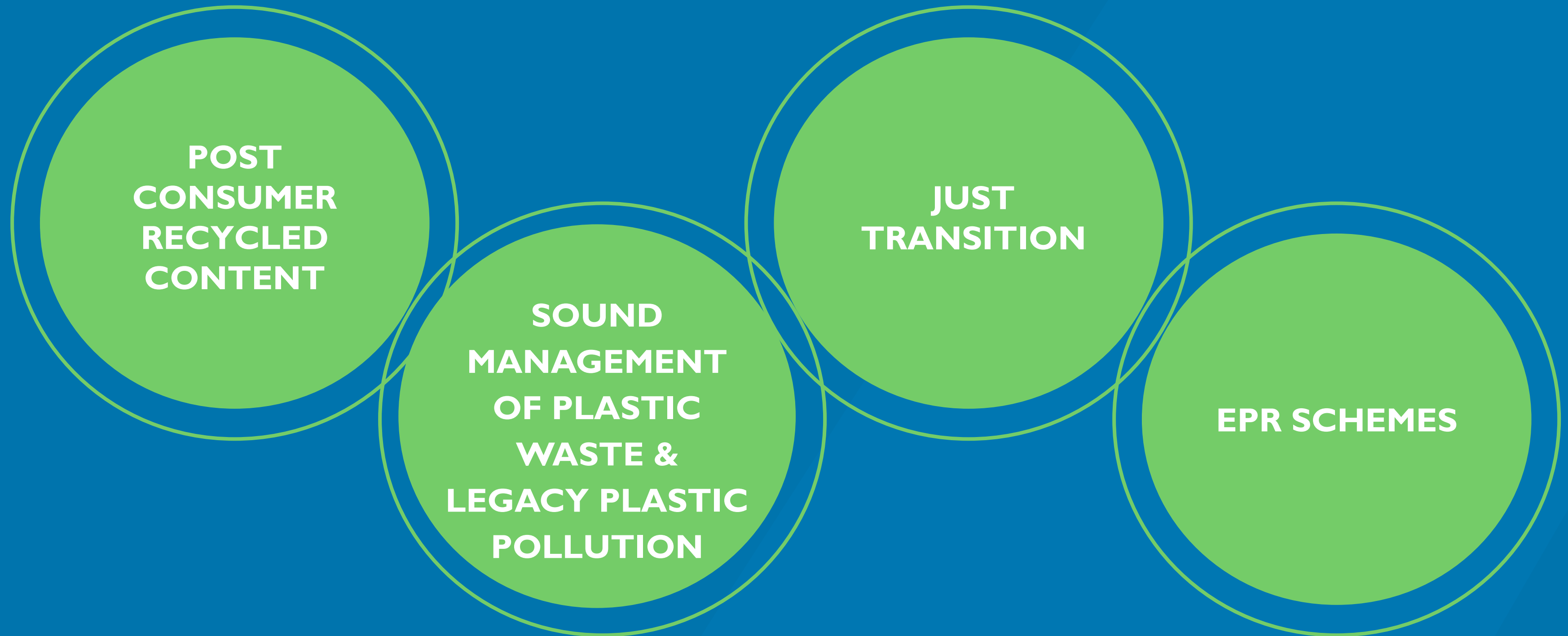
\$5,400,000,000,000

Funding Required to Make the World Circular by 2040*

*Public, private and innovative finance are all needed to implement the ILBI.

Public Finance	National, Sub-national and Local Government Allocations	Private Finance	Corporate Social Responsibility (CSR)	Innovative Finance Sources	Plastic Credits
	Public agencies and funds		Institutional investors and Commercial banks		Plastic Bond
	Development Finance Institutions, Aid Agencies		Philanthropic and Corporate foundations		Blue Bonds and Green Bonds
	Multilateral Environmental Funds	Public-Private Partnerships (PPP) & Other innovative financing sources	Blended Finance		Sovereign Sustainable Development Goals (SDGs) Bond
			Social Impact Bonds		Extended Producer Responsibility (EPR)
					Concessional finance
					Blended finance
					Plastic pollution fees and Environmental levies
					Subsidy redirection

Plastic Credits Can Support Possible Core Obligations of the ILBI



Benchmarking and Harmonized Impact Reporting

EPR Landscape and Challenges for Implementation for the Emerging Markets

OECD describes EPR as “a group of economic instruments that raise revenues and set incentives for the collection and recovery of material at the post-consumer stage of the product lifecycle”

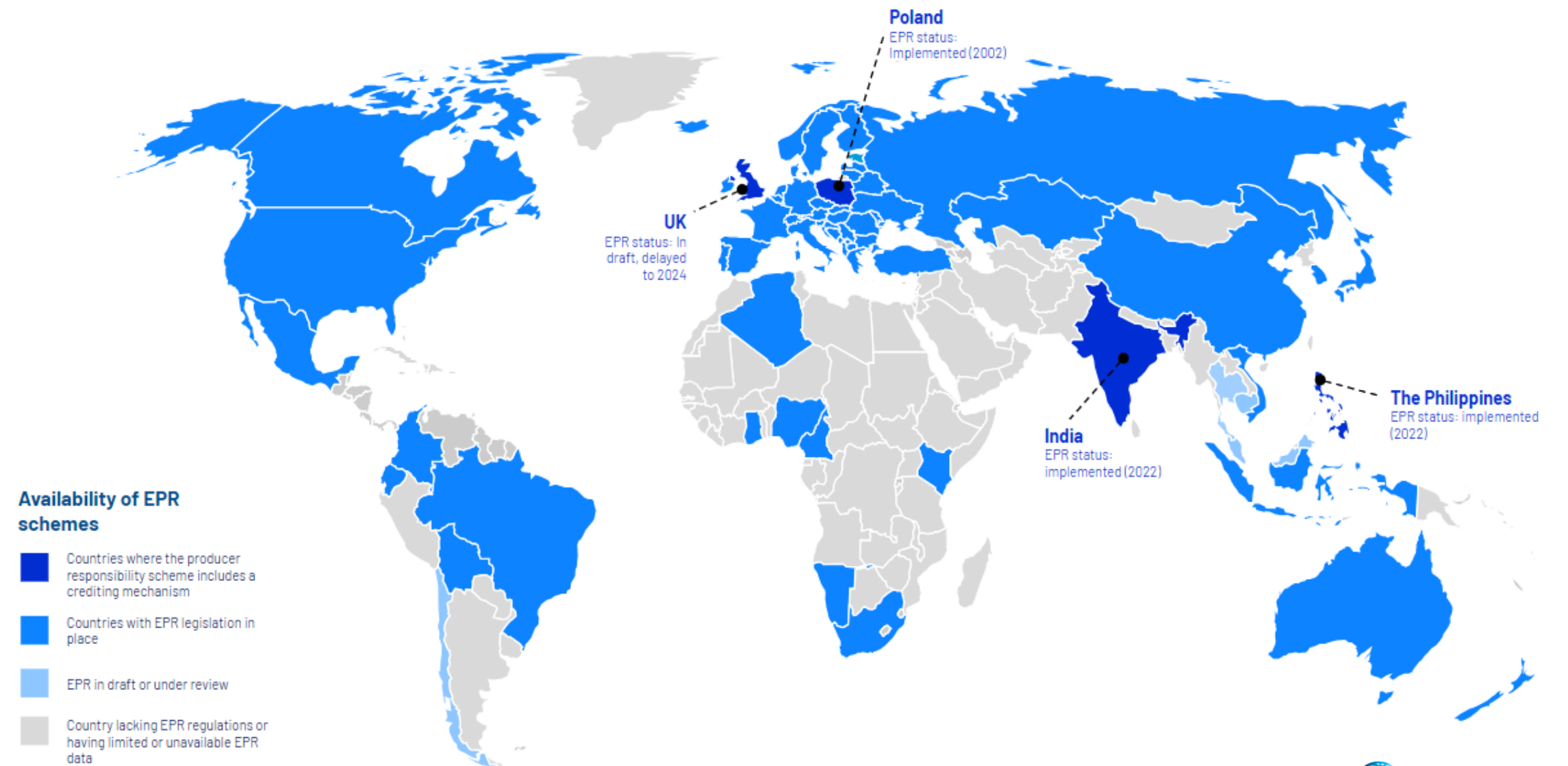
International policy makers are currently exploring implementation of EPR as a necessary means to provide **dedicated, ongoing, and sufficient financing for sustainable waste management.**

UNDER-
DEVELOPED
WASTE SECTOR

LIMITED REGULATORY
AND ADMINISTRATIVE
CAPACITY

FUNDING DEFICIT
FOR
INFRASTRUCTURE

NOT INCLUSIVE OF
THE INFORMAL
SECTOR

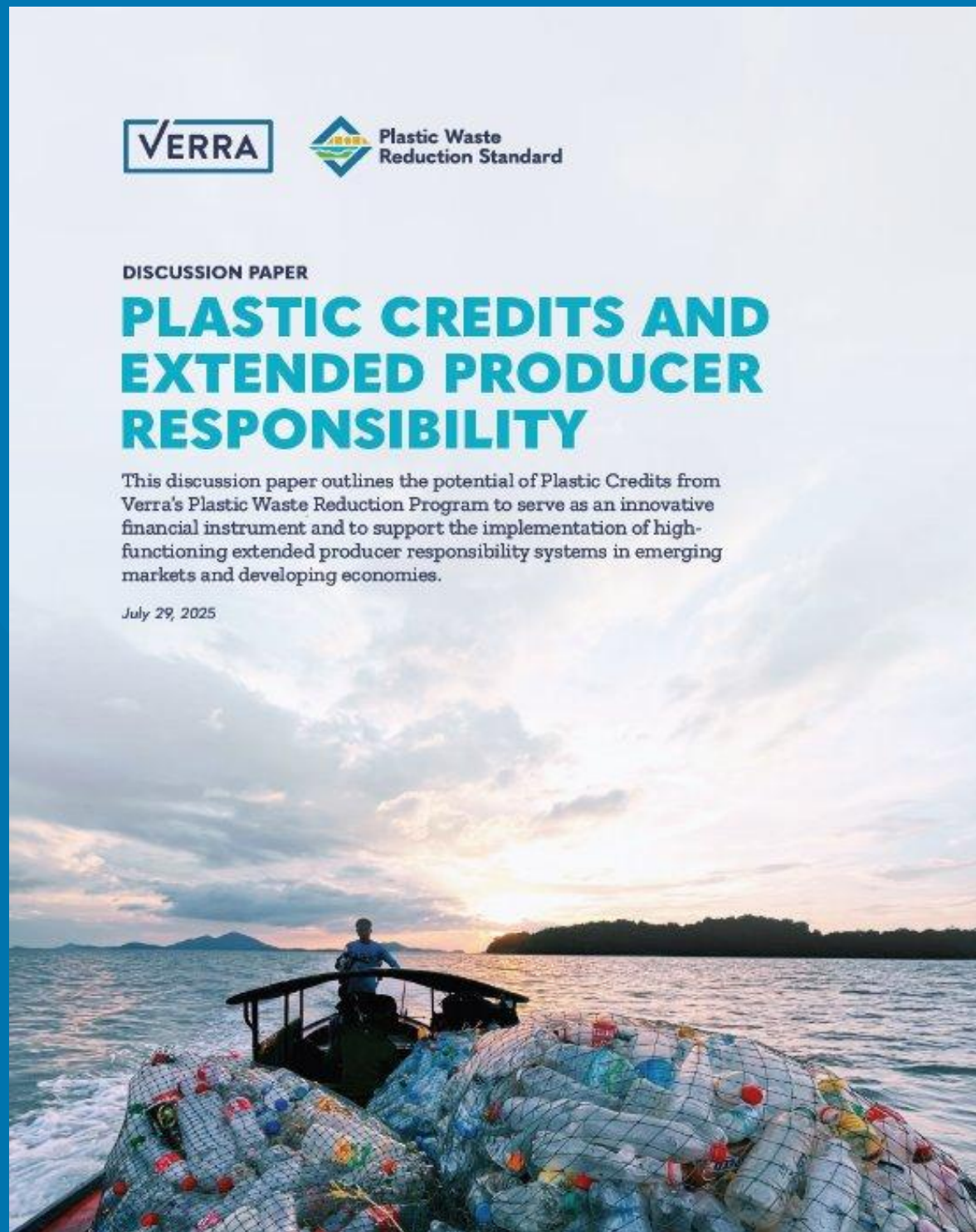


Overview of EPR legislation

Discussion Paper - Plastic Credits and Extended Producer Responsibility

Verra released a comprehensive discussion paper that:

- **Identifies key challenges** countries may face across the different phases of EPR implementation.
- **Explores the potential benefits** of integrating Plastic Credits into EPR systems, drawing on **six country case studies** at various stages of EPR development.
- **Highlights opportunities to leverage Plastic Credits** to enable financing, boost operations, and strengthen administrative functions within EPR frameworks.
- **Provides tailored recommendations** for key stakeholder groups—**governments, producers, and waste management operators**—on how to benefit from the Plastic Program.



The Three EPR Phases – Explained

Phase I:

Initiation – exploration of EPR

Putting EPR on the political agenda

- Initial Discussions to build common vision
- Goal and target setting
- Capacity and gap assessment
- Voluntary industry-led initiatives
- Best practice criteria setting

Phase II:

Transition – moving towards mandatory EPR

Establishing a legally binding and enforceable regulatory framework

- Governance mechanism establishment
- Equitable and efficient delegation of finance responsibilities
- Improvement on the operational performance of waste management
- Infrastructure expansion

Phase III:

Maturity – effective and efficient EPR

Continual monitoring, improving performance, and enhancing efficiency and accountability

- Evaluation and continual operational improvement
- Adaptation to technological evolution
- Innovation that involves all system actors



Country Case Studies

Comparative country case studies contextualize EPR implementation archetypes and identify common challenges and opportunities.



* National performance is not assessed or ranked in this analysis; as EPR is a rapidly evolving landscape, some of the case studies highlighted are likely to move into subsequent implementation phases in the future. However, the features and characteristics highlighted will continue to be relevant to policymakers and stakeholders working on EPR systems in similar stages of development.

Challenges of Phase 1 EPR Implementation

UNDER-DEVELOPED WASTE
SECTOR

LIMITED REGULATORY AND
ADMINISTRATIVE CAPACITY

FUNDING DEFICIT FOR
INFRASTRUCTURE

NOT INCLUSIVE OF THE
INFORMAL SECTOR

Country Case Studies – Phase Specific Challenges

Phase I: Initiation

- Lack of reliable data and administrative structures needed to measure and track progress
- Underdeveloped collection and recycling infrastructures
- Lack of clear financing mandates or mechanism

Indonesia

Decree NO. P.75- Road Map of Waste Reduction by Producers, also known as the “roadmap to EPR” was introduced in 2019. It requires all producers to reduce the waste generated from their products by 30% by 2029. The system primarily targets large national and multinational companies. This year, the Indonesian Ministry of Environment plans to revise the regulation and work towards mandatory EPR

- There is no formal, enforceable mechanism for collecting and distributing funds to finance EPR. There are no fees charged by the system, nor is there a penalty for non-compliance.
- Plastic waste management infrastructure is lacking, especially in rural areas.
- No clear administrative structure for oversight.

Challenges of Phase II EPR Implementation

UNDER-DEVELOPED WASTE
SECTOR

LIMITED REGULATORY AND
ADMINISTRATIVE CAPACITY

FUNDING DEFICIT FOR
INFRASTRUCTURE

NOT INCLUSIVE OF THE
INFORMAL SECTOR

Country Case Studies – Phase Specific Challenges

Phase II: Transition

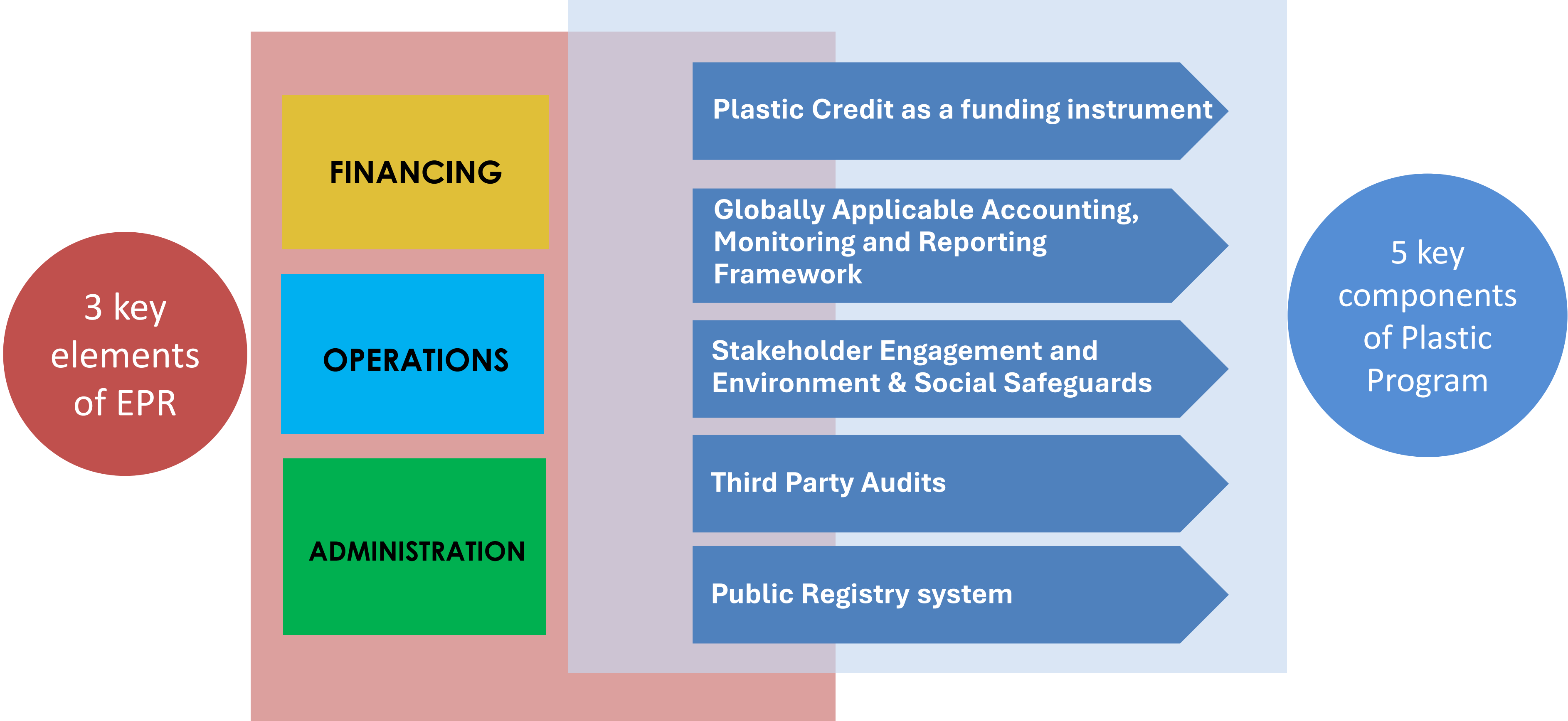
- Fragmentation in the legal and operational framework
- Significant funding gaps remain due to a lack of compliance
- Shortcomings in existing waste management infrastructure and operations (e.g., informal sector integration)

Viet Nam

In 2020, the Ministry of Natural Resources and Environment (MONRE) strengthened its commitment to EPR in the Law on Environmental Protection which set out the transition from voluntary to mandatory EPR. Since 2024, producers of regulated products (e.g., plastic packaging, batteries, tires, chargers, electronic equipment, and vehicles) have been required to comply with mandatory recycling obligations. Producers have the option to choose financial or operational responsibility for waste management.

- Stakeholders have called for greater transparency on the spending of collected EPR financial contributions (VEPF)
- Recycling operations heavily depend on imported waste and use outdated technologies; the informal sector performs 90% of existing recovery activities without proper compensation.
- Lack of guidance and clarity on governance structure and compliance monitoring

Common elements of EPR and Verra's Plastic Program



Key System Change Benefits of Plastic Credits

- Based on analysis of six country case studies

Phase I:

Initiation- Ghana and Indonesia

Demonstrate best practice

Organizations generating Plastic Credits serve as examples that:

- Operate in line with environmental and social safeguards
- Incorporate robust monitoring, reporting and verification procedures
- Demonstrate impact with third-party audited outcome.

Strengthening administration: Safeguards, Transparency, and Record-Keeping

Enabling finance: Access and Security

Boosting operations: Standard and Coverage

The private sector often drives national dialogue to co-create a robust and effective governance system that enables innovation and market-based solutions. **Producers** can leverage Plastic Credit and make credible investments into high-quality projects to demonstrate leadership, set a high standard for best practice and prepare for the forthcoming EPR regulations.

Key System Change Benefits of Plastic Credits

- Based on analysis of six country case studies

Phase II:

Transition - Kenya and Viet Nam

Bolster performance

- Plastic Credits can be leveraged to ensure financial contributions are results-based.
- Plastic Credits provide proven compliance frameworks and ready infrastructure to streamline reporting.
- Leveraging the existing framework reduces regulatory burdens of developing it from scratch.

Enabling finance: Access

Strengthening administration: Record-Keeping

Boosting operations: Impact, Standard and Coverage

Governments are clearly driving the agenda to strengthen EPR systems. They can formally incorporate Plastic Credits as a mandatory or voluntary compliance instrument. It offers efficiency for enforcing compliance through the incorporation of an existing registry and reporting requirements, which can reduce the administrative burden associated with developing these approaches from scratch. Use of the Plastic Program can also ensure uniformity in tracking progress and impacts across projects in different jurisdictions.

Key Benefits of Integrating Plastic Credit into EPR Systems

ENABLE FINANCING

Plastic Credits help address significant funding gaps in waste management infrastructure by providing a results-based mechanism and ensuring the efficient use of financial contributions towards high-quality projects.

BOOST OPERATIONS

The Plastic Program enables waste management operators to demonstrate adherence to social and environmental safeguards while showcasing best practices for operational due diligence and impact measurement.

STRENGTHEN ADMINISTRATION

The Plastic Program can support governments in adopting transparent monitoring, reporting, and verification frameworks thereby enhancing accountability, streamlining compliance processes, and promoting best practices.

Key Benefits of Integrating Plastic Credit into EPR Systems

ENABLE FINANCING

Access: Open access registry increases project visibility and facilitates connection with potential investors

Security: De-risk investments into high quality collection and recycling operations with globally recognized standard

Contributors: Mobilize new funding sources beyond judicial limits of EPR

BOOST OPERATIONS

Coverage: Scale capacity and/or investible infrastructure essential to fulfill EPR obligations and expand services to new areas and materials

Standards: Provide uniformed Monitoring, Reporting and Verification framework for operational due diligence

Impact: Drive measurable outcomes and prioritize results

STRENGTHEN ADMINISTRATION

Record keeping: Provide frameworks and digital infrastructure for tracking progress and producer's financial contribution

Safeguards: Demonstrate best practice standards for environmental and social protection

Transparency: Ensure publicly accessible data frameworks for verifying compliance

Key System Change Benefits of Plastic Credits

- Based on analysis of six country case studies

Phase I:

Initiation- Ghana and Indonesia

Demonstrate best practice

Organizations generating Plastic Credits serve as examples that:

- Operate in line with environmental and social safeguards,
- Incorporate robust monitoring, reporting and verification procedures,
- Demonstrate impact with third party audited outcome.

Phase II:

Transition - Kenya and Viet Nam

Bolster performance

- Plastic Credits can be leveraged to ensure financial contributions are results-based.
- Plastic Credits provide proven compliance frameworks and ready infrastructure to streamline reporting.
- Leveraging the existing framework reduces regulatory burdens of developing it from scratch.

Phase III:

Maturity - Chile and the Netherlands

Drive innovation

- Plastic Credits offer a unique opportunity to support innovation that can continually improve system performance and efficiency.
- Plastic Credits can be leveraged by system actors to target new material streams, underserved areas for increased collection systems, and new recycling technologies.

Engagement Options



FULL REPORT

01 LEARN MORE

ACCESS THE DISCUSSION PAPER AND LEARN MORE ABOUT THE PLASTIC PROGRAM.



VERRA'S WORKSHOP IN JAKARTA

02 ENGAGE

ENGAGE WITH US FOR BESPOKE TECHNICAL AND CAPACITY BUILDING SUPPORT THROUGH COUNTRY SPECIFIC WORKSHOPS OR WEBINARS



SUPPORT VERRA'S WORK

03 SUPPORT VERRA THROUGH VARIOUS FUNDING PARTNERSHIPS OPTIONS

I.E., COLLABORATE ON COUNTRY-SPECIFIC INITIATIVES TO DEVELOP EFFECTIVE EPR SYSTEMS WITH THE SUPPORT OF VERRA'S TECHNICAL EXPERTISE