

ADB BRIEF PLASTIC CREDITS

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WHAT IS A **PLASTIC CREDIT ?**

Plastic Credits are an environmental unit representing 1,000 kilograms or 1 metric ton of plastic waste diverted away from nature, obtained through documented and verified collection, aggregation, and recycling or processing activities.

Plastic credits are intended to fund the development of better waste management and circular economy solutions, environmental rehabilitation, and social justice interventions.



PLASTIC VS. CARBON

CARBON CREDITS

- 1 Intangible and difficult to measure
- 2 Traceability and additionality challenges
Double Counting risk
- 3 Modeled 'Future Impact' risk
- 4 Inconsistent standards
- 5 Contentious regulatory history
- 6 Unclear community benefit

PLASTIC VS. CARBON

A BETTER APPLICATION

Plastic is tangible easy to measure

Traceable + Transparent systems help additionally claims, prevent double counting

Impact delivered and verified today

Clear converging standards

Regulatory frameworks aligning rapidly

Positive socio-economic impact opportunity

CARBON CREDITS

1

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2

Traceability and additionality challenges
Double Counting risk

3

Modeled 'Future Impact' risk

4

Inconsistent standards

5

Contentious regulatory history

6

Unclear community benefit

HOW CREDITS WORK

The war on plastic demands comprehensive solution sets. Credits should not be an excuse to pollute, and over time pricing for non-legacy plastic offsets should increase high enough to encourage the eliminate of unessential plastics.

HOW CREDITS WORK



STEP 1

POLLUTER AUDITS

3rd party audit calculates footprint based on Standard, accounting for scope, type of plastic and location granularity, netting activities.

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STEP 2

POLLUTER PLEDGES

Polluter decides how much plastic to clean up based on compliance or voluntary action.

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STEP 3

ACTIVATE CLEAN UP

Projects must adhere to a Standard with clear definitions and safeguards for traceability, transparency, additionality, double counting, and just-transition assurance.

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1
CREDIT



COLLECT

Certified Projects collect and sort and weigh plastic waste.



TRANSPORT

Weigh in and out of truck recorded at accredited facility.



RECYCLE

Recyclable plastics are sent to certified facilities where they are converted to reusable plastic material.



UPCYCLE

Certified Upcyclers convert plastic to useful products .



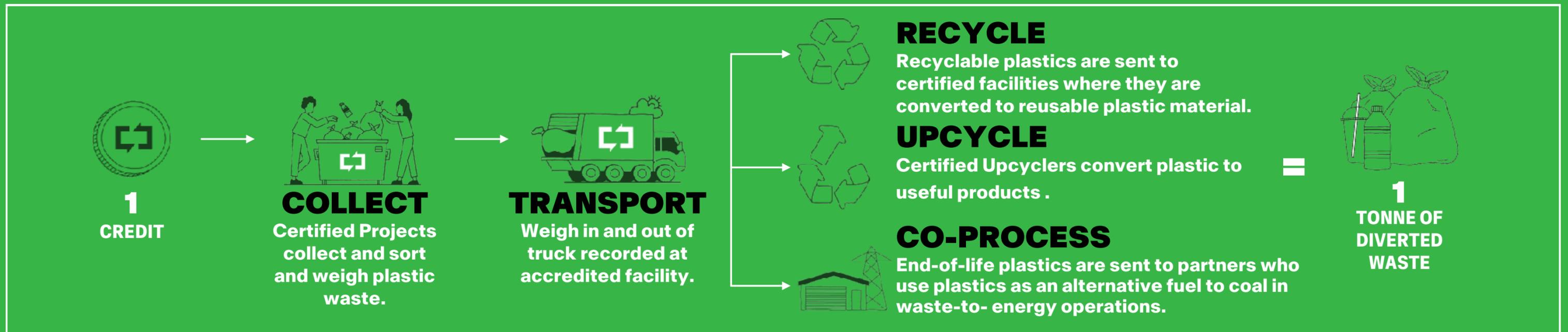
CO-PROCESS

End-of-life plastics are sent to partners who use plastics as an alternative fuel to coal in waste-to-energy operations.



1
TONNE OF
DIVERTED
WASTE

HOW CREDITS WORK



SAMPLE PROJECT:

Aling Tindera

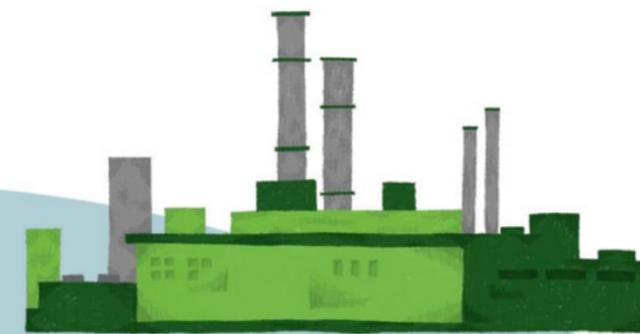


Aling Tindera



WASTE-TO-CASH PROGRAM

Aling Tindera is a women run plastic waste-to-cash program which organizes communities to facilitate cleanups around the Philippines



Community sells plastic waste to Aling Tindera.

Aling Tindera weighs, bales, and stores the plastic waste in her container van.

HOPE buys Aling Tindera's collected plastics and proceeds to hauling.

Plastic waste is delivered to HOPE's recycling, upcycling, and co-processing partners.

Plastic waste is diverted from nature and landfills!



ALING TINDERA

Provide incremental income to communities

Divert plastic waste away from nature

Encourage behavior change

Empower women micro-entrepreneurs to become sustainability champions

Delivers savings to the local government



Aling Tindera



IMPACT TO DATE



1,709,438 kg

Total Plastic Waste
Diverted From Nature



49%

Increase in Income



129

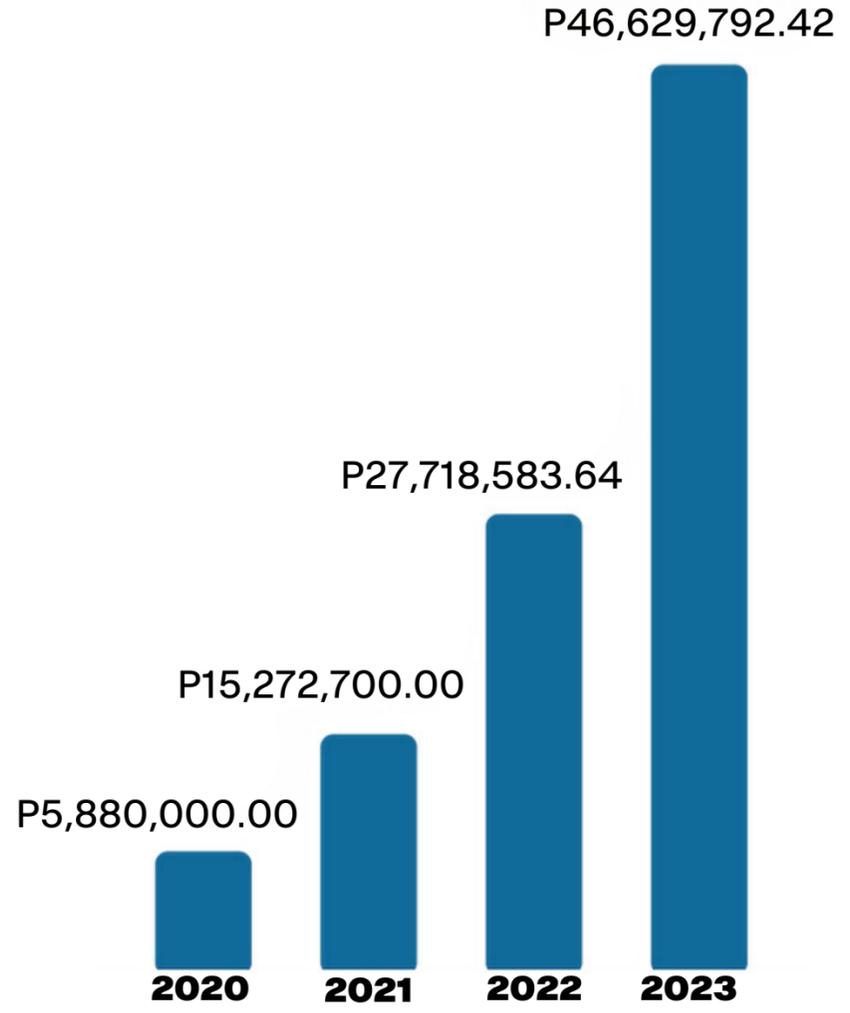
Aggregating Partners



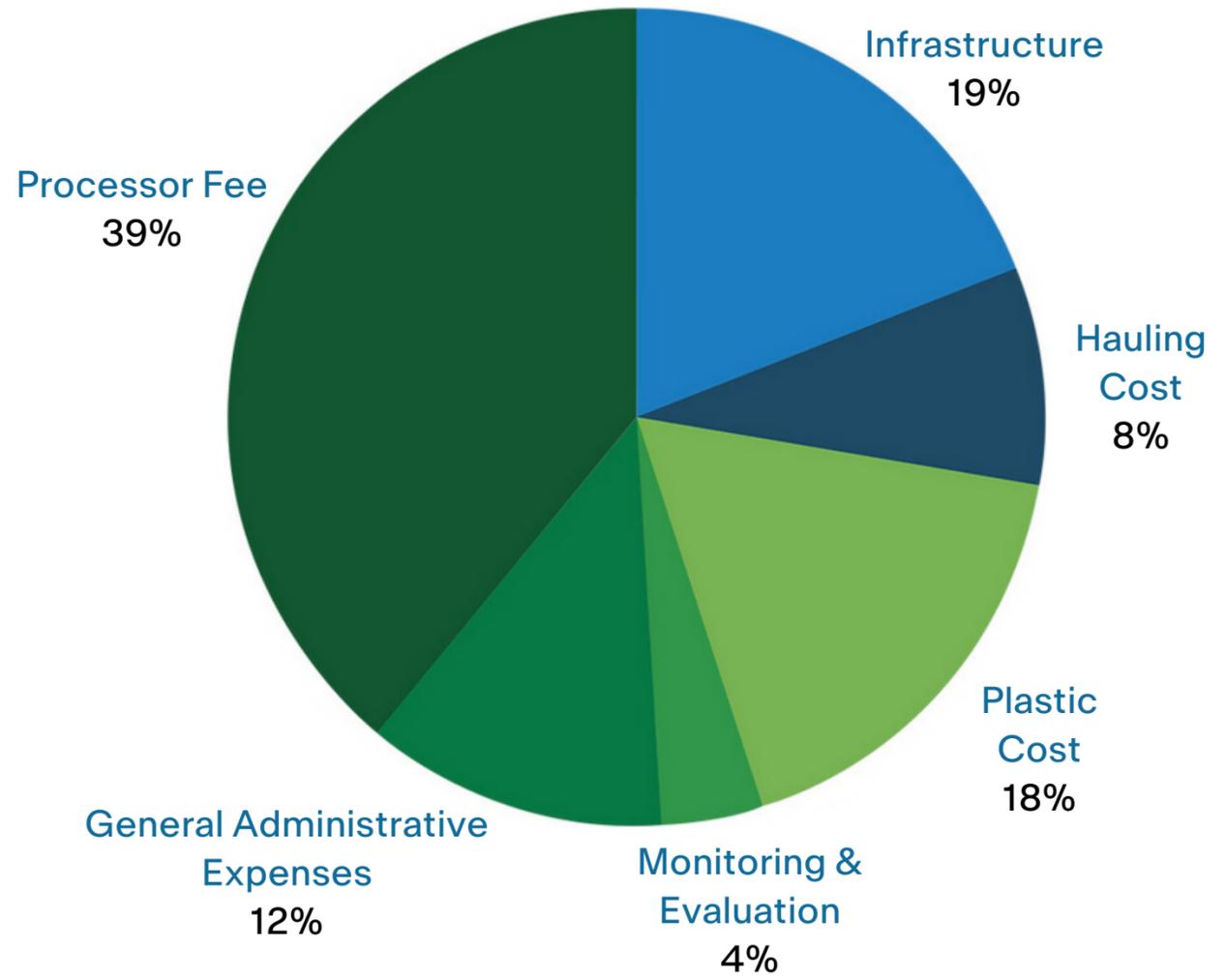
P4,136,431

Total Community Revenue

ALLOCATION OF FUNDS



**Aling Tindera Program
Cost Per Year**



**Aling Tindera Program
Allocation of Funds**

Environmental Safeguards & Protections

✓ Environmental Impact and Pollution Prevention

- There shall be no detrimental impacts to other aspects of the environment, including pollution prevention & and abatement, biodiversity & and marine conservation, management of natural resources, and welfare of people
- Potential impacts and risk assessment shall be conducted in all aspects of the operations and mitigation measures in place when necessary

✓ Labor and Workplace Safety

- Risk inherent to the activities shall be identified and addressed prior to the conduct of the activities from aggregation up to processing
- Necessary measures shall be implemented to avoid accidents, injuries or diseases arising from or associated to the activities including emergency response and preparedness

✓ Feedback and Grievance Mechanisms

- Consultation and feedback mechanisms shall be in place and will be available throughout the implementation activities
- Incorporates the views of all the stakeholders in the conduct of activities and disclosure of Plastic Credits in the PCX Credit Registry

✓ Prohibited Materials and Activity

- Activities involving forms of forced or child labor
- Activities deemed illegal under international conventions and host county regulations
- Activities involving toxic or hazardous materials including weapons, munitions, and radioactive materials





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pepsico positive
planet + people



EXTENDED PRODUCER RESPONSIBILITY

ONLY **REDUCTION + CLEANUP** CAN END THE CRISIS

PCX THEORY OF CHANGE

- ▶ Consistent regulatory mandates (EPR Toolkit)
- ▶ Innovation for reduction/alternatives*
 - ▶ Market-based, scalable solutions
 - ▶ Invest in high value circular infrastructure*
 - ▶ Legacy AND new waste responsibility
 - ▶ Social investment to uplift communities

ROLE OF CREDITS IN

NEAR TERM

- ▶ TANGIBLE WASTE diversion from nature
- ▶ Socio-economic BENEFITS & education

LONGER TERM

- ▶ INCREASE COST of new plastic
- ▶ Catalyst for:
 - ▶ Infrastructure investment
 - ▶ Innovative ALTERNATIVE solutions
 - ▶ Collection and processing supply chains



PH CASE STUDY

PH EPR EXPLAINED

WHO IS OBLIGED?

BRAND OWNER

Who sells or supplies any commodity under a brand, label, or identity using a product it produced, or a material supplied to it by another manufacturer, or supplier

-- OR --

PRODUCT MANUFACTURER/ IMPORTER

Supplies its commodities for the general use of the general consumer, or distributes the same material product of a brand owner

LARGE ENTERPRISE

Businesses with assets (not including land) over
Php 100,000,000

-- OR --

MICRO/ SMALL/MEDIUM ENTERPRISE

When the total value of assets of all enterprises carrying the same brand, label, or trademark exceeds that of medium enterprises as prescribed by Republic Act No. 9501.

PH EPR **EXPLAINED**

WHAT IS COVERED?

PLASTIC PACKAGING refers to products utilized to carry, protect, or pack goods for transportation, distribution, and sale including:

- (a) Sachets, labels, laminates and other flexible plastic packaging products, whether single layer or multi-layered with plastics or other materials;
- (b) Rigid plastic packaging products, whether layered with any other materials, which include containers for beverages, food, home, personal care and cosmetic products, including their coverings, caps, or lids and other necessities or promotional items, such as cutlery, plates, drinking straws, or sticks, tarps, signage, or labels;
- (c) Plastic bags, which include single-use plastic bags, for carrying or transporting of goods, and provided or utilized at the point of sale; and
- (d) Polystyrene.

PH EPR EXPLAINED

WHAT AND WHEN IS COMPLIANCE ?

UPSTREAM STRATEGIES TO REDUCE FOOTPRINT

- Adoption of reusable packaging or redesign
- Inclusion of recycled content
- Adoption of refilling systems
- Viable reduction rates
- IEC
- Labelling to facilitate recovery and diversion

FOOTPRINT RECOVERY AND DIVERSION

Targets for the recovery of plastic product footprint generated during the immediately preceding year:

Dec 31 2023	20%
Dec 31 2024	40%
Dec 31 2025	50%
Dec 31 2026	60%
Dec 31 2027	70%
Dec 31 2028	80%

DOWNSTREAM STRATEGIES TO RECOVER FOOTPRINT

- Waste recovery schemes (redemption, buy back, offsetting)
- Diversion of recovered waste into value chains
- Transporting of recovered waste to appropriate diversion facilities
- Clean-up of waste leaked to coastal areas, roads, etc.
- Establishment of infrastructure for diversion of recovered waste
- Partnership with LGUs, communities, and IWS

EPR COMPLIANCE AUDIT REPORT

- Report on:
 - Footprint declaration
 - Recovery and plastic waste diversion
 - Determination of plastic packaging waste footprint reduction
- Independent third Party Audit
- Submission on or before 30 January of the following year

PH EPR EXPLAINED

WHAT HAPPENS FOR NON-COMPLIANCE?

PUNISHABLE ACTS

- Failure to register an EPR Program
- Failure to meet the recovery targets*
- Falsification of Documents
- Misdeclaration of generated or recovered footprint
- Employment of any scheme to maliciously evade responsibility under the EPR Act
- Tampering of compliance to recovery targets

FINES AND PENALTIES

1. Five million pesos (P5,000,000.00) to Ten million pesos (P10,000,000.00) for the first offense;
2. Ten million pesos (P10,000,000.00) to Fifteen million pesos (P15,000,000.00) for the second offense;
3. Fifteen million pesos (P15,000,000.00) to Twenty million pesos (P20,000,000.00) for the third offense and automatic suspension of business permit until the requirement of the law is complied with.

*In case of failure to meet the targets set under Section 44-F, the obliged enterprise shall pay the same fines set above, or a fine twice the cost of recovery and diversion of the footprint or its shortfall, whichever is higher

EPR CHALLENGES

1

NO RECYCLED
CONTENT
REQUIREMENTS

2

NO DESIGN FOR
RECYCLING
STANDARDS

3

NO PROJECT +
OFFSET
VERIFICATION
STANDARDS

4

NO
FOOTPRINTING
STANDARDS

5

FRAGMENTED WASTE
MANAGEMENT
IMPLEMENTATION

6

INFRASTRUCTURE
GAP

7

VIRGIN
RESIN/
OIL PRICES

8

HIGH
LOGISTICS
COSTS

9

HIGH
ELECTRICITY
COSTS

10

LOW
TIPPING
FEES

11

HEAVY, LOW
VALUE, COMPLEX
PACKAGING

12

SME + INFORMAL
DOMINATED
RECYCLING
INDUSTRY

Source: World Bank Group 2021. Market Study for the Philippines: Plastics Circularity Opportunities and Barriers. Marine Plastics Series, East Asia and Pacific Region. Washington DC

PRIORITY SOLUTIONS

✓ **STANDARDS FOR PACKAGING REDESIGN**

to increase recyclability and mandatory inclusion of recycled content

✓ **STANDARDS FOR FOOTPRINT**

uniform methodology for footprint calculation, verification/audit, and disclosure, published in the public registry

✓ **STANDARDS FOR PROJECTS AND OFFSETS QUALIFICATION + VERIFICATION**

to ensure that the collection and diversion of waste includes the implementation of environmental and social safeguards approved processing technologies, and the requirement of additionality

✓ **INFRASTRUCTURE CREDIT MECHANISM**

to build capacity needed to meet circularity aspirations and meet compliance

✓ **INTRODUCE COMPLIANCE BLOCKS**

offer the opportunity for countries to work together to meet the aspirations of National Action Plans collectively while ensuring much needed circular economy infrastructure, plus the ecosystems to support them, are getting investments from participating block members through private sector credits.

✓ **PUBLIC ACCESS FOR REGISTRY**

of offsets for traceability, transparency and accountability which will inspire confidence in EPR and reduced opportunities for graft

✓ **MEDIA & INFORMATION SESSIONS**

by both the DENR and Producer Responsibility Organizations

A man wearing a dark suit, a blue striped tie, and a bright yellow safety vest with reflective silver stripes stands in a recycling facility. He is holding a small amount of light blue granules in his hands. The background shows a complex industrial structure with blue metal frames and conveyor belts filled with various types of waste, including plastic and paper. The lighting is bright and even.

STANDARD SAMPLE

SAMPLE PPRS

3RD PARTY AUDITED FOOTPRINTS

Who is obliged

Voluntary
Compliance

What is the scope

Packaging
Products
Marketing Materials

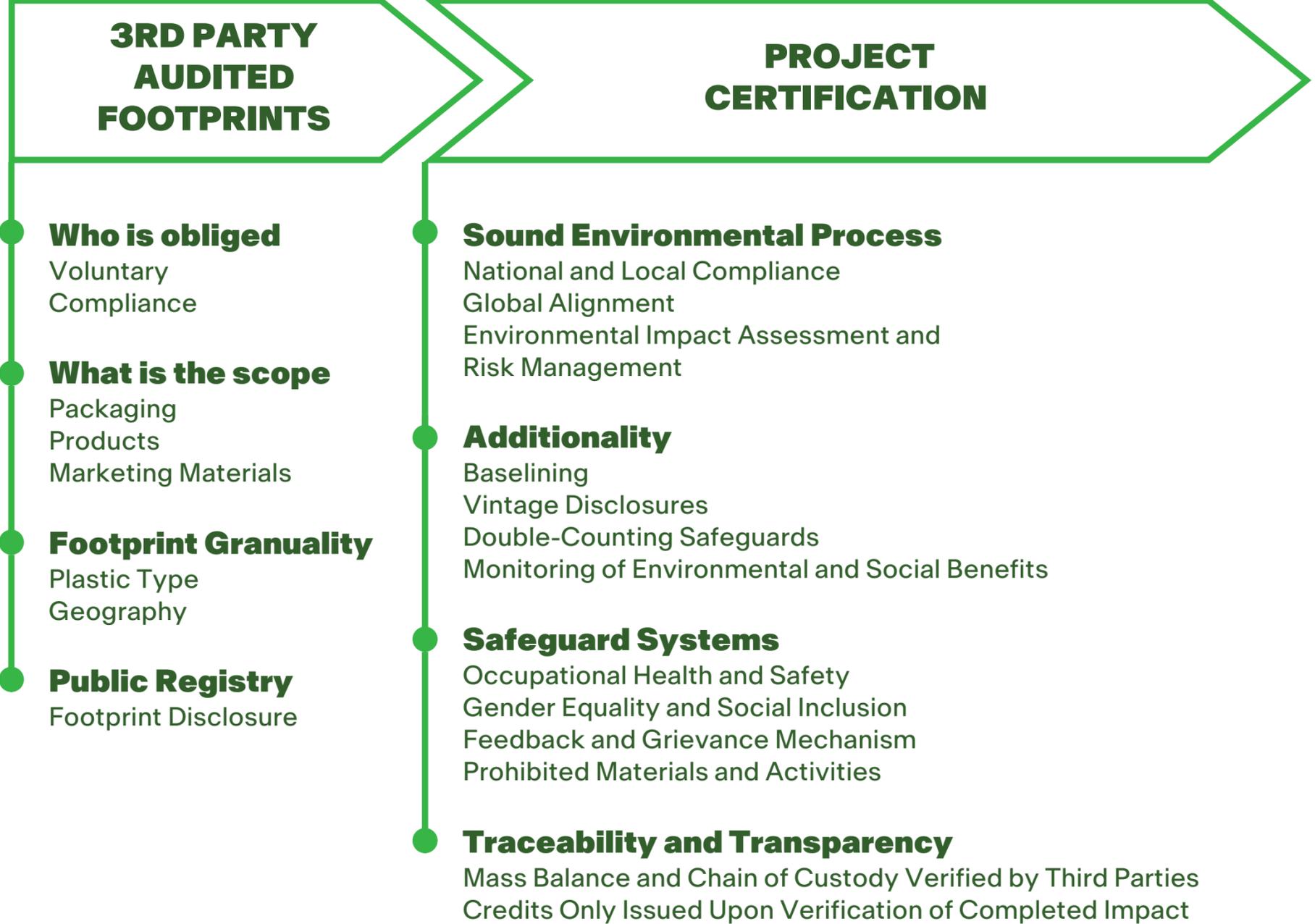
Footprint Granularity

Plastic Type
Geography

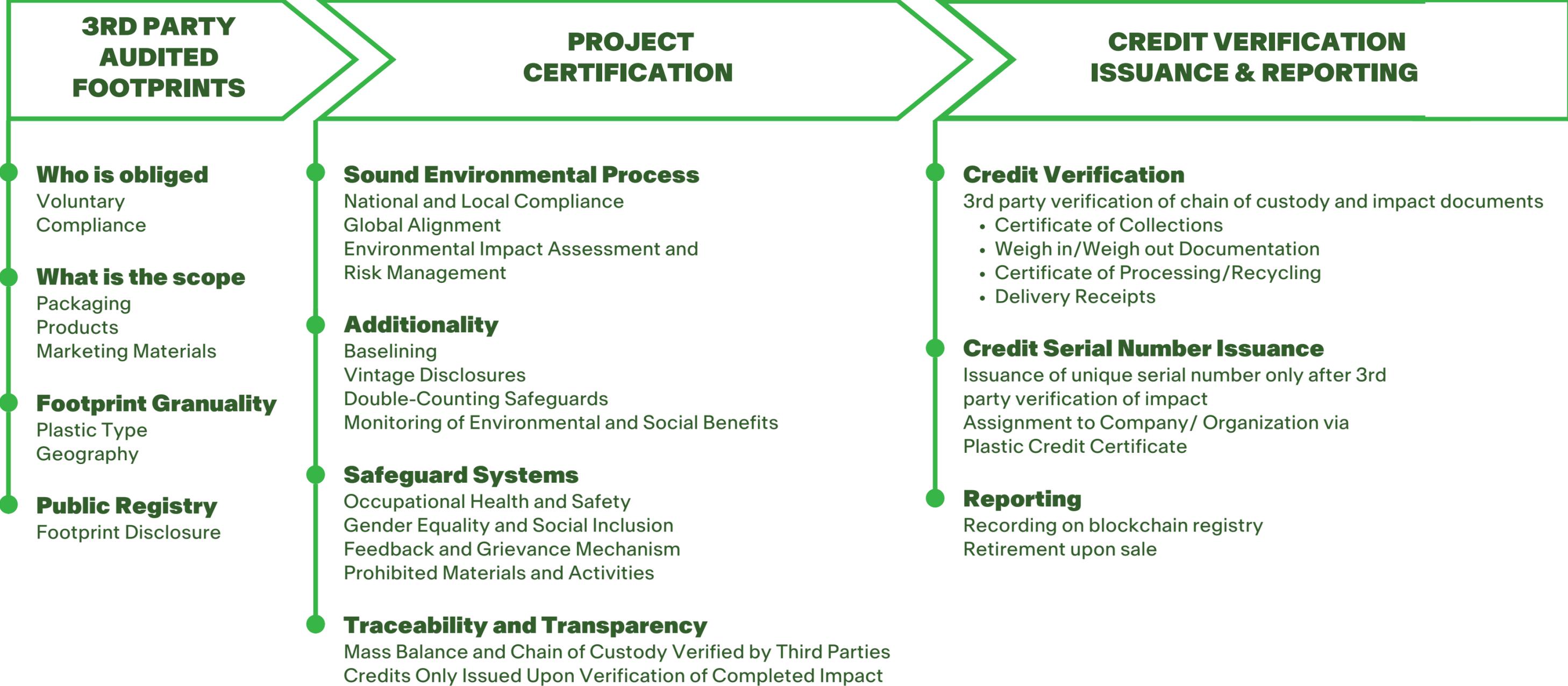
Public Registry

Footprint Disclosure

SAMPLE PPRS



SAMPLE PPRS



SAMPLE

REGISTRY

Company Name	Credits	Purpose	Declared Footprint	Footprint Auditor	Impact/Compliance Year	Impact Auditor (for PPRS)	View more details
PepsiCo Philippines	920	Voluntary	919.09	PwC Philippines	2020	Control Union Philippines	View more details



Projects Funded	Project Credits, MT	Collection Source	Processor	Project Standard Applied	Project VVB
Co-processing in Antipolo, Rizal	377	CEMEX - Greencycle,Philippines	CEMEX - Greencycle,Philippines	PPRS	PwC Philippines
Community Collection and Recycling in Manila	186	Friends of Hope Inc.	Royal Rainbow Recycling	PPRS	Control Union PH
PET Recycling in Bulacan	199.38	Royal Rainbow Recycling	Nam Vang ha Nam	PPRS	Control Union PH
Plastic Upcycling in the Philippines	40.31	Sentinel Upcycling	Sentinel Upcycling	PPRS	EY SGV Philippines
Community Collection and Co-processing	72.13	Friends of Hope Inc.	Republic Cement Ecoloop - Bulacan	PPRS	PwC Philippines
LDPE and LLDPE Recycling	45.18	Veolia Circular Polymer TH	Veolia Circular Polymer TH	PPRS	PwC Thailand

SAMPLE

REGISTRY

Projects Funded	Project Credits, MT	Collection Source	Processor	Project Standard Applied	Project VVB
Co-processing in Antipolo, Rizal	377	CEMEX - Greencycle,Philippines	CEMEX - Greencycle,Philippines	PPRS	PwC Philippines

Co-processing in Antipolo, Rizal

Credit Serial Number	CEM01-GRN01-2020288-02-377MT	Brand Industry	Manufacturing – Consumer Goods
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TRACEABILITY DOCUMENTS

DOCUMENTS		
	Pepsico_CEM01-GRN01-2020288-02-377MT _ CEM01-GRN01-2020059-02-186MT no comments	DOWNLOAD
	CEM01-GRN01-20210511-03-199 no comments	DOWNLOAD
	Plastic Pollution Reduction Standard-PCFET-Frito Lays Salty Snacks- Signed no comments	DOWNLOAD
	Plastic Pollution Reduction Standard-PCFET-Quaker-Signed no comments	DOWNLOAD
	PCX-PNB-20210630-00016 Plastic Neutral Certificate	DOWNLOAD
	Certificate of Collection - GATSI - Jan Feb - Pepsico no comments	DOWNLOAD

	Certificate of Disposal - GATSI - Jan Feb - Pepsico no comments	DOWNLOAD
	Certificate of Disposal - GATSI GCC - Jan - PepsiCo PH no comments	DOWNLOAD
	Certificate of Disposal - GCC - Apr - PepsiCo PH no comments	DOWNLOAD
	Certificate of Disposal - GCC - Feb - PepsiCo PH no comments	DOWNLOAD
	Material Balance Report - GATSI - Jan Feb - Pepsico no comments	DOWNLOAD
	PCFET - Frito Lays Salty Snacks - AUP Report - 2021 no comments	DOWNLOAD
	PCFET_Quaker - AUP Report - 2021 no comments	DOWNLOAD

CREDITS ROLE IN **UN TREATY**

Plastic credits constitute a critical financing mechanism to ensure we can address the legacy and growing amount of plastic waste entering our environment today.

It can help address both environmental and social issues, and incentivise capital investment in long-term circular solutions. Even with a 40% reduction in plastic production over the next two decades, we will still produce an additional 9B tons of plastic waste that must be addressed. Credits can be issued against every tonne of post-consumer plastic waste that has been verified to be collected and properly managed, and should adhere to minimum requirements on transparency, impact, and legal compliance.

In summary, verified and fully traceable plastic credits, in both voluntary and compliance-driven actions, can help ensure we are keeping plastic pollution out of nature while incentivising much needed capital investments for a truly circular economy.

WHAT IF WE CAN BE THE GENERATION THAT SOLVES THE PLASTIC POLLUTION CRISIS?

[PCXMARKETS.COM](https://pcxmarkets.com)

[PCXSOLUTIONS.ORG](https://pcxsolutions.org)

