

## CIRCULAR ECONOMY BUSINESS CASE STUDIES IN SOUTHEAST ASIA



## Only One Planet

- Phnom Penh, Cambodia
- Food packaging
- [onlyoneplanetkh.com](http://onlyoneplanetkh.com)
- Analysis period: 2018-2023

## Alternatives for Single-Use Plastics

## Business Spotlight

Only One Planet (OOP), a social enterprise, has introduced various solutions for food packaging to combat plastic pollution in Cambodia. Since its inception in 2018, OOP has convinced more and more customers to use home-compostable sugarcane-based food packaging as a sustainable alternative to styrofoam, which is widely used by small vendors and the hospitality industry. Aside from this main activity, OOP is developing various initiatives aimed to increase its circular impact: OOP is developing a line of reusable products that can be customised using dye sublimation printing (DSP) technology applied to small product volumes.

OOP's main innovation lies in its active engagement strategy with small and medium enterprises (SMEs) to help them not only to reduce their reliance on single-use plastics, but also to promote a shift towards more sustainable materials, enhancing circularity and resource efficiency for a target population whose interest is difficult to capture. Only One Planet initiated the 'Pay it Forward' recycle glass initiative and is also behind the non-profit retail shop Be Eco Sustainable - a collective of 20+ small businesses providing organic, plastic free and/or plastic alternatives.

OOP's initiatives are reducing plastic waste. However, this business faces challenges in scaling up due to financial constraints and the COVID-19 pandemic, which particularly affected SMEs in the tourism and retail sectors. Despite these challenges, OOP has maintained a steady presence in the market, due also to its commitment to raise awareness about environmental issues through the creation of an environmental awareness website and the organisation of more than 170 events and workshops dedicated to circular economy principles and practices.

**Keywords**

Single-use plastic, Awareness, Glass bottle recycling initiative

**Innovation**

Product/service design, End-of-life management, Resource circularity, Resource substitution

## Context and baseline

Plastic pollution in Cambodia is a growing environmental issue. The Ministry of Environment reported a three-fold increase in municipal waste in Phnom Penh, from more than 343,000 metric tons in 2007 to almost 1 million metric tons in 2019. Significantly, about 20% of this waste is plastic, with single-use plastics (SUPs) such as bags, straws, PET drinking bottles and cups being major items in landfills and waterways.

In response to this challenge, Only One Planet (OOP) has positioned itself as a key player in offering alternatives for single-use plastic products and associated behaviours. OOP brings to the Cambodian market practical and affordable products that contribute significantly to reducing single-use plastics. OOP was the first company to promote actively eco-friendly solutions for the food and beverage industry. Its solutions include home compostable sugarcane-based food packaging as a sustainable alternative to styrofoam, which is used extensively by small food vendors and the restaurant industry, as well as cutlery, straws and reusable home items. OOP's future plans include enhancing the use of sustainable, reusable alternatives in the tourism sector, involving tour operators and hotels.

## Innovation

Only One Planet (OOP) has set a precedent in Cambodia for engaging local small and medium enterprises (SMEs) in using alternatives for single-use plastics. Recognising the pivotal role of SMEs in Cambodia, OOP has been able to influence their transition towards sustainable practices through a holistic approach.

OOP's main innovation is in packaging design, to replace styrofoam packaging with a compostable sugarcane-based alternative. More recently, OOP introduced a line of reusable products made of glass or stainless steel that can be customised in small quantities using dye sublimation printing technology. By eliminating the need for large orders and reducing additional setup costs and wastage, OOP can motivate SMEs to brand their sustainable packaging, aligning with their marketing needs and enhancing their market appeal.

This approach highlights the potential for small-scale interventions and tailoring solutions to the specific needs and capacities of local businesses.

Finally, Only One Planet is behind the creation of the website Eco-Business Cambodia (<https://www.eco-business-cambodia.com/>), dedicated to promoting eco-friendly business practices in Cambodia. It

serves as a searchable directory of businesses in the country that are committed to reducing single-use plastic and other forms of waste. It also gathers extensive environmental information to educate people about sustainability issues and practices in Cambodia.

## Circular Economy impact

The impact of Only One Planet (OOP) on the circular economy in Cambodia is multi-faceted.

First of all, OOP focuses on resource substitution by replacing single-use plastics (that are both non-renewable and non-biodegradable) in food packaging with renewable and biodegradable materials. OOP has replaced 4 million styrofoam food boxes with home compostable sugarcane-based products, and addressed a major source of non-biodegradable waste. Similarly, actions replacing 2.4 million pieces of plastic cutlery with wooden alternatives and more than 1 million plastic straws with recycled paper or noodle straws have contributed to reducing the use of plastic along with waste generation. The reusable glass, stainless steel and silicone items sold OOP, are projected to avoid the use of 5.2 single use plastic items.

Second, OOP promotes recycling and upcycling through their 'Pay it Forward' community glass recycling programme by which individuals or organisations donate for future recycling of glass waste. This has enabled the recycling of a total of 50.3 tons of glass from October 2021 to March 2024, encouraging community participation in sustainability efforts. This corporate social responsibility (CSR) activity is made possible through close collaboration with waste collection companies like GAEA, or individual collaborators who recycle glass into new products. Finally, OOP advocates with different audiences to raise awareness about circularity and sustainability.

From 2018 until early 2024, more than 170 events and workshops were delivered on circular economy principles targeted to diverse audiences that included schools, NGOs, and community groups. Only One Planet has also created an information website to provide better information on specific options in the context of Cambodia. Finally, OOP created BE ECO with 20 other small business to act as a local resource center for eco-products, information, and services. Services offered include drop-off points for glass, hard plastics, and batteries; repair service for luggage, small appliances, shoes and clothing; a freecycle bin for dropping off and/or taking usable items for free. All the vendors have a commitment to the environmental cause.

Through these measures, OOP has not only diverted 13.7 million single-use items from landfills, but has also promoted a broader understanding of the circular economy.

## Business and market impact

Only One Planet (OOP), while still only a relatively small entity, is recognised as a social enterprise in the field of sustainability in Cambodia. OOP has worked relentlessly in replacing conventional plastic items with more sustainable alternatives, and in attracting more and more businesses on this journey. The home compostable sugarcane-based packaging business is profit-oriented, and it has accomplished a breakeven operation. Most of the profits are reinvested in the outreach and non-business activities of OOP (glass recycling, BE ECO, etc.)

However, scaling is an issue in this type of business, and OOP faces several challenges. The need for a fresh capital injection or external investment is growing, as scaling up operations is constrained by limited cash flow and challenging payment conditions. The COVID-19 pandemic affected SMEs particularly in the retail and tourism sectors that are crucial to OOP's operations. Furthermore, the company's journey highlights the necessity for stronger single-use plastic regulations and more accessible financial support for green SMEs in Cambodia, where traditional financing obstacles prevail.

## Stakeholders

OOP works predominantly with the restaurant and hotel sectors in Cambodia, which displays a positive trend of increasing interest not only among large companies for adopting more sustainable practices but also among local SMEs.

OOP's efforts have also garnered support from notable organisations like Khmer Enterprise, which gave support by creating its comprehensive environmental website, [eco-business-cambodia.com](http://eco-business-cambodia.com). This platform created by One Planet (OOP) has successfully cultivated a diverse customer base with over 200 clients. It disseminates information about sustainability and circular economy principles, thereby fostering greater awareness and action among various stakeholders.

OOP has also initiated several long-term and solid partnerships, such as with GAEA on the Glass recycling project, while some leading hotels and restaurants are also contributing financially to the initiative.

Finally, the BE ECO shop involves 20 small eco-businesses that are sharing not only a shop to sell their eco-friendly products, but also various collaborations among members.

This support network highlights the importance of collaborative efforts in driving environmental change. The engagement of a variety of stakeholders, including small local businesses, large corporations, and supportive entities like Khmer Enterprise, demonstrates the collective efforts required to shift towards more sustainable practices in a developing country like Cambodia.

## Implementation

Several challenges can be highlighted in OOP activities. A significant hurdle is the dependency on importing sustainable products, as Cambodia lacks local production capabilities for these items. This reliance on imports not only increases cash flow challenges but also complicates the supply chain.

Another critical issue is the limited infrastructure for waste management, particularly for composting. The environmental benefit of the home compostable products relies ultimately on their disposal in managed landfills or on individuals' willingness and ability to compost at home.

OOP aimed to establish a green packaging factory in Cambodia to address some of these challenges, but this wish was unfortunately stalled by the COVID-19 pandemic. This setback underscores the broader impact of global crises on local sustainability initiatives.

The uneven playing field is also a recurring issue for OOP. Its packaging business faces increasing competition from SMEs that are also importing the same type of products informally and therefore are not paying any taxes (10% of VAT), making the price of their products more attractive for small businesses without, however, ensuring adequate product quality.



## Takeaways

Engaging SMEs and the informal sector is crucial in efforts to minimise single-use plastics. By offering tailored solutions and incentives, OOP has been successful in encouraging these sectors to adopt sustainable practices. Continued efforts in this direction will be essential for the wider adoption of eco-friendly practices.

Cambodia's market for sustainable products offers considerable room for growth and innovation. OOP's advocacy with major hospitality industry players to adopt sustainable alternatives highlights the potential for broader market changes. Future efforts should focus on scaling these initiatives, enhancing collaborations, and innovating to overcome the current market and logistical challenges.

A VAT exemption on certified green products could further support the circular agenda, as it would make genuinely environmentally beneficial products more competitive in the market.



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