



THE **PLASTIC** **POLLUTION** **REDUCTION** **STANDARD**

Version 8.0
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FOREWORD

The plastic pollution crisis presents a tremendous opportunity for humanity to demonstrate its ingenuity, creativity, and resilience. With the right public policies, technology innovation, and market-based solutions, we have all the tools needed to transform our relationship with plastic. Many necessary solutions already exist, but they have not been deployed with the coverage, scale, and quality that is required to address the problem.

The world has produced over 9 billion metric tons of plastic since the 1950s¹. Today, only 9% of plastic waste is recycled, 19% incinerated, and 72% landfilled, openly burned or ends up in the environment², with detrimental effects on our ecosystems and human populations. Even if we were to reduce primary plastic production from today's levels by 40% by 2050, the world would still produce another 11 billion tons which needs to be responsibly managed.

PCX Solutions continues to develop the Plastic Pollution Reduction Standard (PPRS), a framework for the registration of post-consumer plastic waste recovery and diversion projects, and the issuance of plastic credits. It requires the demonstration of additionality³ and compliance to warrant environmental integrity and safeguard systems that aim to protect the people involved in waste management projects. The latter includes occupational health and safety, gender equality, social inclusion, and feedback and grievance mechanisms—all of which must be validated by third-party auditors. The PPRS, along with our management processes, constantly evolve to reflect best available technology, government policies, and industry best practices in all geographies we operate in. PCX Solutions reviews and updates the PPRS on a regular basis with support from its PCX Industry Steering Committee. Users may refer to the PCX Solutions [website](#) for the latest version of the PPRS, its modules, and relevant guidance.

There is no silver bullet that solves the plastic pollution crisis. Plastic credits assign a value to all kinds of plastic waste, including low value plastics that are typically not collected. They are also an important funding mechanism based on the 'polluter pays principle', which is particularly critical in emerging markets that lack waste management infrastructure, and which are most severely affected by the plastic pollution crisis. They can help deliver short- to mid-term impact from collection, transportation, and processing of plastic waste through both voluntary and compliance-driven action under Extended Producer Responsibility (EPR) schemes. Plastic credits also incentivize longer-term, sustained investments in circular solutions and infrastructure such as upcycling and recycling facilities, and can change the unit economics of plastic: if companies take responsibility for their footprint and invest in plastic credits, they have to add the cost of credits to the low virgin plastic prices, which reduces the gap to recycled plastic or other alternatives.

PCX Solutions views plastic credits not as an excuse to pollute, but as a vital element of implementation and financing towards ending plastic pollution by complementing policy frameworks and corporate action to reduce plastic waste. Our mission is to accelerate the transition to a circular economy, and to build a future where no plastic ends up in nature. With bold action and optimistic determination, we can be the generation that solves the plastic pollution crisis.

¹ United Nations Environment Programme (2021). From Pollution to Solution: A global assessment of marine litter and plastic pollution. Nairobi, <https://www.unep.org/resources/pollution-solution-global-assessment-marine-litter-and-plastic-pollution>

² OECD (2022), Global Plastics Outlook: Economic Drivers, Environmental Impacts and Policy Options, OECD Publishing, Paris, <https://doi.org/10.1787/de747aef-en>

³ The concept of additionality is further discussed in Module 2, Objectives and Guiding principles. Furthermore, as this is one of the criteria for PPRS registration, determination and evaluation of additionality is elaborated in Module 3, Criteria 2.

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PPRS Version and History

In an effort to maintain relevance and harmonization with existing regulations and international standards, the PPRS is continually reviewed and updated, as necessary. The following table shows the version history of the standard since its inception.

Version No.	Publishing / Effective Date (DD.MM.YYYY)
1	02.04.2020
2	30.06.2020
3	30.08.2020
4	16.03.2021
5	10.07.2021
6	20.01.2022
7	23.09.2022
8	05.06.2024

Below are the significant changes from version 7 to version 8 of the PPRS:

- Refinement of existing and additional [definitions](#) in an effort to harmonize with globally accepted terminology
- Elaboration of [Environmental and Social Safeguards](#)
- Adopting a [regional baseline approach](#) for determination of quantitative and qualitative additionality
- Elaboration of [Project Registration Processes and Requirements](#) and formalization of the Validation and Verification Model for Project Registration
- Elaboration of [Plastic Credit Verification and Issuance](#) and establishing links to the PPRS Registry
- [Transition from Net Zero Plastic Waste](#) to provision of guidance for self-declared claims in alignment with ISO 14021:2016 and UNEP Guidelines for Providing Product Sustainability Information (2017)

Summary of changes from previous versions are detailed in the [PPRS Summary of Version Changes](#).

Abbreviations

ABS	Acrylonitrile Butadiene Styrene
BAT	Best Available Technology
EPR	Extended Producer Responsibility
HDPE	High-Density Polyethylene
LDPE	Low-Density Polyethylene
LLDPE	Linear Low-Density Polyethylene
O	Other Plastics (classification)
PET or PETE	Polyethylene Terephthalate
PP	Polypropylene
PPRS	Plastic Pollution Reduction Standard
PS or EPS	Polystyrene or Expanded Polystyrene
UBC	Used Beverage Cartons
UN	United Nations
UNEP	United Nations Environment Programme
UN SDGs	United Nations Sustainable Development Goals
VVB	Validation and Verification Body
WHO	World Health Organization
WWF	The World Wild Fund for Nature

Module 1: Definition of Terms and Scope

Reference Documents:

1. UNEP Basel Convention and Secretariat of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (2011). [Technical Guidelines on Environmentally Sound Co-processing of Hazardous Waste in Cement Kilns](#).
2. Plastics Europe (Accessed 11 May 2024). [Chemical Recycling](#).
3. Ellen MacArthur Foundation (Accessed 20 Mar 2024). [Circular Economy Definition](#).
4. ISO (2016). [ISO 14021:2016 - Environmental labels and declarations - Self declared environmental claims \(Type II Environmental Labelling\)](#).
5. European Union (2008) [Directive 2008/98/EC](#) of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.
6. OECD (Accessed 11 May 2024). [Extended Producer Responsibility Definition](#).
7. European Bioplastics (2020). [Back Ground: Mechanical Recycling](#).
8. UN (2018). [Manual on the Basic Set of Environment Statistics of the FDES 2013. Generation and Management of Waste](#).
9. UNEP (2019). [Waste-to-Energy: Considerations for Informed Decision-Making](#).
10. ISO (2023). ISO 5157:2023(en) Textiles — Environmental aspects. [Upcycling Definition](#).
11. Asian Development Bank (2020). [Waste-to-Energy in the Face of Circular Economy Best Practice Handbook](#).
12. Circular Plastics Alliance (2021). [Guidance on Waste Definitions](#).

Definition of Terms

Aggregator	:	An individual or an organization (government or non-government) who collects post-consumer plastic waste from various sources and consolidates it for delivery to processors.
Chemical Recycling ⁴	:	The process of converting polymeric waste by changing its chemical structure and turning it back into substances that can be used as raw materials for the manufacturing of plastics or other products. There are different chemical recycling technologies, e.g. pyrolysis, gasification, hydro-cracking and depolymerization.
Circular Economy ⁵	:	A system where materials never become waste, and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling, and composting. The circular economy tackles climate change and other global challenges like biodiversity loss, waste, and pollution by decoupling economic activity from the consumption of finite resources.
(Environmental) Claim ⁶	:	A statement, symbol, or graphic that indicates an environmental aspect of a product, a component, or packaging.
Co-processing ⁷	:	The use of suitable waste materials in manufacturing processes for the purpose of energy and/or resource recovery and resultant reduction in the use of conventional fuels and/or raw materials through substitution.
End-of-Waste ^{8,9}	:	<p>The EU Waste Framework Directive specifies that certain waste shall cease to be waste when it has undergone a recovery. This includes recycling and operation, and complies with specific criteria to be developed in accordance with the following conditions:</p> <ul style="list-style-type: none"> a. The substance or object is commonly used for specific purposes; b. A market or demand exists for such a substance or object; c. The substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products; and d. The substance or object will not lead to overall adverse environmental or human health impacts.

⁴ Plastics Europe (Accessed 11 May 2024). Chemical Recycling. Accessed through

<https://plasticseurope.org/sustainability/circularity/recycling/chemical-recycling/>

⁵ Ellen MacArthur Foundation (Accessed 20 Mar 2024). Circular Economy Definition. Accessed through:

<https://www.ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview>

⁶ ISO (2016). ISO 14021:2016 - Environmental labels and declarations - Self declared environmental claims (Type II Environmental Labelling).

⁷ UNEP UN Basel Convention (2011). Technical Guidelines on the Environmentally Sound Co-Processing of Hazardous Wastes in Cement Kilns.

⁸ European Union (2008) Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. Accessed through: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008L0098&from=EN>

⁹ Illustration: A recycling process that processes PET bottles into rPET resins or pellets may already qualify as "End-of-Waste" if the recycler can show that it meets the technical specifications of the material buyers such that the recycler's products (rPET) may be used as a primary material for the manufacturing process of the material buyer.

The criteria shall include limit values for pollutants where necessary and shall take into account any possible adverse environmental effects of the substance or object.

Extended Producer Responsibility (EPR)¹⁰ : An environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle. An EPR policy is characterized by:

- a. the shifting of responsibility (physically and/or economically; fully or partially) upstream toward the producer and away from municipalities; and
- b. the provision of incentives to producers to take into account environmental considerations when designing their products.

While other policy instruments tend to target a single point in the chain, EPR seeks to integrate signals related to the environmental characteristics of products and production processes throughout the entire product chain.

Impact Verification : The process of reviewing and confirming evidence (supporting documents) submitted by a Project for a specific plastic waste volume to generate plastic credits. Impact verification is performed by a VVB appointed by PCX Solutions. A positive impact verification results in the issuance of a plastic credit, while a negative verification means that the Project's claim for plastic credit generated shall not result in the issuance of a plastic credit.

Mechanical Recycling¹¹ : Operations that aim to recover plastics via mechanical processes (grinding, washing, separating, drying, re-granulating and compounding), thus producing recyclates that can be converted into plastics products to substitute virgin plastics.

Ocean-bound Waste : Post-consumer waste collected within a 50-kilometer distance from the nearest coastlines, which if not recovered, has a high likelihood of leaking into the oceans.

Plastic/s : Any of a group of synthetic or organic materials, including resins, resinoids, polymers, cellulose derivatives, casein materials, and proteins. Further enumeration is included in the Scope (Module 1).

(PPRS) Plastic Credit : Refers to an environmental unit representing 1,000 kilograms or 1 metric ton of post-consumer plastic waste diverted away from nature, which is obtained through documented and verified collection, aggregation, and recycling or processing activities, and is registered in the PPRS Registry. Each unit is generated through an end-to-end process that starts from collection and concludes in the End-of-Waste processing of the collected feedstock.

¹⁰ OECD (Accessed 11 May 2024). Extended Producer Responsibility Definition. Accessed through: <https://www.oecd.org/environment/extended-producer-responsibility.htm>

¹¹ European Bioplastics (2020). Back Ground: Mechanical Recycling. Accessed through: https://docs.european-bioplastics.org/publications/bp/EUBP_BP_Mechanical_recycling.pdf

Plastic Credit Buyer	:	An individual, organization, or corporation engaged in plastic pollution reduction, avoidance, and/ or responsibility (i.e. by purchasing plastic credits).
Plastic Footprint	:	Amount of plastic associated with a business' activities, including products and services, measured in units of mass (kilograms or metric tons) and based on a defined scope. This may include plastic used in the manufacturing, distribution, promotion, and sale of products or services, as well as in general and administrative functions. It may encompass plastic retained within the business, released to the market and still in use, and/or emitted/leaked into the environment, providing an inventory of the business's overall plastic usage.
Plastic Footprint Assessment	:	Process of quantifying the plastic footprint of a given entity.
Plastic Footprint Verification	:	Independent evaluation conducted by any qualified third-party to check that the quality and sources of input data to the plastic footprint assessment are in line with the methodology used for the assessment.
Post-Consumer Plastic Waste	:	Plastic waste generated by end-user waste generators such as households, businesses, hotels, restaurants, or similar. This definition excludes 'post-industrial' or 'pre-consumer' waste produced by factories (i.e. products or packaging that are defective, rejected, returned, or do not meet quality standards). This definition excludes any plastic waste that is classified as hazardous waste by relevant national regulations.
PPRS Conformity Assessment	:	A process performed by an independent VVB on a Project to ensure its conformity to the PPRS, including its compliance to local regulations, as a requisite for Project Registration. This may sometimes be referred to as Validation or Project Validation.
PPRS Registry ¹²	:	A secure and publicly available registry that is owned and operated by PCX Solutions. It contains project information for PPRS Registered Projects and information on issued and retired PPRS Plastic Credits. This includes, but is not limited to, issuance and retirement date, quantity, and verified supporting documents of the end-to-end collection and processing of the corresponding tonnage of plastic wastes.
Project	:	Refers to activities and facilities managed as a single operation that collects and processes post-consumer plastic wastes. This operation may generate plastic credits upon registration and is subject to verification of impact delivered. The scope of the Project

¹² As of the date of publication of the PPRS Version 8 (05 June 2024), the PPRS Registry of PCX Solutions is in the final stages of development for version 8 and testing. The public may access the relevant information on the issued and retired PPRS plastic credits through the registry of 'PCX Markets', a company that facilitates the sale and purchase of plastic credits, including those generated by PPRS projects. The registry of PCX Markets is accessible through: <https://app.pcxmarkets.com/registry>. Further, all PPRS-registered projects are provided with a registration document containing their PPRS registration number. Stakeholders may email pprs@pcxsolutions.org to confirm the PPRS registration status of a Project. Once the PPRS registry is fully published and live, notification will be done through the PCX Solutions Website: www.pcxolutions.org

is defined by the Project Partner and subject to the validation of a third-party VVB.

Project Partner	:	May refer to an Aggregator, a Processor or an entity that covers both collection and processing of post-consumer plastic and whose Project has passed the registration requirements of the PPRS. The PPRS may also refer to organizations or individuals undergoing the registration process as “Project Partner”. The qualifying word would be “PPRS Registered”.
Project Registration	:	Occurs when a Project has successfully completed a PPRS Conformity Assessment with an independent VVB. The validated project information is then published in the PPRS Registry. Project Registration is valid for five (5) years, subject to the Project Registration terms and conditions between the Project and PCX Solutions, and yearly compliance monitoring/review by the VVB.
Processor	:	An entity that receives, treats, or converts post-consumer plastic waste into other useful forms through material or energy recovery (End-of-Waste).
Recycling ¹³	:	Any reprocessing of material in a production process that diverts it from the waste stream, except reuse as fuel. Both reprocessing as the same type of product, and for different purposes should be included. Direct recycling within industrial plants at the place of generation should be excluded.
Upcycling ¹⁴	:	Process of converting waste products to new materials that are of higher economic value or quality than in the original product.
Validation and Verification Body (VVB)	:	Refers to a third-party organization, independent from PCX Solutions and the Project Partner, that has been approved by PCX Solutions to carry out validation and verification of Projects to evaluate conformity with the PPRS. PCX Solutions also appoints a VVB to verify the credits prior issuance (see impact verification definition). The VVB appointed to perform impact verification is referred to as the “Impact Verification Auditor”.
Waste-to-Energy ¹⁵ (WtE)	:	Refers to a variety of treatment technologies that convert waste to electricity, heat, fuel, or other usable materials, as well as a range of residues including fly ash, sludge, slag, boiler ash, wastewater and emissions, including greenhouse gases.

¹³ UN (2018). Manual on the Basic Set of Environment Statistics of the FDES 2013. Generation and Management of Waste. Accessed through: https://unstats.un.org/unsd/environment/FDES/MS_3.3.1_3.3.2_Waste.pdf

¹⁴ ISO (2023). ISO 5157:2023(en) Textiles — Environmental aspects. Accessed through the ISO Online Browsing Platform <https://www.iso.org/obp/ui#iso:std:iso:5157:ed-1:v1:en:term:3.2.6.39> on 20 May 2024.

¹⁵ UNEP (2019). Waste-to-Energy: Considerations for Informed Decision-Making

Scope of the PPRS

The PPRS covers the processes of conformity assessment and registration of projects, verification and issuance of plastic credits, and some guidance for self-declared environmental claims that Plastic Credit Buyers may wish to make in relation to plastic credits.

Plastic Credit Value Chain

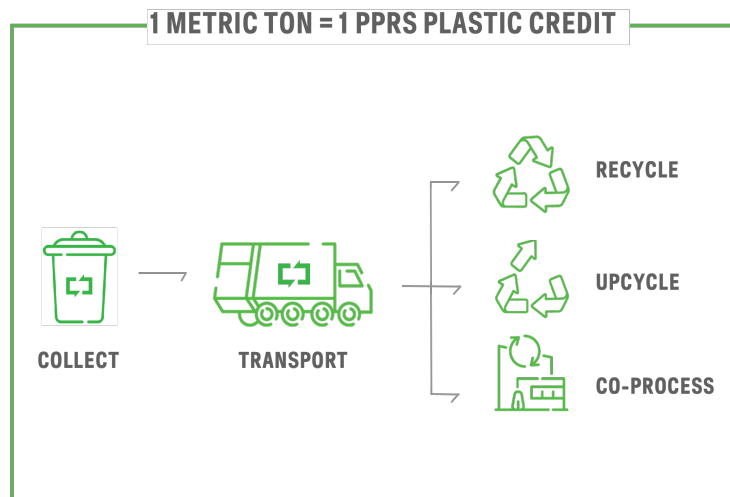


Figure 1: Plastic credit conversion example.

Aggregation: This includes all informal, semi-formal, or formal waste collection activities such as, but not limited to, diversion from landfills, waste picking, waste trading (i.e. junk shops), and government, community, or private-led waste collection activities. This may also include the storage, sorting, and pre-processing that is necessary to gain acceptance of feedstock to responsible End-of-Waste processing facilities.

For avoidance of doubt, aggregation of post-consumer plastic waste by itself is insufficient to generate a plastic credit. There will be no issuance of partial plastic credits as well. For the aggregation activity to enable the generation of plastic credits, the destination of or processing to End-of-Waste shall be included. Further details are available in Module 3.

Processing: As the optimal recovery option for plastic waste depends on many prevailing circumstances, PCX Solutions encourages their Project Partners to adopt a life-cycle perspective prior to deciding the best processing option. The decision depends on the type and composition of the plastic waste and the capabilities and regulations in the respective countries, as well as the consideration of which options would be environmentally favorable and sustainable. At the very least, Projects should sort out the materials where higher levels of processing (such as mechanical recycling) are viable, to ensure that the waste management hierarchy is observed. In the case of commingled or composite plastic waste, or where there is insufficient suitable and at

scale recycling infrastructure, energy recovery and chemical recycling processes may sometimes represent a viable choice. Plastic waste should be managed in accordance with the waste management hierarchy, prioritizing prevention and minimization of waste, and considering the holistic environmental aspects to avoid adverse environmental impacts. In general, plastic waste processing technologies that may be utilized by PCX Solutions' partners can be divided into the following classes:

- a. Material recovery (mechanical recycling, chemical recycling, and biological or organic recycling)
- b. Energy recovery in the form of heat, steam, or electricity generation using plastic waste as substitutes for primary fossil fuel resources
- c. Other Best Available Technologies (BAT) that have undergone and passed assessments from reputable organizations, which are subject to PCX Solutions' review and qualification under the PPRS

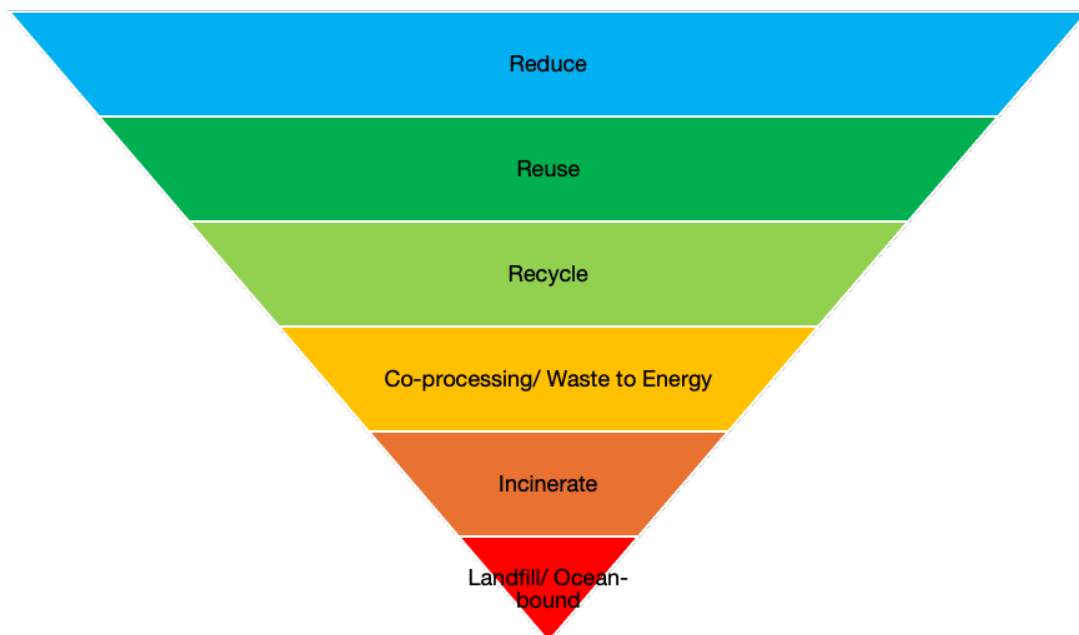


Figure 2: Visual Representation of UNEP Basel Convention: Technical Guidelines on Environmentally Sound Co-processing of Hazardous Waste in Cement Kilns - Waste Management Hierarchy.

The PPRS provides relevant guidance to ensure that our Project Partners abide by local and international environmental and social requirements in their respective processes. For the example of co-processing plants, the PPRS aligns with the requirements of the "Technical Guidelines on Environmentally Sound Co-processing of Hazardous Waste in Cement Kilns¹⁶" released by the UN Environment Programme Basel Convention.

¹⁶ Based on the waste management hierarchy (see Figure 2), co-processing in cement kilns with the proper safeguards and monitoring is an environmentally preferable alternative to landfills and open burning. Please refer to the "Technical Guidelines on Environmentally Sound Co-processing of Hazardous Waste in Cement Kilns" released by the UNEP Basel Convention. "Where waste avoidance is not possible, reuse, recycling and recovery of waste are preferable alternatives to non-recovery operations. As an example, co-processing in cement kilns provides an environmentally sound resource recovery option preferable to landfilling and incineration." Accessed through: <https://www.basel.int/Portals/4/Basel%20Convention/docs/pub/techguid/cement/tg-cement-e.pdf>

Similar references will be used based on the type of process covering environmental and social safeguard systems.

The PPRS aligns with the Asian Development Bank's Waste to Energy in the Age of Circular Economy's Best Practice Handbook¹⁷ in that "'Incineration' is a term associated with technology from the 1960s, which was highly pollutive. Incineration should not be confused with modern thermal treatment facilities, which treat air pollutants. Direct cost of thermal waste treatment is typically more expensive than landfilling. This is due to the additional capital and operating costs for air pollution controls on modern thermal waste treatment facilities. These facilities are often called WtE plants, energy-from-waste (EfW) plants and, incorrectly, incinerators. Some references continue to use the term "incineration" to associate historical environmental performance with modern facilities." Waste-to-Energy, as defined and referenced in the PPRS therefore pertains to modern thermal waste treatment facilities as means to recover energy or materials and are utilizing appropriate technologies to mitigate adverse impact to the environment.

Only processing technologies and infrastructure that have regulatory frameworks in the country where it is implemented shall be considered in the PPRS scope. In the case where regulatory frameworks and applicable international standards exist, the more stringent requirements shall take priority.

Qualified Post-Consumer Plastic Materials

Plastics as defined in the PPRS cover a wide range of materials that go into the waste stream. These include:

- a. All materials made of the seven types of plastics: Polyethylene Terephthalate (PETE or PET), High-Density Polyethylene (HDPE), Polyvinyl Chloride (PVC), Low-Density Polyethylene (LDPE), Linear Low-Density Polyethylene (LLDPE), Polypropylene (PP), Polystyrene or Expanded Polystyrene (PS or EPS) and Other Plastics (O)
- b. Any of a group of synthetic or natural organic materials, including resins, resinoids, polymers, cellulose derivatives, casein materials, and proteins which include, among others, acrylic or poly methyl methacrylate, acrylonitrile butadiene styrene (ABS), polyamide (nylon), polycarbonate and polylactic acid
- c. Composite materials containing the plastics and material types listed above, such as multilayer paper boards with polyethylene and/or aluminum layers

¹⁷ Asian Development Bank (2020). Waste-to-Energy in the Face of Circular Economy Best Practice Handbook. Accessed through: <https://www.adb.org/publications/waste-to-energy-age-circular-economy-handbook>

Multi-component materials, such as tires and UBC (used beverage cartons), can be more specifically referred to as “Used Tires Credit¹⁸” or “UBC Credits”, respectively, to further specify that plastic credits are sourced from these post-consumer materials collected.

For avoidance of doubt, the PPRS Plastic Credit may only be generated for volumes of collected and processed post-consumer plastic wastes. Volumes derived from the collection and processing of industrial, manufacturing, or pre-consumer wastes are not eligible to generate plastic credits. To illustrate, below are examples (not limiting) of commonly considered post-consumer plastic wastes:

- Plastic packaging of consumer goods as delivered to the end-user, such as plastic bottles, food wrappers, plastic bags, and sachets (whether mono- or multi-layered)
- Bulk plastic packaging of consumer goods as delivered to retailers or distributors
- Consumer goods with plastic components such as toys, appliances, clothes, and tires
- Abandoned, lost, or otherwise discarded fishing gear
- Discarded postal and courier packaging
- Discarded food and other services packaging, such as disposable utensils, plates, and cups

Alternatively, the following are examples of excluded wastes from the definition of post-consumer plastic wastes:

- Production rejects, recalls, and scraps
- Plastic packaging of raw or intermediary materials for use in a secondary manufacturing or production process
- Medical wastes
- Wastes classified as hazardous under national regulations such as Waste Electronics and Electrical Equipment (WEEE), chemical contaminated containers, and other hazardous wastes that would pose significant risk and harm to humans and the environment when handled by untrained or unlicensed persons.

Further guidance may be taken from the “Guidance on Waste Definitions”¹⁹ by the Circular Plastics Alliance to distinguish between post-consumer wastes and pre-consumer/post-industrial wastes.

¹⁸ The PPRS follows a 1:1 conversion of used tires credit to plastic credits. When used tires are collected and transported to the end-of-waste processing facilities, the plastic components/ synthetic materials cannot be mechanically separated from the rest of the components and this is taken into consideration.

¹⁹ Circular Plastics Alliance (2021). Guidance on Waste Definitions. Accessed through:
<https://ec.europa.eu/docsroom/documents/46954/attachments/8/translations/en/renditions/pdf>

Module 2: Objectives, Principles, and Safeguards

Reference Documents:

1. International Finance Corporation (IFC) (2012). [Performance Standards on Environmental and Social Sustainability](#).
2. Asian Development Bank (ADB) (2009). [Safeguard Policy Statement](#).
3. World Bank (2016). [Environmental and Social Framework](#).
4. WWF (2021). [WWF Position: Plastic Crediting and Plastic Neutrality](#).
5. International Labor Organization (various). [ILO Standards](#).

Objectives and Guiding Principles

PCX Solutions addresses the legacy and growing amount of plastic waste entering our environment today through solution sets, which include plastic credits and working with organizations on their plastic reduction and responsibility strategies. We encourage the elimination of all unnecessary and avoidable plastics, the reduction of any material use where possible, the switch to recyclable materials, the use of recycled content, and the support of circular business models and responsible management of any remaining plastic so that it doesn't end up in nature.

The objective of the PPRS is to provide a framework for the implementation of a credible and verifiable plastic crediting program. PCX Solutions, through its network of partners, provides a secure and transparent system of physically collecting, transporting, and processing plastic waste to address leakage into the environment. Through a fully audited process, PCX Solutions translates the weight of collected, transported, and processed post-consumer plastics waste into the equivalent plastic credits. All issuances and retirements of PPRS Plastic Credits are recorded in the PPRS Registry. Any individual or organization may purchase plastic credits as a means to take responsibility for plastic waste and in part to achieve goals for plastic pollution reduction.

PCX Solutions strongly emphasizes that the concept of plastic credits is not an excuse for organizations to abandon the reduction and avoidance of plastics used in their products and services, including their supply chain. PPRS is rooted in plastic pollution reduction by curbing the flow of plastics into nature while better means of packaging and recycling are being developed. Plastic credits may form part of the organization's wider strategy, and plastic credits may eventually diminish as more sustainable materials and technologies emerge.

The PPRS is guided by the following principles:

- a. **Conservativeness:** All claims should be validated and verifiable and should be as accurate as possible. In cases where there is doubt, organizations agree to undertake the more conservative approach and to disclose the methodologies that underlie their claim.
- b. **Integrity and Consistency:** PCX Solutions operates in accordance with third-party validation and verification bodies to ensure that claims are applied consistently and appropriately across relevant and intended users of the PPRS. Third-party validation and verification is also required to ensure that Project Partners are consistently assessed in accordance with the PPRS, and all project information and data are accurate and truthful. All delivered impacts shall be verified by a third-party auditor prior to the issuance, sale, and subsequent retirement of plastic credits.
- c. **Transparency and Traceability:** PCX Solutions shall disclose relevant and sufficient information of stakeholder interest to the public, making every effort to

ensure easy, prompt, and practical access to the appropriate information. Plastic Credit Certifications and Project Registrations awarded by PCX Solutions shall have sufficient and verified documentation and evidence.

- d. **Additionality:** PCX Solutions prioritizes operations in communities where there is high mismanagement of plastic waste.

In January 2021, the World Wide Fund for Nature (WWF) published its position on plastic crediting and plastic neutrality and defines additionality as an “activity for which the credit is given would not have occurred in the absence of the crediting mechanism but instead clearly occurred in response to (and after the development) of a crediting mechanism.”²⁰

A baseline needs to be determined to ensure that any socio-economic benefits and volumes claimed for plastic credits are incremental benefits to the status quo. Projects should determine and present an appropriate regional baseline, which will be assessed by the VVBs during the PPRS conformity assessment. These regionally appropriate baselines may come from public and published sources and may refer to either the national or sub-national level, with preference to more localized data and information, as available. Benefits brought about by the Project (i.e. above the regional baseline, in terms of environmental and socio-economic aspects), shall be considered as additional and are the basis of a Project qualifying for the PPRS, even if higher volumes are not collected. The realization of the socio-economic benefits claimed by a Project shall also be validated by the VVB in its assessment.

The regional baseline shall be reviewed at least once every five years, depending on availability of updated public sources, and shall be considered in the re-assessment of the Project.

- e. **Policy Interactions:** The PPRS is aligned with policy mechanisms such as the Extended Producer Responsibility (EPR). In cases where there is an existing national policy for plastic credits and the generation and issuance of plastic credits, the users of this standard should follow the more stringent requirement between the applicable EPR Policy and the PPRS, if there is some variance between the two—i.e. EPR policies may not require additionality in the same way this standard requires. Projects that wish to generate PPRS Plastic Credits are required to demonstrate their additionality.²¹
- f. **Continuous Improvement:** PCX Solutions is committed to regularly reviewing and refining the PPRS for the benefit of the environment and the stakeholders. PCX Solutions benchmarks the processes and results to make sure that operations are harmonized and compliant with international industry best practices. PCX Solutions is open to feedback from the users of the PPRS and relevant inputs will be reviewed, addressed, and, when deemed reasonable, incorporated into the

²⁰ WWF (2021). WWF Position: Plastic Crediting and Plastic Neutrality. Accessed through: <https://www.worldwildlife.org/publications/wwf-position-plastic-crediting-and-plastic-neutrality>

²¹ PCX Solutions actively participates in global policy discussions such as the Intergovernmental Negotiating Committee (INC) process for a Global Plastic Treaty. We seek to align the PPRS to these policies and appropriate modifications to the PPRS may be implemented upon the conclusion of the INC.

standard following the PCX Solutions amendment process. Feedback for PPRS may be submitted through email - pprs@pcxsolutions.org.

PCX Solutions actively works with international organizations and established Industry Working Groups to consolidate language, definitions, and positions to drive further credibility and adoption of the PPRS.

The PPRS aligns with the United Nations Sustainable Development Goals (UN SDGs). This is illustrated as follows:

#	UN Sustainable Development Goals		PPRS
1	No Poverty	End poverty in all its forms everywhere	The PPRS includes socio-economic benefits such as incremental income to communities and vulnerable groups in the consideration of additionality.
3	Good Health and Well-Being	Ensure healthy lives and promote well-being for all at all ages	The PPRS provides a framework for the implementation of solutions towards the reduction or minimization of plastic pollution, affecting the health of people, communities, and future generations.
5	Gender Equality	Achieve gender equality and empower all women and girls	The PPRS includes gender equality and anti-discriminatory policies in its safeguards.
6	Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all	The PPRS provides a framework for the implementation of solutions towards the goal of no plastic ending up in the natural world, including in the marine environment and connected waterbodies.
8	Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	The PPRS includes social inclusion in its safeguards and includes the provision of incremental socio-economic benefits to workers and communities in the determination of qualitative additionality.
11	Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient and sustainable	The PPRS provides a framework for the implementation of solutions towards the abatement and reduction of plastic pollution, affecting health, social justice and economic stability.
12	Responsible Consumption	Ensure sustainable consumption and production patterns	The PPRS helps companies and brands to take responsibility for their plastic footprint and provides

	and Production		guidance on communicating these efforts to their consumers and the general public.
13	Climate Action	Take urgent action to combat climate change and its impacts	The PPRS indirectly addresses climate action through the reduction of resource consumption, increase in resource efficiency, and working towards carbon sinks such as mangroves being alleviated from the stress of plastic pollution.
14	Life Below Water	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development	The PPRS was established to address the growing amount of plastic waste, the majority of which ends up in the oceans or connected waterbodies, affecting not only marine life, but also aerial and terrestrial life that rely on these water bodies.
15	Life on Land	Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, reverse land degradation, and halt biodiversity loss	The PPRS indirectly addresses biodiversity by considering plastic pollution as a threat to all species—whether terrestrial, aquatic, or aerial. Furthermore, the PPRS does not consider landfilling a viable processing option due to potential leakage and competition over land use.

Environmental and Social Safeguards

PCX Solutions aligns with International Standards on Environmental and Social Safeguards, such as:

1. The International Finance Corporation's Performance Standards on Environmental and Social Sustainability²²
2. The Asian Development Bank's Safeguard Policy Statement²³
3. The World Bank Environmental and Social Framework²⁴

PCX Solutions also observes the International Labour Organization Standards and Conventions²⁵ relevant to the below safeguards. The PPRS presents how the safeguards apply to the PPRS Projects:

A. Environmental and Social Risk Management: Project Partners must, during their PPRS Conformity Assessment, demonstrate that they have assessed the risks, benefits, and impacts (both beneficial and adverse) to the environment, the community, and relevant stakeholders during the various stages of the Project's life cycle (i.e. construction, operation, and closure). Sufficient stakeholder consultation (at the minimum, consultation with the local community, indigenous community where applicable, and local government bodies) must have been performed by the Project Partner, as part of the process in determining the risks, benefits, and impacts. Compliance obligations must also have been determined in relation to environmental and social risk management. Relevant adverse impacts should be addressed through actions that prevent, mitigate or abate them and such actions should be monitored regularly.

A.1 Social Risk Management for Vulnerable Groups: In the assessment of risks and impacts of the Project, particular attention should be given to the livelihood of vulnerable groups. Vulnerable groups, such as the informal sector, source their income on waste management activities, such as waste picking and trading. Introduction of Projects that aim to collect and process plastic waste may lead to the loss of income and employment for vulnerable groups. It is important to address this risk, either through integration of vulnerable groups into the Project by granting them an equivalent or incremental income and/or benefits or providing alternative sources of livelihood and ensuring that the vulnerable group is capacitated to participate in these (i.e. skill upgrading, training, opportunity inclusion, and sufficient communication and awareness). Plastic credit schemes should seek to eliminate existing gender inequalities and fortify the socio-economic empowerment of vulnerable groups engaged in informal waste management activities.

The value generated through credits must be shared equitably through the entire value chain, and third-party auditors should track the socio-economic impact of schemes on participating informal waste collectors over time.

²² International Finance Corporation (IFC) (2012). Performance Standards on Environmental and Social Sustainability. Accessed through <https://www.ifc.org/content/dam/ifc/doc/2010/2012-ifc-performance-standards-en.pdf>

²³ Asian Development Bank (ADB) (2009). Safeguard Policy Statement. Accessed through: <https://www.adb.org/sites/default/files/institutional-document/32056/safeguard-policy-statement-june2009.pdf>

²⁴ World Bank, Washington, DC (2016). World Bank Environmental and Social Framework. Accessed through: <https://thedocs.worldbank.org/en/doc/837721522762050108-0290022018/original/ESFFramework.pdf>

²⁵ International Labor Organization (various). Conventions. Accessed through: <https://normlex.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12000:0::NO>

A.2 Environmental Impact, Resource Efficiency, and Pollution Prevention: The Project Partner's compliance with the PPRS provides assurance that in the process of reducing plastic pollution, there shall be no detrimental impacts to other aspects of the environment. The Project Partner shall implement technically and financially feasible and cost-effective measures to improve efficiency in their consumption of energy, water, land, and other resources or materials. The Project Partner shall also pursue all reasonable efforts to avoid the release of pollutants to air, water, and land due to its operations (whether intentional or accidental). Where avoidance is not feasible, the Project Partner shall minimize and/or control the emissions and comply with local regulations.

A.3 Prohibited and Regulated Activities under International Conventions: In the conduct of plastic waste collection and processing, the Project Partner shall not engage the following:

- a. Activities deemed illegal under international conventions and host country regulations;
- b. Activities involving toxic and hazardous materials including weapons, munitions, radioactive materials, and medical wastes; and
- c. Unacceptable practices such as bribery, corruption, harassment, violence, and coercion.

B. Labor and Working Conditions: The Project Partner shall ensure its compliance to national employment and labor laws. They shall ensure that its workers, whether directly or indirectly contracted, are sufficiently informed of their rights and the organizational policies.

B.1 Occupational Health and Safety: The Project Partner shall provide a safe and healthy work environment. During its PPRS Conformity Assessment, the Project Partner must demonstrate that it has assessed the risks related to health and safety of its workers, including compliance obligations, and have put actions in place to prevent, abate, and mitigate those risks. The Project Partners shall ensure that all workers are sufficiently aware and informed of the risks, are provided training in addressing and managing those risks, and are provided with the knowledge, skills, tools, and equipment to protect themselves from these risks. Project Partners may choose to be guided by ILO C155 - Occupational Safety and Health Convention²⁶.

B.2 Child Labor²⁷: The Project Partner shall not employ or allow employment (direct or otherwise) of children in any manner that is economically exploitative, or is likely to be hazardous, or to interfere with the child's physical, mental, spiritual, moral, or social health. The Project Partner shall identify the presence of all persons under the age of 18. Where national laws have provisions for the employment of minors, the Project Partner will follow those laws. Persons under 18 shall not be employed in any hazardous work. All work of persons under the age of 18 will be subject to an appropriate risk assessment and regular monitoring

²⁶ International Labour Organization (1981). Occupational Safety and Health Convention. Accessed through: https://normlex.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312300:NO

²⁷ Adopted directly from the IFC Performance Standards.

of health, working conditions, and hours of work. Project Partners may choose to be guided by ILO C138 - Minimum Age Convention²⁸.

B.3 Forced Labor²⁹: The Project Partner will not employ or allow employment of forced labor, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty. This covers any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor-contracting arrangements. The Project Partner will not employ or allow employment of trafficked persons. Project Partners may choose to be guided by ILO C029 - Forced Labour Convention³⁰.

B.4 Indirect Employment³¹: Where there is a high risk of child labor or forced labor in the primary supply chain (partner collectors, aggregators, processors, etc.), the Project Partner shall identify those risks associated with child and forced labor. If child labor or forced labor cases are identified, the Project Partner should take appropriate steps to remedy them. The Project Partner shall monitor its primary supply chain on an ongoing basis to identify any significant changes, and if new risks or incidents of child and/or forced labor are identified, the Project Partner shall take immediate steps to remedy them. Additionally, where there is a high risk of significant safety issues related to supply chain workers, the Project Partner shall introduce procedures and mitigation measures to ensure that primary suppliers within the supply chain are taking steps to prevent potential or eliminate existing life-threatening situations. The ability of the Project Partner to fully address these risks will depend upon the Project Partner's level of management control and influence over its primary suppliers. Where remedy is not possible, the Project Partner should shift the Project's primary supply chain to suppliers that can demonstrate that they are complying with this safeguard. Project Partners may choose to be guided by ILO C122 - Employment Policy Convention³².

C. Gender Equality and Social Inclusion: The Project Partner shall implement policies that safeguard against any form of discrimination and exclusion, such as gender, age, ethnicity, culture, literacy, sickness, physical or mental disability, and poverty or economic disadvantage. The Project Partner shall also implement policies that prohibit harassment related to the above. The Project Partner is encouraged to observe and promote best practices on gender equality and inclusivity. Project Partners may choose to be guided by ILO C111 - Discrimination (Employment and Occupation) Convention³³.

D. Feedback and Grievance Mechanisms:

D.1 Project: The Project Partner shall implement a grievance mechanism to allow its relevant stakeholders to provide feedback with regards to the Project and its impacts, and for the Project to take appropriate actions or respond to the stakeholder in a timely manner. The

²⁸ International Labour Organization (1973). Minimum Age Convention. Accessed through:

https://normlex.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312283:NO

²⁹ Adopted directly from the IFC Performance Standards.

³⁰ International Labour Organization (1930). Forced Labour Convention. Accessed

through: https://normlex.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312174:NO

³¹ Adopted directly from the IFC Performance Standards.

³² International Labour Organization (1964). Employment Policy Convention. Accessed through:

https://normlex.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312267:NO

³³ International Labour Organization (1958). Discrimination (Employment and Occupation) Convention. Accessed through:

https://normlex.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312256:NO

grievance mechanism shall be communicated and accessible to the Project's stakeholders, including PCX Solutions.

D.2 PCX Solutions: PCX Solutions incorporates the views of all the stakeholders in the conduct of the activities and the disclosure of plastic credits in the blockchain ledger. Stakeholders and the public may submit their grievances and concerns on the PPRS implementation through email to pprs@pcxsolutions.org. Grievances shall be duly investigated and appropriately addressed by PCX Solutions. Results of investigation and/or action plans will be communicated to the concerned party.

Module 3: Project Registration

Related PPRS Documents:

1. Project Preliminary Information Sheet
2. PPRS Project Registration Terms and Conditions and PPRS Registry Terms of Use
3. Validation and Verification Body (VVB) Application Form
4. Terms and Conditions for VVBs
5. PPRS Conformity Assessment Checklist
6. PPRS Compliance Monitoring and Review Checklist

Criteria and Requirements

PCX Solutions provides robust criteria and requirements that will further strengthen the credibility of PPRS Plastic Credits. These requirements provide a comprehensive framework within which the Project Partners are able to extensively describe their processes and environmental impact along with the co-benefits to the communities they operate in. The Project, reviewed through a third-party independent validation and verification body, shall demonstrate its compliance through documentation and data.

Projects shall be eligible plastic credit generators once they satisfy (through systems and supporting documentation) the following criteria:

CRITERIA 1: Sound Environmental Process

For a Project to be able to generate plastic credits, it is important that all collected plastic waste is diverted from nature and is instead repurposed through a properly managed facility. Processes using diverted post-consumer plastic should not cause adverse impacts on the environment (see Module 2, Environmental and Social Risk Management).

REQUIREMENT 1.1: The Project Partner shall provide documented information to demonstrate their Project's process(es) and technology(ies). The following or similar evidence can be presented:

- a. Scope of the Project – the Project Partner shall define the scope of its Project, including:
 - i. Facilities and locations included in the Project
 - ii. Post-consumer plastic waste feedstock types
 - iii. Partner entities and activities covered/roles
 - iv. End-of-Waste product/s or output/s
 - v. Estimated collection and processing capacity per annum

Note to VVBs: In cases where the Project scope encompasses numerous collection sites (greater than 3 sites with significant geographical distance from each other) and/or multiple processing facilities/ units (greater than 2 processing facilities with significant geographical distance from each other), the VVB may use a non-statistical or risk-based sampling methodology to determine the sites to be physically inspected. Risk-based sampling methodology would mean prioritizing for inspection the sites that have historically collected and/or processed the most quantity of plastic waste, or sites that have higher risks in terms of social conflict, grievance or legal issues, or sites within or nearest areas of environmental importance or socio-economic impact. It is also important that where different processes exist within a project (i.e. processing can either be mechanical recycling or waste-to-energy), each type of processing is represented in the sample.

- b. Process Flow Diagram – the Project Partner shall provide a visual representation of the end-to-end process from collection until End-of Waste processing in the form of a flow diagram, block diagram, or other schematic representation. This may be a significant input to the mass balance requirement in criteria 4.

- c. Process Description – the Project Partner shall provide a detailed description of the process from collection until End-of-Waste processing. This should be consistent with the process flow diagram. Details such as the following should be included:
- i. Standard Operating Procedures or similar for the process flow
 - ii. Collection methods and sources, feedstock condition requirements, per type of plastic waste feedstock
 - iii. Sorting, aggregation and storage method, equipment, facilities, and partners, per type of plastic waste feedstock
 - iv. Pre-processing activities, equipment, facilities, method, and partners, per type of plastic waste feedstock
 - v. End-of-Waste processing activities, equipment, facilities, method, and partners, per type of plastic waste feedstock
 - vi. Transportation/Logistics partners or arrangements
 - vii. Destination of End-of-Waste product
 - viii. Description of sub-processes for applicable pollution control methods, as applicable (e.g. wastewater treatment, air emissions treatment, hazardous and residual waste management, chemical and spill management, etc.)
- d. Evidence for the use of Calibrated Equipment for weighing and other process-critical monitoring equipment

REQUIREMENT 1.2: The Project Partner shall provide documented information to show their identification, evaluation, monitoring, and compliance to their national/local environmental regulations. The VVB shall validate the required permits/licenses/clearances from the process description in requirement 1.1 and from the Project's assessment of environmental risks, benefits, and impact as in requirement 1.3.

The following permits/licenses/certificates/clearances or the like may be provided, as applicable:

- Environmental Compliance Certificate or environmental permit to operate the facility
- Permit to operate air pollution sources and control facilities
- Permit to discharge treated wastewater
- Permit to extract/use water sources
- Permit to use chemicals or for handling, storage, transport, and treatment of hazardous wastes
- Air emissions tracking and analysis
- Wastewater discharge quality analysis
- Other certifications (e.g. ISO 9001 or ISO 14001), if available

Information collected from chemical analyses and their intended use shall be recently collected (within the past year) and shall be confirmed to be within acceptable levels based on local (environment regulators) guidance.

REQUIREMENT 1.3: The Project Partner shall provide documented information to show the assessment of relevant environmental risks and impacts and the applicable preventive/mitigation measures in relation to Module 2, Safeguard Systems: Environmental and Social Risk Management. The following or similar evidence can be presented:

- a. Environmental Risks, Benefits, and Impacts Register
- b. Solid waste or by-product waste management plan, as applicable
- c. Environmental management plans/procedures (or similar) for applicable impacts, including monitoring and continuous improvement programs

CRITERIA 2: Additionality and Ownership

To provide guidance on determining additionality, the PPRS considers two types of additionality: quantitative (tonnage) and qualitative (environment and socio-economic).

To determine quantitative additionality, the following baseline conditions shall be considered, depending on the extent of available data from either published government reports or similar reports by reputable organizations that provide these data and deemed acceptable by the country's or regional government. The following regional baseline aspects can be used:

- Current collection rate of the country (ideally more granular, i.e. state-, region-, province- or locality-wise, and/or by plastic waste type)
- Current leakage or mismanaged plastic waste data of the country (ideally more granular, i.e. state-, region-, province- or locality-wise, and/or by plastic waste type)
- Current recycling or material/ energy recovery rate (ideally more granular, i.e. state-, region-, province- or locality-wise, and/or by plastic waste type)

To determine qualitative additionality, the following environmental and socio-economic baseline conditions related to safeguard systems in module 2 shall be considered:

- No forced or compulsory labor
- No child labor
- Minimum wages for direct employees or fair wages/earnings for indirect employees (note: In cases where there is no employee-employer relationship, a baseline income is required if the case to be presented for additionality is on the basis of incremental income)
- Legally required employee benefits (e.g. healthcare, pension funds, etc.)
- Working conditions that ensure basic provisions for health and safety for both direct and indirect employees or workers.

The Project Partners shall then establish and demonstrate the additionality of their Project compared to the regional baseline based on their respective processes:

REQUIREMENT 2.1.a: Quantitative Additionality

The Project Partner shall demonstrate their Project's contribution to improve on the regional baseline. Quantitative additionality can come from either increased sourcing or processing of post-consumer plastic waste. This can be done by showing that these plastic wastes currently are or would have been mismanaged or are leaking or could have potentially leaked into the environment if not for the intervention of the Project. This could be demonstrated through the below examples:

- No existing collection
- Collection is present but unlikely to be responsibly processed or managed
- Collection is present and feedstock is reintroduced into the circular economy, and the Project aims to divert the feedstock to higher levels of processing (in accordance with figure 2 of this standard³⁴)

Quantitative additionality can also be on the basis of financial assistance needed by the project to sustain the operation of the project, or support the expansion of the project, whether through additional collection or processing capacity, in the same or additional area/geographical jurisdiction.

In all cases, the intended financial flow of plastic credit funding towards the claimed additionality basis shall be presented by the Project Partner and shall be evaluated by the VVB.

In all cases, the Project shall not operate below the regional baseline. Only the volumes collected or processed at the conditions of the baseline and above shall be eligible for plastic credits.

REQUIREMENT 2.1.b: Qualitative Additionality and Environmental/Socio-Economic Benefits

The Project Partner shall demonstrate their Project's contribution to improve on the regional baseline. It is possible that there is no additional waste volume collected or processed, but the Project may still qualify as additional if it can demonstrate improvement to the regional baseline conditions.

Examples of qualitative additionality can include the following:

- Increased wages or incremental income to workers and/or members of the supply chain
- Shift from material-based income to service-based income for workers
- Inclusion of social security benefits (health and others) above what is legally mandated
- Inclusion and empowerment of vulnerable groups (e.g. informal sector, impoverished groups, indigenous people, women, etc.)
- Increased livelihood opportunities for frontline communities and vulnerable groups, including skill development programs and prioritization of local community members for employment/income generation

The VVB shall carry out an evidence-based assessment of those environmental and socio-economic benefits that the Project Partner claims are delivered by the Project. The Project shall also put in place monitoring and reporting mechanisms for their benefits to allow impact evaluation over time. In all cases, the Project shall not operate below the regional baseline.

Figure 3 illustrates a flow chart for the evaluation of additionality.

³⁴ The PPRS recognizes that countries may have different preferences and prioritizations for the type of processing technologies applied to wastes. In this regard, the PPRS then requires that projects take into account their country-specific plastic waste management hierarchy in their determination of quantitative additionality.

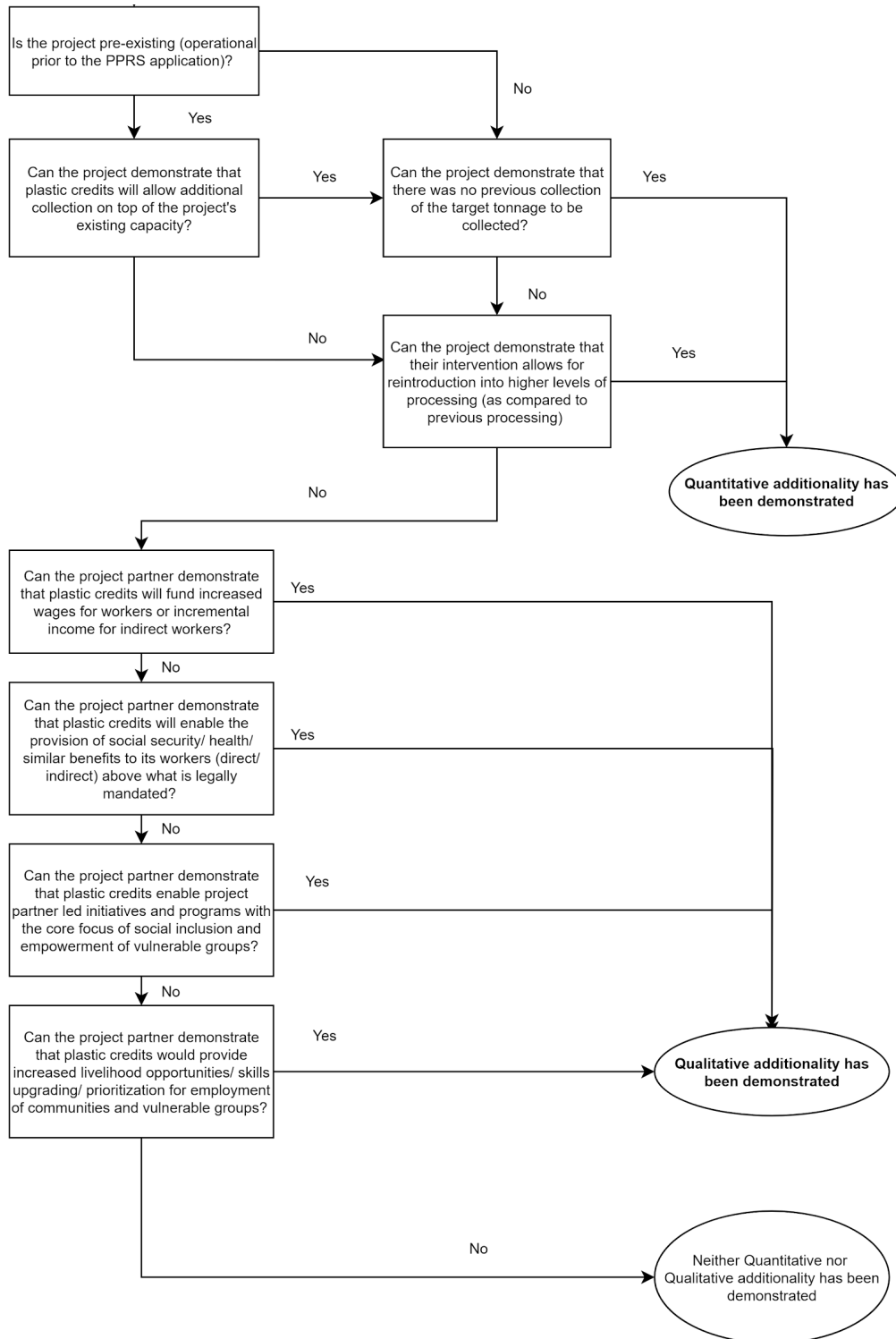


Figure 3: Additionality evaluation illustration.

REQUIREMENT 2.2: Ownership of Credits

Project Partners shall establish the ownership of the Plastic Credit associated with the collection and processing of the post-consumer plastic. There may be Plastic Credits generated from a Project where a sponsor or an owner has already counted, claimed, or reported the plastic waste diversion. It is important that these Credits are accounted for properly and prevented from double counting, double claiming, or double reporting. Ownership of the Credits should also be established across the value chain where multiple value chain actors (i.e. collectors, aggregators, processors, and users of End-of-Waste output/products) exist.

Documented agreements shall be in place to show the prior and informed consent of the value chain partners and their agreement to the Project Partner's intent to sell credits for the shared volume and a warrant that no one other than the plastic credit owner will attempt to sell credits for the same shared volume. The VVB has the right to ascertain that the ownership of these plastic credits is clearly communicated and documented, and agreed upon by all parties involved that have a commercial interest in the plastic credit that will potentially be generated or claimed.

For cases where part of a Project's tonnage is sponsored or will be claimed by another company, organization, or individual, the Project Partner should be able to demonstrate proper tracking, monitoring, accounting, and reporting mechanisms to ensure that no double counting or double claiming is taking place. The same requirement applies when a Project is eligible to generate plastic credits under multiple plastic crediting schemes (i.e. the project has been certified under another plastic crediting certification methodology in addition to the PPRS).

Only tonnages that have no prior claim by any individual or organization, nor any outstanding disputes or doubts on ownership shall be eligible for Plastic Credit issuance.

CRITERIA 3: Safeguards Systems

Project Partners are required to demonstrate that their overall operations do not adversely impact the environment and society, and where adverse effects are unavoidable, actions are in place to prevent, mitigate, and abate the impacts.

The Safeguard system is elaborated in Module 2 of the PPRS. The Project Partner shall be able to demonstrate that the safeguards are in place and communicated to relevant stakeholders.

REQUIREMENT 3.1: Due Diligence

Validation and Verification Bodies (VVBs) shall conduct due diligence activities, including stakeholder consultations and onsite validation, in order to ascertain the implementation of the Project safeguards. Due diligence shall also include the review of the following documented information, as applicable:

- a. Environmental and Social Impact Assessment (may be covered by the same evidence provided in Requirement 1.3 of this module)
- b. Documentation and monitoring of relevant compliance obligations
- c. Social risk management and monitoring plan/program (including outcomes if operational), including stakeholder mapping and stakeholder consultation meeting minutes, documentation of outcomes related to environmental and social assessments, impacts, and mitigation
- d. Environmental impact mitigation, resource management, and pollution prevention plan or program
- e. Permits/certifications/registration showing compliance with national/local labor laws
- f. Register of staff/employees to ascertain fair wages, absence of forced/compulsory labor, and child labor
- g. Occupational health and safety policies/programs, risk assessments, and mitigation plans
- h. Policy on child labor and evidence of implementation/mechanism for implementation
- i. Policy against forced labor and evidence of implementation/mechanism for implementation
- j. Policies for direct, indirect, and contracted workers and implementation and monitoring mechanism
- k. Policies against discrimination or harassment based on gender, age, ethnicity, culture, literacy, sickness, disability, and economic disadvantage and mechanism for implementation
- l. Project grievance mechanism process, including resolution of previous grievances (if any), and evidence that the grievance mechanism process has been communicated and is accessible to the stakeholders.

The PPRS does not require use of specific templates to evidence the above. The Project Partner is free to document these requirements in accordance with their management systems and document control procedures.

CRITERIA 4: Traceability and Transparency

REQUIREMENT 4.1: Documented Information

The Project Partner's compliance to the PPRS shall be evidenced and supported by documented information. All required documented information in the PPRS shall be made available to the VVB and, upon request, to PCX Solutions.

It is recommended that the Project Partners assign document numbers, document status (active/draft/obsolete), and date of last update/effective date to all submitted documents, forms, and records to determine the validity and relevance of each document. The Project Partners are required to notify their VVB directly, in a timely manner, if there are significant revisions or changes to the documents made within the period of the PPRS Registration.

REQUIREMENT 4.2: Mass Balance and Chain of Custody

Documentation related to the Project Partners operations is required to enable complete and accurate reporting and issuance of plastic credits. Any discrepancy within the chain of custody shall be duly analyzed and explained by the Project Partner. Documents to support all transactions shall be made available to the VVB and PCX Solutions, and can include the following:

- a. Monitoring records and their evaluation
- b. Collection records
- c. Processing records
- d. Inventory records
- e. Discrepancy reports and analysis
- f. Communication of transactions of Plastic Credits with other partners, as applicable
- g. Impact monitoring and reporting

The templates of the above records that have been validated by the Project VVB during the conformity assessment, should be used by the Project Partner as supporting documents when requesting for verification and issuance of Plastic Credits. In the case that template(s) or format(s) of these documents are changed by the Project Partner, PCX Solutions shall be notified in a timely manner.

PPRS Conformity Assessment and Project Registration Process

Figure 4 illustrates the process of project registration, including the requisite PPRS Conformity Assessment. Further details are explained in this section.

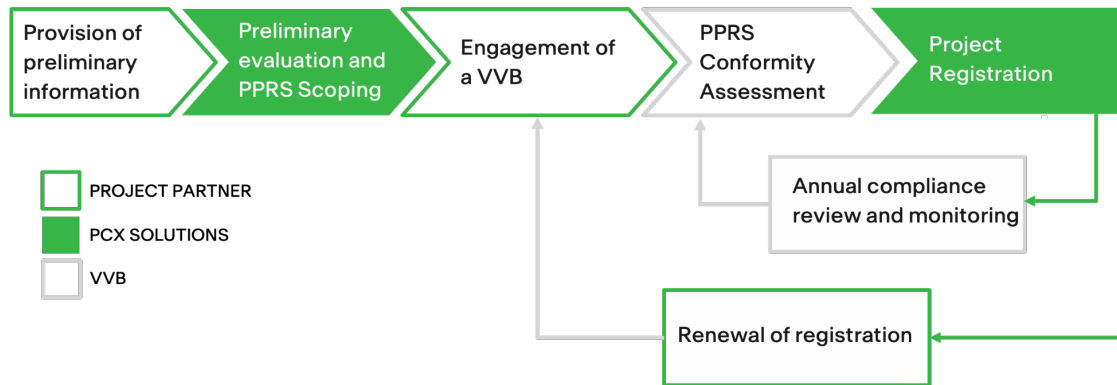


Figure 4: General Process Flow for PPRS Conformity Assessment and Project Registration.

Preliminary Evaluation and PPRS Scoping

The Project Partner may use the Project Preliminary Information Form (as available at pcxsolutions.org or through this [link](#)) to assess the proposed project's eligibility for PPRS registration. The Project Partner may submit the preliminary information sheet to PCX Solutions for initial guidance and scoping.

This step is not mandatory but is recommended to help Project Partners assess their readiness prior to engaging a VVB.

Engaging a VVB

Once the Project Partner confirms that the proposed project is within the scope of the PPRS and the Project Partner is able to fulfill the requirements of the PPRS, they can engage a VVB directly and submit the required project documentation for a PPRS Conformity Assessment.

PPRS Conformity Assessment

The PPRS Conformity Assessment includes the review of project documentation, onsite visit(s), and stakeholder interviews, as well as the completion of the PPRS Conformity Assessment Checklist and PPRS Conformity Assessment Report by the VVB engaged by the Project Partner. The PPRS Conformity Assessment Report shall include a signed statement from the VVB regarding positive or negative results of the Project's validation.

Proof of positive PPRS Conformity Assessment shall be submitted to PCX Solutions by the Project Partner as a requisite for Project Registration in the PPRS Registry.

The PPRS registration is valid for five (5) years from the date of the Project Registration.

Project Registration

Upon review and confirmation by PCX Solutions, a Project Registration number shall be assigned to the Project and an entry will be created on the PPRS Registry.

The Project Partner is responsible for keeping its listing updated and aligned with the information as declared in the PPRS Conformity Assessment Report, or the Annual Compliance Monitoring and Review Report (details below). If there are material changes to the Project that warrant the reassessment by a VVB, the Project Partner is responsible for communicating this to its VVB without undue delay. The Project Partner shall also give notice of reassessment to PCX Solutions and the status of the Project will be reflected on the PPRS Registry.

The Project or Project Partner may choose to maintain its own registry but acknowledges that in case of variances or discrepancies, the PPRS Registry will prevail.

Once a Project is registered, all transactions relating to the plastic credits it generates, as well as their movements and status must be recorded and tracked in the PPRS Registry to avoid double counting.

It is through this timely and accurate recording in the PPRS Registry that the PPRS' guiding principles of integrity, consistency, transparency, and traceability can be manifested, and the mechanism against double-counting can be established for the benefit of the Project Partner, potential Plastic Credit Buyers or transferees, stakeholders, and the public.

Annual Compliance Review and Monitoring

Compliance of the Project with the PPRS is a continuous requirement for the validity of Project Registration. The Project shall thus be subjected to an Annual Compliance Monitoring and Review by the VVB that conducted its first independent third-party audit. The evidence of successful review and monitoring shall be submitted to PCX Solutions at least thirty (30) days prior to the anniversary of the Project Registration. The Project Partner shall engage the same VVB (the same entity that performed the PPRS conformity assessment for the current cycle) to perform the annual compliance monitoring and review.

Annual Compliance Monitoring and Review shall consist of filling out the PPRS Compliance review checklist and submitting such to the initial VVB together with the supporting evidence e.g. documented information. Onsite visit(s) and stakeholder interviews are not required for the annual compliance monitoring and review, unless the VVB deems it necessary. The VVB shall issue a Notice of Acceptance and No Objection to the continued registration of the Project, and this shall be the evidence submitted by the Project Partner to PCX Solutions to maintain its registration within the five (5)-year Project Registration cycle.

Renewal of Registration

At the end of each cycle (5 years), the Project must undergo a re-assessment by a VVB if it wishes to continue its registration. If the Project Partner chooses to maintain the same VVB as in the previous cycle assessment, a new lead auditor/ audit team from the said VVB should be assigned to conduct the subsequent conformity assessment.

Grievance Mechanism

Any stakeholder and/ or member of the public, may at any time, provide feedback and/or grievance regarding any Project that is currently registered under the PPRS. This may be done by sending an email to pprs@pcxsolutions.org or through the [Grievance and Feedback - PPRS Projects](#) form. The PCX Solutions grievance mechanism is demonstrated in Figure 5.

When PCX Solutions receives a grievance or feedback regarding a Project, we shall notify the concerned Project Partner through written communication within ten (10) days of receipt of said feedback, and request for an explanation from the Project Partner. The Project Partner shall have a maximum of thirty (30) days to provide an explanation, which PCX Solutions will evaluate within a reasonable time upon receipt. PCX Solutions will seek clarification with the relevant stakeholder as necessary.

If the grievance is deemed to be unreasonable or invalid, the relevant stakeholder will be notified and the issue will be closed. If the grievance is deemed valid, PCX Solutions will notify the Project Partner and the applicable VVB in writing (electronic) of the need for investigation and corrective and preventive action.

The VVB shall submit the results of its investigation and subsequent recommendations to the Project Partner within thirty (30) days from the receipt of request for investigation. The Project Partner shall then put in place corrective and preventive actions and submit proof of implementation of these actions to the VVB within thirty (30) days. The VVB shall have ten (10) days to evaluate the effectiveness and adequacy of the corrective action and revert to the Project Partner. In the case that an investigation by the responsible VVB is required, the Project Partner shall bear the costs of these and directly compensate the VVB for the same.

The Project Partner must notify PCX Solutions of the results of the investigation and submit evidence of acceptance of corrective and preventive actions and subsequent resolution of the feedback/grievance. This shall happen within a reasonable time from the date of receipt of the notification from PCX Solutions to the Project Partner. PCX Solutions will then share the results of the investigation and subsequent corrective and preventive actions with the relevant stakeholder that filed the grievance. In cases where the stakeholder wishes to further appeal the results and corrective and preventive actions, they may communicate this to PCX Solutions, and the latter may attempt to organize a conflict resolution discussion between the Project Partner and the complainant.

During the investigation period, the Project's ability to request validation and issuance of plastic credits will be put on hold and only reinstated once the grievance has been resolved.

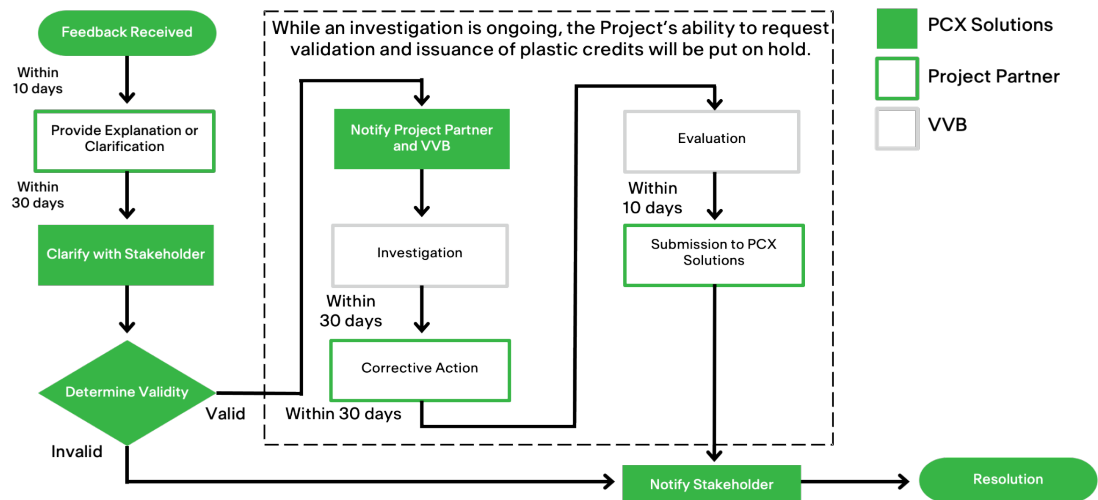


Figure 5: PCX Solutions PPRS Project Grievance Mechanism.

Qualifications of and Application Process for VVBs

Qualifications of a VVB for the PPRS

The Applicant VVB shall present evidence of:

1. Demonstrated competence in auditing quality management systems (e.g. ISO 9001), environmental management systems (e.g. ISO 14001), or in the conduct of validations and verifications of environmental information statements (e.g. ISO 14065:2020). Having the relevant accreditation by a member of the International Accreditation Forum (IAF) is desirable.
2. Significant experience in environmental and/or social auditing, with knowledge of sustainability issues and independent assessment of Project activities against standards.
3. Experience in waste management systems, with knowledge of waste streams, value chains, circularity concepts, and plastics.
4. Evidence confirming legal status of the VVB entity to operate within legal frameworks.
5. Signed Terms and Conditions for VVBs.

VVB Application Process

An applicant VVB may express its interest to become a VVB for the PPRS through pprs@pcxsolutions.org. The applicant VVB may fill out the application form and provide the evidence for meeting the qualification criteria above. Once PCX Solutions has completed a positive evaluation of the application, the VVB shall be granted an approval status as a VVB for the PPRS, which is valid for five (5) years, subject to the VVB's acceptance and continued compliance with the terms and conditions.

Approved VVBs for the PPRS

The list of approved VVBs for the PPRS is available on the PCX Solutions website: <https://www.pcxsolutions.org/vvb>. Project Partners may refer to this list when choosing a VVB to engage for their PPRS Conformity Assessment.

Module 4: Plastic Crediting Process

Related PPRS Documents:

1. PPRS Registry
2. Plastic Credit Certificates

Plastic Credit Issuance Process

Figure 6 illustrates the process flow for Plastic Credit issuance. Elaboration of specific processes are included in this section.



Figure 6: Plastic Credit Issuance Process.

Plastic Credit Generation

PPRS registered Projects will be able to generate one (1) plastic credit for one (1) metric ton (MT) of post-consumer plastic waste with documented collection and End-of-Waste processing. The credits may only be generated under the scope for which the project was validated by its VVB.

Submission of Chain of Custody Documents

Upon completion of recovery and diversion activities, the Project Partner shall submit the complete and corresponding records supporting the collection, transportation, and End-of-Waste processing of the tonnage being claimed of the PPRS registered Project through the PPRS Registry³⁵.

The submitted records should demonstrate the full chain of custody and completion of the Project's process in accordance with the validated process under the Project's PPRS conformity assessment. All records should reflect the following information at the very least:

- Control number or document identification number
- Quantities being claimed (either in kilograms or metric tons) and identifier of the weighing equipment (to trace and ascertain the validity of its calibration)
- Name of the entity issuing the certification/record
- Name and signature of authorized signatory for the entity issuing the certificate/record
- Type of inputs (feedstock type—i.e. flexibles, rigids, PET, LDPE, etc.)
- Output description and destination
- Participating stakeholders (i.e. received from and transferred to)
- Date of record's issuance
- Dates of receipt of feedstock/collection, pre-processing, and End-of-Waste processing completion.

Aside from the above documented information, the proof of calibration for the weighing equipment shall be presented and uploaded into the PPRS Registry.

³⁵ While the PPRS registry is in the final stages of development for version 8 and testing, this process is done manually and communicated through electronic mail. All chain of custody documents and results of verifications are available for public viewing on the [PCX Markets Credit Registry](#). See footnote 12.

Impact Verification

PCX Solutions shall review the provided chain of custody records of the Project Partner for completeness and alignment with the validated Project documents (during the PPRS Conformity Assessment). Once the records are deemed complete, the same will be provided to a third-party VVB engaged by PCX Solutions to perform impact verification.

The third-party VVB assigned to perform the impact verification will review the quantities and information within the documented information to ascertain its veracity, traceability, and completion of the chain of custody. If the auditor finds that the records are incomplete or there are variances and inconsistencies noted, clarification and appropriate action is to be requested from the Project Partner through PCX Solutions. If the auditor deems the records accurate, consistent, and with a clear and traceable chain of custody, the auditor can sign off on these and provide their positive verification findings to PCX Solutions.

Serial Number (SN) Assignment

Upon receipt of a positive (impact) verification decision by the VVB, PCX Solutions shall generate the serial number for each eligible ton. The serial number will contain information relevant to the project source of the credit and information on the delivered impact.

To illustrate, each serial number will follow the below syntax (read from left to right, row by row):

PPRS + Version No. -	Project Country 3 letter code -	Project Code -
PPRS registration date -	Project VVB -	Clean-up Type -
Aggregation type -	Aggregator/collector -	Aggregation end date -
Processing type -	Processing end date -	Impact Verifier -
Date of Impact Verification -	Sequence in batch (1 – n) -	Total tonnage in batch (n) -
Date of generation of SN		

This syntax is effective only for credits issued beyond version 8 of the PPRS. The previously issued serial numbers would remain as previously issued.

There may be changes to elements of the syntax of a serial number of Plastic Credits, and in this case, sufficient communication through the PPRS Registry will be ensured.

Plastic Credit Certificate (PCC) Issuance

Plastic Credit Certificates (PCC) are issued to transfer the ownership of the Plastic Credits and their corresponding serial numbers from the Project Partner to the Plastic Credit buyer(s). As PCX Solutions does not sell plastic credits, the Plastic Credit Buyer details (company/organization and quantity of credits purchased) shall be provided by the Project Partner or its authorized platform/intermediary to PCX Solutions. These details will be reflected on the PCCs and on the details of the retirement of the Plastic Credits in the PPRS Registry. The PCC will contain all assigned Plastic Credits (serial numbers) for ownership transfer to a particular Plastic Credit buyer.

The issuance of Plastic Credits and PCCs shall only be interpreted as written assurance that a certain tonnage has been recovered and processed on behalf of the Plastic Credit Buyer. The PCC shall not serve to warrant the competencies and capabilities of the Plastic Credit Buyer and its compliance with applicable laws and regulations. Further, the PCC shall not be interpreted as PCX Solutions' endorsement of any claims that the Plastic Credit Buyer may make subsequent to the issuance of and in relation to the impact documented in the PCC.

PPRS Registry Credit Retirement

Once a PCC has been issued to a Plastic Credit Buyer through the Project Partner or its authorized platform or intermediary, the relevant serial numbers and Plastic Credits will be retired on the PPRS Registry. To ensure transparency and to avoid double counting of Plastic Credits, the PPRS Registry is available for public view and as such, details of the retirement of credits will be publicly available .

Currently, there is no established and globally accepted mechanism for trading of Plastic Credits. As such, PPRS Plastic Credits are not tradeable, and transfer of ownership may only be done once (i.e. from Project Partner or its platform/intermediary to the Plastic Credit Buyer).

Module 5: Plastic Credit Related Claims

References Documents

1. ISO (2016). [ISO 14021:2016 – Environmental labels and declarations – Self-Declared Environmental Claims \(Type II environmental labelling\)](#)
2. UNEP (2017). [UNEP Guidelines for Providing Product Sustainability Information](#)
3. Plastic Footprint Network (2023). [Plastic Footprint Guidelines Version 1.](#)

PCX Solutions encourages companies and businesses to eliminate or reduce non-essential and avoidable plastics by utilizing upstream solutions, where feasible. For plastic wastes that currently cannot be eliminated, avoided, or reduced, PCX Solutions encourages companies to take responsibility for their plastic footprint through various solutions, such as Plastic Credits.

If companies want to communicate their actions to address plastic pollution through self-declared environmental claims, they should adhere to the highest level of transparency and integrity and take full responsibility for their communication. PCX Solutions only provides recommendations and guidance based on global best practices and consensus on responsible environmental claims. A Plastic Credit Buyer's adherence to the guidelines set forth in this Module 5 of the PPRS shall not equate to PCX Solutions' endorsement nor approval of their environmental claims.

Recommendations For Self-Declared Environmental Claims

PCX Solutions recommends aligning any self-declared environmental claims to the requirements set forth in ISO 14021:2016 – Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling).³⁶ As defined in the requirements of ISO 14021, claims should neither be misleading, subject to misinterpretation, nor overstated. Claims should also be measurable and verifiable with a clear and transparent methodology for the basis of the claim. All elements of the claim should be substantiated and should be accompanied by an explanatory statement.

Companies can also adhere to the fundamental principles of the UNEP Guidelines for Providing Product Sustainability Information³⁷:

- Reliability
- Relevance
- Clarity
- Transparency
- Accessibility

In general, claims should be balanced—i.e. not only communicate positive aspects and impacts, but also to detail how adverse impacts of an organization's product or service are reduced by the positive impacts achieved through e.g. financing Project(s) under the PPRS. The claim should also detail the contribution of a PPRS Project in mitigating plastic pollution in relation to the company's overall strategy to address plastic pollution.

PCX Solutions will not approve or certify any self-declared claims, but provides guidance based on best practices. Plastic Credit Buyers are solely responsible for any and all claims it makes as regards its plastic footprint and Plastic Credit retirements.

If a credit buyer wishes to use any trademark or asset owned by PCX Solutions, communicate its partnership with PCX Solutions, or support its Project Partners and their Projects, approval is needed by the relevant entity. Documented consent must be secured from the Project

³⁶ ISO (2016). ISO 14021:2016 – Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling)

³⁷ United Nations Environment Programme (2017). Guidelines for Providing Product Sustainability Information: Global Guidance on Making Effective Environmental, Social and Economic Claims, to Empower and Enable Consumer Choice. https://wedocs.unep.org/bitstream/handle/20.500.11822/22395/product_sust_info_2017.pdf?sequence=8&isAllowed=y

Partner directly or through their platform/intermediary if there are self-declared environmental claims made with regards to the Project's co-benefits. Separate guidance will be provided to Plastic Credit Buyers.

Impact Communication

Plastic Credit Buyers can choose to purchase Plastic Credits from specific Projects to support its objectives or socio-economic benefits, such as upscaling plastic waste collection and conducting educational awareness programs on plastic waste management. The co-benefits of each PPRS Registered Project varies from Project to Project, and thus certain linkages of benefits derived from a registered Project may only be made when investments of the Plastic Credit Buyer are linked to that specific Project, and only when the claimed co-benefit of the project has been independently audited.

Coordination with either the Project Partners or their authorized platform or intermediary must be done to determine the specific impact of the Plastic Credit Buyer's investment relative to the Plastic Credit funding structure of the Project. Only those impacts and co-benefits which have been validated and verified by the Project's VVB can be claimed. Each Project must be willing to disclose the method(s) and information necessary to substantiate and verify the claim. Claims must quantify the impact being communicated (e.g. it cannot claim the benefit of the entire Project that recycles 100 MT, when it has purchased only 10 MT).

Footprint Methodology Considerations

PCX Solutions provides guidance for computing an organization or brand's plastic footprint, based on prevailing methodology in countries with EPR. However, we acknowledge that there is yet to be a global consensus on the appropriate plastic footprint methodology, both on a general level and on a sectoral level. Any claims in relation to a calculated plastic footprint should be accompanied by explanatory information to declare the methodology used, the scope of the plastic footprint assessment done, and if it has been subjected to a third-party verification. The scope should include the time period for the data used, and the covered products, packaging, brands, activities, components, and its geographical and system boundaries.

PCX Solutions recommends Plastic Credit Buyers to seek third-party verification for footprint declarations and methodologies in order to have assurance on the veracity and appropriateness of their declared footprint.

In an effort to ensure transparent and reasonably reliable calculations of the plastic footprint, the following considerations are highlighted:

Defining Boundaries

Clearly defining the boundaries for the plastic footprint is critical to ensure its relevance and applicability to various contexts. It should be tailored to meet the specific needs and objectives of the assessment, which may vary, depending on the region of application, intended use (internal versus external), and the purpose of the assessment (e.g. disclosure, decision-making, and monitoring). A comprehensive definition of boundaries enables organizations to accurately quantify their plastic usage.

Measurement Methodology

In recognition of the absence of a global consensus on a universally accepted plastic footprint methodology, the PPRS underscores the importance of adopting a conservative approach in selecting an appropriate methodology for calculating the plastic footprint. Utilizing the amount of plastic products purchased by the reporting company as the basis for the plastic footprint is regarded as the most conservative method. This approach ensures a clear and unambiguous definition of the input data and the assumptions required for calculation.

In contrast, methodologies based on plastic products sold may introduce uncertainties, particularly when accounting for returned products. Alternative methods, such as computations based on sales or projections, may lack the clarity and verifiability inherent in the conservative approach.

Plastic Credit Buyers may consider the following best practices when choosing the appropriate methodology³⁸:

- **Defining Boundaries:** It is highly recommended to delineate organizational and operational boundaries prior to calculating a plastic footprint. This practice is particularly crucial for larger entities with multiple subsidiaries, as it facilitates a structured, transparent, and comprehensive evaluation process.
- **Categorizing Footprint:** Footprints are encouraged to be categorized based on the extent of organizational control (direct control, indirect control, influence). This aids in evaluating the organization's impact and responsibility in footprint reduction, thereby emphasizing upstream mitigation measures and adopting a holistic approach to addressing their footprint.
- **Data Quality and Granularity:** The quality and granularity of data should be assessed in accordance with the intended use of the plastic footprint. Ensuring data accuracy and consistency is vital across plastic footprint assessments. An iterative approach to data quality improvement is recommended, starting with available data and progressively enhancing its quality as needed.

³⁸ Plastic Footprint Network (2023). [Plastic Footprint Guidelines Version 1](#).

Transition from Net Zero Plastic Waste (NZPW)

Previous versions of the PPRS authorized the use of the specific claim, “Net Zero Plastic Waste,” to communicate that a company or brand has taken responsibility for 100% of its declared and verified net plastic footprint. While we maintain that the methodology used to certify those claims was sound, we also recognize that there has been no global consensus on the terminologies surrounding “net zero” for plastic, and in the same way, there is currently no globally accepted, science-based approach for the determination of a plastic footprint, which should ultimately serve as the basis for any “net zero” or “neutrality” claim.

In this regard, PCX Solutions is putting any further certification of claims surrounding “net zero” on hold until a global mechanism has been established. This decision has been made with a conscious effort to work with various stakeholders and international organizations in strengthening the credibility of Plastic Credits and harmonizing the understanding of any “net zero” claims. This effort is also consistent with our desire to protect Plastic Credit Buyers and Project Partners from reputational risks and regulatory repercussions.

Since the Net Zero Plastic Waste (NZPW) Certification had a previous minimum commitment of three years, companies, brands, and organizations with active and valid certifications may continue to use the NZPW badge and associated authorized claims, provided it continues to comply with the requirements of Module 5, version 7 of the PPRS and the signed terms and conditions of the NZPW certification. At the end of the three-year period for which a company has committed to this certification scheme, they will be required to remove all associated badges and claims on-pack and applicable channels (website, social media, ads, etc.).

In the case that the Plastic Credit Buyer wishes to use any trademark or asset owned by PCX Solutions, they should adhere to the guidance provided in this module.



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