

Plastic Credits

Background

Waste generation is rapidly increasing worldwide, in particular plastic and packaging waste. Collecting, sorting, recycling and disposing waste is a costly endeavour. For many municipalities, the costs are higher than the revenues that can be made from selling recycled materials.

Besides municipal waste fees, Extended Producer Responsibility (EPR) is widely accepted as a key approach for creating sustainable organisational and financial structures for waste management.^{1,2} It is an environmentally focused approach based on the polluter-pays principle, according to which a producer's responsibility for a product is extended beyond use. It is most widely applied for packaging material but increasingly also to other products such as e-waste or batteries. EPR is, however, a complex mechanism that can take years if not decades to be established. **As a quicker remedy for the underfinanced waste management systems in many parts of the world, plastic credit schemes are emerging as a new approach.**

Plastic credits can be understood as transferable units representing a specific quantity of plastic waste that has been collected from the environment and subsequently recycled or safely disposed. Plastic credits might be compared with carbon credits (which is a generic term for any tradable certificate or permit of a country or organisation to emit a certain amount of carbon dioxide or other greenhouse gas emissions), originating from the area of climate change mitigation.

Plastic credits can be bought by both companies as well as private consumers to compensate for their plastic

footprint. While not creating sufficient ongoing funding, they promise to be an efficient instrument to enhance the funding for collection and treatment of plastic waste in areas without sufficient waste management infrastructure while potentially creating socio-economic co-benefits by improving income opportunities of waste workers.

Many plastic credit schemes, platforms and standards have been set-up in the last two years by companies and NGOs (such as rePurpose Global or BVRio) and the market continues to be highly dynamic. **There is no commonly agreed definition of plastic credits yet** as it entails many complex considerations – much more so than the carbon credit market. The various schemes differ greatly with respect to their standards and processes making it a very convoluted market. This has led to major criticism of plastic credits by leading NGOs at the beginning of 2021.^{3, 4}

Without transparent and stringent monitoring of the entire plastic credit creation process (collection, sorting, transportation, recycling and selling), **there is uncertainty about the actual impact opening the door for greenwashing.** Greenwashing refers to the practice by companies to spend more time and money on marketing themselves as environmentally friendly than on actually minimising their environmental impact. Programs could in the worst-case falsely generate credits for plastic waste that would have been anyways collected and treated through other existing mechanisms.

At the same time increased public awareness of green washing has heightened the need for cautiousness, integrity and guidance. In the last few years non-governmental organisations increasingly filed lawsuits against international brands and companies for making deceptive recycling claims about their packaging.

Further, companies who buy plastic credits could argue that they are offsetting their plastic footprint without implementing measures to reduce this footprint in the first place. In this sense, the term of plastic neutrality is controversial.

Last but not least, supporting plastic credits bears the risk that it could undermine efforts towards EPR systems. Producers and sellers might argue that they fulfill their responsibility already by buying plastic credits or lead to a systemic competition for collected and recycled plastic waste amounts.

To conclude, however, **there is a trade-off between strong quality criteria plus compliance** (such as foreseen by the Verra standard) **and the practicability** of generating plastic credits from small-scale waste projects and initiatives which would and should benefit most from it.

Our position

GIZ's work to reduce plastic pollution and marine litter is guided by the concept of circular economy, which links integrated waste management with sustainable consumption and production.⁵ To reduce plastic pollution sustainably, plastic waste generation has to be reduced by preventing it in the first place while also recycling and disposing the remaining waste in an environmentally sound manner. GIZ strives to establish sustainable long-term solutions while also achieving some short- to mid-term impact in selected locations. Accordingly, our position towards the financing of plastic and packaging waste management recognises that there is no single one-size-fits-all solution:

■ **EPR remains a priority.** Extended Producer Responsibility (EPR) as obligatory national policy instrument is a key solution for sustainable waste management & circular economy. Wherever possible, EPR for packaging should be focused on and prioritised over plastic credit schemes.

In countries where EPR systems are already on the way (such as for instance in Indonesia, Jordan or Vietnam), discussions on alternative options should not undermine the ongoing political process. As plastic credits are not following a uniform global standard yet (in contrast to carbon credits) and both market development and market saturation currently are difficult to project, basic financing of municipal waste management systems should mainly rely on established and long-term funding systems.

■ **Plastic credits can represent a transitional alternative.** Plastic credits are an emerging new financing approach without a common definition or standardised processes, making an all-encompassing assessment difficult. Nonetheless, they can represent a meaningful alternative solution in countries where EPR systems for packaging are still a long way off. They can demonstrate that producers are willing to take responsibility, provide funding for projects while no other funding mechanisms are in place.

They could further contribute to building up relevant infrastructures of collection and recycling as well as data and monitoring frameworks to facilitate tracing of materials and verification of effective collection and recycling of plastic waste as well as payments made to different stakeholders in the plastic waste value chain. In exceptional cases, they can also represent a complementary or even integrated instrument to an obligatory national EPR mechanism (such as foreseen in India).

In order to be able to integrate plastic credit schemes effectively as one way to fulfil EPR obligations, the schemes need to report transparently to national EPR/ plastic waste registries or monitoring entities, be open to collective EPR schemes such as PROs, and subject themselves to monitoring systems of national authorities.

■ **There are other viable alternatives or complementary financing options.** Other financing options for waste management should also be considered, such as municipal waste fees, CO₂ taxes, and cash for trash that are assessed in the EPR Toolbox by the PREVENT Waste Alliance.⁶

Combining a mandatory EPR scheme for packaging together with waste fees can constitute a solid financing base for a municipal waste management system. CO₂ taxes based on ecological criteria regarding resource savings and usage of raw materials offer additional support. Cash for trash-schemes are similar to plastic credits and become less relevant with the set-up of EPR systems. Contrarily to plastic credits, they usually pay workers according to the value of materials collected and are not limited to plastics.

Further plastic-credit-like mechanisms also exist as transitioning financing schemes in other sectors such as e-waste. There, similar considerations apply. Due to the prevalence of plastic pollution and plastic credit initiatives in GIZ's work, this position paper focuses on plastic credits only.

Recommended actions

GIZ is committed to neutrally advising partners on the best available solutions for financing waste management and building a circular economy, given the local context and needs for both the short- and long-term. To this end, GIZ can analyse requirements of national EPR schemes or other plastic waste management financing mechanisms, as well as strong and weak points of existing plastic waste credit schemes, and together with partners, develop options on how to design these systems complementarily or integrate them.

GIZ follows the development of the plastic credit market and contributes to the ongoing discussion on a global level with the PREVENT Waste Alliance, to address shortcomings, align plastic credit schemes with sustainable development principles, as well as promote coordination and harmonisation across different programmes.

Any cooperation with plastic credit schemes has to be carefully evaluated considering potential issues and the local context. In particular when cooperating with companies (such as under developPPP), the cooperation should have a sustainable development impact in the target location and not only benefit a single business venture.

The following criteria and recommendations can provide orientation for both advising partners and designing project measures. They apply to a varying extent, depending on the scope and level of envisaged activities, from piloting the generation of plastic credits in a selected location to advising the partner ministry on integrating plastic credits in their waste management policies.

■ **EPR complementarity:** Plastic credit schemes should not undermine an EPR scheme or the development of such, but rather aid its development or be additional. Specifically, plastic credit schemes should not offer credits that are cheaper than EPR obligations for the same material. Credits should reflect the cost of the environmental service of waste management rather than the material value. At best, a plastic credit scheme should contribute to infrastructure investments in close collaboration with local decision makers. Finally, EPR complementarity should be ideally ensured through a regulation of plastic credits as part of the national waste management policy.

■ **Real and transparent impact:** Plastic credits should only be issued for units of plastic waste that would otherwise have ended up in the environment. The programme should use a relevant and consistent methodology for measuring impact claims beyond existing baseline efforts (Additionality) – ideally differentiating plastic types according to their environmental impact. Double counting in different schemes or with existing EPR systems must not be possible. Further, revenues should be used to pay a fair living wage to waste workers – at best benefitting informal waste workers. The impact claim should be verified by an independent third-party auditing organisation and ideally openly reported.

■ **Waste hierarchy:** Plastic credit schemes and standards should adhere to the principle of the waste hierarchy. They should exploit options of reuse and recycling before incineration and disposal for waste at stake. In order to promote waste prevention, plastic credits should only be sold to organisations that can sufficiently prove that they explored and at best implemented all available options for waste prevention. Offsetting should be transparently reported against the volumes of plastic materials put on the market by the buying companies. This is even more important if schemes provide plastic neutrality certificates to their buyers.

■ **Governance and harmonisation:** Plastic credit initiatives should have a clear governance scheme that involves external stakeholders from various sector in its continuous development. They should seek alignment with other established claims, programmes or standards. In particular a commonly agreed definition is central for better transparency.

Generally, the ISEAL Code of Good Practice for Standard Setting⁷ provides further orientation and should be followed by plastic credits scheme.

As the sector is evolving dynamically, GIZ is closely observing its development and may change its position and recommendations accordingly.

Innovations

■ **Facilitating international exchange:** A **sub-working group on plastic credits** as well as a **roundtable with voluntary standard setters** hosted by the [PREVENT Waste Alliance](#) discuss critical aspects around plastic credits and how to address these. With these the PREVENT is hosting one of very few regular international exchanges on this topic so far. The discussions resulted in a discussion paper⁸, an additional factsheet to the EPR toolbox⁶ as well as a joint statement by the standard setters⁹. The PREVENT Waste Alliance is a multi-actor partnership hosted by GIZ on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ).

■ **Piloting & standardising processes:** Within the PREVENT pilot project [Plastic Credits for inclusive and transparent circularity](#) member organisations are piloting various pilot credit schemes in four components. The project **ValuCred** is one of these components led by [Yunus Environment Hub](#), [Nehlsen & Rodiek](#), and [BlackForestSolutions](#). ValuCred published a market analysis of plastic credit mechanisms^{10, 11} and developed **Standardised Process Model (SPM)**¹². It specifies guiding principles for the integration of minimum requirements for the plastic credit market to foster greater transparency and accountability of all stakeholders involved. Applying the ValuCred Standard Process Model (SPM) and its digital interface leads to ESG-relevant data collection. ValuCred tested its approach in India, Vietnam, Angola, Ghana and Brazil.

Cooperation partners

Besides the partners mentioned already there are further actors involved in the PREVENT pilot project, sub-working group or the round table for standard setters, including among others:

■ **BV Rio** is a non-profit organisation, which works to develop and offer market solutions for different types of environmental assets. BVRio has developed a series of market tools for environmental services such as the [Circular Credits Mechanism](#) and published Guidelines on Best Practices in multiple languages¹³.

■ **rePurpose Global Inc** is the Plastic Action Platform and a global coalition of people and companies dedicated to reducing waste, reviving lives, and restoring nature's balance.

■ **Zero Plastic Oceans (ZPO)** created in 2019, is a non-governmental organisation dedicated to addressing plastic pollution issues. ZPO created the Ocean Bound Plastic (OBP) certifications and labels.

■ **Plastic Credit Exchange (PCX)** is an integrated non-profit market platform, based in the Philippines, helping businesses offset their plastic footprints.

■ **Verra** is a global leader in standard setting with the aim to help the private sector, countries, and civil society achieve sustainable development and climate action goals.

Sources

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² Ellen MacArthur Foundation (2021). "[Extended Producer Responsibility a necessary part of the solution to packaging waste and pollution](#)".

³ TCI (Jan 2021): "[A Sea of Plastics Claims and Credits: Steering Stakeholders Towards Impact](#)".

⁴ WWF (Jan 2021): "[WWF POSITION: PLASTIC CREDITING AND PLASTIC NEUTRALITY](#)".

⁵ GIZ (2021): "Position Paper Marine Litter". [FMB-Wiki](#)

⁶ PREVENT Waste Alliance (forthcoming): EPR Toolbox Factsheet on different approaches and strategies to EPR

⁷ ISEAL: [ISEAL Codes of Good Practice](#)

⁸ PREVENT Waste Alliance (Nov. 2021): "[Discussion Paper: Plastic credit schemes - risks and opportunities](#)".

⁹ PREVENT Waste Alliance (May 2022): "[Joint Statement: Plastic credit voluntary standard setters welcome global plastics agreement](#)".

¹⁰ ValuCred (Sep 2021): "[Plastic Credits – Friend or Foe? Retrospective of recent market dynamics](#)".

¹¹ ValuCred (Oct 2021): "[Establishing a basis for the remuneration of labour in waste value chain as part of ValuCred's new plastic credit pricing model](#)".

¹² ValuCred (Aug. 2022): "[ValuCred Handbook. Standard Process Model](#)".

¹³ BVRio (2021): "[Guidelines on Best Practices](#)".

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Registered offices
Bonn und Eschborn

Address
Dag-Hammarskjöld-Weg 1 - 5
65760 Eschborn, Deutschland
T +49 61 96 79-0
F +49 61 96 79-11 15
E info@giz.de
www.giz.de

Responsible/ Contact:
Sabine Schwab | KC Wasser, Abwasser, Abfall
E sabine.schwab@giz.de

Mira Nagy & Silke Megelski | GloBe
E silke.megelski@giz.de & mira.nagy@giz.de

Involved: Ellen Gunsilius, Christopher Speier, Jai Kumar Gaurav

GIZ is responsible for the content of this publication.

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