

Mini-guide

How to monetize positive externalities from my plastic recycling business?

From barely profitable to fully resilient: here's how



Key learning outcomes:

- Learn how to take advantage of the impact made by your business
- Get inspired by other initiatives and apply these ideas to your own model to perform better
- Get tangible pathways to increase your profitability



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The contents of this guide are proposed in **open source**

Contributions to this mini-guide are welcome → please send an e-mail to jean-baptiste@plasticodyssey.org

1. Definition & Introduction

Definition

Your impact has value! Through positive outcomes (externalities) of your plastic waste management operations, you create value beyond the recycled products: on the environment, the society, the economic situation etc.

What's an **externality**? A consequence of an industrial or commercial activity which affects other parties without this being reflected in market prices, such as the pollination of surrounding crops by bees kept for honey (by Oxford Languages) or cleaning up a lake by collecting plastics and recycling them into products.

Understanding your impact is a good way to better understand how to value it.

Introduction

Monetization of the positive externalities of a plastic recycling business is usually overlooked or ignored. However, it is a key advantage of impactful projects or social businesses over businesses purely designed to make money with low levels of consideration for its positive impact.

It is also essentially a way to get paid for things you would pretty much do anyway or are really close to your existing activity. As such, they usually do not demand too much extra effort or at least they can be highly worth dedicating some time. On top of this, these actions can again in return bring additional benefits to your initial activity. **All in all, you can get paid more and lower your costs for what you do because it has a positive impact.**

Here is below a chart summarizing what we are trying to achieve through these strategies. I applied successfully, they can be a game changer for the project!



Let's dig in the next section with 10 tangible strategies to monetize these positive externalities!

2. Ten tangible ideas to leverage your positive externalities

Opportunities to make your business model more resilient

i. Credits (Offsets):

Plastic Credits: Removing plastic waste from the environment and/or recycling plastic waste has a value and can be monetized through plastic credits (1 credit = 1 tonne of plastic collected and/or recycled). 1 credit can be valued in a range of 100 to 500 USD and more, depending on the impact, difficulty to collect and level of trackability/certifications. Different platforms such as [Empowereco](#) can enable you to easily register your waste collections and sell credits on a marketplace. Many certifications such as the one from [Verra](#), [Ocean Bound Plastic \(OBP\)](#) etc exist to define norms on what can be eligible. Norms exist to also value

additionalities or side externalities of a project such as the social impact (example: [Social+](#) norm from Zero Plastic Oceans).

Note: certifications like Verra have a cost and can take a long time to set up. It is therefore important to have sufficient collection/recycling volumes to be able to amortize this cost. The cost of auditing, in particular, can be an obstacle for small projects. Platforms such as Empower or others may be more accessible to start with.

Examples:

- [Second Life](#) in Thailand (certified by Verra) - here's another [article](#).



- The [Deekali Project](#) in Senegal, integrating both collection and recycling (first project certified by Verra in Africa)
- [Nomad Community](#) in Indonesia with Empower.eco (around USD300 / tonne collected)



- [Plastics for Change](#) in India is for instance the first Social+ OBP certified company



Carbon credits: Recycling plastic reduces the need for new plastic production, which can result in lower carbon emissions. You can earn carbon credits by quantifying and verifying the emissions reductions achieved through recycling. You can also lower your carbon emissions and get more carbon credits through the use of **renewable energy such as solar panels** to power the machines. It should also help you save money as well so it can be worth sourcing investments or support for it.

Note: carbon credits emerged before plastic credits and are more indirect. As such, the financial outcome may be less interesting if the operations are not on a large scale. Prices can also vary significantly depending if it is on the [compliance or voluntary market](#).

Finally, it is important to know that for now, only a few industrial projects are certified for carbon credits in the plastic recycling space (often projects in China, with transactions at \$3 per ton of CO₂eq...). Verra is planning to create a more appropriate methodology, but it's on hold for now. At this stage, carbon credits associated with waste are more generally for landfill gas, biodigesters or compost, and for all types of waste. For carbon credits associated with plastic recycling, some start-ups are making 'claims' ([Green Tech Global](#), [Maava](#)...) but there are no standards, so this remains unreliable and can't fund project developers for the time being...

Biodiversity credits (if applicable): this concept is the most recent of the credits mentioned here. It is a tool used to address the loss of biodiversity resulting from human activities such as land development, infrastructure projects, or resource extraction. Similar to carbon credits and plastic credits, biodiversity credits aim to mitigate the negative environmental impacts of certain activities. It could be interesting to consider in the case of big projects related to conservation organizations or areas with rich biodiversity ecosystems, marine protected areas or biodiversity hotspots.

Note: it is important to have in mind that the market is still very new! The measurement unit and market prices are unknown for now). You can find more info online like on this page from the [WEE](#).

ii. Sales above the market price:

→ Create products with an additional value thanks to where it comes from and its design with recycled plastic. For example, you could specialize in high-quality recycled plastic materials for use in premium products, such as bricks, planks, furniture etc, which can command higher prices in the market or in products made from plastics collected in areas rich in biodiversity (mangroves, coral reefs, etc.).

Examples: [Sungai Design](#) in Bali (chairs made from river plastics - 2,000 plastic bags) - strong narrative, storytelling enabling to sell products with a premium and finance their operations



As an extreme example, The Ocean Cleanup marketed [sunglasses](#) made from plastics from the Pacific at USD200 (one pair would be equivalent to cleaning 24 football fields of the Great Pacific Garbage Patch).

iii. Waste Management Services:

Offer waste management services to businesses, municipalities or households. Besides recycling, you can provide services like waste collection, sorting, and processing, generating revenue from these additional services while also reducing overall waste. For companies or households, it can be based on a subscription model. Some companies/institutions are also willing to pay more to ensure that their waste is recovered/recycled and not landfilled or incinerated.

[Mareblu](#) offers this service in Costa Rica, collecting waste from companies and transporting it to the various recyclers.

Example: [Greentsika Madagascar](#)



iv. Education and Awareness Programs:

Develop educational programs or campaigns to raise awareness about the importance of plastic recycling. By educating consumers and businesses about the benefits of recycling, you can potentially increase demand for recycled plastic products and services. This can be done as a service for governments, NGOs, companies to earn an extra income. It can also be done to support social causes like uplifting waste pickers to benefit your project or using the recycling facility as a training center as well.

Examples:

- [Miawodo](#) in Togo (micro-factory with a school-enterprise model)
- Partnership from our branch Plastic Odyssey Factories in Senegal with a government fund [3FPT](#) (Fund for Professional and Technical Training). This is an opportunity to get paid for doing capacity building and training for people in the waste management space (strengthening the sector and potential future employees). It helps support inclusion programs for marginalized communities struggling to have access to jobs.
- Support for [waste pickers](#) (Mr Green Africa)

v. Certifications and Labels:

Obtain certifications or labels that indicate your business's commitment to environmental sustainability. This can enhance your brand value and attract environmentally-conscious consumers willing to pay more for products made from recycled materials or CSR programs from companies to support your work

Examples:

- [Efficient Solution Label](#) from Solar Impulse Foundation (gives access to an ecosystem of investors and events) - example: [The Nomad Model](#) by Nomad Plastic
- [B-Corp](#) - example of [Mr Green Africa in Kenya](#)

The Nomad Model

A collaborative business model leveraging pyrolysis to end plastic pollution and regenerate nature in high-impact areas



Overall B Impact Score

Based on the B Impact assessment, MR. GREEN TRADING AFRICA (KENYA) LIMITED earned an overall score of 80.9. The median score for ordinary businesses who complete the assessment is currently 50.9.



- 80.9 Overall B Impact Score
- 80 Qualifies for B Corp Certification
- 50.9 Median Score for Ordinary Businesses

vi. Innovations:

By innovating and developing more efficient recycling methods and new products, you can reduce costs and increase the value of your recycled products, thus enhancing your revenue potential. Innovation can be financed by government programs or grants promoting innovation (call for proposals, startup challenges etc).

Examples:

- innovation grant from [Global Startup Award for Kubik](#) to make bricks in Ethiopia
- startup programs such as [Ocean Hub Africa](#) (example of [Arena Recycling](#) in Tanzania)
- [SMEP program with UK Aid for a wastewater treatment](#) (Mr Green Africa, Kenya)



Opportunities through the ecosystem

vii. Corporate Partnerships:

Partner with corporations that have sustainability goals. Many companies are willing to pay a premium for recycled plastic or invest in recycling initiatives as part of their corporate social responsibility (CSR) efforts.

Examples:

- The [Plastic Flamingo](#) in the Philippines developed partnerships with companies to create drop-off points for waste. They also provide [EPR services](#) (Extended Producer Responsibility) to many companies as it is well-established in the country.



COMPANY: Alliance to End Plastic Waste
 PROGRAM TYPE: CSR
 START: July 2019
 STATUS: On-going
 TARGET: 2,000 Metric Tons

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COMPANY: CMA CGM
 PROGRAM TYPE: CSR and EPR
 START: October 2021
 STATUS: On-going
 TARGET: 600 Metric Tons

[LEARN MORE](#)



COMPANY: Charter Next Generation
 PROGRAM TYPE: CSR
 START: April 2022
 STATUS: On-going
 TARGET: 300 Metric Tons

[LEARN MORE](#)



COMPANY: Haleon
 PROGRAM TYPE: CSR
 START: June 2022
 STATUS: On-going
 TARGET: 100 Metric Tons

[LEARN MORE](#)



COMPANY: Eneos Philippines Corporation
 PROGRAM TYPE: EPR
 START: September 2023
 STATUS: On-going
 TARGET: 0 Metric Tons



COMPANY: WWF Philippines
 PROGRAM TYPE: CSR
 START: September 2022
 STATUS: Ended
 TARGET: 12 Awareness Events



COMPANY: Tetra Pak
 PROGRAM TYPE: CSR
 START: April 2022
 STATUS: Ended
 TARGET: Joint collection of UBCs



COMPANY: 11F11C
 PROGRAM TYPE: Distribution
 START: July 2022
 STATUS: Ended
 TARGET: 700 Eco-boards / Month

- Pallets purchased at a premium by a construction company in Dakar, Sénégal from our Plastic Odyssey Factories facility as part of their CSR effort

There are also platforms linking directly impactful projects to companies to source donations indexed on the impact. This can complement the credit system for instance. This is mostly donations in that case so it would work best if you have a non-profit structure.

Examples:

- [NooS](#)
- [Captain Cause](#)

viii. Community Engagement:

Engage with local communities and stakeholders to build support for your recycling initiatives. This can lead to opportunities for community funding, sponsorship, or participation in government-funded projects aimed at promoting sustainability and environmental protection. It works well with schools for instance with students collecting waste donated to the recycling center and improving collection rates.

Examples:

- Sungai Watch is engaging companies or brands to support their community engagement by becoming a [Village Model Partner](#). It's a good way to receive donations while contributing to developing the activity. They also conduct a brand audit to identify and track where waste comes from in Bali (featured in their [impact report](#))



- [AFA - NaturePlastAfrika](#) in Sénégal is developing a twinning program between schools in France and Senegal to boost awareness in the city of Kidira (Senegal) where they are developing their recycling center. It is a way to engage students and households, collecting more feedstock and being eligible for donations and support in doing so.



ix. Government Incentives:

Lobby for government incentives or subsidies for plastic recycling businesses. Governments may offer tax breaks, grants, or subsidies to encourage businesses that contribute positively to the environment. It can be a support to find or allocate a land to operate, a logistics support to collect the waste or push institutions or companies through public policies to use eco-friendly products (for instance construction companies)

Example: [Envirotech](#) (The Philippines) managed to get a land and waste for free from the Local Government Unit (LGU). They also managed to involve many companies in their effort.

Note: sometimes, getting a land from the government in the long run can be tricky as they may take it back as they want or ask for other ways to pay back if the activity is successful. It can be better to rent or buy a land in that case to be fully independent.



x. Collaboration with NGOs, Development agencies or DFIs support:

Working on cleaning the environment or alleviating poverty can lead you to attract bigger institutions to support your action through grants or programs to boost your potential. Such partnerships can help raise funds, access grants for early-stage or established projects, or attract donations from individuals or organizations that support environmental causes.

Example:

- Financing of first equipments to prototype the waste-to-pavers operation from [BGS Recyclast](#) in Guinea (with a local branch of a UN agency) and purchase of several hundreds of m2 of paving blocks as a pilot to improve the city's infrastructure (by ENABEL, belgium development agency)
- [Financing of a micro-factory in Djibouti](#) by a UN agency working on inclusiveness for migrants ([IOM - International Organization for Migrations](#))



3. Conclusion

If we recap the potential of the strategies presented in the section 2, you can find way to:

- get your feedstock for free: partially or in full with profit, depending on the impact made. The higher the impact, the higher the value (for instance waste collected on a deserted island of the Pacific will be more valuable than waste from a public landfill). This can be done through plastic credits or as a service.
- get more money from your products' sales by marketing their eco-friendliness (this is quite an obvious one but it remains important to market it well). It can come as a package with the collection aspect (the customer pays not only for the production but also for the collection and its resulting impact). You sell not just a product but a story.
- get support to gather more feedstock, more involvement from communities and companies,
- get financing to innovate and expand: be creative, push boundaries to solve your local problems and address the local market and reach out for partners by showcasing your prototypes
- get more visibility and credibility through certifications and labels and with the support from institutions.

In this journey, communication, branding, storytelling and impact measurement are important so you can consider getting help or investing on this as you go! It can be a game-changer as having a good production and final products may not be enough.

We hope that by implementing these strategies, you can effectively monetize the positive externalities of your plastic recycling business while contributing to environmental conservation and sustainable development!



It's now up to you to take this knowledge and apply it to the environment around you.

Special thank you to Côme Falque from Removall for his contributions on plastic, carbon and biodiversity credits!