

Discussion Paper

# Plastic credit schemes and EPR – risks and opportunities



**PREVENT**  
Waste Alliance

## Introduction

The idea of “plastic credits” is raising a lot of attention and offers significant opportunities for financing circular plastic systems. At the same time uncoordinated and unregulated plastic credit schemes bear certain risks, especially with regard to incentives for waste prevention and the introduction of EPR systems, crucial corner stones for the sustainable use of plastics. Against this background a PREVENT Waste Alliance task force of plastic credit scheme operators, industry as well as environmental NGOs and researchers has developed this discussion paper on necessary quality requirements and standards in order to ensure that plastic credit schemes actually lead to more circular systems especially for plastic packaging and do not undermine incentives for extended producer responsibility and especially waste prevention as top priority of the waste hierarchy.

## Background: The idea and concept of plastic credits

The idea of “plastic credits” originates from the realm of climate change mitigation – companies can offset their greenhouse gas emissions by buying carbon credits based on implemented certified measures that reduce CO<sub>2</sub> emissions, for example through industrial emission reduction projects or reforestation. In Europe, for instance, the use of the European Union’s Emission Trading Scheme engages more than 15,000 industrial plants and enables those that can reduce their emissions more cost effectively to sell allowances to those that have a higher cost of abatement. The economic efficiency of the scheme results in significant financial savings for the European economy as a whole. The same economic argument can be made for plastic credits.

However, the transferability of the concept is limited: CO<sub>2</sub> spreads across the global atmosphere and its effects are regulated by international treaties and national regulation, which permit “transferability” as mechanism. Plastic pollution on the other hand shows very specific features with only plastics in the waterways being a truly international concern. There are no legal definitions for “plastic credits” but here it is understood as a transferable unit representing a specific quantity of plastic that has been collected from the environment and recovered, not just collected<sup>1</sup>.

As plastic credits promise a source of funding for underfinanced waste management in many parts of the world, several plastic credits schemes have emerged over the last year by companies like rePurpose Global or NGOs like Zero Plastic Oceans and BVRio. They highlight the potential of such systems to increase collection and recovery/recycling of plastic waste in countries without sufficient waste management infrastructure while creating socio-economic co-benefits by improving income opportunities for waste workers. Nevertheless, these schemes show specific strengths and weaknesses<sup>2</sup>, especially with regard to the extended responsibility of producers and resulting incentives for waste prevention. The following discusses key issues to be addressed before drawing preliminary conclusions on specific quality requirements.

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1 This understanding is based on [https://c402277.ssl.cf1.rackcdn.com/publications/1429/files/original/newWWF\\_Position\\_on\\_Plastic\\_Crediting\\_and\\_Plastic\\_Neutrality\\_.pdf?1611957221](https://c402277.ssl.cf1.rackcdn.com/publications/1429/files/original/newWWF_Position_on_Plastic_Crediting_and_Plastic_Neutrality_.pdf?1611957221); nevertheless it’s important to see that legal definitions are lacking and the field of plastic credits is evolving quickly.

2 ValuCred publication “Plastic Credits- Friend or Foe?” (ValuCred report on Plastic Credits published - PREVENT Waste Alliance ([prevent-waste.net](http://prevent-waste.net)))

## Strengths and weaknesses

It has been argued that carbon credits lead to efficient climate protection: CO<sub>2</sub> emissions should be reduced where this can be achieved at the lowest costs; often meaning not in those countries that already “picked the low hanging fruits” but e.g. in emerging countries. The argumentation is not that straightforward for plastic credits where specific environmental impacts clearly depend on local circumstances, nevertheless they can make sense also from an economic point of view.

On the other hand, organisations like e.g. WWF<sup>3</sup> or the Circulate Initiative<sup>4</sup> have emphasised fundamental risks that can be linked to plastic credit systems:

- Without clear definitions and standards, plastic credits might be used for simple green washing without any relevant positive impacts.
- Companies voluntarily using plastic credits to off-set their environmental impacts are not committed to any long-term establishment of collection/recovery infra-structures. There is a risk that plastic credits can be misused by short term activities or even one-off events, e.g. clean-ups.
- Lacking transparency and often unclear governance structures/control mechanisms without independent external verification e.g. with regards to collected amounts of plastic waste as well as treatment processes applied and treatment outcomes can lead to fraud. It has to be ensured that for example plastic credits are not sold or accounted for twice. As these are mainly voluntary and private initiatives, in some cases, there can be a lack of liaison with national, regional, and local authorities<sup>5</sup>.
- Another challenge is the clear documentation that collected amounts of plastic waste are also properly recycled and not for example just exported for disposal in other countries.
- Lastly, plastic credits focus, as the name says, on plastics. However, also non-plastic packaging waste requires collection and treatment and is a source of serious threats if littered (soil and water contamination, breeding grounds for diseases, etc.). By excluding these materials, synergies in waste management are severely limited (reduced collection costs, if plastic packaging is collected together with metal packaging, like cans) and no structures for the non-plastic packaging with no market value are offered. Of course such materials could also be included e.g. in “circular credit” schemes.

Against this background, different sets of minimum requirements have been formulated that especially emphasise the criterion of additionality: plastic credits should only be issued for units of plastic waste that would otherwise have ended up in the environment<sup>6</sup>. Plastic waste that anyway would have been collected and recycled, e.g. pure fractions of

3 WWF Position Plastic Crediting and Plastic Neutrality.docx ([rackcdn.com](https://www.wwf.org.uk/sites/default/files/2021-03/WWF%20Position%20Plastic%20Crediting%20and%20Plastic%20Neutrality.docx))

4 The Circulate Initiative: A Sea of Plastics Claims and Credits:Steering Stakeholders Towards Impact 77554d\_f5f78afcf3e94e29886def2bcb08b60.pdf ([filesusr.com](https://www.circulateinitiative.org/wp-content/uploads/2021/07/77554d_f5f78afcf3e94e29886def2bcb08b60.pdf))

5 Situation differs significantly between countries; In Brazil, for example, the credits are widely accepted for legal compliance.

6 See e.g. [https://www.circularactionhub.org/archives/assets/publications/Circular\\_Credits\\_Mechanism\\_Additionality\\_and\\_Positive\\_Lists\\_Guidance\\_Note\\_2.pdf](https://www.circularactionhub.org/archives/assets/publications/Circular_Credits_Mechanism_Additionality_and_Positive_Lists_Guidance_Note_2.pdf)

production waste, should not be taken into account. In this sense, plastic credits are to be seen as remuneration for an environmental service rather than a material.

Such quality criteria are currently developed by several organisations. The challenge will be stringent monitoring and credible sanctioning when such key quality criteria have failed. It is further not clear who would have the authority to do so and how companies should be obligated to demonstrate that they are not using plastic credits as a cheap way out instead. There is, however, a trade-off between strong quality criteria plus compliance and the practicability or effort of generating plastic credits.

Last but not least, with the plastic credit market just emerging, there are numerous schemes following different criteria. While the testing of various approaches at this point will only benefit the development of plastic credits, in the name of transparency and credibility, there is a need for some integration and quality ranking based on common principles, values and structures. Analogue to the carbon credits market policy makers and accreditation bodies will have to ensure the establishment of trusted platforms, standards and certifiers in order to support the further development of this market, e.g. with regard to the transferability of plastic credits between different schemes.

## Plastic credits and EPR

Beyond such minimum requirements, also the interlinkages between plastic credit schemes and extended producer responsibility (EPR) schemes for packaging should be taken into account. EPR aims to ensure that companies take responsibility for end-of-life costs related to the packaging (and other products) they put on the market<sup>7</sup>. This can set incentives inter alia with regard to the recyclability of their products, the use of recycled materials or also awareness raising activities for the need of waste prevention solutions<sup>8</sup>.

With ample evidence that EPR systems effectively contribute to reducing packaging waste in the environment and allow setting up and financing reliable and systematic waste management structures to ensure that waste is collected, sorted and treated, it should be avoided that plastic credit schemes undermine or contradict existing or future EPR systems:

- Companies that put packaging on the market and currently buy plastic credits could lobby against the introduction of EPR systems as part of a country's policy that would lead to mandatory fee-based payments (or physical obligations to collect and recycle their waste) – especially since EPR systems for packaging are more expensive for the obliged companies and, if mandatory, companies cannot decide to pay less or not pay at all.
- Cherry picking of profitable waste fractions as well as cheap pricing e.g. based on non-payment for labour and lacking safety and health standards can hinder the establishment of EPR systems<sup>9</sup>. Plastic credit systems, when co-existing in the same area, to some extent also compete for paying clients, which means they compete

<sup>7</sup> <https://prevent-waste.net/en/epr-toolbox/>

<sup>8</sup> <https://www.oecd.org/environment/waste/Extended-producer-responsibility-Policy-Highlights-2016-web.pdf>

<sup>9</sup> [https://www.circularactionhub.org/archives/assets/publications/Circular\\_Credits\\_Mechanism\\_Additionality\\_and\\_Positive\\_Lists\\_Guidance\\_Note\\_2.pdf](https://www.circularactionhub.org/archives/assets/publications/Circular_Credits_Mechanism_Additionality_and_Positive_Lists_Guidance_Note_2.pdf)

over the price. In order to be the cheaper one, there is the threat to focus on cherry picking in waste and/ or lower standards for workers' safety, etc.

- Plastic credit systems that focus on specific regions, like in India, can make national planning processes for comprehensive EPR systems challenging when the total amounts of waste to be collected depend on the amounts collected on behalf of plastic credit schemes.

## Plastic credits and waste prevention

Waste prevention, either quantitative in terms of amounts of waste or qualitative with regard to the hazardousness of waste, is the top priority of the waste hierarchy as one of the guiding principles e.g. of the EU Waste Framework Directive. Only if waste generation cannot be avoided, the remaining waste should be prepared for reuse, recycled, incinerated or, as least preferable option, landfilled.

This focus on plastic waste prevention should not be confused with banning plastic; there are many good reasons to use plastics e.g. as packaging if it contributes to food waste prevention. Nevertheless, there are in a large share of cases options to reduce plastic waste by improved design, extended use phases or new business models. Taking into account the predicted increase in plastic waste in the coming years, a much stronger emphasis should be put on waste prevention. Especially with regard to avoidance, plastic and carbon credits show common and transferable characteristics.

Against this background, plastic credit systems should always be designed in a way that they do not undermine incentives for waste avoidance for any stakeholder alongside the value chain; plastic credits should never give an alibi to postpone the necessary “transformational change” for plastics.

- There is a risk that offsetting plastic pollution by buying credits can normalise patterns of production as well as consumption that are clearly unsustainable and will lead to massive impacts on the environment or human health – especially if companies are not effectively obligated to prove the additionality of this measure.
- Plastic credits can easily be seen as the easy way out as they simply require paying someone for a specific service. On the other hand, effective prevention solutions often require the involvement of various stakeholders, take more time and initial investments. Nevertheless they are in most cases the optimal solution in the long run.
- Especially the implementation of reuse systems might be affected by plastic credits when collectors would profit from handing over reusable packaging as waste. Whenever waste prevention requires specific infrastructures – like in the case of reusable packaging systems, there is the risk that credits will not contribute to investment in such infrastructures but rather exploit the situation to generate revenues. Consideration of reuse can be integrated into the design of plastic credit schemes, too often this is not the case.

## Resulting requirements

Looking at these specific risks, policy makers as well as companies and consumers should pay attention that plastic credits systems are designed in a way that they neither conflict with the development of EPR systems nor with waste prevention, ideally creating synergies and additional impulses for improved circularity. If plastic credits were to be used outside the obligations of EPR schemes, additionality has to be a crucial requirement for their use. If plastic credits are incorporated as a means to comply with EPR schemes, it remains important that these refer to waste collection and recycling that is additional to what the public sector is responsible for.

The specific requirements of integrating credit schemes with EPR systems and waste prevention will depend on the status of establishing such systems. In countries where EPR is still not in place they should demonstrate to governments that companies that introduce packaging into national markets are willing to take responsibility, provide funding for infrastructure and human resources, while no other funding mechanisms are in place and contribute to building up relevant infrastructures of collection and recycling. In such cases a flexible recognition of plastic credits as a way to fulfill producer responsibilities might reduce resistance to the introduction of EPR schemes.

In countries where EPR systems are currently being set up, plastic credits should contribute to the collection and monitoring of relevant data e.g. on the traceability of waste generation and shares of collected waste amounts – they should thus use the same or a similar monitoring system. Plastic packaging or general packaging introduced into a national market is essential to become a reporting requirement. In such cases they can act as a bridging mechanism that can run alongside the EPR scheme, while it is being set up. It must be ensured that plastic credits are not considered as a “cheap way out”, the price of a paid credit shall not distort local markets and always reflect the waste hierarchy.

In the context of such developing EPR systems, plastic credits can be used to explore new grounds, e.g. solutions for multi layer plastics, non-packaging plastic waste, regions, or stakeholders (informal sector) that are not yet included in the EPR. Plastic credits can complement EPR as a transitional voluntary transaction by the private sector (or act as a laboratory to test new progressive ideas on how to continuously develop EPR) – they could act as an option for eco-modulated fees, especially for plastic products that are specifically challenging to recycle or have specific impacts on the environment: Putting such materials on the market should be compensated by additional plastic credits. While EPR aims to cover costs of collection and recycling, plastic credits could compensate such extra burdens as well as finance awareness raising, education and waste prevention (provided that the money goes where it is needed).

**Based on past experiences with carbon credits, the following points should be addressed by ambitious plastic credit systems and demanded by every private or public institution buying plastic credits:**

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1. Plastic credits should always be the last resort, wherever possible prevention has to be the priority. Against this background plastic credits should only be sold to organisations that can sufficiently document that they explored available options for waste prevention. The potentials to prevent waste will significantly depend on the type of packaging, size of the company or local market conditions – this will have to be taken into account. Companies communicating the amounts of plastic waste offset by plastic credits should always also indicate the total amounts of plastic packaging put on the specific market. That allows the public to compare negative and positive impact of the claiming company directly.

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2. Some plastic credit schemes have proven to be very effective when it comes to gathering money for setting up new collection and recycling infrastructures and in engaging local actors in the collection and sorting of waste<sup>10</sup>, in a similar way that would be conducted by EPR agents, such as packaging recovery organisations (PROs). Plastic credit schemes should commit to invest a transparent share of their incomes into longer lasting infrastructures (not just ‘one-off’ clean-ups), which can then also benefit EPR schemes once set up, the longevity of such commitments should be communicated transparently. Such investment decisions should be taken in close collaboration with local decision makers, specific regulations should address the responsibilities to administer these finances and decide over which infrastructure investments to support.

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3. Plastic credit systems should be a first step towards the establishment of comprehensive EPR systems. Companies operating such systems should always actively reach out to all relevant stakeholders that would have to be coordinated for the introduction of an EPR system, e.g. with regard to data management or contractual arrangements. Plastic credit schemes should pursue credible monitoring of their activities and actively participate in the development of harmonized criteria. All investments and methodologies should be designed in a way that enables integration into public EPR systems, e.g. as a waste management service provider or a market place organiser.

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## Outlook

The intense discussions within the working group have highlighted the urgent need for further analysis, standards and regulations. A common definition for plastic credit schemes will be crucial in order to avoid that free riders undermine the quality standards already established by front runners in this extremely fast developing market segment. Also a much better understanding of how companies are using these schemes will be important, is it actually contributing circular solutions or just a quick way out? It seems clear that there will be no “one size fits all” solutions and next steps should look into specific countries and the different impacts of plastic credits.

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<sup>10</sup> <https://prevent-waste.net/wp-content/uploads/2021/09/Plastic-Credits-%E2%80%93-Friend-or-Foe.pdf>

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