

POLY PROBLEM

REPORT

BUY YOUR WAY OUT

The rocky road to plastic neutrality
FACTS, OPINIONS, ANALYSES

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(NOT) FEELING GUILTY

Can we live without plastic? Frankly, probably not. Plastic is everywhere and impossible to replace completely. This goes both for consumers and businesses.

How about plastic-neutral? Can we offset our share of plastic waste by funding footprinting efforts? A growing number of NGOs and social enterprises are looking to do just that by issuing so-called plastic credits for removing plastic waste from the environment. These entities are funded primarily by individuals and businesses to recover a certain amount of plastic waste in certain regions and send it for recycling.

The idea sounds tempting and is inspired by the fight against global warming. For a country or company to be considered climate-neutral it must both no longer emit greenhouse gases (which is impossible), but also not produce or emit more CO₂ than it can compensate. Which is the reason you are asked to check the little box to plant a tree whenever you book a plane ticket.

Can this concept also be applied to the fight against plastic waste? What exactly does the term “plastic neutrality” mean? How can it be measured? And can we simply buy it? Shouldn’t our first step be to reduce our use of new plastics before allowing businesses and individuals to pay to offset their own footprint?

In addition to these fundamental questions, there is another problem with the fledgling offset market for plastics: the absence of uniform standards. Conditions and requirements for issuing plastic credits are vastly different across the board, ranging from simple plastic waste collection schemes to waste sorting and recycling and, in some cases include further processing of the plastic waste. Add to this the enormous price range per credit and ton. But it also raises many social issues: How can people in the Global South involved in the collection of plastic waste benefit from this trade of “plastic indulgences”? How can we ensure that such waste collection will meet social, ethical and ecological requirements?

This POLYPROBLEM report explores the fundamental question of whether alternative financing mechanisms can be an effective solution to helping solve our global plastic waste crisis. Spoiler alert: There is still a lot of ground work to be done for this to happen.



This issue of the POLYPROBLEM Report was produced in collaboration with Yunus Environment Hub.

Yunus Environment Hub (YEH) develops and promotes social enterprises in order to drive the social-ecological transformation of the economy and also works as a consultant with a wide range of stakeholders to strengthen sustainability. These include government institutions, public agencies, and municipalities, as well as foundations and large corporations, which YEH supports in implementing socially just sustainability strategies. YEH focuses on the circular economy, waste management, and plastic recycling, CO₂ neutrality, biodiversity, and reforestation.

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BUILDING COMPENSATION ON JUSTICE

by Prof. Muhammad Yunus

The case for carbon neutrality is well-established. There are debates on its strategy, speed, and assigning the relative weight of responsibility, but not on the absolute need for it.

The core idea behind this concept is that companies, countries, and individuals have to offset their carbon footprint generated through production and use and compensate it through CO₂ reducing actions. That naturally raises the question, what about plastic neutrality? Shouldn't companies offset their plastic footprint just as they do with their carbon footprint?

They must because plastic still remains one of the most important unresolved existential threats to the planet. Plastic has become an indispensable part of our lives, be it in the form of products or their packaging. The threat, however, comes from its insufficient disposal. Plastic waste is spreading fast, taking over the whole planet, including the deep bottom of our oceans.

For decades, the global community has not directed enough attention to this problem. In March 2022, the adoption of the UNEA resolution paved the way to an international agreement to ensure the avoidance and responsible disposal of plastic waste by formally acknowledging our shared responsibility for it.

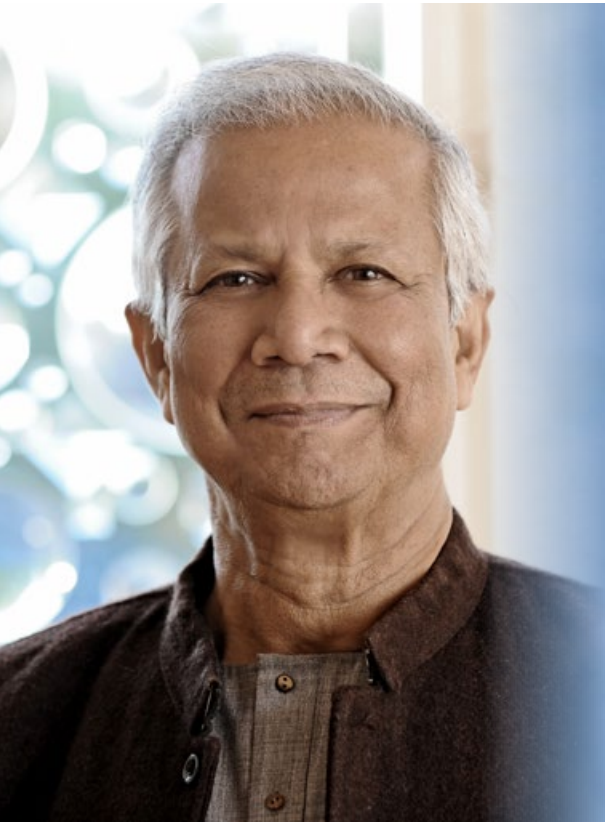
What is often overlooked in light of the devastating ecological consequences of our consumption is the fact that the plastics issue is also about justice. While the Global North with their global corporations is responsible for the lion's share of value creation, the countries of the Global South are building up mountains of waste. Most of these countries have no national waste management systems. The poor of these countries are pushed into a new role of plastic waste collectors. In countries like Kenya, India, or Brazil, informal waste pickers are the frontline workers for the collection of

plastic bottles and other plastic waste, risking their health and even lives.

In recent years there have been isolated initiatives to improve the conditions of these plastic waste pickers through the introduction of plastic compensation and offsetting schemes. For example, some companies have introduced their version of "plastic neutrality" through the purchasing of so-called plastic credits. However, the realities of the global plastic waste crisis are much more overwhelming, complex, and go far beyond what these weak compensation schemes are addressing. They imply that environmental damage caused by plastic waste in one region may be offset by collecting plastic waste in another. This is an unrealistic assumption.

From an environmental perspective, current compensation schemes are only superficial solutions. They do not address the root cause of the crisis, that is, the still care-free use of plastic.

Besides its environmental aspect, which is widely visible, the plastic waste crisis also has a social dimension. Unfortunately, this dimension is mostly side-lined in today's offset visions and projects. For example, informal waste pickers who carry out most of the collection work at the bottom of waste value chains hardly benefit from today's plastic compensation schemes. Because they are compensated for the quantities of waste they collect, but never in consideration of the working hours spent doing so and their working conditions.



Professor Muhammad Yunus has dedicated his life to fighting social and environmental injustice. In 1983, he founded the Grameen Bank in Bangladesh, which has since helped millions of people overcome existential poverty. Professor Yunus is considered a champion of the sustainable development goals and is internationally recognized for his commitment to human rights and economic inclusion.

He was awarded the Nobel Peace Prize in 2006, the Presidential Medal of Freedom in 2009, and the United States Congressional Gold Medal in 2010, making him one of only seven people in history to have received all three awards.

Yunus Environment Hub is a global social business network creating solutions for the environmental crisis.

Plastic offset schemes and all parties involved need to consider the social dimension of the plastic waste crisis and the aspect of human dignity more adequately. To fully integrate all affected stakeholders into any offset or compensation program, human rights advocates should be included in their design.

We need to detach ourselves from the current offset logic and overcome our propensity to find quick and simple solutions to complex global problems. The principle of “one ton in – one ton out” does not work because the plastics problem is not just an ecological and economic issue, but also a social one.

Any path toward plastic neutrality that measures its success in tons ignores important aspects of human rights as well as human dignity. We need to focus on enhanced international collaboration to facilitate access to technology, capacity building, and scientific and technical cooperation. In the meantime, we try our utmost to restrain the harm of plastics by raising people’s awareness, adopting appropriate public policy, holding both producers and users responsible, and by taking massive action to recycle.

FUNDING RESPONSIBILITY

Most countries of the Global South are just starting to build viable extended producer responsibility (EPR) systems. At the same time, many countries in the Global South face ever greater challenges because of the rapidly increasing consumption of plastic packaging worldwide and the ongoing, sometimes illegal, export of plastic waste from the Global North.¹ Despite the global nature of the plastic waste crisis, we need sustainable funding models to build integrated local waste recycling infrastructure. In response to this financing gap, so-called plastic credits have increasingly come into play.

THE LONG ROAD TO A CIRCULAR ECONOMY

At the fifth United Nations Environment Assembly in Nairobi in March 2022, 175 countries launched a historic milestone in the global fight against the plastics crisis by adopting a joint resolution. By involving various stakeholder groups, this resolution aims to negotiate and develop a legally binding agreement by 2024 to move toward the goal of building a successful circular economy for plastics – from product design to end-of-life material recycling.² The resolution is considered the first of its kind to explicitly recognize the relevance of so-called waste pickers and other actors from the informal sector in countries of the Global South.³

The future agreement is expected to lay important foundations for the promotion and implementation of circular economy systems, present options for plastic reduction, and underscore the need for international cooperation.⁴ According to Inger Andersen, director of the United Nations Environment Programme (UNEP), such an environmental agreement on plastics and plastic waste would be the most important agreement since the Paris Climate Agreement.⁵

Until then, national governments will initially remain solely responsible for the sustainable and socially responsible handling of plastic waste. In Germany and

its European neighbors, corresponding EPR schemes form the basis of national disposal and recycling cycles. As a way to holistically implement the “polluter pays principle,” EPR systems incentivize the avoidance of packaging waste and encourage more efficient product design on the producer side while ensuring the financial viability of municipal waste management systems.⁶

In countries of the Global South, EPR systems can also contribute to developing the necessary waste management infrastructure and achieving higher collection and recycling rates. However, it takes time to establish efficient systems and requires the necessary political will. In view of the omnipresent pressure to act, we need quick solutions. Especially in regions where EPR systems are still in their infancy, there is a desperate search for alternative funding options to build waste collection and recycling infrastructure.

This is where plastic credits increasingly come into play. But who will generate and sell this new type of currency? And what compensation will look like is still unclear^{7,8}, as obscure market dynamics and a fragmented landscape of participants illustrate in stark contrast to the strictly regulated market for CO₂ certificate trading that is often cited as a reference for trading in plastic credits in the current discourse.⁹

1 Heinrich Böll Foundation (2019); The Guardian (2021)

2 UNEP (2022) (2)

3 UNEP (2022) (2)

4 UNEP (2022) (2)

5 Inger Andersen on Twitter on March 2, 2022

6 PREVENT Waste Alliance (2020)

7 Phipps (2021)

8 The Circulate Initiative (2021)

9 Ibid.



The German organization NIDISI builds recycling centers in Nepal together with local partners and would like to finance their operation permanently on the basis of plastic credits.

PLASTIC CREDITS – THE BASIC IDEA

Plastic credits are sold either directly by initiatives or through intermediary platforms usually called brokers, to the creators of plastic waste, usually large corporations, manufacturers, or brands in the consumer goods sector. But private individuals as well as the many businesses that do not put plastic on the market themselves may also want to contribute by purchasing plastic credits.

The money going into purchasing plastic credits flows back to the organizations that organize the local collection and recycling of plastic waste, a majority of which are spread across regions of the Global South.

The brokering of plastic credits between local collection organizations as producers or sellers of plastic credits on the one hand and buyers on the other hand ideally rests on independent standards or guidelines. Various organizations have developed such quality guidelines. Let's call them "standardizers." These guidelines define what criteria a local collection or recycling

project must meet in order to be able to issue credits for sale to businesses or private individuals as an offset currency. External inspection bodies, known as certifiers, go on-site to inspect and certify compliance with the set standards.

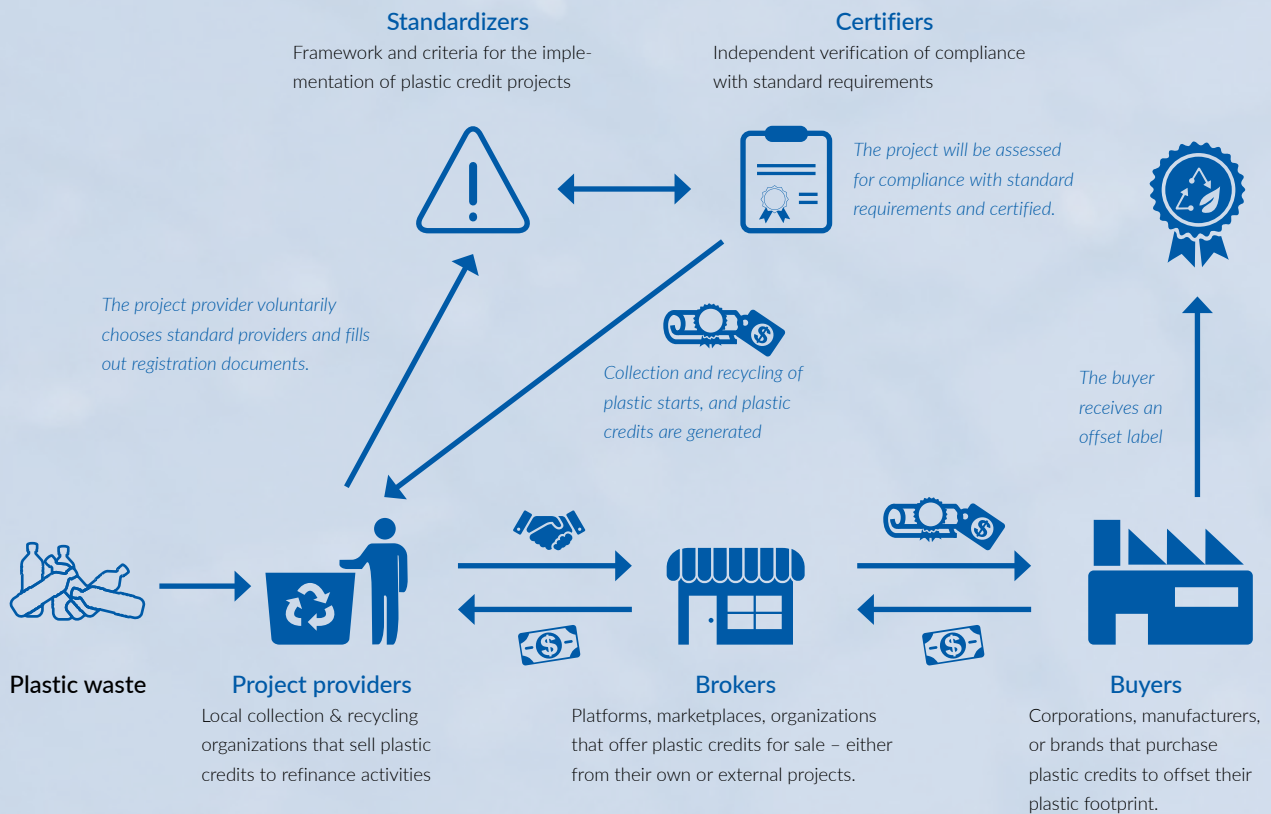
So much for the basic concept. At present, the roles, responsibilities, and business activities of those involved in the global plastic credit market are far from being as clearly defined.

TONS OF POTENTIAL, LITTLE COMMITMENT

At this point, we are still a long way from adopting a set of internationally binding guidelines for the trade of plastic credits as compared to CO₂ offset models commonly cited as a go-to: one reason being that plastics are a much more complex and diverse material than greenhouse gases. It should therefore not come as a surprise that the seven most important standards defined are all voluntary.¹⁰

¹⁰ The four actors behind these seven standards include Verra, Circular Action Hub and Plastic Exchange with one voluntary standard each, and Zero Plastic Oceans with four different voluntary standards (as of June 2022).

How the Plastic Credit Market Ideally Works



Source: POLYPROBLEM

The global plastic credit market also still lacks accredited certification programs. The certifiers, in turn, lack globally uniform standards. The resulting multiverse of certifications, criteria, and certified plastic credit projects does not provide for much clarity either.

In addition, it is unclear what the relationship is between the multitude of brokers as sellers and the local collection organizations, but also who the buyers of these plastic credits are.

Even as plastic credits are playing an increasingly important role in the discourse on sustainability, and a large share of businesses and brands in the consumer goods sector embrace the concept, many of them remain silent when it comes to taking concrete action. For outsiders, and thus for customers and consumers, it is not immediately apparent which businesses have purchased plastic credits to date, to what extent, and according to what criteria as offset schemes for plastics are not yet a required part of their sustainability reporting.



Removal of collected plastic litter in Kerala/India. The Green Worms project is made possible with plastic credits from Cleanhub.



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RISKS AND SIDE EFFECTS

Offset payments for plastic waste are a controversial issue. Being accused of greenwashing is something that seems to be part and parcel of the plastic credits discussion. Blame it on the use of difficult terms such as “plastic neutrality.” It suggests that businesses can offset their historical footprint by making short-term payments. That is impossible because environmental damage from plastic waste that has already occurred is largely irreversible.

Moreover, this approach quickly creates the false impression that local environmental damage caused by plastic waste in a particular region can be offset or “neutralized” by collecting plastic somewhere else. Unlike the offset market for CO₂ emissions, you cannot offset plastic waste pollution in one country by collecting and recycling plastic in another place.

And there’s another dilemma. Where plastic offsetting aims to reduce plastic waste pollution in the environment, it does not provide incentives to avoid plastic waste at the outset of the value chain.

Another critical aspect is that some plastic credit schemes focus exclusively on the collection and disposal of easily recyclable, and thus readily marketable, plastic waste, such as PET bottles. However, these usually end up being collected by waste pickers anyways. In such cases, additional corporate action is often missing.

Offset payments also carry the risk that the businesses involved will prefer to only commit themselves to a short-term effort and opt against making a long-term commitment to sustainability. By purchasing plastic credits, businesses may circumvent a mandatory EPR scheme or even reject it by pointing to their offset payments. Plastic offsetting entails the risk of normalizing linear and unsustainable patterns of production and consumption.

Despite these risks, plastic offsetting offers great opportunities in those parts of the world where there is no functioning waste-processing infrastructure. For

example, it helps remove from the environment plastic waste that cannot be recycled and recovered. Another advantage of plastic credit systems is that they can be set up with little effort, whereas EPR systems are complex and take a long time to establish. Offset mechanisms thus have the potential to serve as transitional funding for developing EPR systems.

The added socioeconomic benefits plastic offsetting offers through plastic credit systems can boost local economies by paying fair wages and creating new jobs. They provide a source of income for local waste pickers who often work under precarious and unsafe conditions for very little compensation.

How should offset mechanisms be designed in order for them to generate the positive effects mentioned without crossing into greenwashing? The PREVENT Waste Alliance has put this issue up for debate to its members, who include both providers of plastic credits and potential credit buyers. The PREVENT working group on plastic credits quickly agreed that in order to avoid greenwashing, an international framework for plastic credit systems must be created to ensure the following aspects:

— **Transparent quality standards**

The term “plastic credit” is still not a legally protected term. As a first step, we need to agree on a uniform definition and transparent quality standards. For example, plastic credit providers should be able to document that their collected plastic waste is properly recycled or disposed of. In addition, labor standards for waste collectors (in terms of payment,

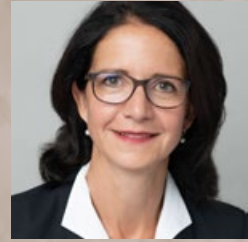


PREVENT Waste Alliance

The PREVENT Waste Alliance is an international multi-stakeholder initiative committed to building a sustainable circular

economy. Around 300 PREVENT members from the business community, academia, and civil society work together to minimize waste, eliminate pollutants, and recycle resources. The Alliance was launched in 2019 by the German Federal Ministry for Economic Cooperation and Development (BMZ).

Our authors Nicole Bendsen and Dr. Silke Megelski work as experts in circular economy with the German Society for International Cooperation (GIZ) and coordinate the work of the PREVENT Waste Alliance.



Nicole Bendsen (above) and Dr. Silke Megelski coordinate the work of the PREVENT Waste Alliance as GIZ experts.

safety, and health) also need to be accounted for. For transparency, external auditors should be tasked with monitoring the awarding of plastic credits and compliance with standards.

— **Offsetting as an add-on**

In order to provide incentives for adopting sustainable production patterns and to prevent greenwashing, plastic credits should only be sold to businesses that can prove they have already taken additional substantial action to avoid plastic waste. Plastic credits should be seen as a supplementary instrument. Businesses must not use them to circumvent or delay investing in optimal product circularity.

— **Creating synergies with EPR approaches**

Offset mechanisms must be designed in such a way that they do not conflict with EPR systems, but create synergies and can be integrated into EPR systems in the long run. For example, a share of the revenues from plastic offsetting should transparently flow into the development of long-term infrastructure, such as reusable systems. Potential synergies also exist in terms of data and monitoring: plastic credit schemes can be used to collect data on the volume and traceability of the waste, which are also relevant for EPR systems.

To promote international dialog on the synchronization of plastic credit standards and the connectivity of offset mechanisms to EPR systems, the PREVENT Waste Alliance has brought together various standardizers. Experience gathered through pilot projects and critical reflections by the plastic credit working group will help ensure that plastic credits will be a feature in international debates and that a suitable governance structure will be established. In a next step, the plastic credit working group will prepare specific case studies on the coexistence of plastic credits and EPR systems in different countries and on financial incentive structures used in companies participating in plastic credit schemes.

READ MORE:

Position paper by the PREVENT working group on plastic credits: [Plastic credit schemes and EPR – risks and opportunities](#)

Position paper by the WWF, a PREVENT member, addressing the main risks of plastic credit systems: [WWF Position: Plastic Crediting and Plastic Neutrality](#)

BETWEEN A ROCK AND A HARD PLACE

How the plastic offset business works



Anyone who wants to offset their plastic footprint by making a financial contribution to environmental protection programs or waste collection projects needs patience and an inquiring mind. A confusing bevy of civil organizations and social enterprises look to finance their activities in the fight against plastic waste by selling plastic credits. Despite best intentions, a disorganized market has emerged. Let's have a look at who these players are.

NO PLAYING WITHOUT RULES

Anyone who buys plastic credits should know exactly what their money goes to pay for: what is the material being collected? How is it recycled? Under what social, ethical and ecological conditions is the work done? A handful of organizations have set out to introduce comprehensible quality standards. We take a closer look at the three most important representatives in the plastic credit market.

To ensure lasting credibility of the plastics offset market, some organizations have developed their own sets of quality requirements but the resulting standards are not legally binding. To make matters worse, their diversity reflects not only the complexity of plastics and the different plastic waste sources, in many cases they also create an enormous amount of red tape for project coordinators, who have to pass elaborate certification processes – typically involving additional costs.¹¹

As important as high-quality standards are at the ecological and social level, their rigor always runs the risk of creating exclusion mechanisms where they are least appropriate. Project operators who have adopted well-intentioned socio-ecological standards often come up hard against real-life limits when working with local waste collectors under difficult conditions.

THE BIG THREE

So far, three non-profit organizations have been able to establish themselves as standardizers: Verra from the U.S., Zero Plastic Oceans (ZPO) from France, and the BVRio network based in Brazil.

They differ primarily in their focus and approach to certification.¹² Loek Verwijst, vice managing director of Control Union Certifications Germany GmbH, an independent certification body, hopes that legislators will enforce standardization, for example at the EU level. .
“What has happened in the CO₂ market as a result of the Paris Agreement could also follow in the plastics sector. Standards would remain different but would have to meet a minimum set of requirements,” believes Verwijst.

WHAT STANDARDS GUARANTEE

In their capacity as external monitoring bodies to ensure that projects comply with standards for fair working conditions and environmental protection, certifiers repeatedly come up against limits, mainly because projects often take off and expand rapidly so that conditions often change significantly within a one-year certification cycle.¹³

“It’s easy for projects to look their Sunday best during a scheduled audit. But they will remain responsible for what actually happen on site for the next 364 days of the year. We can only assess if working methods have been implemented correctly at the next audit twelve months later,” says auditor Loek Verwijst. *But he also points out the risks of overly strict requirements: “Informal waste collection is the only source of income for many people to feed their families in many project regions. When developing new standards, it is not always easy to properly account for the needs of the informal sector and not exclude these people from certified supply chains.”*

COSTS AND BENEFITS

Smaller waste collection and recycling projects, in particular, can often not afford the costs of getting certified. In many cases, they are start-ups or young environmental initiatives where every cent counts.

11 This was an impression that POLYPROBLEM carried away from a series of interviews of actors active in plastic offsetting.

12 Interview with Vincent Decap (ZPO) and Loek Verwijst (Control Union Certifications Germany GmbH)

13 Interview with Vincent Decap (ZPO)

Concepts that enable several small organizations to be audited together may present a solution.¹⁴ Other organizations offer alternative options, hoping to derive benefits from new technologies to significantly reduce workload and costs. Examples include the Norwegian company Empower¹⁵ and the German start-up CleanHub, which together

aim to make documentation easier for projects by using blockchain technology. They strive to provide simple and cost-effective proof that the money invested is actually put toward removing the promised amount of plastic from the environment on the other side of the world.

VERRA

With Verra's *Plastic Waste Reduction Standard (PWRS)*, plastic credits can be issued for collecting (waste collection credits = WCCs) and recycling (waste recycling credits = WRCs) plastics.¹⁶ Verra attaches great importance to making sure that projects are add-ons. One PWRS credit is equivalent to one ton of plastic waste collected.

ZERO PLASTIC OCEANS

Developed by Zero Plastic Oceans (ZPO), the *Ocean Bound Plastic (OBP) standard* focuses on plastic that is already in close proximity to bodies of water and about to enter rivers and oceans.¹⁷ The standard is divided into two subprograms. The OBP recycling certification program applies to actors in the recycling value chain who process commercially recyclable plastic. However, OBP credits are only generated if a project is certified according to the second standard, the OBP neutrality program. It exclusively certifies the collection of plastic that is not commercially recyclable and would normally not be collected.¹⁸ In addition to certifying services providers, the organization also offers to certify (plastic) producers and other purchasers of the credits to officially validate their offset activities.¹⁹ One OBP credit corresponds to one kilogram of plastic.

BVRIO

As part of the *Circular Credit Mechanism (CCM)*, BVRio developed the Circular Credits Standard (CCS) which primarily provides a framework and guidelines for complying with and supporting projects in the following seven areas: additionality, no double counting, traceability, no free rides, fair compensation, do no harm, learning by doing.²⁰ One circular credit is issued for collecting and adequately recycling one ton of plastic. The standard is made available, among other things, to projects that offer their circular credits for sale on the broker platform Circular Action Hub launched by BVRio.²¹

14 Interview with Vincent Decap (ZPO)

15 Empower was mentioned in talks with standardizers and projects as an interesting concept.

16 Verra (n.d.)

17 Zero Plastic Oceans (n.d.) (1)

18 Zero Plastic Oceans (n.d.) (2)

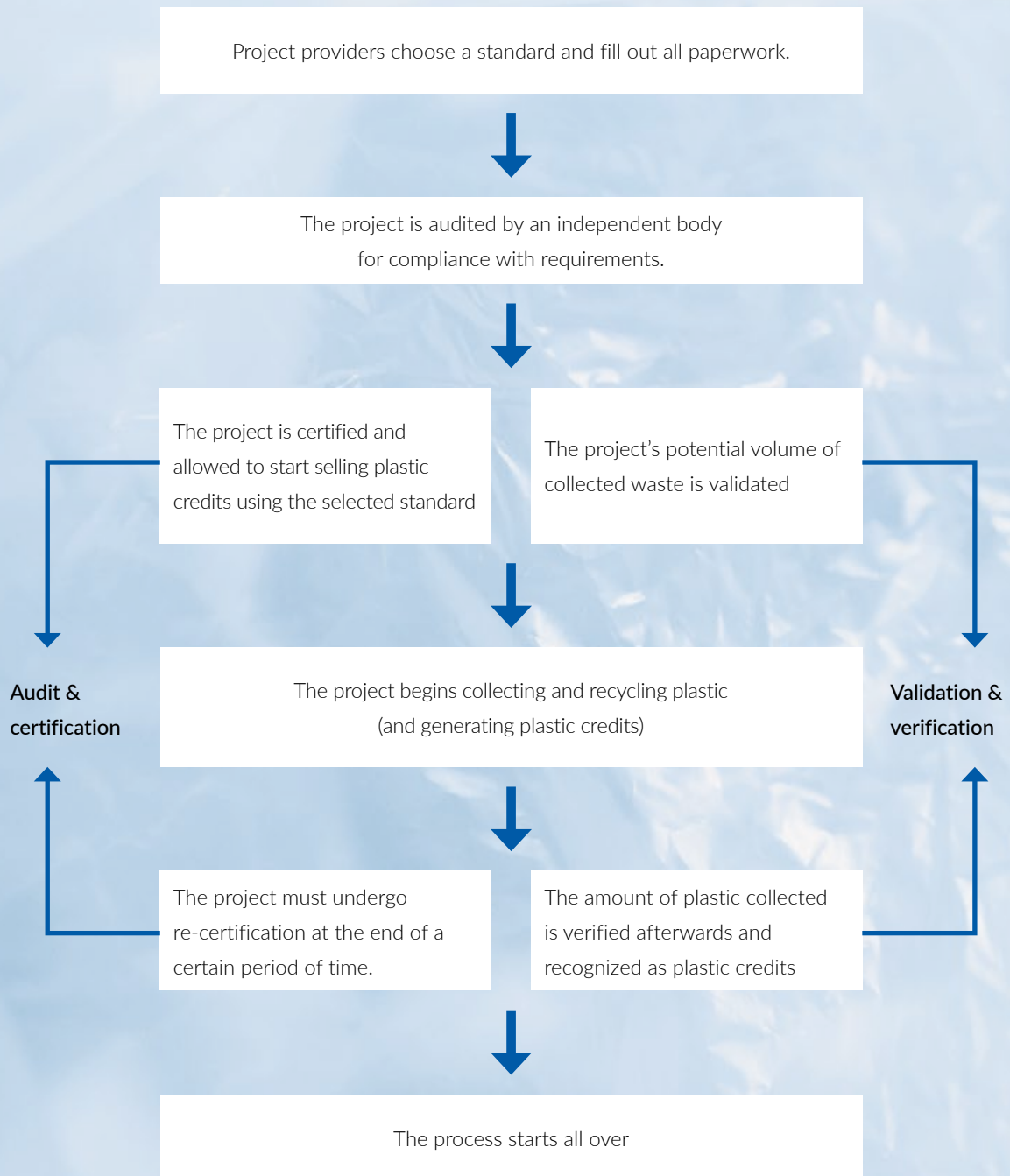
19 Zero Plastic Oceans (n.d.) (3)

20 BVRio (n.d.) (1)

21 BVRio (n.d.) (2)

Process of Validating and Verifying or Auditing and Certifying Projects

Inspired by the processes designed by Verra and OBP



Source: Control Union (n.d.)

INTERVIEW

Vincent Decap,
Zero Plastic Oceans



Unrealistic expectations of pricing models entertained by many large corporations but also a diversity of approaches and methodologies pose a major threat to the future of the offset market. In an interview with POLYPROBLEM, Vincent Decap, co-founder of Zero Plastic Oceans, tells us why it is imperative for the market to move away from a multiverse toward greater uniformity to ensure its continued credibility.

What is the objective of the OBP program, and what is your organization's role in the plastics offset market?

Certification serves as a guarantee for investors who want to fund waste collection projects and rely on our standard to confirm that these projects are serious and properly implemented. In order to be allowed to use our standard, two main criteria must be met. Firstly, the collected material must be found near bodies of water in order to be considered ocean bound. And secondly, they must ensure that only material that is still not commercially recycled is considered for creating the plastic credits.

So, our goal is to create a new market by attaching a value to plastic materials that previously had none. This approach not only reduces the negative impact on the environment, but also contributes to higher wages for waste collectors, thus making an additional social contribution.

Why does the market for offsetting plastics boom at the moment?

I don't know if the market has actually started to boom, but we are seeing an increasing interest by both indi-

viduals and businesses who understand the idea of plastic credits and want to invest in the concept. There is a growing awareness of plastic pollution in the environment and it has become a very important issue for many people. However, the market is still in its infancy and the amounts of material it turns over are still small in relation to the scale of global plastic pollution.

Who are the people interested in buying plastic credits? What do buyers have in common?

As a rule, the current buyers are so-called "purpose companies," whose business models put a stronger focus on ethical and ecological principles. But we also see some large corporations that seem to want to join the market but entertain totally unrealistic expectations in terms of pricing models.

If they intend to buy plastic credits at a fraction of the cost required to implement offset measures ethically and effectively, they will become one of the biggest threats to the sustainable development of the market. Other businesses seem to be watching the current development of the market from the sidelines without wanting to participate yet.

Why We Need Minimum Requirements

Of course, it is possible to curb costs but preferably not at the expense of environmental or social impact. Therefore, standardizers must ensure the integrity of their programs.

[Are concepts for plastic offsetting comparable with those for CO₂ compensation?](#)

No, the approaches are totally different, but people tend to transfer their understanding of one to the other. It is much easier to measure a ton of plastic removed from the environment than a ton of CO₂. On the other hand, most CO₂ credits are defined along similar lines, while each plastic credit is individually composed. This is because the standards for plastic credits comprise a wide range of criteria, from the composition of the material to the scope of the activities to be certified. Therefore, it is essential to understand the vision and objectives of each program.

[Does this not lead to problems or ambiguities?](#)

This can be the case in some cases, which might be one of the factors preventing plastic credits from catching on more quickly as a commodity. At the same time, this could pose an opportunity: The concepts are so different that it may be difficult to align or unify them, but they all pursue legitimate and meaningful objectives.

Nevertheless, we need to agree on how to use a plastic credit and the minimum requirements it must meet. It's crucial that all participants and stakeholders interact and collaborate. We need to highlight the role of

cross-company alliances such as the Alliance to End Plastic Waste, whose work I greatly admire. Initiatives such as these can be instrumental in establishing and disseminating suitable methodologies and guidelines to define what a plastic credit is, how environmental and social impact is measured, and how claims can be made.

[What developments do you hope to see in the market in the future, and what are your goals as an organization?](#)

For us, plastic credit programs remain an interim solution to the immense plastic pollution problem we are currently facing around the globe. They help fund the establishment and improvement of waste management systems and provide short-term fixes, which is hugely important at this point in time.

However, we at Zero Plastic Oceans would be delighted if one day we no longer had to worry about this problem. We hope that in time the OBP program will become obsolete.

The ValuCred Project and its Standard Process Modell

A NEW GUIDE TO WORKING TOGETHER SUCCESSFULLY

With the aim to help streamline different processes and standards in the use of plastic credits, the ValuCred project was formed in the spring of 2021. ValuCred is backed by a consortium led by Yunus Environment Hub, Rodiek & Co., and BlackForest Solutions striving to develop and fund sustainable plastic waste management systems.

ValuCred was one of the first projects funded by the PREVENT Waste Alliance with funds from the German Federal Ministry for Economic Cooperation and Development and the Röchling Foundation.

The collaboration resulted in an international standard process model (SPM) that links the interdependent players in the plastic credits market.

As part of the project, the ValuCred consortium examined 19 of 28 identified relevant international standards, as well as nine associated certification service providers, and 38 plastic credit systems or platforms.

The SPM, which ValuCred subsequently developed and tested in practice in several countries in the Global South together with local partner organizations, is intended to help make up for the current lack of EPR systems in many countries. It provides clear terminology and a common understanding to support interaction among different actors along the plastic waste value chain.

The SPM focuses on building trustworthy and transparent systems around the generation of plastic credits. By paying particular attention to the interests and welfare of (informal) service providers involved in waste collection and recycling at the lower end of the value chain, ValuCred's recommendations simultaneously take into account the perspective of international corporations and organizations by allowing them to be fully integrated into existing management systems such as ISO 9001 or 14001.

The ValuCred consortium has developed a manual that first provides definitions for a number of terms relevant to plastic credits. Second, after a brief overview of the dynamics of today's plastic credit market, the key framework is presented. This includes the Sustainable Development Goals (SDGs) and their specific sub-goals, as well as the relevant ISO and GRI standards. Third, as a technical element, the manual provides a detailed overview of the process steps of the standard process model and presents a detailed guide on how service providers involved in waste collection can use the SPM.

The ValuCred consortium points out that as a crucial next step it is equally important to validate the entire value chain of waste by involving businesses to further develop the SPM as an applicable solution in the plastic credit market.

READ MORE:

ValuCred Report: [Retrospective of recent market dynamics Plastic Credits – Friend or Foe?](#)

[ValuCred-SPM_Handbook.pdf \(prevent-waste.net\)](#)

The ValuCred reporting structure is illustrated in a sample ESG report of a service provider.

The ValuCred SPM is visualized in flowcharts to show the logical and temporal sequence of process steps:

- [Overall flowchart \(for both brands and service providers\).](#)
- [Flowchart for brands](#)
- [Flowchart for service providers](#)



Waste collector in Vietnam's Tiền Giang Province dropping off her material and showing her ValuCred QR code.

TOWARDS THE DUAL SYSTEM OF THE SOUTH

Projects to eliminate and prevent environmental damage caused by plastic waste illustrate the perceptible impact of plastic credits whereby plastic waste is removed from the environment, provided the solution offered works. To fund this diverse array of activities, a growing number of initiatives hopes that businesses and private individuals will want to contribute to offsetting their plastic footprint. In other words: they count on plastic credits.

At the same time, project operators widely agree that plastic credits do not represent an overarching funding mechanism to build resilient waste management and recycling systems in the long run.

Located in countries primarily in Southeast Asia as well as in the coastal regions of Africa where considerable amounts of plastic waste enter the oceans, the majority of project providers sees plastic offsetting through the use of credits as a form of bridge financing and, not least, as a tool to further mobilize against the global plastic waste problem.²²

SAVIOR DURING THE PANDEMIC

As in almost all sectors of the economy, the aftermath of the COVID-19 pandemic posed extreme challenges as well as opened new opportunities for project providers. Dr. Tilman Floehr, chief technology officer and co-founder of the German organization everwave, has witnessed limitations in expanding into new project areas beyond Europe.

For other organizations that operate well-established waste collection points in developing and emerging countries, the strict lockdowns in large parts of the world presented a major issue because it made it extremely difficult for the informal sector to operate. *“The situation was very challenging for many waste companies because we mainly rely on independent waste col-*

lectors who work in the informal sector,” says Prince Agbata, managing director of a collection and recycling business in Ghana. *“Most of them don’t have official IDs, which often made it impossible for them to prove that they were essential workers.”* Consequently, he said, heaps of plastic litter piled up in many places that could not be collected and recycled. In addition to organizational difficulties, the situation was also exacerbated by economic factors, such as sharp drops in the price of the material collected.

It was under these circumstances that the benefits of plastic credits became apparent. Getting into the business of plastic offsetting kept many projects financially afloat during those challenging economic times, especially in the beginning of the pandemic. Despite declining revenues, the additional money generated by plastic credits also enabled projects to continue paying waste pickers their previous rates, and in some cases to even pay them in advance²³. In addition, aid programs were able to supply waste picker families with food and hygiene products during this economically uncertain period.

In general, project operators see the reliability and possibility for long-term planning tied to plastic credits as significant advantages. They help improve transparency, meet the expectations of their cooperation partners, and build trust.²⁴

22 Statista (2018)

23 Interview with Prince Agbata, managing director of a collection and recycling business in Ghana.

24 Interview with Sahithi Snigdha, Bhupathiraju, Waste Ventures India (WVI)

RED TAPE CULTURE SHOCK

Even though the business model of selling plastic credits offers new financing options to chronically underfunded collection and recycling organizations and provides more entrepreneurial security as well as opportunities for new investments²⁵, the concept also has a significant drawback, presenting both small and large projects with a major challenge: high demands on documentation and transparency.

Talks with project providers have made clear that this is where the two worlds collide as standardizers, broker platforms, and large corporations demand detailed recycling information from the collection point of the plastic to the production and sale of the recyclate. Several interviewees have illustrated that bridging the gap between the formal nature of documentation requirements and the informal nature of project activities poses a major challenge.

For example, many waste collectors do not own a smartphone to document the path of the plastic using QR codes. Especially in countries where legislation and regulations have not yet met standards in line with Western expectations, organizations face obstacles that discourage businesses from working with plastic credits as a financing tool. *“I don't think there are many other potential projects in our environment that have the time and patience to undergo the monitoring processes, let alone can afford it,”* notes Agbata.

Others along the way are also familiar with the problem. Loek Verwijst of Control Union is well aware of the fact that: *“Someone who writes the standard in Western Europe doesn't necessarily have an idea of how processes work in Indonesia, for example.”* Several discussions have shown that the additional time regularly required lets project managers consider whether they want to con-

tinue the agreements concluded with brokers or if an exit from the plastic credit market would not present a more viable solution from a financial standpoint.²⁶

On the other hand, the specifications to be met for the sale of plastic credits also create advantages for the projects themselves. They help establish new systems and structures where none existed before. *“We now have official regulations on issues such as child labor or sexual harassment in the workplace. This gives clients a sense of security, but above all it helps us formalize and standardize how we deal with these issues,”* says Prince Agbata.

Not all projects can be certified according to external standards. Projects with a limited lifespan of only a few weeks, for example, hardly lend themselves to certification. In order to use documentation software, the German organization everwave, formerly known as Pacific Garbage Screening, collaborates with CleanHub, a German start-up that created a trading platform for plastic credits. Their system does not offer any external certification according to a specific standard, but they have been in dialog with each other²⁷. Instead, they have developed and implemented their own requirements that include similar factors, such as “fair wages, no child labor, or the motivation to give local people a job whose chances in the labor market would otherwise be slim,” says Dr. Tilman Floehr, head of technology at everwave.

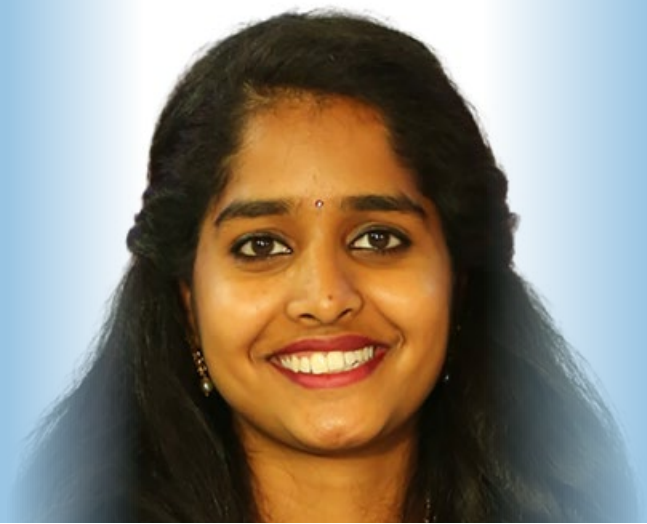
25 Ibid.

26 Interview with Prince Agbata

27 Interview with Joel Tasche, CleanHub

INTERVIEW

Sahithi Snigdha Bhupathiraju,
Waste Ventures India



Waste Ventures India has partnered with rePurpose to sell plastic credits. In an interview with POLYPROBLEM, the company's COO and director, Sahithi Snigdha Bhupathiraju, talks about the advantages of working with brokers and why plastic credits proved a successful business model during the pandemic.

What is Waste Ventures India (WVI)'s mission?

Waste Ventures India was started in 2015. Back then, we worked with brands such as Tetra Pak and helped them meet their EPR requirements in southern India. Today, one of our main jobs is to collect waste directly from private households, businesses, or other institutions. From the very beginning, our goal has been to create both added social and environmental value through our work. By incentivizing the collection of non-recyclable plastic, we were able to integrate this material into the formal supply chain and offer waste collectors an additional income of almost 20 percent.

What does working with brokers such as rePurpose mean for WVI and what is the significance of plastic offsetting as a business model in general?

Plastic credits have proven to be essential because, as is the case of EPR systems, inconsistency is still a major issue. The fact that we don't know whether businesses will renew their contracts makes it difficult for us to build reliable relationships with our waste collectors. Plastic credits, on the other hand, can provide a perspective and ensure continuity. This allows us not only to plan waste collection better, but also to

formulate concrete expectations of our waste pickers and communicate them transparently. That is a great foundation to build trust on and better organize our payment flows.

However, that leaves the major challenge of bridging the gap between extremely formal documentation requirement for plastic credits on the one hand and the informal nature of waste collection on the other hand.

How did your collaboration with rePurpose come about? Did they approach you?

A few years ago, rePurpose approached us when they were looking for so-called impact partners across India. We were also approached by a few other marketplaces. But we signed an exclusive contract with rePurpose, as is common with collaborations with most marketplaces. It also makes sense since they invest a lot of time and effort in helping local projects formalize processes and establish policies. One example is the rePurpose Plastic Credit Protocol, which was released last year. It provides rePurpose impact partners with a guide for designing their internal policies under the framework of international standards.

How Plastic Credits Make It Easier to Plan

[How did the COVID pandemic impact your work? And what role did plastic credits play in this context?](#)

Plastic credits played a huge role during the pandemic as they ensured continuous cash flows. Thanks to rePurpose's support, we were even able to set up a program to distribute food and hygiene items, which allowed us to assist some 1,500 waste picker families during the 2020 lockdown. We were also able to pay them upfront and give them the option to pay back the advance in wages over the following two months in the form of collected plastic waste. In this way, their money remained in circulation and they were able to gradually resume their work afterwards.

[Aside from the pandemic, what does your collaboration with rePurpose look like in practice?](#)

This year, we began to collaborate more closely on the design of our internal processes. To this end, rePurpose has brought in external consultants to help us develop policies and identify processes that need a boost. But we have also recognized the need to go far and beyond, not only for the benefit of rePurpose, but also in our own interest and that of our clients.

[In your opinion how would you rank the importance of the contribution that the offset market can actually make to environmental protection?](#)

Very crucial. The market is still developing, but once it reaches its full potential, it can make a huge difference. Incentivizing waste collection by directly helping

businesses and brands to keep plastic out of illegal landfills forces them to rethink their plastic footprint. Instead of setting a vague sustainability target, the offset business is based on concrete figures that indicate how much plastic is produced and how much needs to be offset accordingly.

However, the main challenge for the plastic credit market remains: to account for the complexity of how the informal sector works while trying to meet the *requirements of brands*.

SHOPPING FOR PLASTIC INDULGENCES

Circular Action Hub, Plastic Credit Exchange, rePurpose, CleanHub, Plastic Collective, Empower – the list is as long as the range is wide of trading platforms that offer plastic offset projects and accompanying marketing efforts. What they all have in common is their desire to bring together project providers with businesses that want to offset their ecological footprint.

These platforms provide advice to businesses and individuals as to which local collection or recycling projects are most likely to meet their needs, and also oversee the transaction of credits or the purchase of certified plastic. Rarely do these brokers act as mere intermediaries. In most cases, they are also project providers. For example, they often also provide software solutions to the cooperation partners listed in their portfolios in order to collect data on the collected or recycled plastic waste along the supply chain and to optimize processes.

GOOD STORY TELLING

Having developed their own “circular credits mechanism,” the Circular Action Hub platform launched by the Brazilian NGO BVRio ranks among the pioneers of plastic credits. Its mission is to create a payment system for services as envisioned by the circular economy, aimed at social including informal waste pickers and providing jobs for them. Today, Circular Action Hub maintains an extensive project portfolio that helps businesses identify suitable projects according to their needs and to receive support in cooperation management through, for example, contract templates and financial intermediation services.

With its platform, the Berlin-based startup CleanHub, founded in 2019, also wants to give brands and consumers the opportunity to partially offset their plastic footprint. The projects in CleanHub’s portfolio focus on collecting non-recyclable or difficult-to-recycle plastic waste made from multilayer or flexible plastics (e.g.,

films), which many other informal collection systems usually ignore because waste collectors have no financial incentive to collect it.²⁸ CleanHub funds itself by keeping a margin on the sale of plastic credits, but plans to introduce a membership program that will serve as a prerequisite for buying credits and naming CleanHub as a partner.

To compensate for price fluctuations per ton of collected plastic between individual projects, which are due to the varying degree of difficulty of collection, CleanHub offers its clients a mix of projects from its portfolio. “Clients can also choose to support entire networks or focus on specific projects based on certain sustainability criteria,” explains CleanHub co-founder Joel Tasche.

He knows from experience that many businesses also attach great importance to communicating their sustainability efforts when selecting an offset project. Those who do good things usually want to talk about it. It is not uncommon for the key phrase “ocean plastic” to come up. A difficult term that has not yet been defined. This is where help is needed, he says. “Water and beach collection projects are very expensive, usually poorly scalable, and they don’t solve the basic problem either,” Tasche explains, which is why he likes to advise his clients to support intelligent aggregation points, such as small stores and kiosks, to collect trash directly at the source. CleanHub’s clientele now comprises more than a hundred brands including Fuchs Gewürze and everdrop, that offset 200 and 60 tons of plastic, respectively.



Plastic pollution in the Coral Triangle in Sulawesi where “The No-Trash Triangle Initiative” works aided by credits that were brokered by CleanHub.

The Philippine NGO Plastic Credit Exchange (PCX) is a credit broker that already works with major brands such as PepsiCo, Colgate-Palmolive, Unilever, and Nestlé. Together with Microsoft, PCX launched a publicly accessible blockchain-based plastic credit registry last year.²⁹ For example, outsiders can see that PepsiCo Philippines has offset a total of 563 tons of plastic by purchasing credits in 2020.³⁰

In total, PCX has been able to collect or process over 23,550 tons of plastic litter³¹ for a total of around \$2.8 million, which have gone toward education and waste infrastructure funds, among other things.³² For exam-

ple, PCX has partnered with HOPE, a Philippine social enterprise, to build a network of female micro-entrepreneurs as part of the Aling Tindera project to create secure income opportunities for women through waste collection.³³

In India, following a change to legislation, it is now possible for businesses to fulfill their extended producer responsibility by purchasing plastic credits from certified plastic collection or recycling businesses. This development was motivation enough for EcoEx to launch India’s first trading platform for EPR plastic credits in 2021.³⁴

29 Business World (2021)

30 Plastic Credit Exchange (n.d.) (1), search term “PepsiCo Philippines”

31 PCX website compares that figure to 157 blue whales weighing 150 tons each.

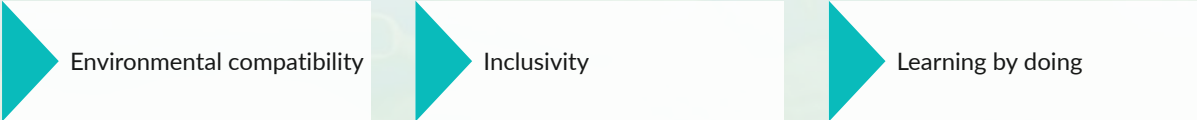
32 Plastic Credit Exchange (n.d.) (2)

33 Plastic Credit Exchange (n.d.) (3)

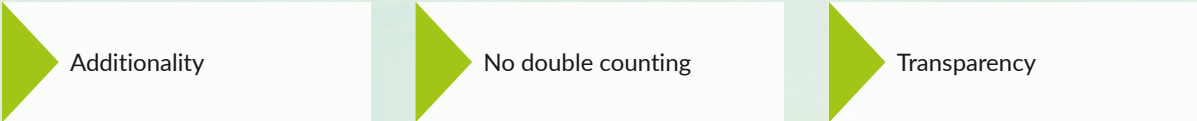
34 Business Standard (2021)

Guiding Principles for Working with Circular Action Hub

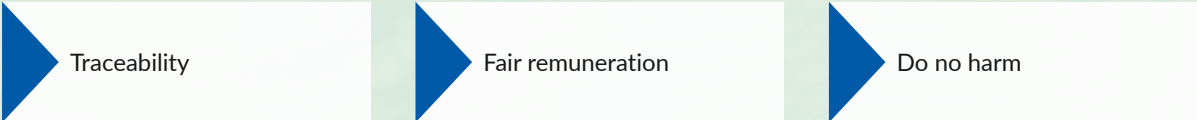
Overarching principles



Principles for plastic credit buyers and investors



Principles for project providers



Source: Circular Action Hub (n.d.) (2)

NAVIGATING PROTOCOL

Especially when working with corporate clients, credit brokers are particularly keen to ensure that collection and recycling partners in their project portfolios comply with universally applicable social and ecological principles in order to avoid reputational risks. For example, rePurpose, one of the best-known offset platforms for plastic waste together with Plastic Credit Exchange and Circular Action Hub, enforces a so-called *plastic credit protocol* which, in addition to stipulating general conditions for cooperation (additionality, measurability, verifiability), also comprises safety guarantees with regard to environmental and labor law requirements, including prohibiting child labor, improving the living and income situation of the informal sector, paying minimum wage, and guaranteeing fair working conditions.³⁵

In addition to the general principles (see chart) that project partners are encouraged to adhere to, Circular Action Hub also welcomes any voluntary certification of projects according to BVRio’s circular credits standard, Verra’s plastic waste reduction standard, or Zero Plastic Oceans’ ocean-bound plastic neutrality subprogram (OBP).³⁶

To be included in their project portfolio, CleanHub requires a successful ten-ton pilot project and a social audit. CleanHub’s CEO Joel Tasche feels that many of the standards in the market have so far failed to take the social aspect into account. CleanHub has therefore developed its own code of conduct based on the requirements of the Fair Labor Association, the Ethical Trade Initiative, and the SA800 standard.³⁷ At the

35 rePurpose (2021)

36 Circular Action Hub (n.d.) (1)

37 ClearHub (n.d.) (2)

38 The Circulate Initiative (2021)

same time, he emphasizes that *“no one expects perfectionism but the goal is to create a constant incentive for optimization and progress among partners”*.

Credit brokers make an important contribution toward increasing the visibility of collection and recycling projects although they tend to stand in the way rather than encourage offset clients and local projects to develop direct relationships.³⁸ Without the additional services offered by trading platforms, such as providing PR material, which in many cases resembles an all-inclusive package, the hurdle for many

businesses to get involved in waste management in the Global South would probably be much higher. In addition to their perhaps not always entirely altruistic contribution to creating greater transparency in an opaque market, brokers need to develop a deep understanding of what local organizations need in order to be socially, environmentally, and financially sustainable.

At the end of the day, what probably truly counts is that brokers educate their clients that offsets are no substitute for a circular economy.

Two Case Studies

ROOM FOR SPECIALISTS

Intermediaries, brokers, and platforms for offsetting plastic differ, sometimes significantly, in what they have to offer and the impact they create. This look at two young companies reveals their different priorities and incentives for plastic credit buyers.

The Berlin-based start-up *precycle* not only brokers plastic credits to private individuals and corporations. The team and its founder Christian Rühlmann have developed a digital solution that helps online stores to invite their environmentally conscious customers to make a voluntary contribution to offset plastic during the checkout process directly at the time of purchase. This is comparable to what many airlines and travel portals offer where you can buy a CO₂ offset directly when you book by paying a little extra.

What's more, *precycle* has integrated a plastic footprint calculator into its app, allowing each consumer to determine their personal plastic footprint.

www.precycle.today

WasteReduction Plus, another start-up based in Berlin, offers businesses its *Plastic-Neutral+* label. The company can also determine your plastic footprint and provide ways to offset it completely.

What makes *WasteReduction* special is that plastic credits not only compensate for the collection and recycling of plastic waste, but 20 percent of the funds go toward educational projects intended to help reduce plastic waste. In this way, founders Ruth Kranenberg and Martin Hinteregger want to use plastic credits not only to treat the symptoms, but to tackle the problem at its root.

www.waste-reduction.de

NO CARTE BLANCHE FOR “BUSINESS AS USUAL”

Consumers increasingly expect businesses to take responsibility for the sustainability of their products. While large corporations invest in their socio-ecological transformation, sometimes succumbing to painstaking customer pressure, young companies seek to seize a competitive edge from the outset by investing in socially and ecologically responsible business models. They are also the ones who overwhelmingly make use of offset schemes to advertise that they are plastic-neutral or carry plastic-neutral products.³⁹

One highly determined family-owned business has committed itself to take ecological action a long time ago. Many people know the name Schaebens from their local drug store as a manufacturer of face masks. Based in Frechen in North Rhine-Westphalia, Germany, they work with Plastic Bank to offset plastic as part of their climate protection strategy, which includes a total of eight plastic and packaging targets.⁴⁰

In addition to achieving plastic neutrality by collecting the total amount of plastic Schaebens puts on the market each year, they also analyze the recyclability of packaging. The company also aims to boost its recycling rate by switching to monopackaging for more products, as well as increasing the recycled content in packaging.

“If you really want to tackle sustainability strategically, two or three years is nothing. That’s why offset measures should always be seen as a mere complementary or transitional solution to reducing your plastic footprint, and not as a carte blanche to carry on as before,” warns Björn Hünemeyer, head of marketing communications at Schaebens.

A holistic plastic reduction strategy ideally comprises targeted action by:

1. Refraining from the use of problematic or unnecessary plastic packaging.
2. Switching from disposable to reusable products, where possible.
3. Achieving 100 percent reusability, recyclability or compostability of plastic packaging.
4. Setting ambitious targets for integrating more recycle in plastic packaging.

Even the most ambitious businesses looking to slash their plastic footprint along their value chain by applying such a catalog of actions are likely to come up against additional challenges sooner or later. *“Offsetting is important to us because we cannot do without plastic as a packaging material. If we were to do so, it wouldn’t make any sense from an economic and ecological point of view because so far alternatives have simply not been good or sensible enough,”* explains Hünemeyer.

In view of the pressure to act, many businesses initially decide to finance recycling or collection projects that offer local offset options⁴¹. This makes the most sense for companies that serve a sales market in regions with particularly high levels of plastic pollution, but do not

39 Interview with Joel Tasche, CleanHub and Vincent Decap, ZPO

40 Schaebens (n.d.)

41 Zinnes (de Risi) (2021)

have their own collection, recycling, or take-back systems due to local conditions.⁴² At this point, it is difficult to say if such ambition is driven by a sense of responsibility for environmental protection or marketing interests.⁴³ Sometimes both go hand in hand.

In any case, the World Wide Fund for Nature (WWF) cautions the use of the term “plastic neutral” because it has not been uniformly defined and it might be misleading to consumers.⁴⁴ Hünemeyer also points out: *“We, too, have recognized that we want to position ourselves differently in communication and not claim ‘We are plastic neutral’ per se. That might be confusing because we are actually only plastic neutral because we work together with Plastic Bank, but our packaging often still contains plastic.”*

For the sake of transparency, the WWF also demands that information on offset measures should also include information on the region where the plastic is collected from the environment and the type of plastic waste because collection and recycling projects are often funded in regions that do not correspond to the areas where the respective company contributes the most to plastic pollution⁴⁵. Or, the plastic litter collected is not the type that a particular company puts into the environment⁴⁶.

LARGE QUANTITIES CREATE RISKS

The large volumes of plastic waste that major plastic producers would need to collect or have recycled to offset their total footprint pose a particular challenge. That is the reason why experts fear that large corporations will take advantage of the unregulated market to push down prices for plastic credits by agreeing to pay only five or ten percent of the current price.⁴⁷ This would have serious consequences for the credibility of the entire offset market and the added social value of many projects.

If you compare the average collection capacity of around 5,410 tons per project of the more than 100 projects listed in Circular Action Hub’s register⁴⁸ (as of October 2022) with the three million tons of plastic produced annually by Coca-Cola alone⁴⁹, the disproportion quickly becomes obvious. If businesses are truly willing to invest the funds necessary to offset such huge quantities, they would have to work with thousands of project providers. That means Coca-Cola would need some 555 project partners to offset its entire annual plastic footprint.⁵⁰

This example clearly shows that offset measures do not suffice in reaching true plastic neutrality, even with the best intention in the world.

However, as the number of cooperation projects rise so do the risks in terms of ensuring compliance with social and ecological standards. At this point, it is not uncommon for brokers to come into play again, those who ideally have checked the projects in their portfolio for compliance with generally applicable standards and principles. Alternatively, projects can be independently certified for certain standards and can thus hope for a competitive advantage. Despite auditing and certification mechanisms, trust is often the only option.

Hünemeyer, a manager with Schaebens, also states: *“You have to admit that the market is very opaque and a lot depends on buyers’ trust because it is difficult to check from here what’s happening on the ground. Of course, project providers show you certificates and pictures, give you information and numbers, and tell you stories. But if there’s no trust, it simply doesn’t work”.*

42 Ibid.

43 Break Free From Plastic (2021)

44 Schaebens (o.J.)

45 WWF (2021)

46 Ibid.

47 This applies to businesses that use flexible plastic compounds (foil/wrap) which are difficult to collect and almost impossible to recycle but that offset their plastic footprint by investing in recycling projects.

48 Interview with Vincent Decap, ZPO

49 Circular Action Hub (n.d.) (3)

50 The Guardian (2019)

INTERVIEW

Stuart Lendrum,
Iceland Foods



At the end of 2021, the British supermarket chain Iceland Foods made headlines in the offset world. In collaboration with the clean-up organization Seven Clean Seas, the second-generation family-run food company aims to become the first plastic-neutral grocery store. To collect and recycle the approximately 9,500-tons of plastic of Iceland Food's own brands, Seven Clean Seas will set up a special global cross-project program.

POLYPROBLEM talked to Stuart Lendrum, head of packaging, quality, and food safety, about corporate activism and the importance of leadership as a driver of plastic reduction measures, as well as about reputational risks and the need for trust in offset collaboration partners.

Iceland Foods strives to become the first supermarket in the UK to offset the remaining plastic footprint of its own products. How is this commitment embedded in a holistic strategy to avoid plastic waste?

In 2018, we committed ourselves to making our own products plastic-free by 2023. This is also our overarching goal around which our holistic strategy has evolved. The biggest challenge we are working on is to fundamentally reduce the amount of plastic we use. The better we do in this area, the smaller our remaining footprint will be. This is not only better for the environment but also makes good business sense. It is in our own interest to keep this investment as low as possible. We also believe that in order to credibly offset your remaining footprint, you first have to reduce waste as much as possible.

Let's rewind a little. What were the decisive factors that led to this commitment?

Our commitment sprang from the UN Climate Conference in Glasgow in 2021 (COP26). We wanted to go a

step further than before because we are aware that we have already put a lot of plastic into the environment. Ultimately, it was a combination of things. First, our CEO Richard Walker, who cares deeply about the issue, played a crucial role. The fact that we are a private company was also key. That gives us the freedom to make such bold decisions without having to satisfy shareholder interests. We knew that the market for plastics offsetting is still in its infancy and also a controversial area. But none of that was a reason not to do it. With our commitment, we hope not only to achieve our own goals, but to contribute to establishing the market, its functioning, and best practices. After all, we are doing this on a unique scale.

You mentioned Seven Clean Seas. How did you find the right partner?

First, we did some research and learned that the market is quite small. Our research was guided by two principles: First, we wanted to find a solution that kept the

Why trust is more important than control

investment within manageable limits. That's why we decided early on to work exclusively with one partner. We believe that this gives us the best chance of implementing long-term, scalable projects while keeping an eye on costs. Second, as we move into a new field and try to do something on a very different scale, I think it really comes down to picking the right people to work with. In terms of values, Seven Clean Seas and Iceland Foods Ltd are a great match.

What scale are we talking about exactly?

Iceland Foods Ltd's primary plastic packaging amounts to about 10,000 tons. This is the amount we are working on with Seven Clean Seas. By comparison, the primary plastic packaging of the branded products we sell equals about 19,000 tons.

Could you elaborate a bit on the types of projects Seven Clean Seas will be implementing?

We are still in the early stages but with the amount of plastic we are dealing with, beach clean-ups alone will certainly not cut it. The projects we plan to implement aim to fill infrastructure gaps in areas where there is no waste infrastructure. This is how we want to help recycle and reuse waste.

Last but not least: What role do you think the plastic waste offset market plays in ending the plastic waste crisis?

We are all responsible for the plastic that is already in circulation. It's not enough to say we've done our share, all our plastic is recyclable. Businesses have to take more responsibility. We have an established market and

price for CO₂. Everyone knows what the price tag on good and subgrade emission certificates looks like. There is no such thing in the offset market for plastics. I think this is a serious barrier to market entry. So, creating transparency will be crucial in the future. I believe that the offset market can play a role in ending the plastic waste crisis. At the same time, we need regulatory or policy measures. For example, I believe that incentives for investments in plastic recovery and recycling, not just in the UK but particularly in developing countries, could be a step in the right direction.

WHEN AMBITION MEETS REALITY

A conclusion and a few brief instructions




Hardly any instrument in the fight against global ecological crises is as controversial as the principle of offsetting. First and foremost, renowned environmental organizations such as the WWF castigate offset measures as mere greenwashing and indulgence trading which only worsens rather than improves the overall situation. Providers and users of offset projects, on the other hand, celebrate them as a low-threshold one-stop solution and a way out of the plastic waste crisis.

As usual, the truth lies somewhere in between. Offsetting offers opportunities, but it also comes with risks. The market for corresponding projects is young, unorganized, and lacks transparency. This makes it difficult for all participants to take advantage of the opportunities. That's why it seems particularly important to realistically assess the opportunities and limits of offset measures and to communicate them openly.

1. IT'S JUST A STEP ALONG THE WAY ... BUT A SIMPLE AND QUICK ONE

When businesses volunteer to pay for someone else to collect the plastic packaging they put into circulation and send it for recycling, that's not what extended producer responsibility should look like. The process requires a legally anchored and thus mandatory system where the distributor of a package pays a license fee that, in return, is used to finance a collection and recycling infrastructure.

 **To make it crystal clear: Plastic credits are no substitute for extended producer responsibility. They are certainly not intended as a means for individuals or businesses to buy themselves out of it.**

Sie können aber durchaus ein Übergangsinstrument in Ländern sein, in denen (noch) keine EPR-Systeme existieren. Denn Kompensationsmaßnahmen über Plastic Credits sind sofort und nahezu überall einsetzbar, gestaltet von vielfach sehr flexiblen und ideenreichen

Initiativen und Start-ups. So können Inverkehrbringer, die ihren Fußabdruck ausgleichen wollen, sofort loslegen.



Their low-threshold nature is a clear plus of plastic credits.


2. DON'T GET INVOLVED IN "PROJECTS"

If offsetting is meant to serve as a transitional scenario toward extended producer responsibility and ultimately pave the way to a circular economy, they must contribute to a durable infrastructure, for example by establishing local collection and recycling centers or forming cooperatives of previously unorganized waste workers. In short: the benefits of projects that plastic credits fund should be long-term. That is not self-evident as we see in many countries where plastic credits often finance single clean-ups and other short-lived actions.

3. CREDIBILITY AS ONE PIECE OF A STRATEGY


Plastic offsetting is the collecting of waste that has already been generated. It does not contribute to waste prevention. And this, as we know, is the cherry on the top of the waste pyramid. For corporate strategists, this insight is significant. Businesses that do not work hard toward transparently investing in new technologies and changing their business models, for example,

to bring less disposable packaging into circulation, should also steer clear of offset measures. They risk credibility – and rightly so.

 **Offsetting only works for companies as a supplement to their transformation toward becoming a sustainable business.**

Providers and brokers of plastic credits know and understand the dilemma. Some of them, for the sake of their own credibility, wisely select their clients carefully.

But the reverse is also true:

 **Those who incorporate plastic credits in an overall strategy and communicate it transparently to the public will find this an additional lever for immediate and timely intervention.**

4. DO NOT SWIM AGAINST THE MATERIAL TIDE

Not all plastics are the same. It needs to be made clear which plastics and recycling routes a project financed through offset measures deals with. If a relatively well-functioning material flow already exists in the target region, for example, for PET, which is easy to recycle and therefore in demand, it might be counterproductive to intervene in this already established process with projects financed by plastic credits.

Some providers and brokers of plastic credits focus entirely on the collection of plastic waste that is difficult or impossible to recycle. It then ends up in waste incinerators where it is still more useful than left in the environment but that is not (yet) a contribution to a circular economy.

For potential buyers of plastic credits willing to offset their footprint, it is important to plan consciously and know exactly which plastics and recycling routes the chosen offset measure will target. Local conditions must

also be taken into account, since what makes sense in one region may be counterproductive in another.

5. BE CAUTIOUS WHEN PEOPLE SPEAK OF NEUTRALITY

The term “neutrality” is frequently used in connection with plastic offsetting. The idea behind it is that anyone who offsets at least as much as they produce or put into circulation is operating in a plastic-neutral way. In the course of researching this report, this term proved to be problematic.

On the one hand, true neutrality would also require offsetting your historical footprint, which hardly seems realistic. On the other hand, plastic waste is not distributed evenly across the globe as is the case with greenhouse gases in the atmosphere. Environmental damage caused in one particular region cannot be “neutralized” by taking action somewhere else.

6. MORE PLEASE

The principle of additionality plays a crucial role. Plastic credits should not be used to fund measures that already happen in the target region anyway. But surprisingly, that is often what happens.

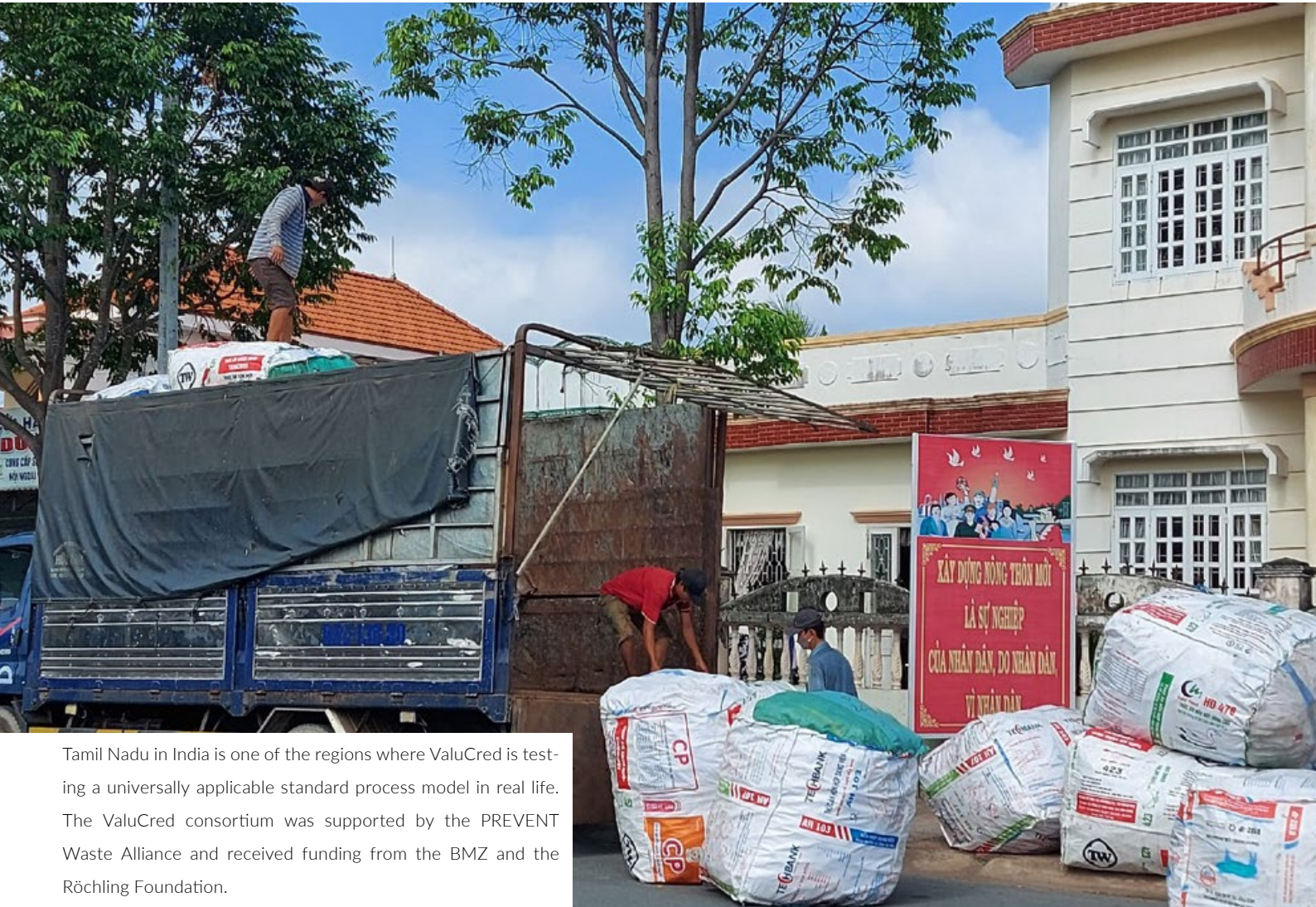
The six points listed above merely summarize the core aspects of dealing with offset approaches for plastic waste. They illustrate how much clarification is still needed before a generally accepted set of quality standards is formed that suppliers and brokers, project implementers, standardizers, and potential buyers all share.

This includes realistic communication about opportunities and restrictions. Environmental organizations rightly point out the danger that offset measures may

lead consumers to believe that environmental damage caused by plastic waste emissions can be undone. Providers and buyers of certificates should be responsible for making clear that offsetting can never be a substitute for avoiding plastic waste and building a circular economy.

In terms of quantities, voluntary offsetting is not yet a relevant tool in the fight against the plastic waste crisis as research for this report has revealed. If it is ever to become one, it would be advisable for all major market players to step up their efforts to establish common standards.

Once plastic credits are seen as an alternative financing instrument that allows businesses and individuals to contribute to the development of waste management and recycling infrastructure in an easy and quick way, then there is an opportunity here. But that has nothing to do with one's own plastic footprint – let alone offsetting it.



Tamil Nadu in India is one of the regions where ValuCred is testing a universally applicable standard process model in real life. The ValuCred consortium was supported by the PREVENT Waste Alliance and received funding from the BMZ and the Röchling Foundation.

POLY PROBLEM

POLYPROBLEM: Knowledge. Transparency. Cooperation

POLYPROBLEM is a joint initiative of the non-profit Röchling Foundation and the consulting firm Wider Sense. Under the same name, the initiators published a study in 2019 that came to the sobering conclusion that despite lively public interest in the growing problem of environmental pollution caused by plastic waste, a global agenda is still not in sight. What's more, there is little continuous, comprehensive, or scientifically sound information on the issue.

Together with businesses, foundations, NGOs, the science community, and policy makers, POLYPROBLEM aims to close this gap and encourage cutting edge innovations for a plastic waste-free environment.

POLYPROBLEM works with scientists and practitioners to publish reports on the latest developments and most pressing questions surrounding plastics and the environment on a regular basis. Our aim is to provide more clarity, more transparency, and better orientation in complex fields of action, but also to shed light on startling facts or aspects that have not yet been brought to attention.

www.polyproblem.org



The Röchling Foundation is committed to plastics and the environment. It supports both research projects and civil society initiatives that contribute to the responsible use of plastics in the sense of a sustainable circular economy. The Röchling Foundation does not see itself as a mere investment partner, but is fundamentally active in establishing new, cross-sector collaborations and networks.

In addition, the Foundation also initiates its own activities that contribute to a holistic understanding and integrated solutions to the global challenge of plastics and the environment.

The Röchling Foundation was established in 1990 by the Röchling family who is also the owner of the Röchling Group, one of the leading international suppliers of high-performance plastics for automotive technology, industrial applications, and medical technology.

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By offering customized consulting services, from research to strategy design and implementation, WIDER SENSE helps businesses and foundations to effectively shape social change. In May 2015, Wider Sense was certified as a B Corporation. In recent years, WIDER SENSE has built up expertise in CSR, philanthropy, and social investment, and has developed a global network of strategic partners. Thanks to its international outreach and multidisciplinary team, WIDER SENSE has worked with more than 100 clients on projects in more than 30 countries, who have contributed funds in excess of EUR 100 million directly toward fostering social change.

<https://widersense.org>

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LINKS TO THE ORGANIZATIONS MENTIONED

Organization	Abbr.	Link
3R Initiative		https://www.3rinitiative.org/
Alliance to End Plastic Waste		https://endplasticwaste.org/
Break Free From Plastic		https://www.breakfreefromplastic.org/
BVRio		https://www.bvr.io/
Circular Action Hub		https://www.circularactionhub.org/
CleanHub		https://www.cleanhub.com/
Control Union Certifications Germany GmbH		https://controlunion-germany.com/de
EcoEx		https://www.ecoex.market/
Empower		https://www.empower.eco/de/
everwave		https://everwave.de/
Green Worms		https://greenworms.org/
HOPE		https://www.generationhope.ph/
Iceland Foods		https://www.iceland.co.uk/
NIDISI		https://nidisi.com/de/
Plastic Bank		https://plasticbank.com
Plastic Credit Exchange		https://www.plasticcreditexchange.com/
Precycle		https://www.precycle.today/
PREVENT Waste Alliance		https://prevent-waste.net/en/
rePurpose		https://www.business.repurpose.global/
Schaebens		https://www.schaebens.de/
Seven Clean Seas		https://www.sevencleanseas.com/
The Circulate Initiative		https://www.thecirculateinitiative.org/
The No-Trash Triangle		https://www.no-trashtriangle.org/
United Nations	UN	https://www.un.org/en/
United Nations Environment Assembly	UNEA	https://www.unep.org/environmentassembly/
United Nations Environment Programme	UNEP	https://www.unep.org/
ValuCred		https://yunusenvironmenthub.com/valucard/
Verra		https://verra.org/
Waste Reduction		https://waste-reduction.de/
Waste Ventures India	WVI	https://wasteventures.com/
World Wide Fund for Nature	WWF	https://www.wwf.de/
Yunus Environment Hub	YEH	https://yunusenvironmenthub.com/
Zero Plastic Oceans	ZPO	https://prevent-waste.net/en/zero-plastic-oceans/

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List of interviewees:

CleanHub, Joel Tasche, co-founder

Control Union Certifications Germany GmbH, Loek Verwijst, vice managing director

everwave, Dr. Tilman Floehr, head of technology and co-founder

Iceland Foods, Stuart Lendrum, head of the packaging, quality, and food safety department

Collection and recycling company in Ghana, Prince Agbata, managing director

Schaebens, Björn Hünemeyer, head of marketing communications

Waste Ventures India, Sahithi Snigdha Bhupathiraju, COO and director

Zero Plastic Oceans, Vincent Decap, co-founder

