



Circular Credits Mechanism

An innovative market mechanism to increase waste recovery and recycling rates, improve livelihoods and strengthen the circular economy.

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BVRIO



1. INTRODUCTION

THE SOLID WASTE POLLUTION PROBLEM

Today, cities around the world generate about 1.3 billion tons of solid waste per year¹, and this is expected to double over the next 20 years in lower income countries². While most of this waste can be collected and kept out of the environment, the actual rates of collection, recycling and landfill disposal are very low in developing countries. This is in large part because of the limited incentives to drive the collection of waste materials and insufficient resources to develop the necessary recycling and waste management infrastructure. The result is that large amounts of waste remain uncollected, contributing to serious public health and environmental impacts, including river and ocean pollution.

Many low/middle-income countries (LMICs) lack adequate collection, containment and re-processing infrastructure and incentives. As a result, there are huge volumes of plastic waste in cities, on beaches and reaching the oceans (8m tons annually). Driven by urbanisation, the problem is particularly acute in a dozen or so major 'hotspots' in Latin America, Africa, and particularly southern/eastern Asia³. The impacts of this on our ecosystems, our health and our quality of life are substantial, and the problem is growing. The World Bank estimates that by the middle of this century, global waste will increase at a rate double that of the Earth's human population.

 $^{^1}$ World Bank, 2012: What a waste. A Global Review of Solid Waste Management. Daniel Hoornweg and Perinaz Bhada-Tata. March 2012, No. 15-

http://siteresources.worldbank.org/inturbandevelopment/Resources/336387-

<u>1334852610766/What_a_Waste2012_Final.pdf</u>

² Ibid, and Abramovay, R., Speranza, J. and C. Petitgand, 2013: *Lixo zero:* gestão de resíduos sólidos para uma sociedade mais próspera. Planeta Sustentável, Instituto Ethos, São Paulo 2013

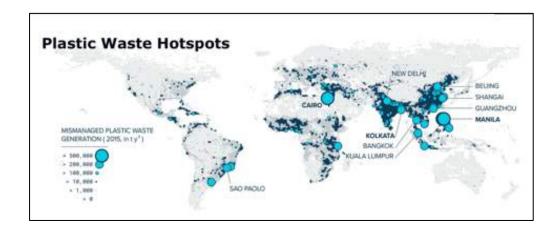
vww3.ethos.org.br/wp-content/uploads/2013/09/Residuos-Lixo-Zero.pdf

³ www.statista.com/chart/12211/the-countries-polluting-the-oceans-the-most/





In addition to domestically-produced waste, there is a vast supply chain of recycled plastic flowing from developed countries to East Asia. Following China's January 2018 waste import ban,⁴ significant volumes of recyclable waste that could serve as feedstock for new plants have reached neighbouring countries. The total volume of scrap plastic exported from the G7 to Thailand, Malaysia, the Philippines, Indonesia, Myanmar and Vietnam increased by a factor of more than 4 between H1 2017 and H1 2018.



Failure to recycle results in a waste of a financial opportunity worth more than US\$ 30 billion per year⁵. This is particularly unfortunate, given that waste separation and recycling in developing countries tend to involve and benefit low-income groups. Failure to recycle waste also results in significant and unnecessary greenhouse gas emissions. For many materials, the emissions generated by recycling are significantly lower than those from the production and use of virgin raw materials⁶.

CORPORATE LEADERSHIP

The consumer goods industry, which generates around US\$ 12 trillion in annual sales and spends approximately US\$ 3 trillion on raw materials, is responsible for the vast majority (75%) of municipal solid waste⁷. At the same time, recycling and reutilization of materials could result in savings exceeding US\$ 1 trillion⁸. Globally, solid waste management costs more than US\$ 200 billion⁹, placing a financial burden on municipal governments that do not always have the resources to ensure the proper collection and destination of these residues.

Meanwhile there is a growing movement towards increasing recycling rates, in particular by consumer goods companies who are facing intense pressure to reduce the environmental impact of their waste packaging. A variety of measures are being

⁶ International Solid Waste Association ISWA and UNEP, 2015: Global Waste Management Outlook 2015. United National Environment Programme -

⁴ www.bbc.co.uk/news/world-48444874

⁵ UN-HABITAT, 2010: Solid Waste Management in the world's cities. Water & Sanitation in the world's cities 2010. Malta

www.unep.org/ietc/Portals/136/Publications/Waste%20Management/GWMO%20report/GWMO%20f ull%20report.pdf5

⁷ Ellen MacArthur Foundation, 2013: Towards the Circular Economy. Opportunities for the consumer goods sector. 2013. <u>www.ellenmacarthurfoundation.org/business/reports/ce2013</u>

⁸ ISWA and UNEP, 2015 (ibid)

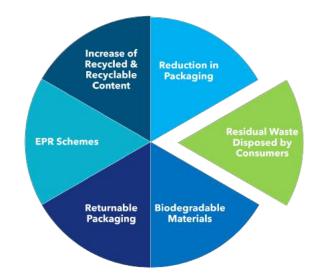
⁹ World Bank 2012 (ibid).





explored, including reduction of packaging, increasing recycled and recyclable content of packaging, the use of biodegradable material, packaging returning schemes, etc.

While the combination of these measures has the potential to significantly reduce waste pollution, companies are still faced with the problem of ensuring the adequate disposal and recycling of the products after they sell them to consumers. In countries where adequate waste collection systems are in place, this impact is moderate, as the rates of waste reaching the environment are modest.



This situation is more concerning for the portion of products that these companies export to developing countries given that the rates of collection, recycling and landfill disposal are very low in developing countries. This is in large part because of the limited incentives to drive the collection of waste materials and insufficient resources to develop the necessary recycling and waste management infrastructure. The result is that large amounts of waste remain uncollected, contributing to serious public health and environmental impacts, including river and ocean pollution.

Without new incentives, however, it will be challenging to motivate both the collection of waste materials and the needed investment in the development of recycling infrastructure.

CIRCULAR ACTION HUB

Recognizing this challenge, BVRio established Circular Action Hub¹⁰, a platform that connects local waste management projects and activities with companies and investors willing to support, accelerate and strengthen a more effective and socially-responsible circular economy. Financial support for the projects could come in the form of sponsorship, investment, or purchase of the Circular Credits – a new market mechanism created to reward activities that increase waste recovery and recycling rates, thereby enabling corporates to address the part of their waste footprint they cannot reduce through internal actions alone.

¹⁰ www.circularactionhub.org



THE CIRCULAR CREDITS MECHANISM

The Circular Credits Mechanism (CCM) is a a system of performance-based payments for environmental services of circularity, striving for inclusiveness and wide social participation. It is a market tool for buyers and sellers of the environmental services related to the collection (recovery), sorting and appropriate destination of recyclable waste materials that today pollute our environment.

Through the use of credits, interested parties (the buyers – e.g., companies, individuals, projects) can compensate for their waste footprint, by effectively subcontracting the services provided by sellers (e.g., projects, waste pickers associations, etc.) providing the environmental service of waste recovery and appropriate destination.

The use of credits enables interested parties to engage service providers in different parts of the world, where such waste pollution is more prescient (e.g., coastal or riverine areas, islands).

In the absence of polluter-pay regulations in some countries (e.g. Extended Producer Responsibility – "EPR" schemes), the tool can positively contribute to social and environmental impacts (e.g., low income groups in developing countries). For countries with existing EPR schemes, the Credits may be recognised as one of the ways of complying with these regulations.

The Circular Credits Mechanism has the potential to provide a socially, economically and environmentally positive approach to recyclable waste collection and recycling worldwide. The CCM is based on the Reverse Logistics Credit scheme developed by BVRio in 2013 and used in Brazil until recently (see Box 1).





Box: BVRio Reverse Logistics Credit System in Brazil

Early in 2013, BVRio signed a collaboration agreement with the National Association of Catadores to develop a system to support the remuneration of Catadores for the environmental services derived from the reverse logistics and recycling that they provide to companies, the government and society as a whole.

Based on the factors and circumstances described in the previous sections, BVRio in collaboration with the National Association of Catadores, developed a system of Reverse Logistics Credits to assist companies to meet their obligations under the law while rewarding Catadores for their role.

Reverse Logistics Credits are certificates which confirm that reverse logistics services were provided to ensure that a certain amount of waste was responsibly disposed of. These credits are issued and sold by cooperatives of Catadores and purchased by producers and/or importers who need to comply with the solid waste legislation. Through the purchase of credits, companies effectively subcontract cooperatives of Catadores to provide reverse logistics services.

For the companies, the credits provide an efficient and cost-effective solution to legal compliance. For the Catadores, the sale of credits provides an additional source of revenue, adding value to their activities and resulting in an important social impact.

Environmentally, the additional value generated by the sale of credits makes it worthwhile for Catadores to collect waste materials with lower raw material value, widening the range of products collected beyond the current high value products, such as aluminum cans.

The sale of Reverse Logistics Credits does not affect the ability of the Catadores to sell the physical material to be recycled. Reverse Logistics Credits only represent the environmental service provided by Catadores, i.e. the collection, screening, and direction of solid waste to recycling and reutilization in the productive cycle - in other words, the service of reverse logistics. In this way, in addition to the revenue generated through the sale of recyclable materials, Catadores can also sell Reverse Logistics Credits to the companies that need this service to comply with the requirements of the National Solid Waste Legislation.

The system is in operation since 2013 and an initial survey of results was conducted involving 30 waste picker cooperatives and 1000 individual waste pickers that participated in the first year. These cooperatives recovered and sent for recycling ca. 1600 tonnes of solid waste during that year. The income from the sale of Reverse Logistics Credits increased the revenue of these cooperatives by 30%, providing an important social impact additional to the environmental impact of reducing pollution.

This effective and socially-inclusive circular economy mechanism paved the way for the creation of the Circular Credits Mechanism and the Circular Action Hub, an international version of the Reverse Logistics Credit system.

Additional information:

Reverse Logistics Credits - A social and environmental innovation to address urban waste and recycling. BVRio 2015. <u>www.bvrio.org/publicacoes</u>

Video: www.youtube.com/watch?v= 8X5wE0DZq0





2. PRODUCT CYCLE AND WASTE GENERATION

The distribution of consumer goods in most countries follows this simplified chain:

- Manufacturers and importers sell their products to distribution companies.
- Distributors supply the products to retailers.
- Retailers (e.g. supermarkets) sell their products directly to consumers.

A desirable 'reverse logistics' process integrated with this distribution chain would therefore happen in reverse:

- Consumers bring their solid waste products to return points or through selective home collection.
- Retailers and distributors collect and return the post-consumption waste from goods they sold to their consumers.
- Producers and importers collect the recyclable solid waste products and dispose of them accordingly.

In many countries, however, this reverse logistics of recyclable waste products do not occur as described above. In many developing countries, selective waste separation does not occur, or occur at very low rates¹¹. Consequently, a significant amount of waste receives an inappropriate destination.

In these cases, introducing reverse logistics integrated chains, would therefore require the following measures:

- Consumer awareness and information.
- Selective collection and disposal points.
- Waste transportation equipment.
- Storage and processing warehouses.
- Sorting and pre-treatment activities, including equipment and labour.
- Investment in equipment for recycling or environmentally sound disposal.
- Coordination of these activities by each company's in-house team.

From a financial perspective, if companies were to be responsible for managing their own reverse logistics systems, this process could prove very costly and inefficient. Furthermore, it would be incidental to the companies' main activities, and would divert human resources from core activities. As a result, reverse logistics integrated chains would have low efficiency and high costs.

A more efficient and effective alternative is therefore needed. This was the motivation behind the creation of the Circular Credits Mechanism.

¹¹ For instance, in Brazil selective waste collection represents less than 3% of the total volume.







3. Circular Credits Mechanism (CCM)

3.1 DEFINITION OF A CIRCULAR CREDIT

A Circular Credit represents the service of recovery (collection, sorting) and appropriate destination of 1 metric tonne of recyclable material that is inappropriately discarded, causing pollution of our natural environment.

The objective of the credits is to facilitate the contracting of services that remove waste materials from the environment¹² and send them to an appropriate, responsible destination. The destination of residues varies depending on the circumstance of the project or operation and the availability of economically viable options. In some cases, it may be a recycling plant; in others, where this option is not available, it could be the next best alternative available.

The use of Circular Credits enables companies and individuals to compensate for the volume of residues they feel responsible for, through a one-in-one-out approach to reducing their waste footprint.

¹² While we refer here to recovery of waste from the 'environment', the CCM's objective is to recover recyclable materials that are being sent to a sub-optimal destination and redirecting these materials for a more appropriate destination. In many cases, the recovery may happen at landfills, where recyclable materials are collected, sorted and sent for recycling.





A Circular Credit represents 1 metric tonne of a certain type of recyclable waste, including:

PLASTIC:

- PET
- PS
- PVC
- PP
- HDPE/LDPE
- Styrofoam
- Mixed plastic waste

GLASS

• Mixed glass waste

PAPER:

- White paper
- Undulated paper
- Newspapers and
- magazines
- Composite carton (e.g. Tetra Pak

METALS:

- Aluminium tins
- Mixed scrap metals

Other types of materials will be included in the future (e.g., e-waste, tyres, etc.).

With relation to country of origin, all credits will be fungible, but may also carry a country label (i.e., PET Credits from Indonesia).

In order for projects to be eligible to issue Circular Credits, their operations must meet the Principles and Criteria of the CCM, to ensure their environmental and social integrity (see next section).





3.2 **CCM'S PRINCIPLE AND CRITERIA**

Principle 1. One-in One-out accounting - the Circular Credits Mechanism is based on an equivalence between the amount of waste created by a certain entity (a company, an event, an individual), and the amount of waste recovered by the parties selling the credits. No discounts, no surcharges.

Principle 2. No double counting – an essential requirement of the Circular Credits Mechanism is that the environmental impact related to the recovery and destination of waste should not be attributed to more than one entity. In practice, this means that credits cannot be issued for activities where this service has already been contracted and paid for (e.g., municipal waste collection services). Similarly, the credits can only be used once, to compensate for the footprint of a certain entity.

Principle 3. Demonstrability - Monitoring and Verification - the amount of credits to be issued must be substantiated by evidence that demonstrates that the activity was conducted and that a certain amount of waste materials was indeed recovered and sent to an appropriate destination. This can be done using different types of documents, such as invoices/receipts associated with the sale of materials to recycling plants, bills of laden, transportation authorization, or balance records. This documentation must be kept and made available for third party verification, to substantiate the issuance of credits.

Principle 4. No free riding - related to Principle 2, the CCM only recognises the environmental service if the activities are fairly paid for, in addition to any payment for the acquisition of physical recyclable materials. For instance, in the case where waste pickers are only paid for the sale of physical recyclable materials delivered by them to a buyer, the entity buying these materials are not entitled to claim the environmental service provided. It is understood that this is a transaction involving solely the purchase of waste materials as a feedstock for recycling plants, and not a contract for the provision of an environmental service. Payment for the environmental service must be over and above the payment for the recyclable materials purchased, creates a second revenue stream for its providers.



The Circular Credits Pathway





Principle 5. Fair remuneration – linked to the 'no free riding' criterium, the provision of this environmental service must receive fair remuneration, commensurate with the workload and the time required to the provision of the service.¹³ The Circular Credits Mechanisms does not intend to establish minimum prices (prices will be determined through supply and demand market basis) but will provide an oversight to ensure that participants in the scheme do not adopt exploitative market practices.

Principle 6. Do no harm - All projects are required to meet minimum social and environmental safeguards to ensure that the activities involved in the creation of credits do not cause harm to the parties involved.

Principle 7. Learning by doing - Recognising that there is a huge diversity of variation in terms of circumstances, technologies available and approaches that can be used of projects in different parts of the world, with different circumstances, the CCM does not assume that a 'one size fits all' monitoring approach can be defined at the outset. Instead, the CCM adopts a 'learning-by-doing' approach to its monitoring and verification requirements, and will strive for continuous improvement of its requirements based on the experience learned with participating projects.



¹³ The determination of 'fair price' is subjective and variable in different parts of the world, thus the prices practiced in existing EPR schemes can be used as reference. In the EU, for instance, EPR schemes charge companies for the services of collection and appropriate destination of the residues generated by companies (on average between ca. EUR 100 and 500 per tonne of material). While this value may not be appropriate for services provided in all countries, it provides a benchmark to calibrate the fair value for the provision of these services in different parts of the world.

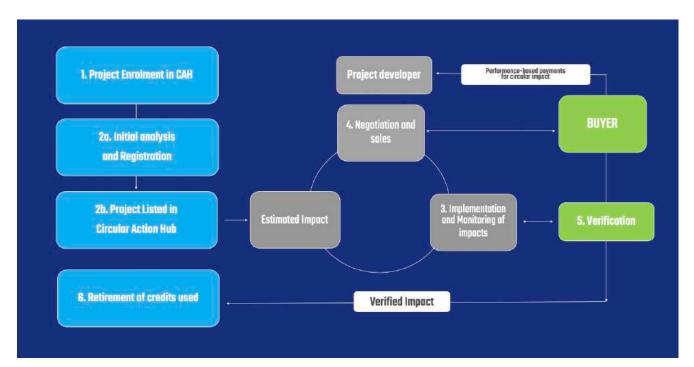


3.3 CREATION OF CIRCULAR CREDITS

HOW TO CREATE CIRCULAR CREDITS? PROJECT CYCLE

Traditional project cycles for environmental markets (e.g., carbon markets) require the validation, registration, independent verification, and issuance of credits before developers can receive any financial return.

The Hub will adopt an 'inverted project cycle' where developers can post their offers based on an initial, self-declared estimate that is verified after projects secure financial support. Transaction costs are covered by the buyers of environmental services. This aims to reduce transaction costs and remove a barrier to entry to smaller projects.



Projects aiming to participate in the initial phase of the Circular Credits Mechanism will need follow the process described below to approve a project and create and trade credits:

- i. **Complete a Project Registration Form (PRF)** describing the project activities, the situation prior to the project, the expected project benefits, and the monitoring plan. See PFR template in Annex 1.
- **ii. Analysis and registration of the PRF**, done by BVRio's Circular Action Hub technical team, to ensure data completeness. The project proponent makes a self-declaration about the project's expected environmental impact and its conformance with the CCM's Principles and Criteria. After this:
 - a. The project is registered, and;
 - b. An Estimated Amount of Circular Credits is allocated to the Project.
- **iii.** Implement project activities and monitoring of results, updating the Estimating Amount reported to the Hub.





- iv. Negotiate and transact credits Once a potential buyer or investor expresses interest in the project, the Hub will help parties negotiate and conclude a transaction, which could result in financial support to the project.
- Verify the results of the project at this stage, the buyer will need to contract for verification of the project's impact and its conformance with the Hub's Principles and Criteria. Once verification is concluded, the Verified Amount of Circular Credits to be allocated to the Project and transferred to the Buyer.
- vi. Retirement of Circular Credits once credits are used for any specific claim, the party must inform the Circular Action Hub in order to have these credits retired from the Project's Registry.

WHO CAN CREATE CIRCULAR CREDITS?

Any party can become a Project Proponent, including companies, NGOs, informal waste pickers, etc., provided that their projects meet the Principle and Criteria of the CCM.

3.4 TRANSACTING CREDITS

Once credits are created, they can either be used to mitigate the project proponent's own footprint or can be sold to reward the project's activities.

The process of negotiation starts when project developers offer their credits for sale. There are no floor or maximum prices - developers offer their credits at whatever price they choose. Organisations registered on the platform can access these offers and make counteroffers until a settlement price is reached. While the clearing prices are those agreed by the parties, through a market-based approach, the Circular Credits Mechanism will play a market oversight to ensure that no exploitative practices are conducted.

The Circular Action Hub is responsible for the clearing of these transactions – i.e. once transactions are concluded, it collects payment from companies and transfers funds to the project developers while simultaneously transferring ownership of the credits to the buyers. An administration fee will be charged.

All transactions involving Circular Credits will need to be channelled through the Circular Action Hub, even if these are only the transfers from the project to its sponsors. This is to ensure that market prices arise and create benchmark values for Circular Credits, as well as to ensure that any revenue sharing are reported in a transparent way (i.e., by having a transparent price, it is possible to determine whether parties are fairly remunerated – Principle 5).

If credits are negotiated in the Trading Platform, the identity of participants is kept anonymous to ensure that negotiations are not affected by personal or powerful relationships (i.e., large corporations negotiating with local waste collector organisations). Buyers that want to know the identity of the projects would need to contact them through the Circular Action Hub's marketplace (see Box 2).





SUPPORTING INFRASTRUCTURE

In order to enable these transactions, the CCM developed the following infrastructure:

- The Circular Action Hub, an online platform that serves a dual purpose:
 - a Marketplace to connect buyers and sellers of Circular Credits, 3R Plastic Credits, and other services associated with responsible waste management, as well as
 - a **Registry** of all issuances, transfers and retirement of Circular Credits.
- An **online trading platform** to enable the negotiation of Circular Credits.
- **Standard contracts** for buyers and sellers to transact Credits and or provide other types of financial support to projects.
- **Rule Books** with instructions for participants on different sides of the transactions (buyers and sellers) as well as instruction manuals, videos, etc.

Additionally, a price index will be created, displaying the price of different types of Circular Credits in different parts of the world.

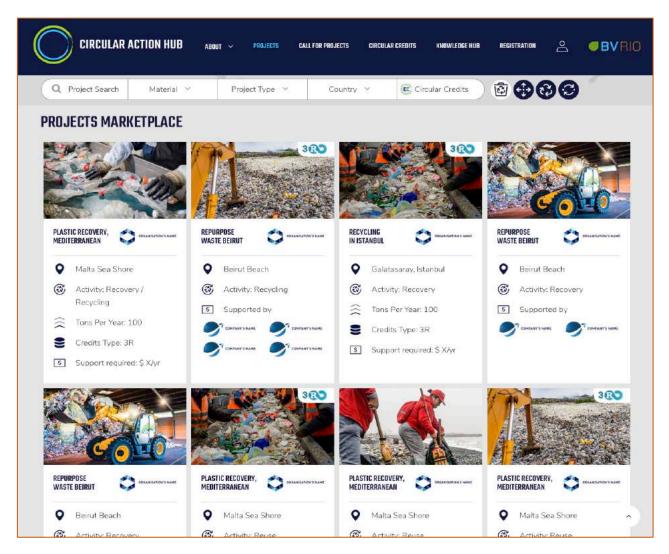


Figure 1: Screenshot of Circular Action Hub's Marketplace.





Box 2: The Circular Action Hub's project marketplace and the Circular Credits trading platform

Circular Action Hub is an online platform that connects local waste management projects and activities with companies and investors willing to support, accelerate and strengthen a more effective and socially responsible circular economy.

Financial support for the projects could come in the form of sponsorship, investment, prepayments or performance-based payment for circularity (i.e., purchase of Circular Credits) created by these projects. All eligible projects that wish to generate Circular Credits must be registered on Circular Action Hub.

Projects that secure sponsorship directly through the Hub may provide sponsors with the right to the Credits they generate but may also want to sell all or part of their credits through the Hub's Trading Platform.

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ISOPON .				1	-	SOPOR					
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Figure 2: BVRio price index for physical waste recyclable materials.



3.5 USING CREDITS AND ASSOCIATED CLAIMS

The objective of Circular Credits is to allow companies to reduce their waste footprint by contributing (via the financial value of credits) to activities that mitigate their negative environmental impact.

The CCM was designed as an international scheme, so that Circular Credits can be created in one country and used in another one. This would enable transnational support for recyclable waste collection, recovery and recycling activities.

The use of Circular Credits will enable companies to claim that they mitigated the impact of a certain amount of post-consumer waste pollution derived from their operations. It does not, however, enable companies to make claims such as "plastic neutral", "waste offset", etc., unless complementary measures are put in place (for instance, a set of corporate guidelines is been created by the 3R Initiative - see Section 3.7).

3.6 GOVERNANCE

In order to oversee the operation of the CCM, a couple of governing bodies will be created with actors involved in the circular economy. The governance bodies planned are:

I. TECHNICAL COMMITTEE

This committee will be formed by participants representing industry, investors, and civil society and will have the responsibility to analyse and advise on issues related to the technical aspects of the Standard – i.e., whether to accept certain types of projects and monitoring approaches to demonstrate their impact (Principles 2 and 3).

II. MARKET SUPERVISORY COMMITTEE

The Market Supervisory Committee will be formed by participants from industry and civil society and will have the responsibility to analyse and advise on issues related to the market practices adopted by participants - i.e., whether buyers adhere to Principles 4 (No free riding) and 5 (Fair remuneration).



4. CONCLUSIONS AND NEXT STEPS

The Circular Credits Mechanism is a new, innovative mechanism to enable the crossboundary support of waste collection and recycling projects through the sale and purchase of Circular Credits. It has the potential to become an important tool for meeting the challenges of recyclable waste collection, screening and recycling. These credits can be issued and sold by the parties performing these activities, and purchased by companies (i.e. producers and/or importers of consumer goods products) that desire to conduct the reverse logistics of their products and mitigate their negative impact.

Given that in the developing world these waste management activities are often performed by low income, informal waste pickers¹⁴, this mechanism has the potential to create positive social, economic and environmental impacts in many developing countries.

For companies, the use of credits provides an efficient and cost-effective solution for waste management. For sellers (e.g., waste pickers), the sale of credits provides an additional source of revenue, adds value to their activities and creates an important social impact. Indeed, a survey conducted by BVRio has shown that the sale of credits increased the income of waste collectors by more than 30% in addition to the value of sales of recyclable materials.¹⁵

Environmentally, the additional value generated by the sale of credits makes it worthwhile to collect materials with lower intrinsic value, widening the range of products collected.

The use of Circular Credits could bring a series of benefits, including:

- Ease of meeting compliance with environmental legislation (e.g. EPR schemes) or voluntary targets, given that it is simpler and more cost effective for companies to contribute to the reverse logistics of their products through the use of credits than to create internal departments to deal with the new activity. It is expected that the benefits of specialization, comparative advantage, economies of scale, and trading will reduce the aggregate cost of waste collection and recycling for all parties.
- Increased transparency and credibility of waste management, providing an important source of information to support the compilation of solid waste and recycling inventories and the development and implementation of public policies and voluntary corporate targets.
- Creation of opportunities for social entrepreneurship and investment in a new economic activity related to the reverse logistics service industry. This would create jobs and support local entrepreneurs, such as waste picker cooperatives, adding value and increasing income levels for millions of low-income people worldwide.
- Creation of a cost effective and socially inclusive tool to facilitate compliance with new Extended Producer Responsibility schemes in developing countries.

 ¹⁴ IDB 2013: Preparing informal recycler inclusions plans – an operational guide, <u>www.iadb.org</u>
¹⁵ BVRio 2015: Reverse Logistics Credits – A social and environmental innovation to address urban waste and recycling. <u>www.bvrio.org/publicacoes</u>





- Additional value creation for waste materials, increasing the range of waste types collected and recycled in a socially and environmentally beneficial manner.
- Reduction of greenhouse gas emissions, providing an important climate benefit.

In the future, such a scheme would also enable the creation of additional initiatives. For instance, the creation of investment funds in new recycling capacity, working capital lines for projects and waste collectors, or the creation of trading platforms to negotiate sales of the recyclable materials, together with systems to facilitate freight contracts for the transportation of recyclable waste.

Results from similar schemes suggest that the use of tradeable credits can greatly reduce the costs of achieving environmental objectives. The Circular Credits Mechanism has the potential to provide a socially, economically and environmentally positive approach to scale up recyclable waste collection and recycling worldwide.







ANNEX 1. PROJECT REGISTRATION FORM (PFR) TEMPLATE

BASIC INFORMATION						
Title of the project activity	In English and local language					
Leading project organization implementing the project						
Other project participants						
Focal contact person/ details within project organization	Name, email and telephone					
Location of the project/ activities	Country, region, city, area in the city					
Project Status	new, ongoing (active), proposed, expansion, retrofit					
Operational Status	Prototype, Pilot, On-going (fully implemented), Scaling up					
Project start date	Month and Year					
Types of recyclable materials to be recovered						
Waste final destination	Mechanical recycling, chemical recycling, landfilling, incineration, repurpose project, other					
Estimated tonnage of materials recovered per year and during project, per type of material						
Summary of project description	Describe waste pollution situation before the project, and the project activities (200 words)					
Contact information of focal point:						
Organization name:						
Contact person:						
Country:						
Address:						
Email:						
Telephone number:						





SECTION A. Full description of project and its context

A1. Description of project activity

Describe and quantify what are the project activities, who will be the actors involved, and how it is going to be financed (business model).

Describe also the scope of activity used to reduce recyclable waste pollution.

A2. Location of project activity and project boundaries

Describe what is the area of impact of the project.

A3. Project participants

Describe what are all the parties involved in implementation and management of project activities.

A4. Types and sources of recyclable materials

Describe what are the types of recyclable materials, and their source, that the project aims to recover.

A5. Expected environmental impacts, per type of waste material

Describe and quantify what are the expected volume of waste materials that will be recovered, per type of material and what is the destination to be given to these materials (e.g., recycling, repurposing, appropriate disposal).

A6. Project business model

Describe the basic business structure of the project: its cost structure (e.g. salaries, machinery, fuel, etc.) and the revenue channels (sale of material, sponsorship, collection fees, etc.)

SECTION B: Waste pollution situation in the absence of the project

B1. Description of current situation

Describe the current situation related to waste flows, collection and disposal (e.g., volumes disposed in the environment, rubbish dumps, landfilling, recycling rates) as well as what actors are involved in the sector (e.g., including industry, government, waste pickers, etc.). List the actors involved, what were the volumes collected and final destination given, what is the estimated amount going to the environment causing pollution.

B2. Explanation of project impact

Explain why the project activities will improve the current situation

B3. Estimation of project impact per type of waste materials

Describe and quantify what are the expected volume of waste that will be removed, per type of material





B4. Risk of unexpected impacts

Describe any potential side effect of the project that could reduce expected project benefits

SECTION C. Monitoring plan

C1. Monitoring plan

Describe how the project will measure the volumes of waste materials removed from the environment and given an appropriate final destination, including frequency of measurements and sample size.

C2. Monitoring team

Explain who are the parties responsible for monitoring and reporting, as well as any internal (or external) verification that will be conducted

SECTION D. Social impacts and inclusion

D1. Social context

Describe the current involvement of low-income groups, communities, waste pickers, in waste collection and destination. Provide a qualitative and quantitative assessment of the type of activity and volume of residues collected by these groups in the absence of the project. Describe whether those actors currently involved use child labour, protective gear, and how the current situation will be improved.

D2. Inclusiveness of the project

It is Important to ensure that projects do not appropriate themselves of the work of low-income groups previously conducting similar activities. Explain what roles these groups will have in the proposed project.

D3. Benefit sharing and fair remuneration

Explain how these stakeholder groups will benefit from the project (e.g., employment, payment for services, revenue sharing, etc.), and how the propose project will improve their current situation.

SECTION E. Other environmental impacts

E.1. Analysis of environmental impacts

Describe any other environmental impact that may be derived from the implementation of project activities (e.g., use of fuels, water, water contaminants, etc.) and how these will be mitigated.







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