

WHY PLASTICS RECOVERY ENTERPRISES CANNOT CARRY THE FULL COST OF THE SYSTEM ALONE

Plastics recovery enterprises create environmental, social and economic value that extends well beyond the revenue they generate. Collecting and processing plastic waste reduces pollution across land, waterways and coastal areas, helping to create and protect healthier environments, livelihoods and local economies. It also creates jobs and local supply chains, and returns material to productive use. This matters because recycled content is increasingly needed by producers and policymakers, but low virgin plastic prices can make recycled plastic less competitive. The market price of sorted plastic therefore captures only part of the value created. The rest is public benefit that nobody pays for (UNEP 2023, UNEP 2024, UNDP 2024).

That gap has to be filled somehow – and right now, recovery enterprises are often filling it themselves. The costs of poor-quality feedstock, sorting, washing, logistics, compliance and dealing safely with material that cannot be recycled are created by products placed on the market without adequate end-of-life systems, and by gaps in municipal collection and treatment infrastructure. Recovery enterprises are simply the ones left to deal with the consequences. Plastic credits can provide some relief, but revenues depend on verification and buyer demand, so they cannot replace predictable long-term funding for recovery (World Bank 2024, Verra 2021).

Some parts of these models can become commercially viable, especially at the right scale. Others will need ongoing support through extended producer responsibility (EPR), public budgets or producer partnerships. Knowing the difference is what makes the business case realistic – and what makes the case for system-level change (SMEP 2024).

SMEP (2024). *The SMEP Programme: execution and impact*. Annual review report (April 2023 to March 2024).

OECD (2022). *Global plastics outlook: economic drivers, environmental impacts and policy options*. Paris.

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Verra (2021). *Plastic waste reduction standard*. Washington, DC.

World Bank (2024). *Unlocking financing to combat the plastics crisis: opportunities, risks, and recommendations for plastic credits*. Washington, DC.

IN BRIEF



Plastics recovery is not one business model, and different activities have very different economics that are sensitive to scale.



Feedstock quality is the single biggest determinant of whether a model can generate revenue.



Recovery enterprises routinely absorb costs created by producers lacking end-of-life solutions for their products and municipalities lacking adequate waste collection systems.



EPR, source separation, procurement rules and stable demand can shift that burden where it belongs.



WHAT THE SMEP PROGRAMME EXPERIENCE SHOWS

Recovery activities have different economics

River cleaning, land-based collection, buy-back centres, sorting hubs, plastics trading and recycled product manufacturing each carry different costs and generate different revenue streams. Of these, river cleaning sits in a category of its own. The material recovered is invariably mixed, wet, contaminated and degraded to the point where recyclers will not buy it. River cleaning has real environmental value, but it will always be a cost, not a revenue stream.

Feedstock quality shapes what can be recovered

Tonnes collected are not the same as tonnes recycled. The quality, consistency and cleanliness of plastic waste determine how much can be processed, what value it holds, and whether it can reach higher-value markets. Cleaner material supports higher-value recycling; mixed or contaminated material reduces recoverability and market access (OECD 2022).

The full cost of recovery is often underestimated

SMEP-supported projects in Kenya, Ghana and Nepal show that plastics recovery depends on more than collecting material and finding a buyer. Sorting, washing, wastewater treatment, logistics, compliance and safe disposal of what cannot be recycled all have to be paid for – and if these costs are not built into the business case from the outset, a model will struggle to survive once grant or project funding ends.



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PRACTICAL LESSONS FOR IMPLEMENTATION

Plan for the full cost of recovery

Collecting plastic is just the start. Processing, compliance and safe disposal of what cannot be sold all carry costs that need to be budgeted for from the outset, not discovered once funding ends.

Fund clean-up as a public good, not a business model

Environmental clean-up has real value but will always need subsidy. That subsidy belongs with producers, governments, and municipalities, not with the recovery enterprise. Where financial viability matters, land-based collection and buy-back systems generate cleaner feedstock and more reliable revenue, and reduce the need for costly clean-up downstream.

Design around marketable outputs

Before a model is built, the questions to answer are: what will be sold, who will buy it, what quality is needed, and what happens if prices fall? Mr Green's move into food grade PET and RiverRecycle's plastic boards show two different answers to the same question: one opens export and packaging markets, the other finds local buyers for material that commodity recycling cannot use.

Create demand for recovered plastic

Recycled content mandates and public procurement rules can create the stable demand that makes recovery viable. Direct offtake agreements with brands and converters can achieve something similar through the market: Mr Green's partnership with Unilever to produce containers from recycled PP shows what's possible when producers engage directly with the recycling supply chain.

Allocate recovery costs fairly

Carefully designed and implemented EPR schemes can shift costs back to producers. Municipalities can contribute through practical support – waiving disposal fees, providing land for operations, investing in source separation. Recovery enterprises should not be expected to carry costs that belong with producers and governments.



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LEARNING CONTRIBUTORS

This briefing draws on the first session in the SMEP Programme Plastics Webinar series, held on **7 May 2026**. It reflects learning from SMEP-supported projects and a moderated discussion with **John Adelegan** from RiverRecycle Ghana, **Christian Mang'eli** from Mr Green Africa, **David Ong'are** from Kenya's National Environment Management Authority, and contributions from the webinar audience.

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WHAT THIS MEANS IN PRACTICE

Practitioners

Build models around realistic feedstock quality, operating costs and confirmed markets.

Producers & brands

Help pay the real cost of recovery through EPR and offtake agreements. Invest in better packaging design and material selection to reduce end-of-life costs at source.

Donors & programme designers

Fund the full picture: equipment, operating costs and the enabling conditions that determine whether a model can survive beyond the grant period.

Policymakers & regulators

Support source separation, procurement and safe disposal systems. Recycled content mandates, like Kenya's 30% requirement for plastics manufacturers, can create stable domestic demand.

Local government & municipalities

Invest in collection systems, source separation and safe disposal infrastructure that improve feedstock quality and reduce recovery costs. Support recovery operations by waiving disposal fees and providing land for operations.

KEY TAKEAWAY

Plastics recovery enterprises will succeed when they focus on what they do best: producing marketable materials from waste. But that is only possible when producers, governments and municipalities stop leaving them to carry costs that were never theirs to bear.



“ **Viability is not driven by collection alone. It is driven by the ability to consistently produce market-acceptable material.** ”

Christian Mang'eli
Mr Green Africa



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