

PLASTIC CREDITS AT A GLANCE

Product Overview Series
for Financial Instruments

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CONTEXT

Plastic pollution is a pressing global challenge, with policymakers, business leaders, and communities working to develop solutions. However, a significant funding gap hinders the transition to a circular plastics economy.

As an emerging results-based financing tool, plastic credits offer a new way to connect public and private sector funding with targeted efforts to combat plastic pollution. When applied responsibly, plastic crediting can enable organizations to financially support pollution reduction initiatives with quantified and verified results.

USD 1.64 trillion

of investment will be required by 2040 to beat plastic pollution

(UNEP 2023)

WHAT IS A PLASTIC CREDIT?

There is no universally accepted definition of a plastic credit. Current definitions vary in scope of activities and terminology.

For the purpose of this guide, the following working definition is applied:

“A plastic credit is a transferable unit representing a specific quantity of plastic that is avoided from use, collected and managed, or recycled , as a result of a project activity.”

A ‘transferable unit’ refers to the result of a project activity (e.g., plastic collection and management, recycling, or avoidance) captured in a predetermined metric, e.g., kilograms (kg) or ton (t), that can be issued by one party and sold to another through a transaction chain.

This results-based approach ensures that finance is only received after real outcomes are achieved.

WHAT TYPE OF ACTIVITIES GENERATE PLASTIC CREDITS?

Main-type	Upstream	Downstream		
Sub-type				
Goal	Reduce problematic plastic use	Reduce plastic waste in nature	Reduce plastic waste in landfill	Increase recycling of plastic waste
Possible activities	Eliminate or redesign packaging, reuse/refill systems alternative materials	Environmental cleanup activities, household collection and management of collected plastic	Recovery of plastic waste from waste dumps or landfills and management through co-processing or recycling	Mechanical or chemical recycling (e.g. processing plastic waste into secondary raw material)
Stage of development	Conceptual		Operational	

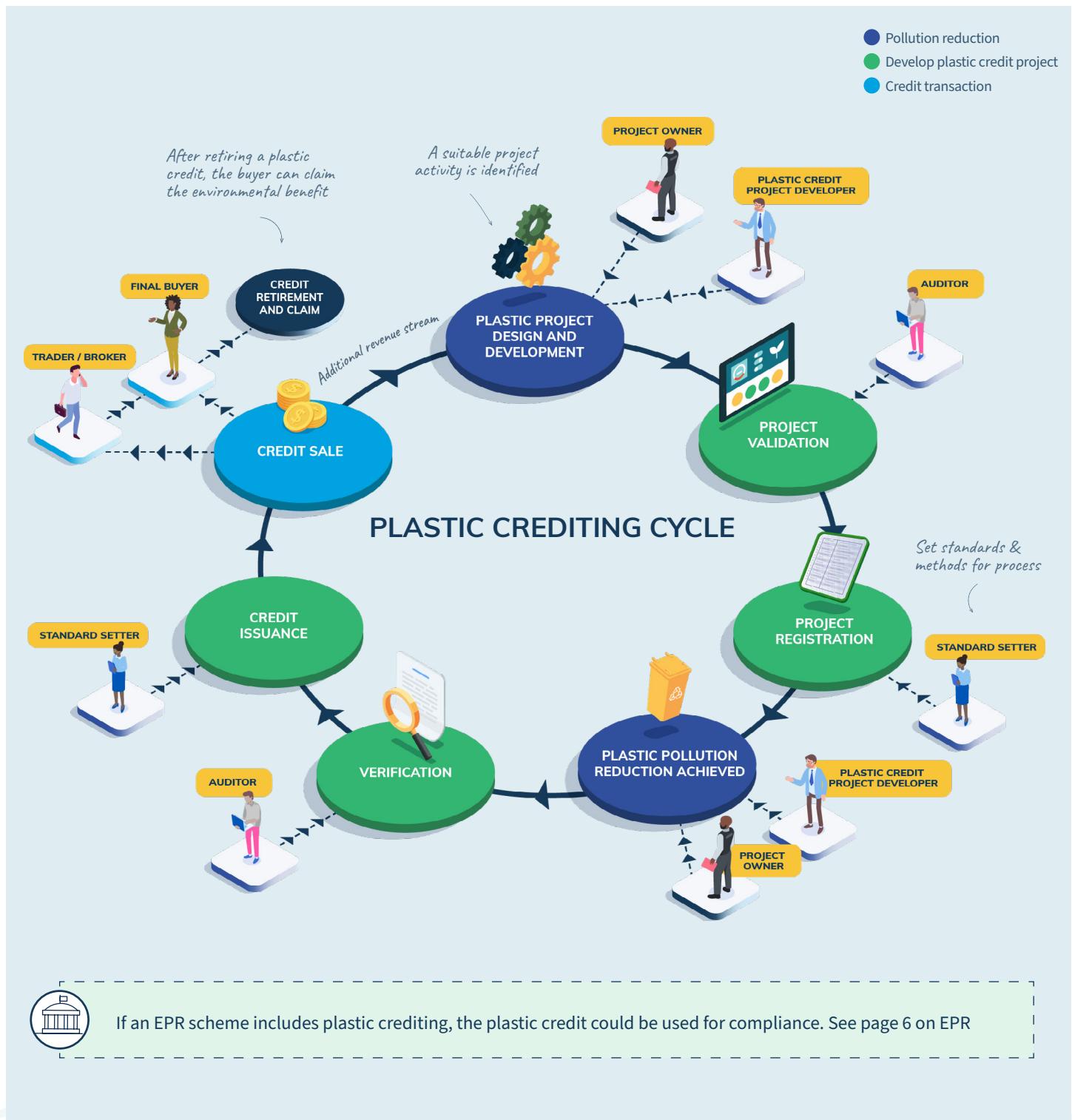
WHAT ARE THE BENEFITS?

	Providing an alternative financing mechanism		Valuing plastic waste reduction
Plastic credits can be used as an additional revenue stream to help make plastic pollution reduction initiatives economically viable and scalable.		By placing a monetary value on reducing plastic waste and consumption, plastic credits can incentivize sustainable practices.	
	Enhancing accountability and transparency		Empowering marginalized groups
Plastic crediting provides a traceable, results-based framework that can enhance the monitoring and evaluation of plastic pollution initiatives, ensuring greater transparency in impact reporting.		By recognizing these groups as key stakeholders in waste management, plastic crediting can be used to share benefits, improving both social and environmental conditions.	



Policymakers could consider promoting plastic credits as an additional tool to address short-term funding gaps, within a wider policy framework, providing impactful efforts, with measurable and verifiable results.

HOW DOES THE PLASTIC CREDITING CYCLE WORK?



WHAT CAN YOU CLAIM?

Plastic credits can be used for both voluntary and regulatory purposes to showcase an organization's contribution to addressing plastic pollution. Although voluntary purchases may support claims like "plastic neutral," it is often seen as misleading. The impact and cost of addressing plastic pollution differ based on the type of plastic, how it is used, and where it ends up.

As a result, removing one ton of plastic in one context is not the same as removing one ton in another. With plastic crediting being increasingly used as a way to mitigate plastic pollution rather than offset specific amounts used, clearer guidelines are needed to define their application and associated claims.

WHAT ARE THE MAIN PLASTIC CREDITING STANDARDS?

Plastic crediting programs vary widely, each with its own approaches, definitions, rules, and processes.

Category 1 programs are fully independent and transparent, with publicly available standards, methodologies and registries, and require third-party verification for their projects. They have no involvement in project implementation, project development and sales of plastic credits. Current programs include:

- Verra Plastic Waste Reduction Standard (PWRS)
- GreenBlue Recycled Material Standard (RMS)
- Zero Plastic Oceans Ocean-Bound Plastic (OBP)

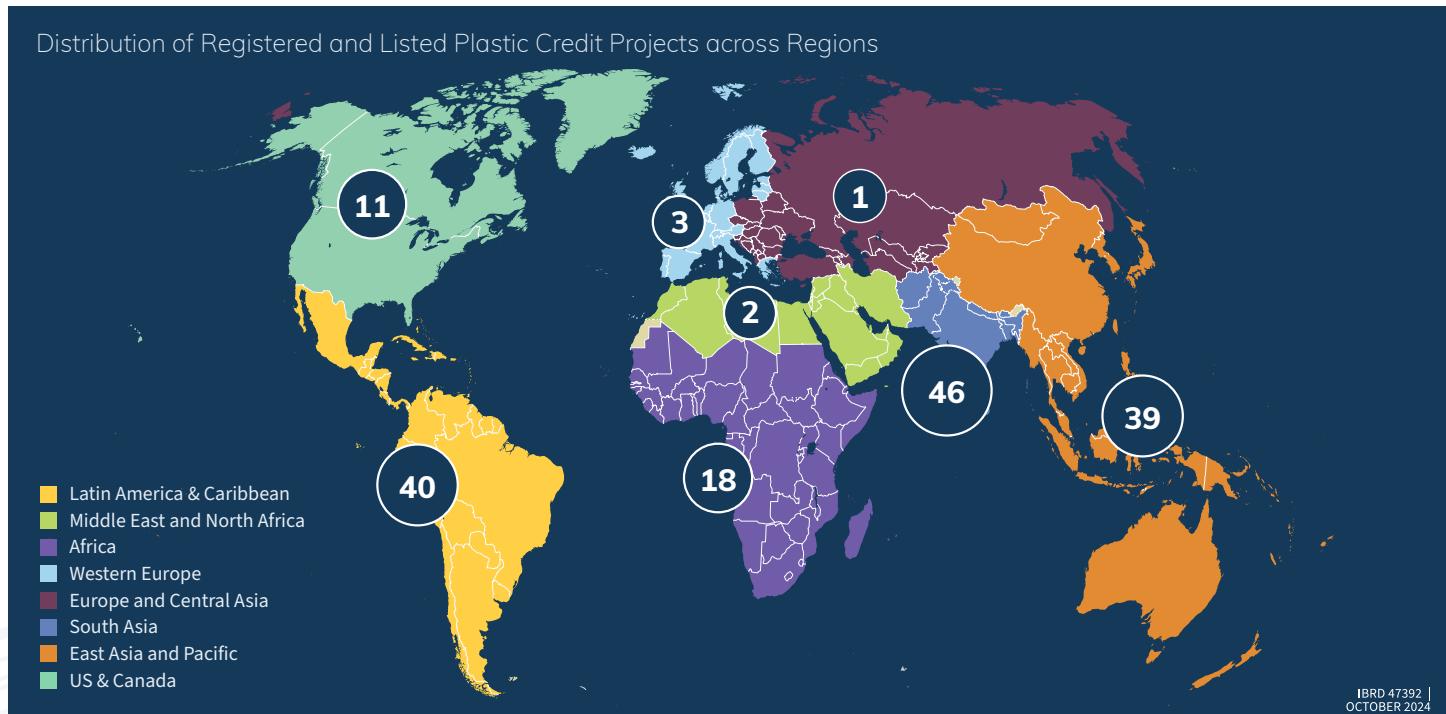
Category 2 programs create publicly available standards and methodologies and require third-party verification as standard practice. These programs may not offer the same level of independence and transparency; they could be involved in project implementation, development or credit sales, or provide limited information on public project and credit registries. Current programs include:

- PCX Solutions Plastic Pollution Reduction Standard (PPRS)
- BVRio Circular Credits Mechanism (CCM)

In addition to the Category 1 and 2 programs, several other programs* offering financing solutions under terms like ‘credits,’ ‘offsets,’ ‘certificates,’ or ‘contributions’ tend to establish their own guidelines and project, with project and credit registries not being publicly available. These programs typically implement their own monitoring systems (e.g., traceability platforms), are either directly involved in projects or assume multiple roles (e.g., project implementation, result measurement and verification, sales transaction), while following their own payment process.

* Examples include: CleanHub, Plastic Bank, Plastics for Change, rePurpose Global, Verified Plastic Recovery Protocol, Waste4Change

WHAT DOES THE CURRENT PLASTIC CREDITS MARKET LOOK LIKE?



The plastic credit market is still emerging, with the majority of plastic crediting standards starting from 2021. As of December 2023, approximately 160 projects are listed on plastic credit registries, mainly in developing countries across East Asia and Pacific, and South Asia. This regional focus reflects both heightened awareness and early innovation in response to visible plastic waste issues.

A total number of 75,665 credits have been issued by standards under category 1 and 2. Plastic crediting programs currently focus on waste management activities, with one pilot exploring upstream measures aimed at preventing and reducing plastic waste generation. Further piloting and methodology development is needed to enable plastic credits for upstream activities.

WHO ARE THE MAIN BUYERS OF PLASTIC CREDITS?



These entities are motivated by the desire to meet Environmental, Social, and Governance (ESG) goals and respond to growing consumer demand for more effective action to reduce plastic pollution.

As the plastic credit market is largely voluntary, these buyers are driven by a commitment to contributing to plastic pollution reduction and accelerate their progress in delivering environmental and social impacts.

WHAT IS THE PRICE OF A PLASTIC CREDIT?

Plastic credit prices should reflect the true cost of plastic waste pollution and reduction efforts. Prices vary widely due to the lack of standardized guidelines. Current prices can range from 140-670 USD per credit (equivalent to one ton of plastic waste).

Factors influencing these costs include the type of waste management activity, the plastics targeted, project location, and the extent of benefit-sharing with marginalized workers and local communities.

The complexity of the certification process also affects pricing, making it essential to consider these elements when evaluating the cost of plastic credits.

Prices can range from

**140-670 USD
per credit**



HOW CAN PLASTIC CREDITING BE EFFECTIVELY INTEGRATED INTO EPR SCHEMES?

Extended Producer Responsibility (EPR) schemes make producers responsible for the full life cycle of their products, including the end-of-life stage. Obligated parties can carry out the required activities themselves or pay EPR fees.

Plastic crediting can be used as a compliance mechanism within EPR schemes. Producers can purchase plastic credits to meet some of their obligations (e.g., around plastic waste collection and management), and demonstrate verified plastic waste reduction results.

Policy makers can choose which plastic types, activities, and standards are eligible under the EPR scheme.

Plastic crediting can be applied throughout various stages of EPR implementation, as illustrated in the following three scenarios:

SCENARIO 1

In countries where EPR is not yet implemented, voluntary plastic crediting schemes offer a way for businesses to support global plastic collection and management, and recycling efforts.

SCENARIO 2

As EPR policies are introduced, existing voluntary schemes can serve as interim solutions during the transition, preparing organizations for compliance.

SCENARIO 3

Once established, plastic credits can be used both to comply with and to exceed legislative requirements. This integration ensures that plastic credits can support a broad range of regulatory and voluntary sustainability efforts.

What countries have done this?



UNITED KINGDOM:

Introduced in 1997, the UK's Producer Responsibility Obligations (Packaging Waste) Regulations included a crediting mechanism where obligated parties can purchase Plastic Recycling Notes (PRNs) and Plastic Export Recycling Notes (PERNs) from accredited re-processors and exporters to comply with recycling requirements and boost recycling rates.



INDIA:

In 2021, India's EPR scheme incorporated plastic crediting as an optional compliance method. Producers and Importers of Brand Owners (PIBOs) can buy plastic waste recycling certificates from accredited processors or exporters, with all transactions tracked on a central EPR portal managed by the Central Pollution Control Board (CPCB).



BRAZIL:

In Brazil, a voluntary reverse logistics system was introduced to address non-compliance with the national EPR scheme. This system, which allows waste management providers to sell certificates, has notably included informal waste workers (catadores). By financing projects that integrate these workers, the system enhances waste management and social inclusion. Although not officially part of the national EPR framework, it has successfully increased compliance rates by providing a clear method for meeting EPR obligations.



PHILIPPINES:

Plastic credits (referred to as offsets) were integrated into the Philippines' EPR scheme in 2022. This mechanism allows producers to meet part of their EPR responsibilities through purchase of eligible plastic credits.



Plastic crediting should be one of the instruments in the plastic reduction toolkit and should complement, not displace other efforts and commitments to reduce plastic pollution.

Key considerations for policymakers on integrating plastic credits with EPR schemes



Integrating plastic crediting into EPR schemes requires careful planning:

- Establish clear guidelines outlining definitions of plastic credits, eligible activities, robust standards and methodologies, auditing processes, and monitoring requirements. These guidelines should also specify whether credits from existing independent standards can be utilized and outline procedures to prevent double counting.
- Additional resources may be needed for government authorities to oversee plastic credit transactions and ensure compliance.
- A central fund could be established to allocate finance to projects through crediting, as plastic crediting models channel finance directly to project activities, which may influence the centrally collected EPR fees.
- EPR schemes may cover a range of materials and actions, so plastic crediting can be used to address short-term gaps and finance specific plastic pollution reduction activities.



INTEGRATION OF PLASTIC CREDITS WITH PLASTIC BOND

Outcome bonds offer a promising approach to financing plastic projects by providing upfront capital in exchange for future plastic credits.

The Plastic Waste Reduction-Linked Bond, launched by the [World Bank in January 2024](#), allows investors to fund plastic waste reduction initiatives and receive returns through the issuance of plastic credits, with Verified Carbon Units under the Verra Standards. Bond investors may receive an extra payment at maturity if credit sales exceed expectations.

The bond mobilizes \$14 million for projects in Ghana and Indonesia, enabling them to fund recycling efforts, scale waste collection and management, and create job opportunities for marginalized groups.

GHANA:

The project in Ghana uses the funds to expand waste collection and management, and recycling sites in Accra, strengthening waste management networks and supporting women entrepreneurs in establishing social enterprises.



INDONESIA:

In Indonesia, the investment enhances efforts to reduce ocean-bound plastics in Surabaya by providing training, employment, and incentives for coastal communities to collect ocean plastics.



RECOMMENDATIONS FOR RESPONSIBLY SCALING PLASTIC CREDITS: A COLLABORATIVE APPROACH FOR STAKEHOLDERS AND POLICYMAKERS

ESTABLISH A FRAMEWORK OF ACTION: <p>Develop holistic action plans and policies that address plastic pollution across the full plastic value chain, from upstream avoidance measures to downstream waste management. Plastic crediting should be considered one component within this broader action plan.</p> <p>Role of policymakers: Develop and implement policies that address plastic pollution, and identify priority activities that require financing, to create an enabling environment for action.</p>	SET STRONG GOVERNANCE PROTOCOLS: <p>Enhance governance mechanisms for plastic crediting, establish minimum requirements and common principles for plastic credit programs, including measures to ensure additionality and avoid double counting.</p> <p>Role of policymakers: Promote strong governance mechanisms and minimum protocols to be developed by sector experts.</p>	SET PRICING GUIDELINES: <p>Develop guidelines for plastic crediting pricing, to ensure that prices reflect the full cost of pollution reduction. This may involve creating pricing categories based on factors such as activity types, locations, materials, and associated co-benefits, including setting a floor price.</p> <p>Role of policymakers: Work with research institutes to create national guidelines, and/or work with other governments and multilaterals to create regional pricing standards.</p>
PROMOTE BEST PRACTICES: <p>Work with sector experts to develop best practice guidelines on the responsible use of plastic credits, including possible claims and measures to incentivize waste reduction at source.</p> <p>Role of policymakers: Develop and promote supporting resources, either in-house or in collaboration with experts. When incorporating plastic credits into EPR schemes, ensure that the guidelines align with best practices in plastic pollution accounting.</p>	PROVIDE TECHNICAL ASSISTANCE: <p>Offer support and capacity-building for early-stage projects and those involving informal and marginalized workers.</p> <p>Role of policymakers: Establish a fund or technical assistance facility in collaboration with multilateral partners.</p>	SUPPORT INNOVATIVE PROGRAMS: <p>Consider endorsing pilot programs that trial the use of plastic crediting for upstream solutions aimed at reducing plastic waste generation at source.</p> <p>Role of policymakers: Signal the importance of upstream solutions in addressing plastic waste and consider funding a pilot with project owners and standard setters to explore and validate these approaches.</p>

CONCLUSIONS

While plastic crediting presents a valuable mechanism to support plastic pollution reduction efforts, it should be viewed as part of a broader environmental strategy. To be effective, plastic crediting should complement other initiatives across the value chain.

Policyholders can help enable the right environment for plastic crediting to thrive by developing targeted policies and regulations, and ensuring transparency in the systems. Engaging private sector stakeholders and evaluating plastic credits as a compliance tool will also be key to scaling effectively.

FAQS

- **How do plastic credits differ from carbon credits?**

Plastic credits represent the collection, recycling, reduction, or avoided use of plastics, whereas carbon credits denote reduction, removal, or avoidance of greenhouse gas emissions. Both incentivize environmental outcomes and enable results-based financing. Carbon credits are measured in tonnes of carbon dioxide equivalent, based on the green house gases' global warming potential. Plastic credits are newer. Conversion method is yet to be fully developed. One plastic credit represents one ton of plastic collected and managed or recycled regardless of the plastic type. As the methodological work advances, conversion in impact equivalency of plastic credits is expected to become available.

- **How are different types of plastic products measured and converted into a unit of plastic credit? Is recycling one ton of various plastic products treated the same?**

Currently, one ton of plastic collected and managed, or recycled equals one plastic credit, regardless of the plastic type. Each plastic credit is linked to specific information about the type and weight of each plastic type, ensuring traceability. In the future, conversion metrics may be adjusted as data on the impact equivalency becomes available, allowing for more accurate representation of the impact of each polymer. For example, in the future hard to recycle plastics like multi-layer plastic (MLP) may have a higher impact equivalence than easier to recycle polymers like PET.

- **Under what circumstances are plastic crediting suitable as a financing tool?**

Project activities seeking plastic crediting need to fulfill specific requirements, including demonstrating additionality - showing that the project would not proceed without credit financing; implementing measures that surpass current plastic pollution reduction practices (such as increasing plastic waste collection and management); and ensuring results are measurable and verifiable.

Plastic crediting provides a mechanism to direct financial support to activities that require funding to either commence or scale, thus bridging the gap between private and public sector investors and eligible projects in the short to medium term. However, it should not be seen as a substitute for long-term, sustained financing necessary for comprehensive plastic waste avoidance and management strategies.

- **How to avoid the use of plastic credits becoming a disincentive for action, or used for greenwashing?**

To prevent plastic credits from becoming a disincentive to direct reduction or a tool for greenwashing, it is crucial to establish rigorous guidelines on their use and related claims.¹ This includes ensuring that plastic credits are used as part of a comprehensive strategy for plastic waste reduction, complementing, not replacing, activities that directly reduce plastic waste generation. Regular audits and clear reporting requirements can help maintain accountability.

This publication, *Unlocking Financing to Combat Plastic Crisis: Opportunities, Risks, and Recommendations for Plastic Credits*, aims to provide a comprehensive analysis of plastic crediting, including the potential benefits, the challenges and risks associated, and a set of recommendations for key stakeholders.

This report is intended for policymakers, plastic crediting programs, multilateral organizations, private sector, and civil society organizations.

[Read full report here](#)



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