CIRCULAR CREDITS MECHANISM
a BVRio initiative

CIRCULAR ACTION HUB
a BVRio initiative

Guidelines on best practices

for credit systems related to the circular economy

Recommendations for better and more inclusive waste collection and recycling practices to improve livelihoods and strengthen the circular economy.

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PREVENT
Waste Alliance

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FOREWORD AND ACKNOWLEDGEMENTS

The PREVENT Waste Alliance serves as a platform for exchange and international cooperation. Organisations from the private sector, academia, civil society and public institutions jointly engage for a circular economy. The PREVENT members contribute to minimising waste, eliminating pollutants and maximising the reutilisation of resources in the economy worldwide. They strive to reduce waste pollution in low- and middle-income countries and work together for the prevention, collection, and recycling of waste, as well as the increased uptake of secondary resources. The PREVENT Waste Alliance was launched in 2019 by the German Federal Ministry for Economic Cooperation and Development (BMZ). More information: https://prevent-waste.net/en/.

The Hub and the Circular Credits Mechanism were selected for support for development from the PREVENT Waste Alliance, through a commission from the Federal Ministry for Economic Cooperation and Development (BMZ) from the German Government. The project 'Circular Credits: performance-based payments for plastic recovery projects' involves the creation of systems for the generation of Circular Credits for all types of plastic waste by a group of organizations (cooperatives and associations) of waste pickers in Brazil and Mexico. This project forms part of the pilot project "Plastic Credits for Inclusive and Transparent Circularity" supported by the PREVENT Waste Alliance. As such it actively takes part in the exchange with other project partners on the development and implementation of Plastic Credits. Moreover, BV Rio contributes to the ongoing discussion on Plastic Credits in the working group on plastics.

In this context, BVRio prepared these Guidelines on best practices to guide the development of project activities and to contribute to a process of continuous learning and improvement process within the project and the waste management sector at large.

This report was produced with the financial support of the PREVENT Waste Alliance, an initiative of the German Federal Ministry for Economic Cooperation and Development (BMZ). The contents of this report are the sole responsibility of BV Rio and do not necessarily reflect the positions of all PREVENT Waste Alliance members or official policy positions of the governments involved.

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1 INTRODUCTION

1.1 THE NEED FOR BEST PRACTICES

A large and growing number of waste collection and recovery initiatives are being created and promoted around the world using credit mechanisms.[1] For these mechanisms to be more widely adopted, it is important to ensure their integrity and transparency.

There is a need, therefore, to support these initiatives and ensure that their impact is recognised, while at the same time ensuring that they adopt best practices so to improve their impact in the future.

One of the goals of the Circular Action Hub and its associated Circular Credits Mechanism is to harmonize approaches of projects worldwide that increase circularity in the plastic waste management sector and promoting best practices for this new sector, while recognizing different realities in which project activities take place.

More specifically, these goals include:

- Harmonization of approaches;
- Standardization of claims;
- Promotion of environmental and social best practices;
- Promotion of inclusiveness;
- Gradual adoption of better practices, raising the standards of projects, activities, and investments in the circular economy worldwide.

While many of the recommendations and best practices listed here are applicable to any circular economy project, activity or investment, this document will focus on practices specifically related to developers, sellers and buyers of circular credits (i.e., credits related to waste collection, sorting and recycling of any type of waste materials). Most examples were drawn from the experience in using the Circular Credits Mechanism, and of the projects listed in the Circular Action Hub.

[1] For example, see ValuCred, 2021: Plastic Credits – Friend or Foe? Retrospective of recent market dynamics. Available at: https://prevent-waste.net/wp-content/uploads/2021/09/Plastic-Credits-%E2%80%93-Friend-or-Foe.pdf

1.2 BACKGROUND: THE SOLID WASTE POLLUTION PROBLEM

Today, cities around the world generate about 1.3 billion tons of solid waste per year[2], and this is expected to double over the next 20 years in lower income countries[3]. 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. 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 Asia[4]. 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.

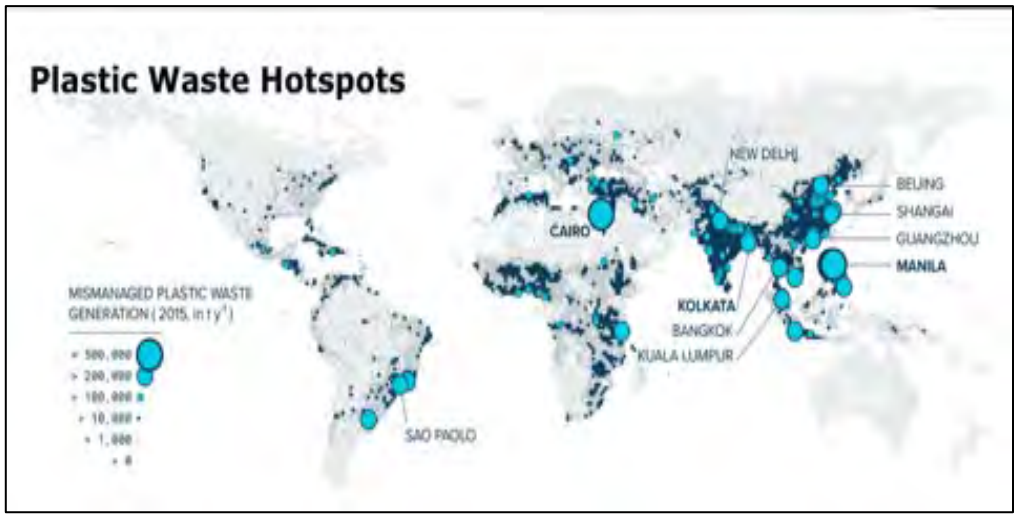
In addition to domestically-produced waste, there is a vast supply chain of recycled plastic flowing from developed countries to East Asia. Following China's January 2018 waste import ban,[5] significant volumes of recyclable waste that could serve as feedstock for new plants have reached neighbouring 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.

[2] 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/336387-1334852610766/What_a_Waste2012_Final.pdf

[3] 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 www3.ethos.org.br/wp-content/uploads/2013/09/Residuos-Lixo-Zero.pdf

[4] www.statista.com/chart/12211/the-countries-polluting-the-oceans-the-most/

[5] www.bbc.co.uk/news/world-48444874



Failure to recycle results in a waste of a financial opportunity worth more than US$ 30 billion per year[6]. 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 materials[7].

1.3 Circular Action Hub

Recognizing this challenge, BVRio established Circular Action Hub[8], 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. The Circular Action Hub was created to support the 3R Initiative[9], and subsequently expanded to cover a wider range of initiatives.

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

[7] International Solid Waste Association ISWA and UNEP, 2015: Global Waste Management Outlook 2015. United National Environment Programme - www.unep.org/ietc/Portals/136/Publications/Waste%20Management/GWMO%20report/GWMO%20full%20report.pdf

[8] www.circularactionhub.org

[9] www.3r-initiative.org

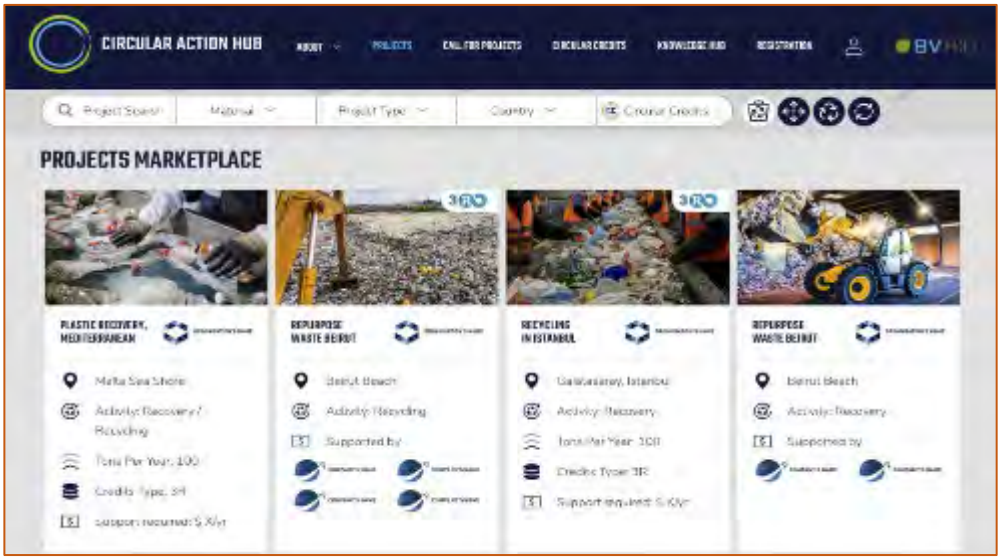


Figure 1: Screenshot of Circular Action Hub's Marketplace

1.4 The Circular Credits Mechanism

The Circular Credits Mechanism (CCM)[10] is 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 in Brazil[11].

[10] www.circularcredits.org

[11] BVRio 2015: Reverse Logistics Credits – A social and environmental innovation to address urban waste and recycling. BVRio 2015. www.bvrio.org/publicacoes

Video: www.youtube.com/watch?v=_8X5wEoDZqo

1.5 THIS GUIDANCE DOCUMENT

This Guidance document describes the principles and criteria and codes of conducted adopted by the Circular Action Hub and its Circular Credits Mechanism and expected to be used by participants in the Hub and CCM.

It aims at extending the use of its codes of conduct to a wider range of users that share the same objectives of improving their practices related to circular economy activities and circular credit projects worldwide.

2. PRINCIPLES & CRITERIA OF CIRCULAR ACTION HUB

OVERVIEW

To ensure that the waste management activities facilitated by the Circular Action Hub are conducted in a safe and equitable way, their design and operations, and codes of conduct of those involved, should be guided by a set of principles.

The Hub's principles are organized in three overarching principles (applicable to all participants, standards and initiatives listed in the Hub), three additional principles for credit buyers and investors and three additional principles for project developers. The circular Credits Mechanism's principles are very similar to those of the Hub, with the addition of the concept of Additionality.

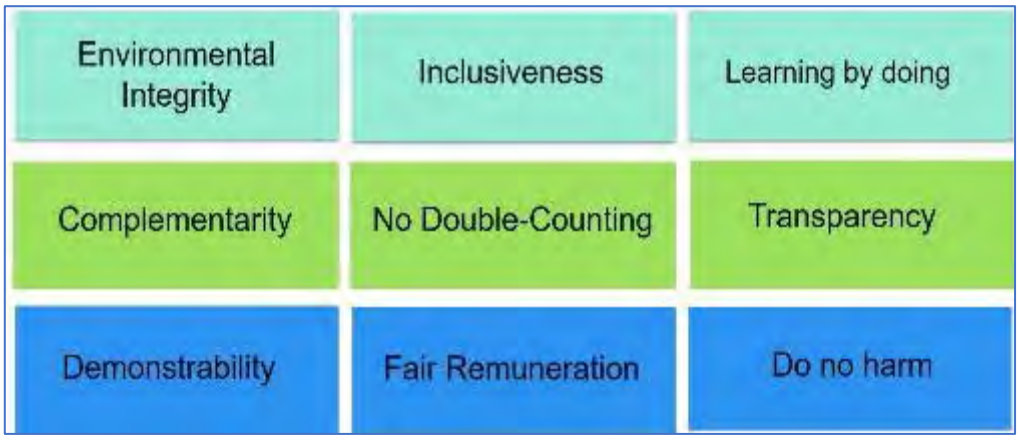


Figure 2: Circular Action Hub's principles

While these principles were developed to guide the codes of conduct of the Hub and the CCM, Circular Actin Hub recommends that these are adopted by any actor involved with the circular economy that strives for environmental integrity and social inclusiveness.

These principles are described in the next sections and additional discussion and examples are sometimes provided in the annexes.

OVERARCHING PRINCIPLES

2.1.1 ENVIRONMENTAL INTEGRITY

Project developers and investors in projects and activities related to the circular economy are expected to behave with Environmental Integrity in the conduction of their activities. While the main objective of their involvement with the circular economy may be to reduce the negative impact of waste on the environment, it is expected this is not in detriment of other environmental services, such as climate, water, biodiversity, etc.

2.1.2 Inclusiveness

Given that the circular economy involves and depends on a significant number of low-income groups and the informal sector, it is imperative that the design of projects and activities in this sector result in a higher degree of inclusiveness, benefiting these groups. The principle of *Inclusiveness* stresses the importance of removing the barriers to entry for projects and activities that have financial or management constraints to operate and/or expand.

2.1.3 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, it is important that new approaches related to the circular economy do not assume that a 'one size fits all' defined at the outset. Instead, there is a need to adopt a 'learning-by-doing' approach to the development of these new initiatives and strive for continuous improvement based on the experience learned. This should apply to both project developers and buyers/investors, but also to standards and regulations related to the sector.

Principles mostly relevant to Buyers and Investors

2.1.4 Complementarity

Complementarity refers to the need for companies to adopt comprehensive and holistic strategies to reduce their plastics and waste footprint. In practice, companies should prioritise actions following the waste management hierarchy[12], namely starting as high up in the value chain as possible (e.g. changing the packaging design, reducing the amount of plastics used). However, they should also take into account the social, environmental and economic trade-offs involved in each action.

In the case of the use of circular credits (e.g., plastic credits), their use should be complemented by other measures, in line with the Guidelines for Corporate Plastic Stewardship developed by the 3R Initiative[13].

2.1.5 Transparency

Transparency is an important principle to be observed by all involved in circular economy activities, projects and investments. By adopting a transparent approach, it will become increasingly possible to compile better data to understand the current and future flows of waste materials, assess the effectiveness of different initiatives, and attribute results to the parties involved.

[12] The waste management hierarchy is a conceptual framework that indicates the order of preference for waste management options according to what is best for the environment. The preferred option is waste prevention, followed by preparing for re-use, recycling, recovery and disposal. A graphical representation can be seen at: https://ec.europa.eu/environment/green-growth/waste-prevention-and-management/index_en.htm

[13] Available at: https://www.3rinitiative.org/guidelines-for-corporates

In the case of companies, it is important that they report on their plastic and waste footprints, as well as on the impacts of activities that they promote. And, if businesses plan to make claims about their positive actions, these should be substantiated by clear and transparent reporting of footprints, impacts, and parties involved in their investments or plastic credit purchases.

In the case of credits, it is important that all transactions are recorded in public registries, so that any claim can be more easily substantiated. For this reason, the Circular Action Hub offers a public registry of all activities listed in the Hub[14].

Figure 3: Screenshot of Circular Action Hub's project registry

2.1.6 No double-counting and No Free-riding

An essential requirement of any circular economy investment (and/or purchase of circular credits) that plans to make public claims is that the environmental impact related to the recovery and destination of waste should not be attributed to more than one entity.

In the case of credits, this means these 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.

The need to avoid double-counting is closely related to the issue of free-riding: the avoidance to contribute to the environmental services of waste collection, sorting and appropriate destination. Indeed, the Circular Action Mechanism, for instance, only recognises the environmental service of activities that are 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

[14] https://www.circularactionhub.org/circular-credits-registry/projects

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.

For more information and discussion, see Annex 2. See also the Guidance Note on No Double Counting and No Free Riding on the Circular Credits Mechanism's Resources page[15].

Principles mostly relevant to Sellers and Developers

2.1.7 Demonstrability

Any circular economy claim 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 is particularly relevant in the case of projects involving the issuance of credits, where these activities and impacts need to be carefully monitored and verified.

Monitoring 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.

Any recommendation related to demonstrability, monitoring and verification, however, need to take into account the local circumstance, data and equipment availability, and capacity of the actors involved, and design solutions that suit their capabilities. Failure to do that could result in the exclusion of segments of this sector (e.g., informal groups with low resources), in detriment of the objective of inclusiveness.

2.1.8 Fair remuneration

The provision of the environmental service of waste collection, sorting and appropriate destination must receive fair remuneration, commensurate with the workload and the time required for the provision of the service.[16] While determination of what is 'fair' and adequate is difficult, parties should endeavour not adopt exploitative market practices.

2.1.9 Do no harm

Any circular economy investment or project should adopt social and environmental safeguards to ensure that their activities do not cause harm to the parties involved.

As a minimum, such projects and activities must comply with all local, regional, and national rules and meet social and environmental safeguards appropriate to its scale and circumstance; the enforcement of these safeguards must be monitored and

[15] https://www.circularactionhub.org/certification/circular-credits-mechanism/resources/

[16] 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.

demonstrable, and the ideally compliance should be verified by an independent third party.

The minimum social safeguards required by the CCM are Occupational Health and Safety (OHS), and Principles and Rights at Work, in compliance with the relevant Guidelines of the International Labour Organization (ILO)[17].

When identifying and designing a project, these safeguards should help assess the potential social risks and impacts (positive or negative) associated with it. The project should also define measures and processes to effectively manage risks and enhance positive impacts. The process of applying safeguards can be an important opportunity for stakeholder engagement, enhancing the quality of project proposals and increasing ownership, whatever the source of financing.

Annex 3 describes the minimum safeguards recommended by the Circular Credits Mechanism.

Additional Principles & Criteria of the CCM

The list of principles described before should be adhered by all and any party involved in circular economy projects, investments and activities. In the case of projects that result in the issuance of credits, other requirements may become necessary, depending on the focus of the standard and the associated claims. For instance, plastic credits related to the avoidance of ocean-bound waste may have requirements that other standards would not include.

The Circular Credits Mechanism (CCM), developed by BVRio, adopts a set of seven principles and criteria that mostly overlap with the ones required by the Circular Action Hub (see diagramme below and Annex 1). In addition, it also adopts the concept of Additionality.

The ones in the left column are oriented to guarantee environmental robustness in the operation of the waste recovery projects and in the process of generating credits, while the ones in the right column aim to ensure that projects meet social and environmental safeguards.

[17] ILO (2001). Guidelines on occupational safety and health management systems. Available at https://www.ilo.org/global/publications/ilo-bookstore/orderonline/books/WCMS_PUBL_9221116344_EN/lang--en/index.htm

ILO (2010). WARM: Work Adjustment for Recycling and Managing Waste. Available at https://www.ilo.org/asia/publications/WCMS_126981/lang--en/index.htm

ILO conventions 29 and 105, and the protocol to the convention 29 (forced labour), 87 (freedom of association), 98 (right to collective bargaining), 100 and 111 (discrimination), 138 (minimum age) 182 (worst forms of child labour).

Figure 4: Principles & Criteria of the Circular Credits Mechanism

2.1.10 ADDITIONALITY

The requirement of 'additionality' is to ensure that environmental impact of activities and projects must contribute to an improvement of historic trends of waste pollution. Additionality plays a key role in ensuring that the environmental impact of projects contributes to an improvement of current trends of environmental degradation.

At the same time, larger projects may need to demonstrate that their impacts add to business-as-usual practices, in order to be eligible for additional circular credit revenue. This requirement will ensure that such revenues are directed to activities that change current practices, and do not divert financial flows from activities that could be playing a more important role.

Determination of additionality, however, can be difficult for some groups of actors that do not have the ability to navigate these requirements. It requires analytical skills, data sets, and sector knowledge, which may not be available to these groups. For this reason, the analysis of additionality has to be contextualised, and take into proportion the relative contributions and impacts of different types of activities. It is clear that the informal waste recovery sector makes an extremely important contribution to reducing waste pollution globally. In order to ensure that the sector continues to play an important role, it is essential that credit systems' rules do not preclude informal waste recovery projects from participation.

A possible approach to overcome these barriers may be through the use of 'positive lists' for inclusion in circular credit programmes and markets. The use of positive lists for automatic project approval has been proposed for adoption by the climate

sector.[18,19] Following this approach, some types of activities are automatically deemed eligible and, by definition, considered additional. It is proposed here that this approach could adopted for certain types of circular economy projects and activities. See Annex for more discussion on this topic.

USING CREDITS AND ASSOCIATED CLAIMS

The objective of any circular economy project or investment 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 use of Circular Credits enables companies to substantiate claims 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 (see for instance, 3RI's Guidelines for Leadership in Corporate Plastic Accounting[20]). Any claim has to be properly substantiated, using approaches such as WWF's Principles for Credible Plastic Credit Claims[21].

[18] World Bank, 2012: CDM reform: Improving the efficiency and outreach of the CDM through standardization. Carbon Finance at the World Bank. https://web.worldbank.org/archive/website01379/WEB/IMAGES/CDM_REFO.PDF

[19] UNFCCC 2018: Positive lists of technologies. CDM Tool 32. https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-32-v2.0.pdf

[20] https://www.3rinitiative.org/solutions

[21] https://www.worldwildlife.org/publications/wwf-position-plastic-crediting-and-plastic-neutrality

3. CONCLUSIONS AND RECOMMENDATIONS

Circular credits (including any type of plastic credits or the Circular Credits Mechanism) is a new, innovative mechanism to enable the cross-boundary support of waste collection and recycling projects. It has the potential to become an important tool for meeting the challenges of recyclable waste collection, screening and recycling worldwide. 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 pickers[22], 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.[23]

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.

For this to become as effective and socially beneficial, it is important that such plastic and waste credit schemes adopt robust codes of conduct incorporating best practices. The principles and criteria described in this document were designed to assist actors involved in the circular economy to gradually adopt best practices, in a continuous improvement process.

[22] IDB 2013: Preparing informal recycler inclusions plans – an operational guide, www.iadb.org

[23] BVRio 2015: Reverse Logistics Credits – A social and environmental innovation to address urban waste and recycling. www.bvrio.org/publicacoes

ANNEX 1: PRINCIPLES AND CRITERIA OF THE CIRCULAR CREDITS MECHANISM

Principles & Criteria of the Circular Credits Mechanism

Principle 1. Additionality - the environmental impact of activities and projects must contribute to an improvement of historic trends of waste pollution. Positive lists are adopted for project types deemed additional by definition. For more information, see Guidance Note on Additionality and Positive Lists, on the Circular Credits Mechanism's Resources page.

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. For more information, see Guidance Note on No Double Counting and No Free Riding, on the Circular Credits Mechanism's Resources page.

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. For more information, see Guidance Note on_No Double Counting and No Free Riding, on the Circular Credits Mechanism's Resources page[24].

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.[25] The Circular Credits Mechanism 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.

[24] https://www.circularactionhub.org/certification/circular-credits-mechanism/resources/

[25] 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.

ANNEX 2: NO DOUBLE COUNTING AND NO-FREE-RIDING

DEFINITION OF NO DOUBLE COUNTING

Principle 2 of the Circular Credits Mechanism (No Double Counting) states that the environmental impact related to the recovery and destination of post-consumer 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.

The concept of 'no double counting' is important to ensure that the environmental impact derived from a circularity activity (e.g., removal and appropriate destination of waste), is not claimed more than once, thereby ensuring the environmental integrity of the system.

If the same amount of waste collected is claimed more than once, this would give the false impression that a larger amount of waste was recovered than what happens in reality (i.e., it would result in a claim that is not additional to past trends). In other words, 'no double counting' ensures that the contributions to circularity embodied in Circular Credits are additional to existing claims (see box 1 for a definition of possible claims).

Box 1: Waste recovery, Circular Credits and associated claims

A Circular Credit represents the service of recovery (removal, collection, sorting) and appropriate destination of one (1) metric tonne of post-consumer material that is inappropriately discarded, causing pollution of the natural environment or foregoing the opportunity of a better destination.

The choice of appropriate destination of the materials recovered varies according to local context. Nevertheless, projects should pursue the best economically feasible destination within the hierarchy of choices available for the waste recovered.

While some of the materials collected may be recycled, the Circular Credits Mechanism currently focuses on the recovery of post-consumer materials to avoid waste leakage and environmental pollution.

Consequently, any claim associated with waste recovery must refer to the avoidance of waste leakage, but not be extended to claims such as 'zero waste' or 'waste neutral', unless complemented by other measures (see WWF's document on that).

In essence, a project cannot attribute the environmental services of recovery of the same amount of waste to more than one buyer[26]. For example, if a waste picker group collects 1 tonne of post-consumer PET waste, it cannot transfer the 'credit' derived from the collection of this material to more than one company. If a company acquires the credit related to the recovery of this 1 tonne, they can claim that it contributed to the reduction of its PET footprint by 1 tonne. Consequently, this environmental service, represented by the credit, can only be claimed once.

Similar questions arise with relation to local governments and/or waste management companies paid by the government, their rights to finance their activities through circular credits, and the potential for double counting - see below.

DIFFERENCE BETWEEN 'PAYMENT FOR ENVIRONMENTAL SERVICES' AND 'PURCHASE OF RECYCLABLE MATERIALS'

What happens when different actors make separate claims derived from the payment for the activity of waste recovery and from the purchase of the post-consumer recyclable material collected? For instance, Company A buys credits from waste pickers that collect and recover waste materials from the environment. This recyclable material is then sold to Company B as feedstock for further recycling.

Provided that the claims refer to different environmental impacts and purposes, i.e., the 'purchase of recyclable material' and the 'payment for the activity of waste recovery', we believe that this does not constitute double counting.

[26] In order to facilitate the control of double counting and prevent multiple sales of the same material, it is important that projects selling credits are listed in transparent and publicly available registries. The Circular Action Hub will act as a registry for all projects transacting credits through its marketplace.

Company A can claim to have contributed to the recovery of waste material from the environment, reducing pollution. Company B can claim to have increased the recycled content of their products, but not to have reduced waste pollution[27]. Both companies are, in distinct ways, contributing to circularity, and can make different but complementary claims.

This separation of concepts ('purchase of physical recyclable material' and 'payment for the activity of waste recovery') is also important to avoid situations of 'free riding'.

For instance, Company B buy recyclable materials collected from waste pickers as feedstock to meet their targets of increased recycled content. At the same time, Company B also claim that the environmental service of waste recovery (i.e., credits) belongs to them, given that they acquired the material collected.

We believe that the acquisition of physical material does not allow Company B to claim to have contributed to the unremunerated activities of waste collection and recovery. If the collection and recovery of waste is not separately paid for, it would be an appropriation of the environmental service provided. In countries with EPR obligations, this practice is referred to as "free riding"[28].

Definition of No Free Riding

As per its Principle 4 (No Free Riding), the Circular Credits Mechanism only recognises the environmental service embedded in Circular Credits 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 to a buyer, the entity buying these materials is 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.

The aim of the "No Free Riding" principle is to ensure that the environmental service of waste recovery is paid in addition to the purchase of recyclable materials, as these payments are made for different purposes.

The easiest way to visualise the difference between these concepts is to understand the costs related to make a comparison of the costs of waste management and circularity to companies operating in countries with and without EPR (Extended Producer Responsibility) obligations[29].

In countries with EPR obligations, companies need to pay EPR levies[30] to ensure that the materials that they put in the market are recovered and sent to an appropriate

[27] As per Box 1, it is important to note that the Circular Credits Mechanism does not represent recycling activities, but waste collection, sorting and best appropriate destination.

[28] See, for instance, OECD 2019: Extended Producer Responsibility (EPR) and the impact of online sales. Environmental Working Paper 142; or Watkins et al. 2017: EPR in the EU Plastics Strategy and the Circular Economy: A focus on plastic packaging. Institute for European Environmental Policy.

[29] Most EU countries have EPR obligations (see Europen reports) and these are been replicated in some developing countries (e.g., India)

[30] EPR levies in the Eu range from less than €100/tonne to ca € 500/tonne, depending on material and country. See, for instance Watkins et al. 2017

destination after consumption[31]. These levies can be paid to government agencies or EPR agents[32] that conduct the collection and recovery of such materials. In addition, if these companies decide to increase the recycling content of their products (or packaging)[33], they would need to incur on the additional cost of acquiring recyclable material, usually sold from a different party.

	Payment for waste recovery and collection	Purchase of recycled materials
Objective	Extended Producer Responsibility	Increase recycling content; Ellen MacArthur targets, etc.
Countries with EPR obligations	✓	✓
Countries without EPR obligations	x	✓

In countries without EPR obligations, the service of collection of recyclable waste materials is often incipient and vast amounts of material end up in the environment. Companies that sell or distribute products to these countries have a risk that their post-consumption products leak into nature, causing pollution and affecting their brands.

CIRCULAR CREDITS AS PROXIES FOR EPR SCHEMES

If used responsibly, the use of circular credits provides the opportunity to 'extend the responsibility of producers' to countries without EPR obligations. Through the use of credits, companies can engage local actors in the collection and sorting of these materials in a similar way that would be conducted by EPR agents in regulated countries.

Companies may also want to buy physical recyclable materials, with the objective to increase the recycled content of their products. In countries with more advanced waste management systems (which often also have EPR obligations), these materials are purchase from actors different from the ones that conduct waste collection in the first place. In less specialised economies, it is often the case that the same actors conduct the collection and sorting of waste materials and also sell the recyclable fractions. The fact that the same party performs both functions should not result in them not being paid for both.

In this context, the payment for the acquisition of recyclable materials should be additional to the payment for the environmental services of waste collection and sorting, even when the two activities (waste recovery and the sale of recyclable material) are conducted by the same actors. Failure to recognise and contribute to the

[31] The appropriate destination for the materials collected varies according to local context. Projects should pursue the best economically-feasible destination for waste recovered available.

[32] In the UK, for instance, there are over 30 Producer Responsibility Organisations (PROs) – agents that assist companies in meeting their EPR obligations.

[33] For instance, to meet voluntary or compliance targets.

service of waste recovery, configures “free riding” - a practice rejected by the Circular Credits Mechanism as per its Principle 4.

Some applications of the concepts of no-double counting and free-riding, however, can be complex. For instance, in the case of activities promoted by the public sector. See below.

CIRCULAR CREDITS AND LOCAL GOVERNMENTS

Should local government agencies or waste collection companies subcontracted be allowed to sell credits to third parties based on municipal waste collection services?

Local governments usually operate with revenue collected from taxpayers and are often mandated to perform municipal waste collection services. As societal expectations demand the adoption of circular economy models, there will be increasing need for more sophisticated waste management practices to increase recycling rates (which requires segregated waste collection or sorting stations, recycling facilities, etc.) and minimise leakage to the environment.

Collection of waste is chronically underfunded, despite often being the single highest item in budgets of municipalities.[1] To cover the additional costs associated with these practices, governments may need to resort to increasing taxation, transferring this responsibility to domestic producer companies (i.e., through EPR obligations), or, potentially, issuing and selling circular credits.

Given that government agencies will report the amount of waste recovered in their official statistics, what happens when the company buying the credits also make a claim in respect to these activities? Would the claim made by the buying company result in double counting of the same amount of waste collected and already reported by the municipality? Or do these claims have a different nature and could co-exist (the government agency reporting its operational activities to the society; the buyer company claiming to have mitigated part of their waste footprint)?

In many cases, the municipal waste collection services are actually performed by a separate entity (a public-owned company or a private-sector company), acting by delegation, as a concessionaire, or sub-contracted company to provide this public service. Would any of the questions above have a different answer when the waste collection services are provided by a concessionaire or sub-contractor? Can these waste management companies sell credits in respect to the activities performed, if they are also paid for the provision of these services?

CREDIT OWNERSHIP AND TRANSFER OF CLAIMS

Associated to the discussion above is the question about what party creates the credit in the first place, and how the rights to the credit (and associated environmental claims) are transferred.

The starting point here is that the "original owner" of the credits is the party / organisation that actually performs the waste recovery services in the first place. Their subsequent transfers depend on agreements, unless the contracting entity expressly retains the rights to issue the credits through contractual arrangements.

In the case of municipal waste collection companies, the activities they perform result in the reduction of waste from the environment, generating a positive environmental impact. Both the government agency and the municipal waste collection company (or a private concessionary company, as the case may be) are entitled to report the amount of waste removed. This "double-reporting" doesn`t necessarily lead to a double-counting if the reporting of this same amount of waste collected is for a different use and perspective (the agency reports the amounts collected indirectly through the concessionaire; and the concessionaire reports the amounts collected directly). Any jurisdictional assessment of the amounts collected should take this "double-reporting" in consideration and make the necessary adjustments when consolidating the numbers.

A different question is related to whether or not the agency and/or the concessionary company should be entitled to issue (and monetise) circular credits based on the public service provided by them. Assuming that circular credits schemes allow these entities to issue credits, the next factor to be addressed is if the credits should belong, by default, to the entity paying for the services (the government) or to the entity actually performing the services (the concessionary company).

The answer to this question is not only technical but also a conceptual matter: which solution would be more aligned with the objectives of credit schemes? The option to issue the credits for the entity that paid for the services would lead to a concentration of credits in one single player (the local government`s agency or, ultimately the government itself), reducing the impact of the credit scheme on the promotion of a plurality of new initiatives in this space. On the other hand, if the credits are given to the entity that actually performed the services (i.e., the informal sector, or waste collection companies), each time one entity delegates the services downstream the right to the credits is considered to be transferred as well (from the government agency to the concessionaire; and, in turn, from the concessionaire to one or more waste collection SMEs or co-operatives).

In all cases, when the entity receiving the credits (being it the government agency, the concessionary company or the sub-contracted SMEs or co-operatives) sells the credits to a third party, the right to claim this positive environmental impact is transferred to the buying party, who can use it to mitigate their own waste footprint.

Finally, in the case of informal groups collecting recyclable materials to be sold for its physical value, the activities they perform also result in the reduction of waste from the environment. This positive environmental impact provided is not claimed by these groups and, consequently are unnoticed, not valued and not remunerated.[2] If credits were issued for these services, this would result in better measurement of the amounts of waste recovered, their sale would provide remuneration to these groups, and the environmental impact could be claimed by the buying party.

Additional References:

1. Kaza et al., What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. International Bank for Reconstruction and Development, The World Bank, 2018.
2. R. Linzner and U. Lange, “Role and Size of Informal Sector in Waste Management—a Review,” Resources, Conservation and Recycling 166, no. 2 (2013): 69-83.

ANNEX 3: SOCIAL SAFEGUARDS OF THE CCM

Projects are expected to adopt social safeguards appropriate to its scale and circumstance and the enforcement of these safeguards must be monitored and demonstrable. Social safeguards in place are essential to prevent and mitigate undue harm to people.

When identifying and designing a project, safeguards should help assess the potential social risks and impacts (positive or negative) associated with it. Safeguards should help define measures and processes to effectively manage risks and enhance positive impacts. The process of applying safeguards can be an important opportunity for stakeholder engagement, enhancing the quality of project proposals and increasing ownership whatever of the source of financing.

The project should comply with all local, regional, and national rules and requirements. In addition, to be able to issue Circular Credits the project must also comply with the CCM's minimum social safeguards and this compliance will be verified either by the CCM team or by a third party. The minimal social safeguards from the CCM are as follows:

i. Occupational Health and Safety (OHS)

To an appropriate extent, projects should aim at establishing, implementing, and improving occupational safety and health management systems, with the aim of reducing work-related injuries, ill health, diseases, incidents and deaths. Additional information and guidance are provided by the International Labour Organisation (ILO)[34].

Whenever possible and appropriate, Personal Protective Equipment (PPE) should be provided, and its use promoted in the project activity. Additional information and guidance are provided by ILO[35].

ii. Principles and Rights at Work

The project should respect and protect the fundamental rights of workers, consistent with the International Labour Organization's (ILO) Declaration on the Fundamental Principles and Rights at Work[36], including:

[34] ILO (2001). Guidelines on occupational safety and health management systems. Available at https://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_PUBL_9221116344_EN/lang--en/index.htm

[35] ILO (2010). WARM: Work Adjustment for Recycling and Managing Waste. Available at https://www.ilo.org/asia/publications/WCMS_126981/lang--en/index.htm

[36] Including ILO conventions 29 and 105, and the protocol to the convention 29 (forced labour), 87 (freedom of association), 98 (right to collective bargaining), 100 and 111 (discrimination), 138 (minimum age) 182 (worst forms of child labour).

a. The prevention of child labour. No use of unacceptable forms of child labour (i.e., work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development and/or affects their schooling). Additional information and guidance are provided by ILO[37];

b. The elimination of discrimination, in respect of employment and occupation;

c. Freedom of association and the effective recognition of the right to collective bargaining;

d. The elimination of all forms of forced or compulsory labour. When appropriate, the project should demonstrate compliance with the local National Labour legislation, which establishes country-wide minimum wages and the legal contract between employees and employers.

[37] Definition of child labour: https://www.ilo.org/ipec/facts/lang--en/index.htm

ANNEX 4: ADDITIONALITY

DEFINITION OF ADDITIONALITY

The requirement of additionality aims to ensure that a project's positive environmental impacts are additional compared to the impact in the absence of the project. As additionality has been widely used for greenhouse gas (GHG) mitigation projects, some of the following discussion is based on examples from this sector.[38]

The term "additionality" was first used for GHG mitigation projects in the early 1990s.[39] At that time, only a few projects were being developed with the specific objective of reducing GHG emissions (or promoting carbon sequestration in trees) , and it was important then to demonstrate that these project activities would not have taken place "but for" this new source of climate finance.[40] The requirement of additionality aimed to prevent existing activities (e.g., reforestation) being re-labelled as GHG mitigation projects, giving the false impression that these were established to offset a rise in GHG emissions taking place elsewhere.

Since then, additionality has become a mandatory requirement for any climate mitigation project, both at UN level as well as in voluntary markets (e.g., VCS, Gold Standard, etc.).

DETERMINATION OF ADDITIONALITY

Determination of additionality, however, involves a complex analytical process and requires specialised technical knowledge.

Additionality is the deviation from a baseline of practices. Baselines, in turn, are projections of past trends into a future scenario that would take place *in the absence of a specific project.*

Establishing baselines requires observing past trends and projecting them to the future, taking into account factors that could affect their trajectory. For example, past levels of waste generation could continue linearly into the future, accelerate due to economic growth, or slow down due to economic downturns (Figure 1). Thus, a series of assumptions must be used to decide which of these three alternatives (and their level of intensity) is the most likely future scenario.

[38] Gillenwater, M., 2012: What is Additionality. Part 1: A long standing problem. GHG Management Institute. https://web.archive.org/web/20140602182548/http://ghginstitute.org/wp-content/uploads/content/GHGMI/AdditionalityPaper_Part-1%28ver3%29FINAL.pdf

[39] Moura-Costa, P.H., 1993. The Innoprise-Face Foundation Rehabilitation of Logged-over Forests project. A note to the European Tropical Forest Research Network Newsletter 6.

[40] Moura-Costa, P.H., Stuart, M.D. and Trines, E., 1997. SGS Forestry's carbon offset verification service. In: Greenhouse Gas Mitigation. Technologies for Activities Implemented Jointly. Proceedings of Technologies for AIJ Conference. Vancouver, May 1997. Riermer, P.W.F., Smith, A.Y. and Thambimuthu, K.V. (Eds.). Elsevier, Oxford. Pp. 409-414.

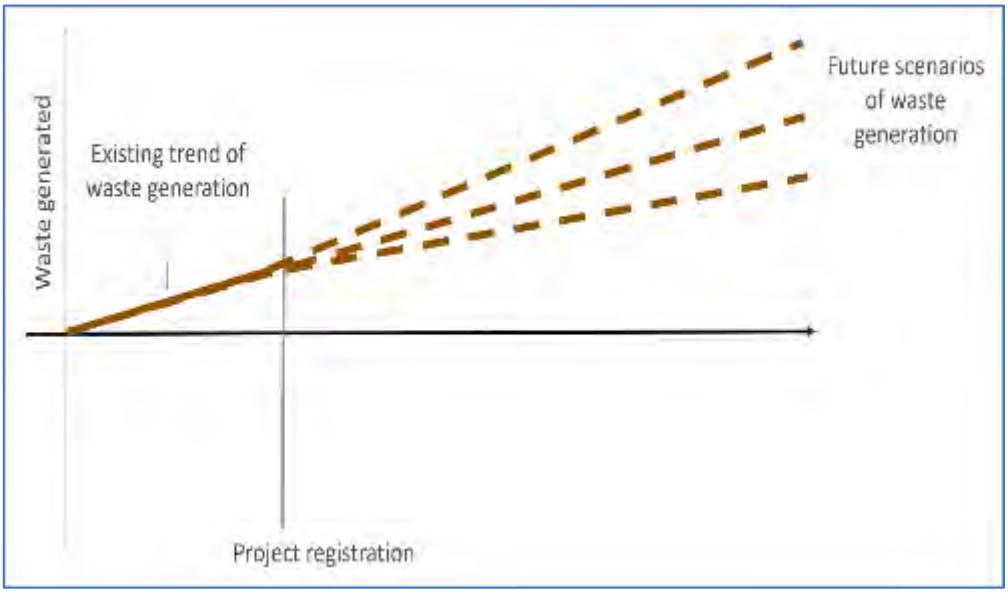


Figure 1: Illustration of possible baseline scenarios for waste generation

In the case of waste recovery projects, there is the added complication that modelling future activity levels in the sector requires a second order analysis. First, one needs to determine future levels of waste generation and, based on this, derive future waste recovery levels (Figure 2).

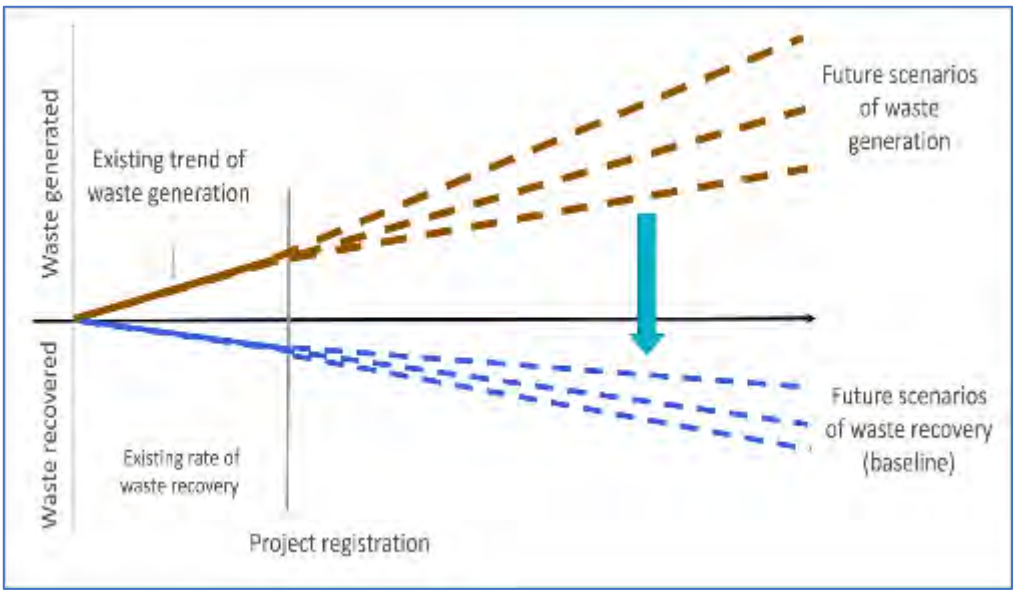


Figure 2: Illustration of possible baseline scenarios for waste recovery

Irrespective of the complexity of analyses, and whatever set of parameters is chosen to establish a baseline, it is not possible to monitor them since future practices both include and interact with project activities. Baselines are business-as-usual (BAU) future scenarios and, by definition, counterfactual constructs.

To illustrate the analytical challenges involved, a recent study conducted by Pew and Systemiq[41] used Monte Carlo analysis to estimate the variability in future waste management scenarios, conducting 300 simulations for each scenario to achieve projections with 95% confidence levels.

Once a baseline is established, it is then necessary to determine the additionality, i.e., how project activities differ from this future scenario. A series of approaches have been proposed and adopted by various carbon standards to address this question: "Environmental additionality", "project additionality", "investment additionality", "financial additionality", "barrier analysis", etc. are some of the analytical tools that have been used to try to define whether a project's impact would not have happened in the BAU future scenario[42]. In many cases, future scenarios are dependent on multiple factors that require extremely complex multivariant analysis, such as economic global equilibrium models[43] or the stochastic analysis mentioned above.

Irrespective of all these efforts, keen analysts could still find fault in these projections and suggest error type II problems, i.e. that non-additional projects are approved[44,45].

LACK OF ADDITIONALITY AND REPUTATIONAL RISKS

Given the difficulty in predicting future baseline scenarios, there is an inherent uncertainty in determining project additionality. This, in turn, creates a risk for organisations approving these projects, as they could be accused of lack of environmental integrity. This has affected the UNFCCC mechanisms[46], and subsequently the voluntary standards.

As a response, these organisations have gradually increased the amount of information and analysis required for project approval. In the case of the UNFCCC, for instance, the time needed for project approval increased from 100 to 1000 days, between 2005-2007[47]. At the same time, methodological complexity and documentation length have also increased. Voluntary carbon schemes have followed the same trajectory: the amount of documentation needed to develop and validate a project is in the hundreds of pages and the time needed to have a project registered can easily take over a year.[48]

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[41] Pew and Systemiq, 2020: Breaking the Plastic Waste – a comprehensive assessment of pathways towards stopping ocean pollution.

[42] See UNFCCC CDM Tools. https://cdm.unfccc.int/Reference/tools/index.html

[43] World Bank, 2020: Modelling macroeconomic impacts and global externalities. Economy & Environment. Good Practice Note 7. http://documents1.worldbank.org/curated/en/815971530883640016/pdf/ESRAF-note-7-Modeling-Macroeconomic-Impacts-and-Global-externalities.pdf

[44] Oko-Institut 2016: How additional is the Clean Development Mechanism. https://ec.europa.eu/clima/sites/clima/files/ets/docs/clean_dev_mechanism_en.pdf

[45] Michaelowa et al., 2019: Additionality revisited: guarding the integrity of market mechanisms under the Paris Agreement. Climate Policy. https://doi.org/10.1080/14693062.2019.1628695

[46] In particular, the Clean Development Mechanism (CDM) of the United Nations Framework Convention on Climate Change (UNFCCC).

[47] EcoSecurities Group 2007: Real life experience with the CDM. Presentation given to UNFCCC, Feb 2007.

[48] Ascui, F. and Moura Costa, P. 2007. CER pricing and risks. A project developer's perspective. In: Determining a Fair Price for Carbon. CD4CDM, UNEP.

As illustrated in the Oko-Institut report[49], the adoption of such measures *does not* reduce uncertainty. On the contrary, it increases participation costs[50], reduces the number of projects developed, and delays project implementation[51]. Moreover, these entry barriers in essence preclude the participation of low-income groups, as the technical knowledge and financial costs required to participate are often beyond them. This is the case of waste recovery projects conducted by informal groups in developing countries.[52]

ADDITIONALITY AND WASTE CIRCULARITY PROJECTS

The concept of additionality is also important for circular action projects. With the urgent need to develop more waste recovery capacity worldwide prevalent, this additional capacity will have to include a range of complementary approaches, involving different actors and activities. These, in turn, will reflect different circumstances, levels of sophistication and scale.

On one end, there is the need for large scale projects developed by large waste management companies - often contracted by local governments - involving investment in new infrastructure, equipment, staff, and working capital. New sources of capital and forms of financing (e.g., green bonds, public-private partnerships, blended finance) will need to be developed to ramp up investment in these ventures.

On the other end, future solutions must also take into account the role of informal waste pickers. The Pew & Systemiq study estimates that around 11 million people worldwide are involved in the informal waste collection sector. Consequently, this sector needs to be engaged in future waste management solutions.[53] At the same time, given the current degrading working conditions and low payment levels of waste pickers, their involvement cannot be promoted unless future schemes ensure both additional income and improved working conditions.

Circular credits for waste recovery could be one of the solutions to the challenges faced by the informal waste sector. However, effectiveness will require credit schemes designed in a way that reduces barriers to entry, ensures inclusiveness and contributes

[49] Oko-Institut, 2016: ibid.

[50] Taking into account all costs, we estimate that the validation of a project could cost in excess of USD 50,000, a sum unaffordable to small projects.

[51] Given that many projects will not be able to participate, that the incentives for investment in project infrastructure is considered too risky, or that projects are delayed by years, delaying their positive contributions to the environment.

[52] Using the numbers in the Pew & Systemiq 2020 report (see ref above), currently 11 million waste pickers are responsible for the collection of 27 million tonnes of plastic waste per year in developing countries – an average of 2.45 tonnes collected per person per year. Other studies (e.g., IPEA 2013) estimated higher efficiencies – 12 tonnes/person/year, which will be adopted here. Assuming that waste picker associations or SMEs involve 30 individuals, the aggregate tonnage collected by these organisations is 360 tonnes a year. At USD 20/tonne (the price charged for 'plastic credits' by waste picker cooperatives in Brazil, for instance), these organisations would generate a turnover of USD 7200 per year from the sale of credits. Considering a total transaction cost of USD 50,000 (including technical assistance, validation and verification), these organisations would take 7 years to be able to pay for the initial costs of participating in these plastic credit schemes.

[53] Pew and Systemiq, 2020: ibid. Which also states that, "Discouraging waste-picking on the grounds of poor working conditions would deprive entrepreneurs of vital income. Conversely, encouraging the proliferation of the informal recycling sector as a cost-effective waste management service is to be complicit with sometimes unacceptably hazardous working conditions."

to improved working conditions for the informal sector, while still ensuring environmental integrity.

A possible approach to achieve this, is through the use of 'positive lists' for inclusion in circular credit programmes and markets.

POSITIVE LISTS AND SMALL PROJECTS

The use of positive lists for automatic project approval has been proposed for adoption by the climate sector.[54,55] Following this approach, some types of activities are automatically deemed eligible and, by definition, considered additional.

We argue here that this is precisely the case of informal waste collection activities in developing countries, for the following reasons.

Firstly, the contribution to current waste recovery levels by the informal sector is only a small fraction of the overall amount of waste collection required today and, will most probably remain so in the future[56]. Consequently, allowing their participation in the system will not 'flood the market' with non-additional credits. At the same time, by removing the need to determine additionality, the CCM will, in turn, greatly reduce the need for historical data and analysis, making the system simpler, cheaper and more inclusive to low income groups.

Secondly, no circular credit scheme can condone the present unacceptable working conditions of waste pickers. Instead, projects should aim to not only stop these practices, but also ensure that all waste recovery activities conducted by waste pickers are fairly remunerated, and benefit from additional income derived from Circular Credits.

Thirdly, given that collection and recovery from the environment conducted by informal groups is mostly unpaid (waste pickers collect and recover solely to sell physical material), their impact is often not quantified, and is therefore out of the scope of public and private sector statistics alike[57] (i.e., it cannot be counted in a baseline). As we move into the formalisation of these services (through payments derived from the issuance of credits, or through EPR schemes), this will result in quantification of their impacts and so enable parties (public and/or private) to make claims that are additional to current statistics.

[54] World Bank, 2012: CDM reform: Improving the efficiency and outreach of the CDM through standardization. Carbon Finance at the World Bank. https://web.worldbank.org/archive/website01379/WEB/IMAGES/CDM_REFO.PDF

[55] UNFCCC 2018: Positive lists of technologies. CDM Tool 32. https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-32-v2.0.pdf

[56] Often less than the standard error of future projections of waste volumes.

[57] R. Linzner and U. Lange, "Role and Size of Informal Sector in Waste Management—a Review," Resources, Conservation and Recycling 166, no. 2 (2013): 69-83.

ADDITIONALITY AND COMPLEX PROJECTS

While it is evident that smaller waste recovery activities should be included in positive lists, larger projects require more in-depth analysis. This is the case, for instance, of projects that involve complex chains of funding and delegation of responsibility.

As highlighted in the Circular Credits Mechanism Guidance Note 1[58], one important aspect of additionality is that impact cannot be claimed more than once. In the case of projects that involve multiple parties, if impact is not properly allocated, this could result in double counting.

For instance, can municipalities claim credits for waste collection activities paid with taxpayer's money? Similarly, how should the activities of Producer Responsibility Organisations (PROs) paid by industry be treated? (See Annex 2 for a discussion on this type of projects).

In all these cases, it is important to define whether these activities are additional, not only from an environmental aspect, but also in relation to environmental claims derived from them. More complex analysis will be needed to determine the environmental justification for that, and how to address the requirement of additionality for these cases.

A POSITIVE LIST FOR THE INFORMAL WASTE SECTOR

The Circular Credits Mechanism proposes the adoption of a positive list approach to deal with the issue of additionality of informal waste recovery projects.

Under this approach, when this type of activity is formally engaged in circular action projects, it is considered additional automatically and does not have to provide further information to demonstrate that it is eligible to receive and sell circular credits. The reasoning for this proposal is discussed below, using figures drawn from a recent and comprehensive report by Pew and Systemiq[59] on plastic waste.

According to the Pew & Systemiq report, the total amount of plastic waste generated globally in 2016 was 220 million tonnes. Moving forward, it is projected that, under the BAU scenario, this amount will rise to 430 million tonnes per year by 2040.

With relation to the informal waste sector, the report estimates that waste pickers recovered and sent for recycling 27 million tonnes of waste (12% of the total amount) in 2016. A more challenging task was to decide how to project informal sector participation in future waste management scenarios. As stated, "discouraging waste-picking on the grounds of poor working conditions would deprive entrepreneurs of vital income. Conversely, encouraging the proliferation of the informal recycling sector as a cost-effective waste management service is to be complicit with sometimes unacceptably hazardous working conditions."

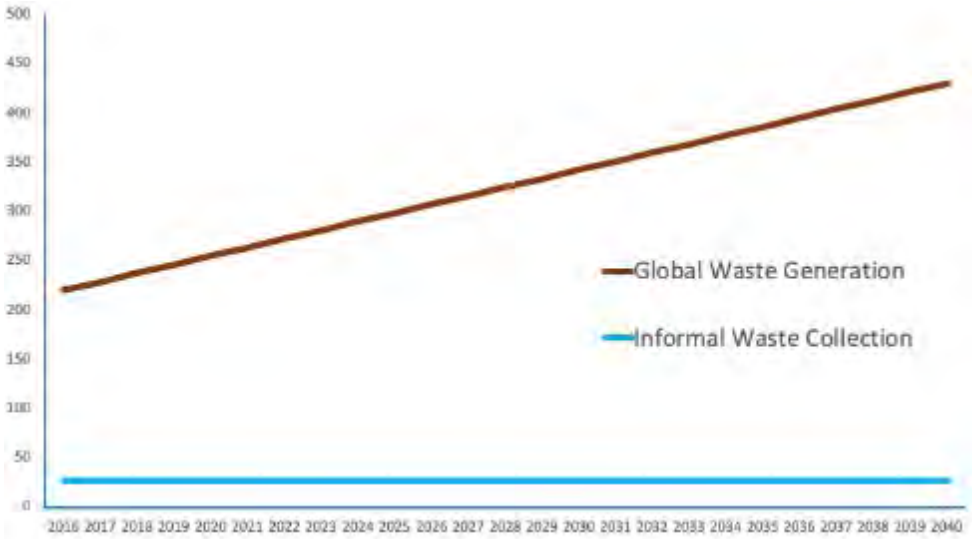
[58] BVRio Circular Action Hub 2020: No double counting and no free riding. Guidance Note 1. October 2020. www.circularactionhub.org/archives/assets/publications/CircularCreditsMechanism_NoDoubleCounting_Guidance_Note1.pdf

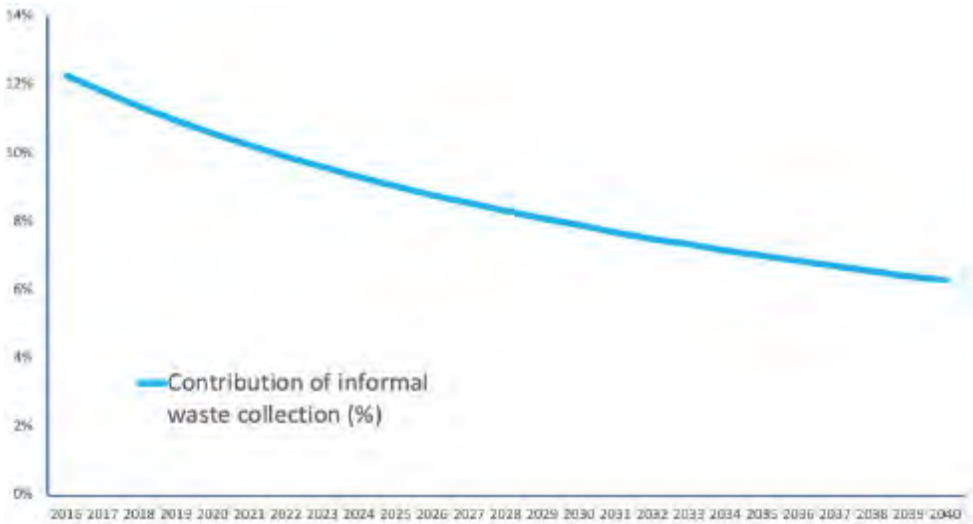
[59] Pew and Systemiq, 2020: Breaking the Plastic Waste – a comprehensive assessment of pathways towards stopping ocean pollution.

In order to demonstrate the relative contribution of the informal sector to overall waste generation, we assume two different scenarios:

1. Current levels of informal collection will remain stable at current levels (27 million tonnes a year). In this case, its overall share of the total amount will gradually decrease from 12% of total waste, to 6% in 2040.[60]

   This contribution (6%) is close to the acceptable statistical confidence levels for determination of baselines, and consequently is inconsequential. At the same time, requiring that projects deduct the contribution of current levels of informal waste collection from their environmental claims of plastic credit projects would result in the exclusion of an important group of actors that most need this financial support to continue to operate (see Box 1).

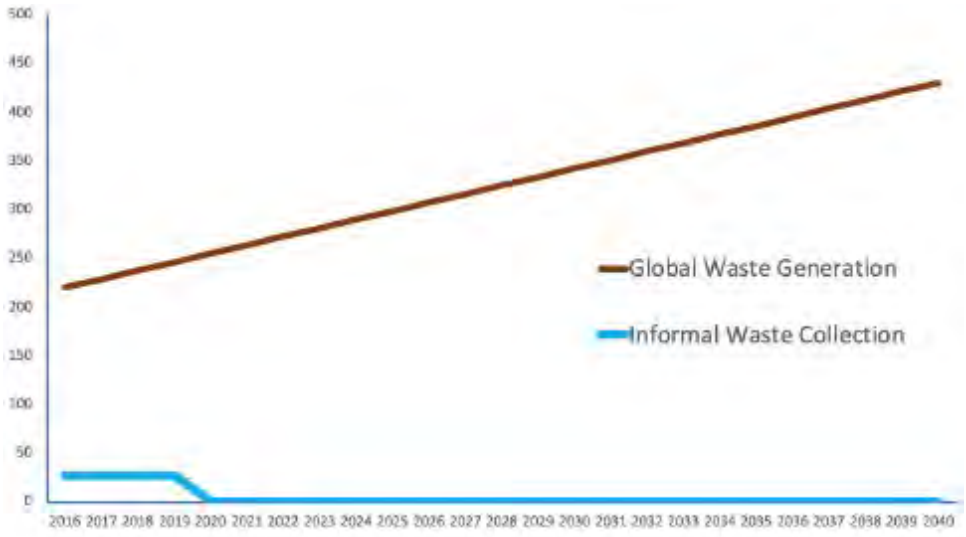




[60] In fact, the contribution of informal recovery activities that are currently unremunerated is even lower than the figures stated in the Pew and Systemiq report. In many situations, the informal sector is 'hired' by local waste management companies or local governments to provide the services of collection and sorting of waste materials, and paid for these services, but there is little data available on these informal contractual arrangements.

2. Unremunerated informal waste collection is discontinued and not included in any plastic credit project from now on (at least for the purposes of any analytical determination of additionality).

   Under this scenario, all waste collection activities are considered additional by definition.

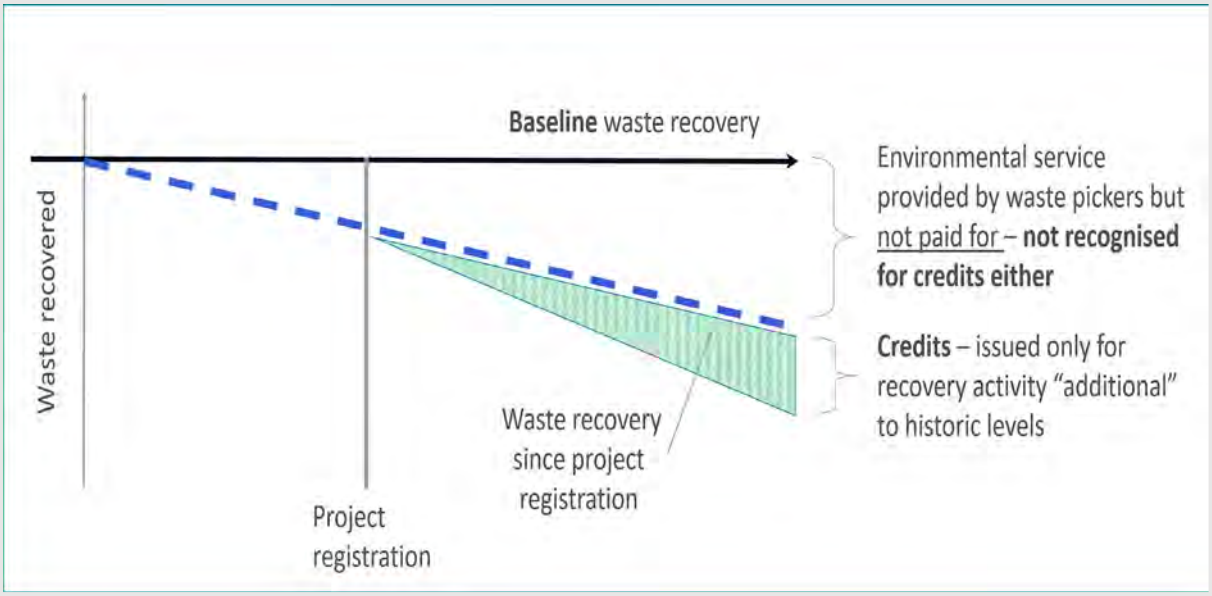


The Circular Credits Mechanism believes that revenue generated by the sale of Circular Credits for waste recovery is one of the solutions to the challenges faced by the informal waste sector. The sale would increase their revenue, and the participation in these projects will engage these actors in more formal contractual relationships in the long run, while improving working conditions. This improvement of working conditions would enable a more robust participation of these stakeholders, increasing their effectiveness and relative contribution to waste management solutions for the future.

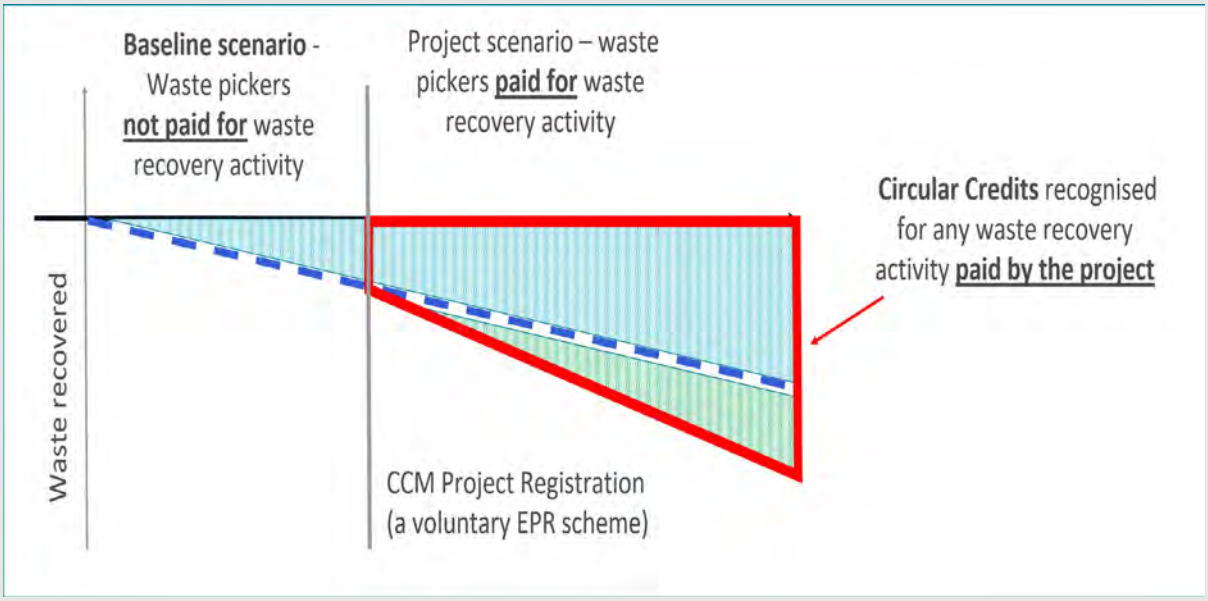
Box 1: Additionality impacts on waste collection projects

The strict application of additionality treatments to informal waste collection, irrespective of the relative contribution to total global waste management levels and whether these activities are unremunerated and conducted under degrading and exploitative practices, would result in perverse outcomes.

Under this interpretation, activities that have been conducted in the past are not considered additional. Consequently, if new contractual arrangements associated with nascent crediting schemes are not introduced, activities conducted under exploitative conditions will be extended into the future, precluding these actors from receiving new revenue streams available from the sale of plastic or circular credits.



The Circular Credits Mechanism believes that such practices should be discontinued and that any waste recovery activity conducted by the informal waste sector, whether existing or new, should be eligible to receive remuneration from the sale of credits.



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