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POLICY CENTRE

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Designing effective reuse policy

Regional recommendations for Southeast Asia

2026

Acknowledgements

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Executive Summary

Reuse systems are receiving growing attention as a policy response to plastic pollution and waste generation. This report provides a policy-focused assessment of how national and regional policy can better support reuse systems in Southeast Asia, drawing on comparative policy analysis of Indonesia, the Philippines, and Thailand. These countries were selected because they reflect different policy approaches, levels of system maturity, and market conditions, while also illustrating a set of shared challenges that are relevant across the region.

The analysis shows that reuse in Southeast Asia is shaped by a mix of longstanding cultural practices, emerging business innovation, and growing policy attention to plastic pollution. Refill and return practices remain visible in everyday life, particularly through informal and community-based systems, water refilling, and some continuing beverage bottle reuse. These provide a practical foundation for more structured reuse systems. At the same time, national policy support remains weak. Across the case study countries, there are no binding national reuse targets, no clear regulatory incentives for reuse systems, and limited use of policy instruments that would support scaling. Existing references to reuse in legislation and national plans are often indirect, non-binding, or framed narrowly around material reuse rather than system-level approaches.

Several factors nevertheless create an opening for progress. Policy attention to plastic pollution has increased across all three countries, and reuse and refill are appearing more frequently in roadmaps, draft legislation, and circular economy discussions. Local single-use plastic restrictions, early-stage EPR reforms, and pilots led by civil society organisations, start-ups, and companies have begun to test what reuse can look like in practice. In some contexts, geographic conditions also strengthen the case for reuse, particularly where reliance on distant recycling or disposal infrastructure is costly and difficult.

The research also identifies a consistent set of barriers, the primary one being that policy continues to favour recycling and substitution over prevention. EPR frameworks do not yet create strong drivers for reuse, and national-level single-use plastic restrictions are limited or absent, while local bans are fragmented and weakly enforced. Product safety regulations create additional constraints where they are narrow in scope or difficult for smaller businesses to comply with. Infrastructure for washing, return logistics, and quality assurance remains limited, and access to long-term finance is weak. These conditions make it difficult for reuse systems to compete with cheap and widely available single-use packaging.

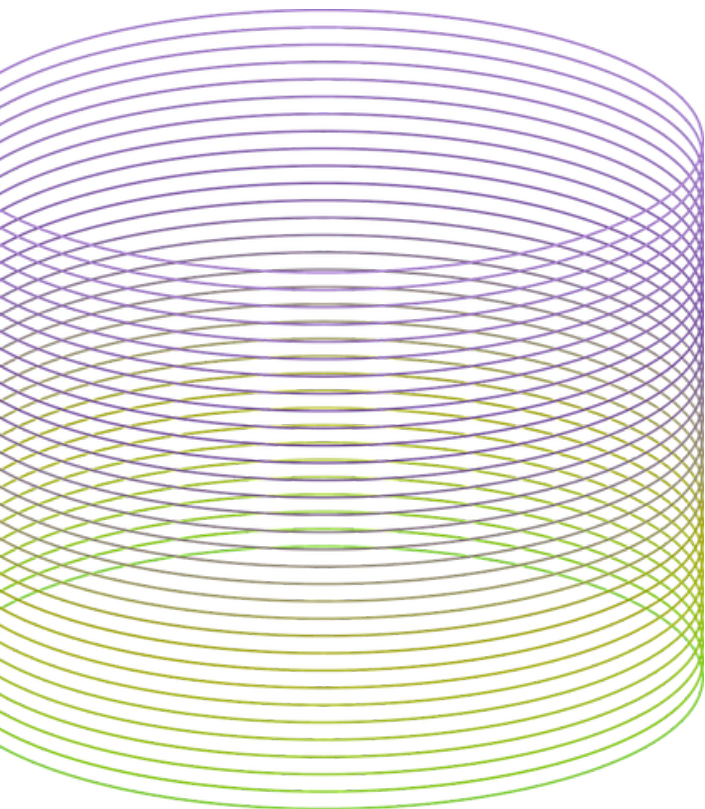
In response, the report proposes six sets of practical recommendations to support national progress which when combined point to the need for more deliberate policy design that links regulation, finance, infrastructure, and behaviour, rather than relying on isolated interventions. The recommendation areas identified are:

- **embedding reuse within national packaging and waste frameworks or regulations;**
- **creating financial and market incentives for reuse system development;**
- **reforming EPR systems to fund and operationalise reuse;**
- **strengthening governance, coordination, and implementation capacity;**
- **building public participation and social inclusion in reuse systems and policy design;**
- **ensuring reliable data collection and transparent monitoring to support reuse.**

Executive Summary

The research also highlights the importance of designing reuse systems that reflect the realities of the region. This includes recognising the role of local government, informal retail, and community-based practices, as well as the need to ensure that system design does not exclude smaller businesses or lower-income consumers. In this context, public participation, convenience, and affordability are not secondary concerns. They are central to whether reuse systems can function in practice. At the regional level, there is scope for greater coordination across Southeast Asia. While implementation will remain national, ASEAN and related regional platforms can support stronger alignment on definitions, metrics, knowledge exchange, and policy learning. This would help reduce unnecessary inconsistencies across markets, support businesses operating across borders, and strengthen the region's contribution to international processes such as the Global Plastics Treaty.

Southeast Asia has a credible basis on which to strengthen reuse systems, but progress will depend on moving beyond indirect and fragmented support. Existing cultural practices, early market innovation, and growing policy attention create a foundation for action. The next step is to translate that foundation into clearer legal frameworks with more effective incentives, and implementation pathways that reflect the economic and institutional realities of the region.



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Abbreviations

ARC	Asia Reuse Consortium
ASEAN	Association of Southeast Asian Nations
CSO	Civil Society Organisation
COP	Conference of Parties
DRS	Deposit Return Scheme
EPR	Extended Producer Responsibility
FDA	Food and Drug Administration
FMCG	Fast-moving consumer goods
HORECA	Hotel, Restaurant and Catering
HUHS	Household/Urban Hazardous Substances
LGU	Local Government Unit
SEA	Southeast Asia
SME	Small and Medium-sized Enterprises
SUP	Single-use Plastic

1. Introduction

An abstract graphic consisting of numerous thin, parallel lines that flow and curve across the page. The lines are colored in a gradient from light green to light purple, creating a sense of movement and depth. The overall shape is reminiscent of a stylized, flowing ribbon or a series of connected loops.

1.1 Overview

Reuse systems are increasingly recognised as a critical component of waste prevention and resource efficiency, with the potential to reduce greenhouse gas emissions by up to 20% in the consumer goods sector by 2030 (International Resource Panel, 2024). Reuse involves the repeated use of products or packaging for the same purpose without significant reprocessing, reducing the need for new materials and lowering energy use and waste generation. By extending the life of packaging and products, reuse can reduce resource extraction, decrease landfill use, and support the development of circular business models. Reuse systems can also generate economic opportunities across logistics, cleaning, repair, and redistribution systems, with the global reuse market projected to exceed \$100 billion by 2030 (Grand View Research, 2025).

Despite this potential, reuse systems remain underdeveloped in many markets. Existing initiatives are often fragmented, underfinanced, and unevenly implemented, limiting their ability to deliver environmental, social, and economic benefits at scale (Global Plastics Policy Centre, 2023). While a growing number of countries are beginning to explore reuse as part of their plastics and circular economy strategies, significant gaps remain in policy coherence, implementation capacity, and monitoring frameworks (OECD, 2020).

The Global Plastics Policy Centre, has undertaken a global multi-country research initiative to examine how national policies can effectively support reuse systems. For the Southeast Asian (SEA) regional study, this research has been conducted in collaboration with Enviu and Dietplastik Indonesia. Through policy mapping, stakeholder interviews, and comparative analysis across diverse national contexts, the project explores how legislation, regulation, and supporting measures shape the development and performance of reuse models. While the wider project's scope is global and covers multiple regions, this report focuses specifically on SEA. Across the region, policy attention to plastics and the circular economy is increasing, with emerging and increasing measures related to single-use plastics (SUPs), extended producer responsibility (EPR), and waste reduction. Despite this growing momentum, policy approaches to reuse remain largely indirect, with limited dedicated regulation, fragmented responsibilities across institutions, and considerable variation in ambition, system design, and implementation capacity across countries. This research aims to identify practical, evidence-based recommendations to support more harmonised, scalable, and economically viable reuse systems across the region.

The scope of this study is centered on packaging reuse systems, as these are the primary focus of emerging policy frameworks on reuse. While the analysis draws on packaging, many of the lessons are transferable to other sectors. The objective is to assess how national and regional policies can support packaging reuse systems, identify common barriers and enablers, and provide governments with practical options for embedding reuse within waste, packaging, and circular economy-related regulations.

This report offers a blueprint for developing effective reuse policies in SEA, drawing on case studies from Indonesia, Philippines and Thailand. These countries illustrate the varied ways in which reuse is defined, governed, and implemented, highlighting both commonalities and divergences. Rather than proposing a one-size-fits-all model, this research acknowledges that reuse systems can take multiple forms, shaped by differences in infrastructure, regulatory capacity, market structures, and cultural attitudes. In light of these national variations, the aim is to provide governments, regulators, producers, system operators, and supporting institutions with flexible and actionable policy insights and tools that can be adapted to local conditions while advancing the transition toward scalable and effective reuse systems.

This section explores the contextual realities of reuse in SEA. While Europe's reuse transition is largely policy-driven through harmonised legislation (Darut et al., 2025), SEA's journey is characterised by cultural legacy, economic diversity, and grassroots innovation. The section examines the historical roots, emerging models and policy landscape that define the reuse ecosystem across Association of Southeast Asian Nations (ASEAN) member states.

1.2 Reuse context in Southeast Asia

1.2.1 Historical context

Reuse is not a novel concept in SEA; it is a deeply embedded cultural practice that predates industrial packaging systems. Historically, communities relied on refillable containers, returnable bottles, and bulk purchases from neighbourhood stores, which ensured minimal waste generation. However, these systems were progressively displaced over recent decades due to rapid urbanisation, the proliferation of SUP packaging, and the rise of fast-moving consumer goods (FMCGs) (GAIA Asia Pacific, 2024). Today, the region generates over 31 million tonnes of plastic waste annually, and six of the world's top ten marine plastic-leaking countries are located in SEA (World Economic Forum, 2023). This underscores both the urgency and opportunity for reuse systems as an upstream solution to address waste generation and resource inefficiency.

The resurgence of reuse is being driven by a growing coalition of governments, civil society organisations (CSOs), and enterprises. Regional leadership is being consolidated through the Asia Reuse Consortium (ARC), co-convened by GAIA Asia Pacific, Break Free From Plastic, and Dietplastik Indonesia, to mainstream reuse and refill systems across the region (Dietplastik Indonesia, 2025a). This momentum aligns with ongoing negotiations under the Global Plastics Treaty, where Articles 5 and 12–13 emphasise product design for reuse and financial and technical assistance frameworks (Dietplastik Indonesia, 2025b).



Photo: © Dietplastik Indonesia

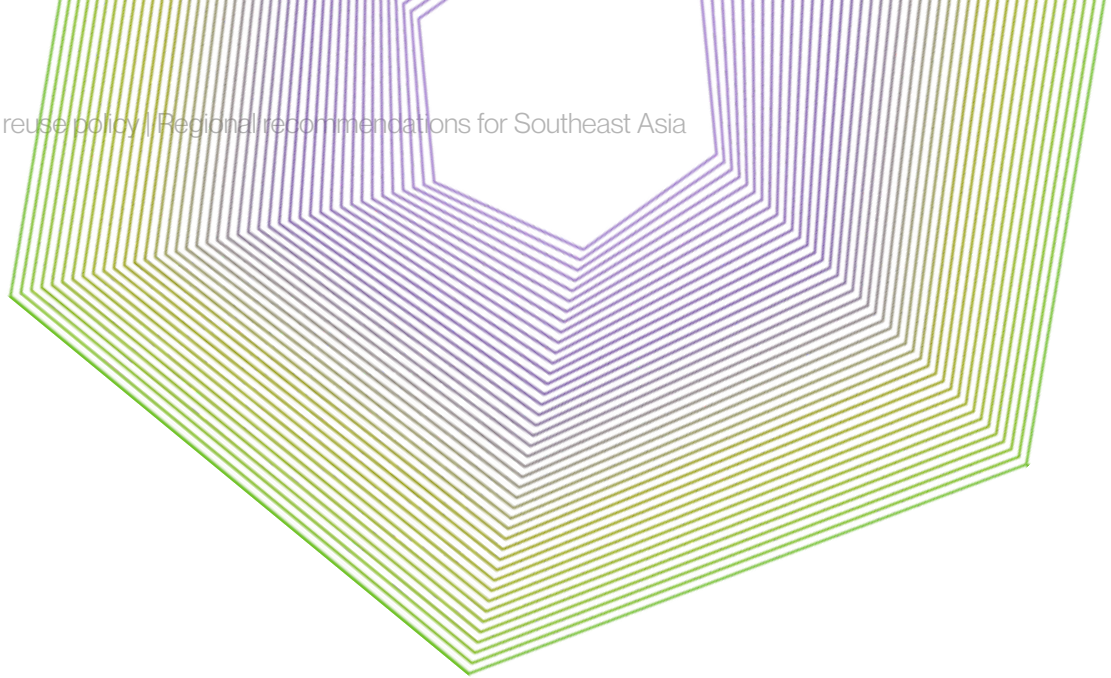
1.2.2 Regional models and practices

Across SEA, reuse systems are emerging through both legacy practices and innovative business models. Four archetypes are particularly evident: (1) refill and bulk retailing, where retailers obtain large quantities of products which are then dispensed to consumers, who usually own and are responsible for the refill containers; (2) return-for-reuse systems, involves users returning packaging or products after use, allowing the items to be professionally cleaned, sanitised, and reused for future cycles; (3) informal and legacy schemes, are the older and traditional reuse systems that are often community based and open loop, involving informal workers with little to no control on the returnability of the packaging; and (4) institutional or event-based reuse, reuse systems operate in closed or semi-closed settings such as offices, hospitals, festivals, where tableware and containers are cleaned either on-site or at centralised facilities (GAIA Asia Pacific, 2024).

Refill and bulk retailing models are gaining traction in Indonesia, the Philippines, Thailand, Malaysia, and Singapore. Examples include Siklus, Aler, and Hepicircle in Indonesia; Kuha sa Tingi in the Philippines; Bottle Free Seas in Thailand; and Muuse in Singapore (Dietplastik Indonesia, 2025a). Return-for-reuse systems, such as Muuse in Singapore, demonstrate how digital tracking and reverse logistics can enhance efficiency in dense urban markets. Event-based initiatives like Rent-A-Cutlery in India and Taksu Reuse in Indonesia further illustrate citizen-led innovation that could be integrated into formal frameworks.

These models illustrate how reuse in SEA is both a revival of traditional cultural wisdom and a frontier of modern innovation, bridging local practices with emerging policy frameworks and technological systems (GAIA Asia Pacific, 2024).

Public awareness and consumer readiness for reuse have also been gaining momentum in some SEA countries, with surveys showing over 80% support for refill and return systems (Greenpeace Malaysia, 2024; Greenpeace Philippines, 2024). This suggests a growing potential for reuse in SEA, although progress remains uneven. Persistent barriers, such as infrastructure gaps and the cost advantage of SUP packaging, continue to limit scalability and investor confidence. Addressing these challenges will, therefore, require targeted financing and policy incentives to create price parity and attract private investment into shared reuse infrastructure, highlighting the need to develop reuse-focused policies across countries in the region.



1.2.3 Policy landscape

There has been increasing policy attention in SEA in recent years on the need to tackle plastic pollution. Alongside countries in the region actively discussing and developing national policies, regulations, and roadmaps to address the issue, several regional-level initiatives have also emerged to encourage collective action among states. For instance, in November 2017, the ASEAN Conference on Reducing Marine Debris, held in Thailand, recommended an integrated land-to-sea policy approach through the development and implementation of a Regional Action Plan for Combating Marine Debris in the region. At the 34th ASEAN Summit in June 2019, both the Bangkok Declaration on Combating Marine Debris in the ASEAN Region¹ and the ASEAN Framework of Action on Marine Debris were adopted², with Member States encouraged to pursue their implementation. The declaration acts to align member states by setting shared priorities, norms for policy instruments, and guiding principles. The framework acts to coordinate national responses by identifying four priority pillars, policy support, research and capacity building, public awareness, and private sector engagement, setting out specific policy directions such as EPR and upstream measures. As a follow-up, the ASEAN Regional Action Plan for Combating Marine Debris was developed and published in May 2021 (The ASEAN Secretariat, 2021). More recently, in October 2024, the 44th and 45th ASEAN Summits in Viet Nam adopted the Declaration on Plastic Circularity, signalling an explicit and deepening commitment to a full life-cycle approach to plastics and an increased emphasis on a circular economy³. The action plan articulates concrete areas of action across product design, reuse and refill systems, non-plastic substitutes, waste management infrastructure, leakage prevention, cross sectoral collaboration, and support for future international legally binding instruments on plastic pollution. Whilst these declarations are non-legally binding, they still offer structured guidance for implementing national actions, encourage future regulatory convergence, and mobilise technical, financial, and knowledge cooperation.

Despite this growing attention to the urgent need to address plastic pollution, the policy landscape for reuse in SEA remains fragmented, with significant variation in ambition, scope, and enforcement across countries (Dietplastik Indonesia, 2025b). While a number of national policies reference reuse, they often fall short, in their current form, of effectively supporting the development of reuse systems. For example, Indonesia's Regulation No. P75/2019 mandates producer waste reduction and incorporates reuse within EPR frameworks; however, it largely remains a voluntary approach without clear targets, sanctions or penalties, although revisions are anticipated in the near future. Similarly, Thailand's draft Sustainable Packaging Management Act refers to refill and reuse systems, but there is no clear timeline for when it will become enforceable or what the final policy will entail. The Philippines' EPR Law (2022) lacks concrete mechanisms to operationalise reuse, while Vietnam's Environmental Protection Law (2020) includes reuse conceptually but places greater emphasis on recycling and treatment fees (Dietplastik Indonesia, 2025a). On the other hand, Singapore, through its Resource Sustainability Act (2019), has taken preparatory steps towards packaging collection and reuse. The absence of harmonised definitions, sanitation standards, and traceability frameworks continues to hinder regional coherence and limit investment readiness.

¹ Available at: <https://asean.org/wp-content/uploads/2021/01/2.-Bangkok-Declaration-on-Combating-Marine-Debris-in-ASEAN-Region-FINAL-1.pdf>

² The Framework of Action on Marine Debris encouraged Member States to develop and implement EPR policies and schemes. <https://asean.org/wp-content/uploads/2021/01/3.-ASEAN-Framework-of-Action-on-Marine-Debris-FINAL.pdf>

³ Available at: <https://asean.org/wp-content/uploads/2024/10/23-Final-ASEAN-Declaration-on-Plastic-Circularity.pdf>

2. Method

The research underpinning this report has three components The method to conduct this research consists of three parts - national reuse policy analyses, regional synthesis that compares and integrates findings across regions, and extensive stakeholder consultations.

2.1 National reuse policy analyses

This report draws on a structured comparative analysis of three national case studies: Indonesia, Philippines and Thailand. The case studies were selected based on a combination of factors including the presence of national regulations directly supporting reuse, diversity in policy design and implementation, varying levels of systemic maturity, and distinct consumer habits. The intention was to highlight a range of contrasting models that could offer insight into different pathways toward reuse policy development. This approach does not aim to provide an exhaustive picture of all reuse policy in SEA. Other countries, such as Viet Nam and Singapore, also have policy level changes related to reuse in place. However, the three countries included in this analysis were chosen to balance comparability with diversity, offering useful insights into how policy ambition, governance structures, and market conditions interact to shape reuse outcomes. The exclusion of other potential candidates should be seen as a limitation of scope rather than an indication of their lesser relevance.

The case studies as a collective provide insights into how national policy frameworks can support or constrain the development of reuse systems as part of circular economy efforts. The case studies followed a common methodological approach, designed to produce consistent and comparable findings across different country contexts. The process combined three core components:

Literature review

A targeted review of relevant national literature was undertaken for each country. This included academic research, policy documents, grey literature, and national reporting. The review focused on the evolution of the reuse policy landscape, key legal instruments, available evidence on policy effectiveness, and the main challenges and barriers to implementing reuse policies effectively. The output of this stage was a country-specific fact sheet summarising the policy history, system structure, and key regulatory developments relevant to reuse.

Policy mapping

A structured policy mapping exercise was conducted for each country to document the relevant legal and regulatory instruments that support or influence reuse. This included identifying interdependencies between different policies, and tracking amendments over time.

Semi-structured interviews

Primary qualitative data were collected through semi-structured interviews (Annex 2) with stakeholders involved in the design, implementation, or operation of reuse systems. Interviewees included government officials, reuse businesses, civil society representatives, and other relevant actors where contextually relevant. A minimum of six interviews were conducted per country, with efforts made to capture perspectives from both national and local levels, and across different stakeholder groups. Interviewees were asked to share their general reflections on the reuse policy landscape in their country, discuss the challenges they have experienced, and identify the enablers for effective reuse policy. Interviews were coded using a deductive coding framework in Microsoft Excel to ensure consistency and support comparative analysis. This qualitative approach provided in-depth insights into practical experiences and helped identify common barriers and opportunities across different contexts.

The findings from each country were synthesised into individual structured case study reports (Annex 3), which provide a comprehensive, context-specific overview of the reuse policy landscape in each country. To support transparency and reflect the variable availability of evidence across countries, each case study includes an assessment of the overall strength of evidence. This captures both the depth and breadth of available literature and stakeholder insights, allowing readers to better interpret the findings and their limitations.

2.2 Regional synthesis of findings

The regional synthesis aimed to identify cross-country findings and shared policy design considerations to inform a blueprint for national reuse policies. The regional synthesis was conducted as follows:

Cross-case coding and clustering of themes

Building on the detailed national case studies, the first step involved systematically coding qualitative data, including policy documents, stakeholder interviews, and secondary literature across the four countries. Using a common coding framework, key themes were identified and clustered to reveal patterns across cases. This coding focused on aspects such as policy coherence, regulatory gaps, institutional coordination, funding mechanisms, and monitoring practices. Themes were grouped to capture both shared issues and country-specific nuances, allowing for a structured comparison.

Identification of common enablers and barriers

The clustered themes were then analysed to distinguish enablers and barriers of effective reuse policy implementation that were common across the countries. This involved comparing the policy environments, implementation experiences, and stakeholder perspectives to highlight recurring facilitators and obstacles. The analysis also accounted for contextual factors such as the national context, which influenced how these enablers and barriers manifested at national scale.

Validation and triangulation

To ensure robustness and reliability, findings from the thematic analysis were triangulated with multiple data sources. This included cross-referencing insights from literature reviews, the policy mapping exercises, and stakeholder interviews within and across countries. Where discrepancies or unique national practices emerged, these were examined closely to assess their relevance and potential transferability. This triangulation helped confirm key findings and provide a nuanced understanding of policy dynamics.

Prioritisation of actionable recommendations

The final step synthesised validated findings into a set of actionable recommendations designed to support harmonisation and capacity building at the regional, SEA level. Recommendations prioritised areas where policy alignment could drive impact, such as regulatory clarity, knowledge exchange, institutional cooperation, and integration with national circular economy goals. The process also highlighted opportunities for tailored national actions based on unique contexts, ensuring the blueprint could be adapted to diverse member state situations.

2.3 Stakeholder inputs

In addition to ensuring academic rigour, the research process was deliberately designed to be stakeholder-focused. Stakeholders contributed at multiple stages, shaping both the evidence base and the resulting recommendations.

- For each country, stakeholders participated in semi-structured interviews to share insights and practical experience.
- Draft country case studies were peer-reviewed by national experts, providing an additional layer of validation.
- Preliminary cross-country findings were presented at an online workshop in October 2025, where group activities allowed stakeholders to refine the emerging conclusions.

This final report incorporates all stakeholder inputs, totalling 49 individuals across 39 organisations. The report has also been independently peer-reviewed.



3. Cross-country analysis and comparative case study findings

3.1 Policy landscape overview

This section distils key insights from the detailed case study analyses of Indonesia, Thailand, and the Philippines (Annexes 3a–3c) into a concise comparative format, structured around common indicators (Table 1).

The reuse policy landscape across the case study countries shares broadly similar characteristics, with some differences in their respective stages of policy development in relation to plastic pollution. In all three countries, there are currently no binding regulations that incentivise reuse systems or establish mandatory reuse targets. Although the term “reuse” appears in several policy documents and legislation, it is generally defined in the context of material reuse rather than system-level reuse models. In each country, the national Food and Drug Administration (FDA) has issued regulations on refilling, primarily aimed at ensuring health, hygiene and consumer safety. While these regulations have important implications for the development of refilling systems, not all products that could potentially be distributed through refill systems are covered under existing regulations, and the scope of coverage varies between countries. For example, in Indonesia and Thailand, the regulations apply to cosmetics, whereas in the Philippines they apply to regulated health products. The absence of national-level SUP bans, as such measures are enacted by local government units (LGUs), has resulted in fragmented and uneven implementation of bans at local level. Therefore, enforcement of bans is often weak, limiting the policy incentives needed to drive the development of reuse systems. While policy discussions around reuse and refill solutions are increasing in these countries, they largely remain at the level of discussions or non-binding visions rather than translating into mandatory targets or enforceable regulatory frameworks. For instance, in Indonesia, the government has recently introduced policy perspectives and roadmaps (although non-binding) that highlight the circular economy concept and emphasise reuse and refill practices, signalling the potential emergence of a more supportive policy environment for reuse initiatives in the near future. Similarly, the Philippine Action Plan for Sustainable Consumption and Production recommends conducting studies to develop alternatives to SUPs, and creating business models for waste minimisation such as refilling stations. By contrast, although Thailand has introduced roadmaps aiming at addressing plastic pollution and is currently developing a dedicated Packaging Act, reuse and refill solutions receive only limited attention in these policy documents.

Table 1. Summary of the reuse policy landscape in Indonesia, Thailand, and the Philippines.

Policy area	Indonesia	Thailand	The Philippines
Historical reuse context	Historically embedded reuse practices include bringing personal containers for buying essentials, using stacked food containers for carrying meals, continuing widespread use of refillable water gallons supporting a regulated water refill market, and limited but continuing beverage bottle reuse. The country is currently witnessing the emergence of small-scale start-ups introducing refill and reuse business models despite the absence of national-level policies and infrastructure.	Culturally embedded reuse practices through local and community-based initiatives. Examples include using pinto boxes, a traditional Thai lunch box made from metal, used to transport meals, and the widespread presence of repair shops and second-hand markets. These practices have declined due to the influx of cheaper imported goods, for example plastic water bottles are seen as being cheaper and safer than using piped water and filters at home. However, reuse start-ups have emerged as the modern extension of these practices.	Traditionally practiced tingi culture, i.e., buying products in small, exact quantities, supported by neighbourhood convenience stores. This culture was later leveraged by multi-national companies to introduce sachets. Beverage bottle reuse continues (beer and certain carbonated drinks), alongside regulated water refilling and reusable gallon systems.

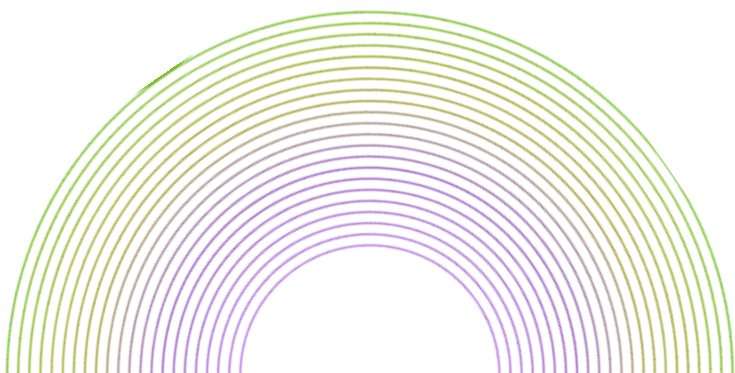


Table 1 (continued). Summary of the reuse policy landscape in Indonesia, Thailand, and the Philippines.

Policy area	Indonesia	Thailand	The Philippines
Key legislation and national plans on circular economy	Law No. 18 of 2008 on Waste Management and the legislation made to operationalise its provisions, the Minister of Environment and Forestry No. P75 of 2019 on Waste Reduction Roadmap by Producers and National Roadmap & Action Plan - Circular Economy Indonesia 2025-2045. The circular economy roadmap is also legally regulated through Law No. 59 of 2024 on National Long-Term Development Planning 2025-2045.	Roadmap on Plastic Waste Management 2018–2030, Draft Sustainable Packaging Management Act, National Action Plan on Plastic Waste Management, phase 1 and 2.	Ecological Solid Waste Management Act of 2000 (Republic Act No. 9003) and related legislation, Philippine Action Plan for Sustainable Consumption and Production, 2021, Sustainable S&T Solid Waste Management Roadmap 2022-2028.
Refill standards	Food and Drug Supervisory Agency (BPOM) Regulation No. 12 of 2023 on the Supervision of Cosmetic Manufacturing and Distribution	Notification of the Ministry of Public Health on the characteristics of cosmetics, criteria, methods and conditions for dividing cosmetics for sale at service points (Refill station) B.E. 2566, 2023	Administrative Order No. 2024 - 0008 on Guidelines on the Licensing of Establishments Engaged in Refilling Activity of Certain Cosmetics and Household/ Urban Hazardous Substances (HUHS) Products
Specific mention of reuse systems in policy	No.	No.	No.
Key reuse targets	While Indonesia does not have legally binding national targets, it does have voluntary milestones, outlined in the National Circular Economy Roadmap and Action Plan. These milestones only apply to manufacturers of personal care and cosmetic products, and include establishing 6,500 refill stations by 2045, up from 500, and to achieve 40% of the market share of manufacturers providing reusable products by 2045.	No national targets	No national targets.
Linked to Deposit Return System (DRS)	No.	No.	No.

Table 1 (end). Summary of the reuse policy landscape in Indonesia, Thailand, and the Philippines.

Policy area	Indonesia	Thailand	The Philippines
DRS implementation	No national legally established DRS is currently in force. However, DRS is mentioned as a potential strategy in the National Plastic Waste Reduction Strategic Actions and in the National Roadmap & Action Plan for Circular Economy (2025-2045), indicating possible future policy inclusion.	No nationwide legislation-based DRS is currently in place. The Roadmap on Plastic Waste Management (2018–2030) identifies promoting DRS as a potential policy option, but it provides no legal obligations and subsequent packaging legislation has dropped references to DRS after industry opposition.	Currently does not have a formal nationwide DRS. However, policy discussions and pilot initiatives are underway to introduce DRS and integrate it with the EPR framework.
EPR role and mechanisms	No mandatory EPR law currently exists. Minister of Environment and Forestry Regulation No. 75/2019 establishes an EPR framework, but it is not mandatory. Indonesia is in the process of introducing mandatory EPR through a revision of the current regulations package on waste management..	Does not have an EPR policy or scheme currently. The proposed Sustainable Packaging Management Act, still in the draft stage, is expected to lay the foundation for a future mandatory EPR framework.	Enacted EPR Act in 2022 but insufficient systemic influence to drive substantial environmental or market change. Greater emphasis on recovery rather than reduction and does not provide sufficient incentives for businesses to adopt reuse systems.
Implementation and enforcement challenges	Reuse implementation remains fragmented, with no mandatory targets, limited regulatory incentives, a narrow definition of reuse in policy documents, inadequate infrastructure, weak and inconsistently enforced SUP bans, poor integration of reuse models within industrial classifications and stringent FDA regulations restricting the participation of small businesses.	Limited regulatory focus on reuse, absence of national-level targets, weak and inconsistently enforced SUP bans, absence of an operational EPR framework, fragmented ministerial responsibilities hindering the development of comprehensive reuse policy, socio-cultural and dietary habits limiting reuse in the food sector and stringent FDA regulations discouraging small-scale refill businesses.	Absence of national-level policy targets and incentives, limited scope and inconsistent enforcement of SUP bans, defining reuse as a downstream activity in policies, EPR framework prioritising recovery over reuse, weak coordination across national, regional, and local governments, deeply entrenched sachet culture and FDA guidelines that are limited in scope and laying down high standards.

3.2 Cross-cutting challenges, opportunities and enablers

The analysis of reuse policies across the case study countries reveals a range of shared opportunities and challenges that have significant implications for future reuse development in SEA. In the absence of national-level policies that set reuse targets or provide incentives for reuse systems, the analysis identifies a number of existing enablers or opportunities that are consistently present across the case study countries, which contribute to a conducive environment for the emergence of business models focused on reuse and refill, and create favourable conditions for the development of policies that support such models. This section also outlines the key barriers that are slowing progress towards the establishment of a supportive and well-functioning reuse ecosystem in the case study countries.

The separation of enablers and challenges in this section is based on evidence drawn from the case studies, the interviews conducted with stakeholders, and the outcomes of the workshop carried out for this research. Often, enablers and barriers may be inverse of one another, but they are presented here according to how they were identified by participants.

3.2.1 Key enablers of effective reuse systems implementation

While the case study countries are at different stages of developing policies that integrate reuse, several enablers have been identified that could help create a more conducive ecosystem for reuse businesses and future policy development.

Culturally embedded nature of reuse

Everyday practices, such as *tingi* purchases in the Philippines and long-standing traditions of container reuse in all three countries, offer a potential entry point for reuse systems. Although limited in scope, some beverage companies continue to operate informal DRS or reuse of bottles in these countries. These practices indicate consumer familiarity with reuse models, which policy could support and build upon rather than displace.

Increased policy attention to plastic pollution

In the case study countries, growing recognition of the threat posed by plastic pollution within policy circles and among key stakeholders has led to heightened policy attention to addressing plastic waste. The development of various regulations, roadmaps, and action plans across these countries reflects this shift. Although these policy documents do not yet establish binding measures, reuse and refill systems and DRS are increasingly mentioned as potential future policy options to combat plastic pollution. For instance, in Indonesia, the National Roadmap and Action Plan on Circular Economy 2025–2045 introduces a 9R framework and acknowledges the role of refill stations and reuse practices in reducing SUP packaging waste. In the Philippines, several legislative bills have been proposed by individual legislators that more explicitly encourage reuse and refill practices, although they are still awaiting approval from the legislative bodies. CSOs are also actively engaged in policy advocacy by mainstreaming discussions and promoting policies that effectively support reuse-based solutions (Dietplastik Indonesia, 2025a). This rising policy attention could help lay the groundwork for reuse-enabling policies and the development of supporting infrastructure. Moreover, it creates an opportunity to recognise and institutionalise existing reuse practices and expand them into more system-level frameworks.

Presence of complementary policies

Although implementation remains weak and uneven, and no comprehensive national-level bans are in place, SUP bans have been introduced in all three countries at the local government level. If consolidated into a coherent national-level policy covering all SUP items that can be replaced through alternative business models such as reuse and refill systems, such measures could provide stronger incentives for businesses to experiment with and adopt reuse models. In addition, all three countries are in the process of developing or strengthening their EPR frameworks. If explicit reuse targets are incorporated into these frameworks, they could further stimulate the development and scaling of reuse business models.

Geographic characteristics create a rationale for reuse systems

The archipelagic nature of Indonesia and the Philippines makes transporting or shipping post-consumer plastic from small islands and communities in remote locations to recycling facilities costly (Akenji & Bengtsson, 2019). This geographic constraint makes upstream solutions such as reuse more attractive and could be leveraged to support policy measures that reduce dependence on long-distance waste transport.

Pilots initiated by CSOs or industry demonstrate feasibility of reuse models and provide policy feedback

Across the case study countries, many pilots of reuse and refill business models have been implemented by CSOs or corporate actors. For instance, some beverage companies continue to operate refillable glass bottle systems in selected Philippine cities, particularly where enforcement of local ordinances is stronger. In Thailand, Environmental Justice Foundation has run programmes such as Bottle Free Seas, while in Indonesia, successful public-private pilots like Jakarta's Reuse Hub have been established (Dietplastik Indonesia, 2025a). These initiatives demonstrate that reuse is both technically and commercially viable in the current market and can serve as proof of concept for scaling up. More importantly, such pilots can generate performance data that regulators can use to inform and calibrate national policy instruments. Caution with such data must be taken however, as environmental and economic benefits for reuse systems are most evident when run at large scale. Smaller pilots can still provide data on consumer willingness and behaviour, supply chain readiness, reuse container lifecycle impacts, cost curves, job creation etc. However, without policy measures to standardise and expand these systems beyond specific urban areas, the impact of such pilots remains limited. National recognition through incentives, public-private partnerships, or integration into EPR plans could help shift these initiatives from niche experiments to mainstream practice.

Emergence of an environmentally conscious young generation driving a shift

Despite existing policy gaps, a number of start-ups in these three countries are experimenting with reuse and refill models, often motivated by the environmental commitment of their founders. The growth and success of such start-ups can inspire more young entrepreneurs to enter the reuse sector, thereby generating greater demand for a supportive policy environment in the future. Besides, growing environmental awareness among the public is encouraging consumers to make more environmentally responsible consumption choices, thereby expanding the market for reuse and refill solutions.



3.2.2 Key challenges in reuse systems implementation

GAIA Asia Pacific (2024) identified several barriers to the effective development of reuse models in Asia, including the artificial cost advantage of disposables due to unpriced externalities, fragmented regulatory frameworks, insufficient infrastructure investment for washing and reverse logistics, weak data systems, and a policy bias toward recycling or misleading solutions, such as compostable single-use packaging. Many of these barriers were reflected in our study as well. Across the three case study countries, the absence of national-level policies focused on incentivising reuse (such as the provision of enabling technical, regulatory, and financial frameworks) or specifying mandatory reuse targets or timelines, often discourages businesses from adopting reuse or refill models and prevents private investors from investing in such business models. Without policy support, businesses find it difficult to compete with cheaper SUP products and often struggle to sustain operations or scale up, limiting the accessibility of reuse solutions for low-income consumers. A suite of consistent challenges has been identified, as outlined below.

A narrow regulatory definition of reuse and prioritisation of recycling and substitution in regulations

Current regulations often define reuse narrowly, focusing only on downstream activities such as material reuse, rather than an approach that proactively prevents waste through the establishment of reuse systems. This constrains the development of system-level reuse models. Moreover, existing legislation tends to prioritise recycling and biodegradable substitutes over reuse, limiting the confidence of businesses to enter or scale up reuse business models.

The EPR framework does not create strong drivers for reuse

Although reuse is mentioned in the existing EPR framework of Indonesia (Minister of Environment and Forestry Regulation No. 75/2019) and the EPR Act, 2022 of the Philippines, it is defined narrowly in terms of waste reuse rather than as part of a broader system-level reuse approach. The regulations also lack specific reuse targets and do not provide sufficient incentives for businesses to adopt reuse systems. For instance, in Indonesia, the existing EPR framework is largely voluntary, giving producers the flexibility to choose between waste reduction, reuse, or recycling. In practice, this flexibility often results in businesses opting for recycling as the easier strategy (Pairunan & Rabbow, 2022). In the Philippines, the EPR Act places greater emphasis on recovery rather than reduction, limiting the motivation for businesses to develop reuse systems as part of their EPR obligations. Similarly, the current draft of the proposed Sustainable Packaging Management Act in Thailand, which is expected to establish an institutional framework for future EPR regulations, gives relatively less attention to reuse compared to recycling.

Weak regulation and inconsistent enforcement of SUP restrictions undermine progress on reuse

There are no national-level SUP bans in these countries, and enforcement of existing local-level bans remains fragmented and weak. Inconsistencies among LGUs regarding which SUPs are restricted and the nature of these restrictions reduce their effectiveness in driving systemic change. This constrains the potential for reuse and refill models to compete with widely available and cheaper SUP packaging, creating an uneven playing field. Moreover, SUP bans without accompanying reuse policies or supporting infrastructure often result in substitution with other single-use items, such as biodegradable plastics, rather than durable, reusable alternatives. This is particularly concerning given the limited availability of dedicated facilities in these countries for the environmentally and socially sound management of bioplastics.

Stringent product safety regulations restrict market penetration and scaling

Existing FDA regulations on refilling in all three countries focus on compliance rather than providing incentives. While the higher hygiene standards stipulated in these regulations enhance consumer safety, their design without proportionality clauses, that is providing additional support or allowances for SME's whilst still maintaining safety, excludes small enterprises from participating in refill markets and stifles innovation. Besides, these regulations currently cover only selected products, leaving out many other products and sectors where reuse or refill could be potentially implemented. This creates uncertainty for reuse and refill businesses and investors, preventing them from scaling because they fear sudden new regulations could jeopardise their operations.

Absence of regional-level mandates and lack of system interoperability

Unlike the European Union, ASEAN does not have regional-level mandates, which reduces external pressure on countries to adopt stronger national policies. The lack of harmonisation between countries can also create barriers for cross-border trade or unintended consequences if one country introduces strong domestic reuse policies without considering cross-border compatibility, especially given the interdependence of these countries for goods and products.

Fragmented administrative responsibilities and weak coordination

The distribution of responsibilities for plastic waste management, trade, health, and industrial regulation across multiple ministries, coupled with limited horizontal coordination, often constrains the ability to design coherent national reuse policies or align supporting measures such as fiscal incentives, public procurement, and infrastructure development. Besides, poor coordination between national, regional, and local governments, as well as among various stakeholders, along with complex administrative hierarchies, sometimes creates hurdles to designing and effectively enforcing policies on plastic pollution.

Infrastructure and financial gaps

The development of reuse systems requires a supportive ecosystem of logistics, including return points, industrial washing facilities, quality assurance mechanisms, and digital tracking systems. These components are capital-intensive to establish and maintain. Given the financial constraints faced by the case study countries, governments often prioritise recycling over reuse and are less inclined to provide long-term funding or investment incentives for reuse initiatives. The absence of well-established EPR schemes further limits the availability of dedicated financial mechanisms to support reuse infrastructure. Institutional capacity and private investment opportunities are also often limited, leaving reuse initiatives underfunded and heavily reliant on short-term or philanthropic support.

Economic constraints

The cost advantage of single-use packaging, driven by unpriced externalities and subsidies, often keeps the cost of reuse relatively high, thereby undermining the economic case for reuse systems. Without targeted subsidies or shared collection systems, single-use packaging remains the most convenient and affordable option for both businesses and consumers.

Cultural, and behavioural constraints

Beyond the lack of regulatory or financial incentives, several cultural and behavioural constraints limit the uptake of reuse systems. First, there is limited nationwide awareness among the public regarding reuse systems and the reuse models currently available in these countries, as initiatives developed by start-ups or CSOs remain small in scale and largely concentrated in urban centres. Second, deeply ingrained habits, particularly those associated with convenience and disposability, require sustained behavioural interventions to shift. For example, Thailand's extensive street food culture, characterised by multiple separate condiments, a strong reliance on takeaway packaging, the rise of online delivery platforms, and the small scale of many vendors, makes the operationalisation of reuse systems logistically and financially challenging within the food sector. Third, reuse systems often involve additional effort, whether through returning containers, navigating unfamiliar procedures, or altering shopping behaviours, which may unintentionally create barriers to accessibility and often discourages consumer engagement.

A decorative graphic consisting of multiple thin, wavy lines that flow across the page. The lines are colored in a gradient from purple on the left to green on the right, with some lines being a mix of the two colors. They create a sense of movement and depth.

4. National recommendations for effective reuse policy

The transition toward reuse systems and the resulting reduction in waste present a strategic opportunity for SEA, particularly given the region's significant plastic pollution challenge and the limited infrastructure available to manage the growing volume of waste. This section outlines practical, scalable recommendations that can support governments and stakeholders in developing a suite of recommendations to advance reuse systems at the national level. The proposed recommendations are informed by policy analysis, case studies, stakeholder interviews and the outcomes of the workshop conducted as part of this research.

These recommendations reflect the structural reality of SEA countries: fragmented governance, limited fiscal space, and reliance on voluntary or donor-driven pilots.

Isolated regulatory actions have limited effectiveness when developed and implemented without policy coherence (Global Plastics Policy Centre, 2022). Advancing reuse requires a suite of mutually reinforcing measures that address financing, infrastructure, and behaviour together, rather than fragmented or standalone initiatives. These recommendations therefore involve actions grounded in a systems approach, where regulatory instruments, fiscal policies, and behavioural incentives are designed to work together across multiple governance levels. For these regulatory actions to be effective, careful consideration of the right enabling environment (as outlined in Sections 3.2.1) is required to reduce policy friction, harness the 'easier wins', and facilitate timely implementation.

The path forward lies in institutionalising reuse through legal clarity, aligning financial incentives, coordinating implementation, and embedding social inclusion as a design principle.

4.1 Embed reuse within national packaging and waste frameworks or regulations

A coherent national legal framework is needed if reuse systems are to progress beyond isolated pilots. Across SEA, reuse is referenced in high-level strategies but not operationalised through binding targets or regulatory detail. Establishing clear legal definitions and measurable obligations would help move reuse from voluntary initiatives into enforceable systems.

Integrating reuse into core legislation and national plans.

If reuse is to be treated as a recognised waste-prevention measure, it needs to be incorporated directly within packaging and circular economy laws. As a prerequisite, evidence based research, showing the environmental and economic benefits of reuse systems, needs to be clearly communicated to and understood by policymakers. While implementation and enforcement may pose challenges in the initial phase, setting reuse obligations for producers, retailers, and service providers through regulations can be a first step toward creating consistency and accountability. Linking these obligations with EPR or plastic-reduction targets would also provide a structured compliance route. Introducing quantitative targets, differentiated by sector or product group or the size of the businesses can help ensure a level playing field and reduce enforcement challenges. Setting reuse targets in the most feasible sectors during the first phase can help strengthen monitoring and evaluate the practicality of such targets. Indicators determined based on practicality and contextual relevance, such as minimum reuse rates, required reuse cycles, or national coverage of refill and return infrastructure, would give both regulators and businesses a clear trajectory to plan against.

Defining reuse clearly in regulations to encompass reuse systems.

To incentivise innovation and support the growth of initiatives that enable reuse, the first step is to broaden the legal definition of the term. Currently, while many existing laws and roadmaps emphasise the 3R approach (reduce, reuse, recycle), they tend to interpret "reuse" narrowly, focusing on the repeated use of materials rather than recognising reuse systems as an upstream intervention. Clearly distinguishing reuse from recycling and explicitly defining reuse in terms of reuse systems, rather than materials reuse, can help shift public perceptions and understanding of reuse. Amending core legislation to explicitly include reuse systems within the definition can establish a stronger foundation for subsequent regulations, incentives, and policy measures that promote and scale reuse across sectors.

Aligning related standards and hygiene regulations.

Existing food, drug, and trade regulations often pose hidden barriers to the adoption of reuse systems. While these standards are essential for ensuring safety, sanitation, and hygiene, they must also be practical and adaptable to reuse contexts. Simplifying regulatory requirements, without compromising consumer safety, and introducing proportionality clauses can enable smaller operators to participate in emerging refill and reuse markets. At the same time, developing clear and consistent safety and sanitation guidelines for refill business models across all potential sectors would help reduce liability concerns and build consumer confidence in reuse practices. Designing policies differentiated by sector or product type (for example, applying distinct standards for food and personal care versus household care products) can help eliminate unnecessary regulatory barriers to market participation.

Introducing and effectively implementing supporting regulations.

Supporting regulations, such as SUP bans and single-use taxes, can enhance the effectiveness of reuse policies and ensure the price competitiveness of reusable alternatives compared with single-use products. Maintaining price competitiveness encourages greater consumer adoption of reuse models and incentivises businesses to enter the market and innovate within reuse systems. Revenues from the single-use tax can be used to fund reuse infrastructure or subsidise consumer-facing incentives. Clear communication of the cost differential between single-use and reuse is important for uptake.

Requiring reuse systems in closed settings, such as hospitality and catering settings.

Legislation or local ordinances can require hotel, restaurant, and catering (HORECA) providers to offer reusable options and accept consumer-brought containers. Mandates can focus on high-waste contexts such as take-away services, events, and delivery platforms. As an initial step, restaurants and food delivery services could be required to give customers the option to opt out of disposable utensils by default, making single-use utensils available only upon request. To set an example, regulations can prohibit the use of avoidable SUPs (such as bottled water and disposable utensils) in government offices and at government-organised events at both national and local levels, replacing them with reusable alternatives. Accompanying guidance and monitoring are important to ensure compliance and protect hygiene standards.



Case highlight

All three case study countries have FDA regulations that set standards for refilling certain types of products to ensure consumer safety and hygiene. While these standards are important, their high requirements without proportionality clauses often create compliance challenges for small-scale businesses and discourage their participation in refill models. Besides, these regulations currently cover only selected products, leaving out many other products and sectors where reuse or refill could be implemented. This regulatory gap creates uncertainty for refill businesses and investors, limiting their ability to scale due to concerns that sudden new regulations could jeopardise operations.

4.2 Create financial and market incentives for reuse system development

At present, most reuse interventions and businesses operate with financial support from CSOs, grants provided by international development agencies, and pilot funding. Current market conditions continue to favour SUP packaging, reflecting low material costs and weak financial incentives for reuse. Progress on reusable packaging systems depends on targeted financial support and investment in physical infrastructure and innovation. Financial tools can help correct market distortions that favour SUP packaging and make it easier for businesses and local authorities to participate in reuse. However, transitioning to reuse systems requires more than piecemeal interventions. Combining tax incentives, public funding, and infrastructure investment creates a more stable operating environment for businesses and local governments transitioning away from single-use paradigms. The following actions can support system growth and long-term viability:

Introducing DRS to include reusable containers, with appropriate reimbursement rates.

National coordination can consolidate donor support, public financing and producer contributions (such as from EPR fees) into dedicated national funds. Other potential funds could be linked into this, such as those for carbon offsetting, increasing biodiversity and social benefits, if appropriate. Having multiple and mixed funding streams is essential, especially until the market for reuse systems matures, for the long term resilience of reuse systems, as variable economic conditions and competing national expenditure priorities will impact the fund available. These funds can be used to offset initial capital expenditure, finance critical infrastructure, research into new materials, behavioural awareness campaigns, future planning, and to ensure a just transition for those whose jobs may change and to develop the capacity and skills of groups such as informal workers. The funds can be used to consolidate and ensure the longevity of reuse systems, and provide critical stability through the end of pilot funding gap. Clear eligibility criteria and reporting obligations for the recipients of funds, grants or loans can build long-term monitoring and evaluation processes.

Using tax and subsidy incentives to stimulate business transitions to reuse systems.

Financial incentives such as tax credits and subsidies can make investments in reuse systems more attractive, particularly for startups. However, the tax mechanisms alone may not be sufficient, in some cases, a more direct investment approach may therefore offer greater simplicity and impact for the early stage of reuse system development.

Exploring national reuse transition funds or dedicated financing windows.

Dedicated financing mechanisms could help pool public, producer, and donor resources to support investment in reuse infrastructure such as reverse logistics networks, washing facilities, and digital tracking systems. In practice, establishing entirely new funds may be administratively and politically challenging in several SEA countries, where even the introduction of core instruments such as EPR has proven difficult. As a result, governments may consider integrating reuse financing within existing mechanisms, for example through dedicated “reuse windows” within environmental funds, circular economy programmes, or EPR systems, rather than creating new standalone funds. These financing structures could provide a mix of grants, concessional loans, and equity support, alongside resources for planning, stakeholder engagement, and ecosystem development. In some cases, fiscal instruments such as material or packaging taxes could also help generate revenue streams that stimulate investment in reuse systems. Clear eligibility criteria and reporting requirements would be needed to ensure that financing is linked to measurable outcomes and supports scalable system development.

Redirecting existing fiscal instruments towards reuse.

Where plastic bag or packaging taxes already exist, a share of revenues could be directed towards building reuse capacity. This would transform existing deterrent measures into enablers of change by financing the infrastructure and public engagement needed for long-term uptake.

Supporting SME access to finance and shared facilities.

Smaller firms often lack the capital and logistics to invest in reuse systems. Shared cleaning and redistribution facilities, supported through public-private partnerships or industrial park planning, would allow smaller businesses to participate on fairer terms. Strengthening SMEs' capacity to access finance by guiding them on how to prepare and submit grant and funding applications and connecting them with potential investors can help ensure a level playing field in market participation. Direct government support in the form of seed funding, grants, match funding, or low-interest loans can incentivise start-ups to develop innovative reuse business models and expand market participation.

Incentivising investors and financial institutions to fund reuse.

Investors and financial institutions could be encouraged to direct capital into reuse infrastructure through guarantees, risk-sharing mechanisms, green taxonomy or preferential terms. Mobilising private finance would reduce reliance on donor funds and government budgets.

Case highlight

Indonesia's Circular Economy roadmap promotes reuse but lacks mechanisms to finance implementation. Enterprises such as Enviu have piloted refill systems, yet expansion has been constrained by high upfront costs and limited access to credit. Establishing a dedicated reuse window under the Environmental Fund Management Agency could enable concessional finance for reuse infrastructure and operations.

4.3 Reform EPR systems to fund and operationalise reuse systems

EPR has become the cornerstone of plastic waste policy across SEA, yet most schemes remain focused on recycling rather than waste prevention. Realigning EPR to explicitly support reuse would create a durable financial and institutional foundation for transition.

Mandating reuse as a recognised compliance pathway within EPR schemes.

If producers are able to meet part of their recovery obligations through verified reuse, it would create a direct incentive for investment in reusable packaging. National EPR regulations could include reuse as an eligible form of waste reduction, accompanied by measurable targets and reporting standards. Introducing mandatory reuse targets initially for high-impact and immediate feasible sectors, such as food and beverages, and gradually expanding to additional sectors, would encourage businesses to transition to alternative models while providing sufficient time to adapt.

Allocating a fixed share of EPR revenues to reuse system development.

Designating a percentage of producer contributions for reuse infrastructure, pilot projects, or research would provide stable funding for early-stage implementation. Allocation could be linked to performance indicators such as return rates or packaging lifespan.

Using eco-modulation to reward durable and refillable packaging.

Financial contributions can be differentiated to reflect differences in material type, durability and the potential for reuse. Eco-modulation enables higher fees to be applied to formats with limited reuse potential, high material consumption, or reduced transport efficiency, while offering lower fees or bonuses for packaging that can be efficiently reused multiple times with minimal environmental burden. Introducing bonuses applied at the point of entry into a reuse system can create upfront incentives for producers to invest in packaging that meets these criteria, encouraging design choices that reduce lifecycle emissions and system losses. Clear definitions and verification mechanisms would be needed to avoid greenwashing and ensure measurable outcomes.

Aligning EPR reporting with reuse monitoring.

Incorporating reuse-related indicators into producer reporting requirements would provide governments with data on packaging flows, return rates, and lifecycle impacts. Transparent publication of this data would improve accountability and support evaluation.

Ensuring equitable access to EPR funding for SMEs and social enterprises.

Simplified application procedures and technical assistance would enable smaller actors to access EPR support, promoting innovation and preventing market concentration among large producers.

Ensuring that reusable packaging is charged once under EPR, and not at each rotation.

Applying fees only at the point of entry can avoid penalising reuse. Charging for each reuse cycle undermines economic viability and discourages uptake. Ensuring single charges for reusable formats, alongside clear reporting obligations, supports a fairer and more consistent application of the polluter-pays principle.

Case highlight

Although the EPR Act, 2022 of the Philippines and its implementing rules and regulations mention reuse and refill systems as a strategy to meet obligations under the Act, the regulation lacks specific reuse targets, places greater emphasis on recovery rather than reduction and does not provide sufficient incentives for businesses to adopt reuse systems. In practice, the flexibility allowing businesses to choose between reuse and recycling often leads them to favour recycling, which is perceived as the simpler and less resource-intensive option.



4.4 Strengthen governance, coordination, and implementation capacity

Institutional fragmentation, and a lack of key agencies supporting and leading on reuse systems, has been one of the strongest barriers to scaling reuse in the region. Greater coordination across ministries and alignment between national and local levels would help translate strategy into practice.

Strengthening coordination mechanisms across ministries.

Reuse policy intersects with responsibilities held across multiple ministries, including environment, trade, health, and local government. While formal inter-ministerial bodies may best support coordination as a primary recommendation, establishing new structures may be difficult and time-consuming in practice. In many cases, strengthening existing mechanisms, such as designating a lead agency, creating technical working groups, or integrating reuse into existing circular economy coordination platforms, may be more effective. Initial steps could include convening cross-ministry dialogues to clarify roles, identify regulatory overlaps, and develop practical guidance that aligns requirements across packaging, food safety, and waste management policies.

Creating a national-level platform to coordinate and scale local level interventions.

A national platform to consolidate fragmented local regulations and provide unified guidance and standards can improve enforcement and enhance business certainty. It can also facilitate scaling successful, replicable local initiatives to the national level. Maintaining a repository or website of best practices from LGUs will further support replication and wider adoption of effective reuse measures.

Empowering local governments to operationalise reuse.

LGUs are often the first to engage directly with retailers and consumers. Providing them with technical assistance, financial support, and legal backing to implement reuse measures would improve policy reach and consistency. Encouraging LGUs to establish reuse and refill stores, either managed directly or in partnership with private agencies, can drive behavioural change, and motivate investment and business participation in reuse systems.

Developing national standards and certification schemes.

Interoperable packaging formats, labelling, and cleaning protocols can strengthen trust and lower compliance costs. Introduction of a national certification scheme for reusable packaging and its integration with EPR would provide assurance to both businesses and consumers, while supporting interoperability across supply chains.

Case highlight

In the Philippines, more than 300 LGUs have enacted ordinances regulating SUPs. However, the types of plastics covered, the nature of restrictions imposed, and the levels of enforcement vary significantly across jurisdictions. This inconsistency, particularly between adjacent cities, creates enforcement challenges and undermines overall policy effectiveness. Establishing a unified national policy can harmonise these fragmented regulations, ensuring greater consistency, compliance, and enforcement across all LGUs.

4.5 Build public participation and social inclusion in reuse systems and policy design

Public participation remains a prerequisite for scaling reuse, yet most systems do not offer consumers clear reasons to engage. Especially in the socio-cultural context of SEA, where cost and convenience strongly influence daily purchasing decisions, structural incentives embedded within these decisions are far more effective than standalone awareness campaigns. Awareness and education campaigns have limited impact on behaviour without supportive infrastructure, visible incentives, and a user-friendly experience. This includes reducing friction at the point of return, making packaging options more visible at point of sale, or ensuring reuse is the default rather than the alternative. Policy design often assumes environmental awareness is enough to drive participation, overlooking the importance of convenience, price signals, and habit. The following actions to structure reuse systems to reward participation, reduce friction, and build social norms can help normalise reuse in everyday routines.

Case highlight

Thailand's NGO-led Bottle Free Seas programme has worked with schools and hotels to install water refill stations and eliminate single-use bottles. The success of this initiative demonstrates that when convenience and awareness are combined, reuse can gain rapid social acceptance even without regulatory mandates. Integrating similar initiatives into national communication strategies would strengthen long-term participation.

Ensuring wider consultations with all the impacted actors during policy design.

Engaging all affected stakeholders, including informal waste pickers, street vendors, and small businesses, in the policy design process can ensure a smoother and just transition to reuse practices. Inclusive consultations not only promote fairness and social acceptance but also strengthen compliance and encourage community ownership of reuse initiatives. Developing public-private collaboration, particularly with FMCG companies in the cosmetics and food industries, and encouraging them to establish robust reuse mechanisms under their ownership, can help build the necessary reuse infrastructure, benefiting SMEs in the process.

Leveraging existing skill and experience by integrating informal and community actors into reuse logistics.

Informal sector workers, including waste pickers and small vendors, can play significant roles in collection, cleaning, and redistribution, leveraging local knowledge and experience. In some contexts, such as in India and Brazil, organised cooperatives already recover reusable containers, particularly in beverage systems. Their fair inclusion can potentially offset costs associated with developing new reuse systems and infrastructure. Waste pickers' reuse activities could be supported through formal recognition and inclusive fiscal instruments. Any fiscal instruments may require embedded social eligibility criteria, in their design and implementation, to ensure equitable market access for waste pickers. This would require monitoring and benchmarks to quantify reusable materials collected, which justifies funding and support for waste pickers, guides policy, incentivises stakeholders and improves circular economy outcomes. Investing in training programmes for informal workers could also be provided, for example in repair and refurbishment services, which improves reuse and circular economy outcomes and provides additional income.

Ensuring equitable and geographically inclusive system design.

National and municipal planning for refill and return systems can ensure that access is not limited to urban areas. Locally adapted solutions, such as mobile refill stations or shared collection points, could extend participation to smaller towns and islands. Strategic spatial planning is also important. Designating appropriate locations for refill stations, such as supermarkets, neighbourhood centers, and public transit hubs, can help remove convenience barriers that often discourage consumer participation in reuse practices across SEA. Coordinated spatial planning can further minimise brand conflicts and optimise consumer access, ultimately supporting broader adoption of reuse systems.

4.6 Ensure reliable data collection and transparent monitoring and evaluation to support reuse

Reliable, high-quality data is foundational to the successful design, implementation and evaluation of the national reuse systems and related policies. Data on intervention efficacy, on the economic and environmental benefits, is also essential to ensure policies are working and to gain more public and political support, to further expand and improve reuse systems in the long term. Without consistent information on reuse flows, financial investments, consumer behaviour, and the environmental impacts, policymakers and stakeholders would face significant challenges in making informed decisions at the local and national levels. This can hinder the effective allocation of resources and compromise the enforcement and compliance of existing regulations.

Collecting data to inform the design, implementation, and refinement of policies.

Relevant data on existing waste flows, current waste management practices, business readiness, infrastructure availability, and consumer behaviour can guide the development of reuse policies and supportive legislation. Periodic evaluation of policy outcomes, along with assessments of implementation, compliance, and pilot intervention results, will enable regular refinement and updating of policies, ensuring their effectiveness and adaptability.

Using cost–benefit analysis to guide financing decisions.

Cost–benefit analysis can identify which reuse models deliver the highest return on investment, in terms of waste reduction, emissions savings, and operational performance. Governments could conduct recurring assessments of the economic, environmental, and social impacts of reuse systems and investments. National systems could monitor both public and private financing of reuse, enabling governments to assess how funds are allocated, whether they are reaching intended actors, and what results they produce based on pilot outcomes and results.





5. Ways forward at the regional level

While policy development for reuse is largely driven at the national level, there are several areas where regional coordination across Southeast Asia can help address shared challenges and support more consistent system development.

Regional alignment to reduce inconsistencies at borders.

Establishing a harmonised regional policy framework for reuse under the ASEAN Circular Economy Framework can help overcome existing fragmentation across countries. This could include measures that make sure regulations apply equally across the whole supply chain, where manufacturing, distribution and sales to end users exist across multiple countries. Approaches could include developing a Common Reuse Protocol for standardised cleaning, labelling, and data reporting; embedding reuse metrics within EPR and corporate reporting systems; and mobilising fiscal instruments such as tax incentives, public procurement, and blended finance to scale shared infrastructure. Sharing methodologies for expressing targets, for example in terms of tonnage or market share, and fostering regional dialogue and knowledge exchange can further support the development of common reference points for reuse value chains, including valuation approaches, pricing structures, and minimum safety and quality standards. While implementation will remain at the national level, greater alignment across these areas would improve comparability, reduce friction for producers operating across markets, mitigate unintended cross-border effects arising from misaligned policies (such as differences in waste management regulations), and enable more effective learning between countries. Establishing a Regional Reuse Knowledge Hub under the Asia Reuse Consortium and creating a Reuse Entrepreneurship Fund could further strengthen capacity building and innovation. There is also an opportunity to engage multinational producers to adopt more consistent approaches to reuse across markets, helping to reduce fragmentation in system design.

Promote international reuse system uptake in the Global Plastic Treaty.

SEA countries can support international progress on reuse by advocating for its inclusion in the Global Plastics Treaty as a core mechanism for reducing plastic pollution. This includes encouraging the adoption of global targets, reporting obligations, and financing structures that support reuse at scale. As treaty implementation mechanisms emerge such as potential national plans, Conference of the Parties (COP) processes, and possible compliance frameworks, countries in the SEA region can help inform their design by sharing diverse national experiences and practical approaches to reuse. While policy contexts differ across SEA, coordinated signals and peer learning can help strengthen regional influence and provide relevant insights for other countries facing similar conditions. Linking national frameworks to the Global Plastics Treaty will help secure international financing and technical support for implementation.

Promote inclusive system design through regional guidance and exchange.

Regional collaboration can help ensure that reuse systems are designed in ways that recognise and include informal actors, particularly waste pickers and informal street vendors. This includes sharing approaches to measuring and recognising their contribution to reuse, as well as models for integrating social considerations into policy design, such as linking incentives to social criteria or supporting collective organisation. Lessons from different country experiences can help inform more inclusive approaches. Regional platforms can also support capacity building and training exchange, helping to strengthen the ability of informal actors to engage in reuse systems as these develop.



Conclusion

This report has outlined specific actions to address key policy and financing gaps that currently limit the uptake of reuse in three SEA countries. Across the case study countries, reuse remains largely unsupported by binding national policy, with no mandatory targets, limited regulatory incentives, and a reliance on indirect measures such as local SUP restrictions, and voluntary initiatives. While reuse practices and pilot models are present, often building on existing cultural behaviours and local innovation, these have not yet been translated into coherent, system-level policy frameworks. As a result, progress remains uneven, with limited investment certainty and few pathways for scaling beyond niche applications.

Advancing reuse in SEA will require a shift from fragmented and indirect support toward more deliberate policy design. This includes establishing clear definitions and targets for reuse, aligning EPR and fiscal mechanisms to create economic incentives, and addressing regulatory barriers that currently constrain scaling, particularly in areas such as health standards and product regulations. Greater coordination across national and subnational levels will also be necessary, alongside clearer allocation of institutional responsibilities and more consistent enforcement. Given the diversity of contexts across the region, there is no single model for reuse. However, common priorities emerge. Reuse needs to be more explicitly integrated within existing policy frameworks, supported through infrastructure and system design, and underpinned by stronger data and monitoring systems. Building on existing and traditional practices, and emerging policy momentum, there is an opportunity to develop approaches that are both contextually appropriate and scalable, enabling reuse to play a more central role in addressing plastic pollution and supporting circular economy transitions in SEA.

References

Please note, country case studies are independently referenced in their respective reference lists (See Annex 3).

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Annex 1: Glossary

Circular economy	A circular economy is one that is restorative and regenerative by design. It looks beyond the take-make-waste extractive industrial model, and aims to redefine growth, focusing on positive society-wide benefits. It is based on three principles: design out waste and pollution; keep products and materials in use; and regenerate natural systems.
Consumer	Means any natural person who is acting for purposes which are outside their trade, business or profession.
Deposit return scheme (DRS)	A system in which a refundable surcharge is applied to a product to encourage consumers to return it after use. In practice, DRSs can be applied to several different situations: • Single-use beverage packaging (where it encourages return for subsequent recycling) • Reusable beverage (or non-beverage) packaging (where it encourages return for reuse) • Return of non-packaging products (though these may not always involve a centralised system that enables universal return and refund regardless of point of sale). Deposits could be applied to fulfil reuse or recycling objectives in these cases.
Downstream measures	Downstream measures in the plastics lifecycle focus on managing plastic waste, recycling, and leakage after product use. Key actions include improving waste collection, developing sorting/recycling infrastructure, and implementing bans on single-use items.
Extended Producer Responsibility (EPR)	An environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle. An EPR policy is characterised by: • the shifting of responsibility (physically and/or economically; fully or partially) upstream toward the producer and away from municipalities; and • the provision of incentives to producers to take into account environmental considerations when designing their products.
Packaging	All products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer. In this report, we focus on plastic packaging.
Packaging waste	Means any packaging or packaging material that is waste, with the exception of production residues.
Packaging waste prevention	Means measures that are taken before any packaging or packaging material has become packaging waste and that reduce the quantity of packaging waste, so that less or no packaging is required to contain, protect, handle, deliver or present products, including measures as regards the re-use of the packaging and measures to extend the life of the packaging before it becomes waste.

Annex 1: Glossary (continued)

Reduce	Increase efficiency in product manufacture or use by consuming fewer natural resources and materials. It includes the prevention of food waste along food value chains including in agricultural production, processing, manufacturing, distribution and consumption.
Recycle	Recover materials from waste to be reprocessed into new products, materials or substances whether for the original or other purposes. This includes the reprocessing of organic material but does not include energy recovery and reprocessing into materials that are to be used as fuels or for backfilling operations.
Refill	Means an operation by which a container that fulfils the packaging function, and that is either owned by the end user or purchased by the end user at the point of sale of the final distributor is filled by the end user or by the final distributor with one or several products purchased by the end user from the final distributor.
Refill station	Means a place where a final distributor offers to end users products that can be purchased through refill.
Reuse	Reuse means use of a product (or component) multiple times in its original form for the same purpose for which it was conceived.
Reusable	Products (including packaging) that are conceived, designed, and placed on the market to be used multiple times for the same purpose for which they were conceived in a system for reuse.
Reused	A component or part that has reached the end of one use and is used again with minimal or no physical alterations—such as cleaning, minor adjustments, or repairs.
Reuse system	Systems for reuse means organisational, technical/or financial arrangements, which enable the re-use either in a closed or open loop system. In this report, we focus on reuse systems wherein consumers return the used product to the system operator, either from home or via collection points. A business or service-provider then takes care of cleaning and redistribution.
Rotations	The number of uses or trips performed by a reusable product from the moment it is placed on the market to the moment it is sent back for reuse in a system with a view to its repeated placing on the market. This can relate to potential rotations, referring to the number of uses that a product is designed to be technically capable of achieving, or the actual rotations that a product achieves in practice within a given operational context.

Annex 1: Glossary (end)

Return rate	The percentage of reusable products returned to the starting point in the reuse system at the end of a rotation. The higher the return rate, the more economically viable the reuse system, however, return rate should not be considered equivalent to a reuse rate, since items that are returned may not end up being reused thereafter.
Single-use plastic product	Means a product that is made wholly or partly from plastic and that is not conceived, designed or placed on the market to accomplish, within its life span, multiple trips or rotations by being returned to a producer for refill or re-used for the same purpose for which it was conceived.
Single-use packaging	Means packaging which is not reusable packaging.
Upstream measures	Upstream measures in plastics refer to interventions implemented at the earliest stages of the product lifecycle (raw material extraction, design, and production) to prevent plastic waste and pollution.

Annex 2: Interview questions and coding

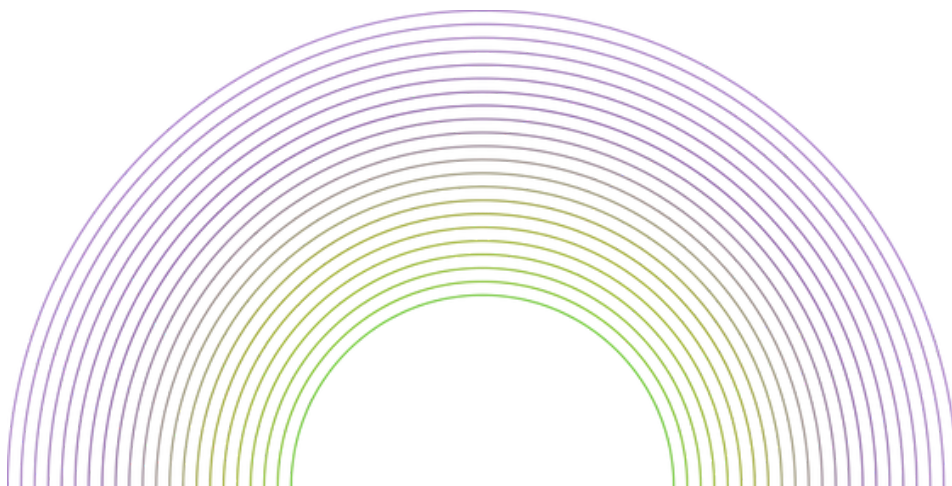
Semi-structured interview questions

The interviews conducted for this research were semi-structured, designed to guide discussion while leaving space to probe issues in greater depth as they arose. The set of questions presented in this annex therefore represents an indicative framework rather than a rigid script. In practice, the interviews often explored additional themes raised by respondents, reflecting the iterative and adaptive nature of the inquiry. This approach allowed us to capture both expected and unanticipated perspectives on the design and implementation of reuse policy.

The main questions guiding the interviews were as follows:

- What is the current level of reuse?
- What are prevailing attitudes towards reuse?
- Why does reuse exist in the absence of policies that explicitly incentivise it?
- Is the government likely to move towards stronger support for reuse and what is the current policy focus?
- What needs to happen to enable a transition towards reuse in the future?

Topic	Question
Reconfirmation of consent	• Are you happy to proceed with this recorded interview?
Demographics	• Could you describe your role and your organisation's involvement in reuse systems?
Reuse policy landscape currently	• What kind of reuse systems currently exist? - e.g., local examples, pilots, some businesses or retailers • Why does reuse exist if there is no policy to incentivize it? / What motivates this reuse? • Does this system work, is it successful? • Main barriers and opportunities • What is currently limiting the growth of reuse? E.g., lobbying
Future reuse policy	• Do you think reuse should become part of national policy? • Why, why not? • Do you think that policy would help support the growth of reuse in XX? • Why, why not • What specific policy do you think would be beneficial? • What current policies exist that support reuse?- single use bans, taxes etc • Are there any policies that would limit reuse? E.g., sanitary policies, regional policies e.g., Colombia • What specific support would be useful for businesses to support reuse?
Close	• What three things would you like to see happen to support reuse in your country? • Are there any countries that you think could be useful to learn from, from a reuse perspective?



Annex 2: Interview questions and coding

Coding framework

Once anonymised, transcripts were coded against these themes to identify consistent findings, highlight areas of divergence, and guide deeper analysis. This framework therefore reflects both the planned lines of inquiry and the issues that interviewees raised in practice.

Key: ID = participant ID

Focus areas	Interview question (paraphrased)	Guidance	[ID]	[ID]	[ID]	[ID]	[ID]	[ID]	Synthesis (describing data across all cases)
Demographics	Could you describe your role and your organisation's involvement in reuse systems?	Select role from drop-down							
		Other points of interest							
Policy landscape	What do you think about the policy landscape in [case study country] and how it facilitates reuse?	General sentiment							
		Other comments, observations in bullet points							
	What do you think was the main driver for the development of policy around reuse? Or in your opinion, what factor will be the main driver for the development of reuse policy in case study countries?	Select response							
		Other comments, observations in bullet points							
	What has caused conflict / problems?	Observations in bullet points but highlight on interview document							
	How could the regulatory environment support overcoming these?	Observations in bullet points but highlight on interview document							
	What are the gaps in current policy or policy landscape?	Answer in bullet points							
	What kind of policy landscape will facilitate reuse?	Observations in bullet points, but highlight on interview document							
Policy design	Do you think reuse policies should be integrated into EPR schemes, or would standalone regulations for reuse be more effective in achieving reuse goals?	Select response							
		Other comments, observations in bullet points							
	For policy design, what was successful?	Observations in bullet points but highlight on interview document							

Annex 2: Interview questions and coding

Coding framework (continued)

Key: ID = participant ID

Focus areas	Interview question (paraphrased)	Guidance	[ID]	[ID]	[ID]	[ID]	[ID]	[ID]	Synthesis (describing data across all cases)
Policy design (continued)	For policy design, what was problematic?	<i>Observations in bullet points but highlight on interview document</i>							
	What other policies supported reuse?	<i>Observations in bullet points but highlight on interview document</i>							
	How was the policy designed?	<i>Observations in bullet points but highlight on interview document</i>							
	Who was/should be consulted in policy design?	<i>Observations in bullet points but highlight on interview document</i>							
	Key observations on finance or mechanisms for financial delivery	<i>Observations in bullet points but highlight on interview document</i>							
Implementation and adaptation	Do you think the reuse policy is successful?	<i>Observations in bullet points, but highlight on interview document</i>							
	How have stakeholders reacted to the policy?	<i>Observations in bullet points, but highlight on interview document</i>							
	How have businesses had to change in response to the requirements of regulations?	<i>Observations in bullet points, but highlight on interview document</i>							
	Has there been sufficient support for small to medium sized businesses in adapting to and complying with reuse requirements of the policy? Or what are the challenges faced by refill/reuse businesses in the absence of a conducive policy landscape?	<i>Observations in bullet points, but highlight on interview document</i>							
	Have there been any unintended consequences as a result of the reuse regs?	<i>Observations in bullet points, but highlight on interview document</i>							
	What will support businesses to implement / adapt?	<i>Observations in bullet points, but highlight on interview document</i>							

Annex 2: Interview questions and coding

Coding framework (end)

Key: ID = participant ID

Focus areas	Interview question (paraphrased)	Guidance	[ID]	[ID]	[ID]	[ID]	[ID]	[ID]	Synthesis (describing data across all cases)
Interview close	What are the top three enablers of reuse? (Enabler 1)	<i>Observations in bullet points, but highlight on interview document</i>							
	What are the top three enablers of reuse? (Enabler 2)	<i>Observations in bullet points, but highlight on interview document</i>							
	What are the top three enablers of reuse? (Enabler 3)	<i>Observations in bullet points, but highlight on interview document</i>							
	Are there lessons from other countries that could enhance the effectiveness of reuse policy in your country?	<i>Observations in bullet points, but highlight on interview document</i>							
Analysis and synthesis	On reflection, who did the interviewee see as more important in driving reuse - industry or government?	<i>Select response</i>							
		<i>Please list</i>							

Annex 3: Country case studies

This annex presents detailed case studies from the four selected countries, providing in-depth insights into their approaches, challenges, and successes. These case studies illustrate how different national contexts influence the implementation of key policies and initiatives, offering valuable lessons and comparisons on the design and implementation of reuse policies.

Annex 3A: Reuse policy in Indonesia

1. Reuse context

Reuse practices have long been embedded in Indonesia's traditional culture and daily life, as in many Southeast Asian countries. However, the development of a formal reuse system remains at a relatively early stage in the country. At present, Indonesia does not have specific legal or policy instruments that set legally binding reuse targets or directly regulate businesses adopting reuse or refill solutions. However, the government has recently introduced policy perspectives and roadmaps that highlight the circular economy concept and emphasise reuse and refill practices. Although not legally binding yet, these documents outline Indonesia's policy vision for the transition toward a green and circular economy and identify the adoption of reuse and refill business models as one of the strategies to achieve this goal, signalling the potential emergence of a more supportive policy environment for reuse initiatives in the near future. Despite the existing policy gaps, a number of start-ups experiment with reuse and refill models in Indonesia, often driven by the environmental commitment of their founders.

Reuse history

Reuse practices are deeply interwoven in Indonesia's traditional wisdom and daily life. Common examples include bringing personal containers when purchasing essentials such as rice and cooking oil, and even acquiring herbal medicines called Jamu from travelling sellers using one's own bottles or glasses, and the widespread use of rantang (stacked food containers) to carry meals (Mubtasir, 2024; Nusantara et al., 2024). Another culturally embedded practice is the use of refillable water gallons in homes and offices, as in Indonesia, the filter technology is not widely available. This has given rise to a thriving market where vendors collect empty gallons, clean and refill them with drinking water (Jong, 2025), with certain water quality standards and regulations in place to ensure public health. The beverage industry also has a long-standing history of reuse. Carbonated drinks, including Coca-Cola, used to be sold in glass bottles, while the well-known Indonesian brand Teh Botol continues to offer its products primarily in reusable glass packaging.

In recent years, reuse practices in Indonesia have evolved in more innovative, technology-driven directions, with a growing number of businesses adopting refill and return-based models (Ministry of National Development Planning, 2024; Nusantara et al., 2024).

In summary, Indonesia's reuse history is marked by:

- Strong regional reuse traditions embedded in local cultural practices.
- Emergence of small-scale start-ups introducing refill and reuse business models despite the absence of national-level policies and infrastructure.
- Shift in policy perspectives toward supporting a circular economy and encouraging reuse and refill practices.

Annex 3A: Country case studies Indonesia

Reuse system structure

While Indonesia currently lacks formal, nationally coordinated reuse systems, reuse itself remains embedded in everyday life. Many sectors still rely on informal but functioning reuse practices such as restaurants serving meals with washable crockery, cafes using durable cups, and households reusing containers. These everyday systems demonstrate that reuse is not new, but rather a long-standing social norm that has been eroded by the spread of single-use packaging and the low cost of disposability. Recently, a number of business-led initiatives are adopting reuse practices aligned with the four reuse business models developed by the Ellen MacArthur Foundation: refill at home, refill on-the-go, return from home, and return on-the-go (Dietplastik Indonesia, 2024). These private-sector initiatives represent an attempt to protect and expand existing reuse practices, rather than to invent them. However, these efforts operate largely without coordinated government support or enabling infrastructure. The absence of clear regulations, fiscal incentives, or shared logistics networks limits their ability to scale or to compete with single-use systems that remain cheaper and more convenient for both producers and consumers.

Evolution of policy landscape

Indonesia, like many other low-income countries, faces pressing challenges in solid waste management, particularly with plastic waste. Plastic waste constitutes the second-largest component of Indonesia's municipal solid waste stream, with around one-third being mismanaged and more than half left uncollected (World Bank, 2021). Despite the involvement of both formal and informal actors, the national plastic recycling rate stands at only 10% (Zahrah et al., 2024). However, the country does not yet have a binding legal instrument that promotes reuse or refill solutions or sets mandatory targets for reuse systems. In the absence of reuse-specific policies, this section outlines the existing regulatory frameworks and policy perspectives in Indonesia, which broadly support a circular economy approach and plastic pollution reduction, and implicitly encourage reuse and refill solutions.

Since the early 2000s, Indonesia has shown increasing interest in adopting a circular economy approach to waste management (Government of the Republic of Indonesia, 2012). A significant turning point in the legal framework supporting this shift came with the enactment of Law No. 18 of 2008 on Waste Management, which introduced a more integrated and circular framework. The law emphasises waste reduction at the source and promotes a resource cycle approach, centered on the 3Rs; reduce, reuse, and recycle. It mandates a holistic approach to waste management, addressing both upstream and downstream stages. The law also introduces the concept of Extended Producer Responsibility (EPR), requiring producers to manage product packaging and items that are difficult or impossible to decompose. Additionally, it provides incentives for entities engaging in waste reduction and disincentives for those using materials that are non-environmentally friendly, non-reusable, or non-recyclable.

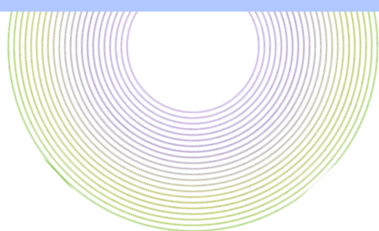
To operationalise this umbrella law, a series of regulations were introduced, including Government Regulation No. 81 of 2012 on the Management of Household Waste and Household-like Waste, Regulation of the Minister of Environment and Forestry No. 14 of 2021 on Waste Management at Waste Banks, Regulation of the Minister of Public Works No. 03 of 2013 on Waste Infrastructure and Facilities, Regulation of the Minister of State for Environment No. 13 of 2012 on 3R Implementation through Waste Banks, Regulation of the Minister of Environment and Forestry No. 75 of 2019 on the Roadmap for Waste Reduction by Manufacturers, and Presidential Regulation No. 97 of 2017 on the National Policy and Strategy on Household and Household-like Waste Management. Although primarily focused on managing existing waste, these regulations collectively highlight the importance of reducing waste generation and promoting the conversion of waste into resources, with a strong emphasis on the 3Rs (Government of the Republic of Indonesia, 2012).

Annex 3A: Country case studies Indonesia

While interviewees generally welcomed these regulations, many highlighted that their narrow definition of 'reuse' limits the development of reuse systems. These regulations primarily interpret reuse as a downstream measure, focusing on the direct reuse of waste. Specifically, they define 'reuse' as an effort to use waste again, either for the same function or a different one, and/or to reuse parts of the waste that remain useful, without undergoing any prior processing.

"The Waste Management Bill also needs to be refined. Because the loose translation of reuse is actually reuse of waste. So it will be wrongly defined by other people, because some industries already mentioned that "we are using waste for recycling materials." It's very misinformation."

NGO, P39



"[...] we have the definition of reuse limited to how to reuse the waste, not reuse a system. I think we have to make a new definition in our regulations."

Policy implementor, P47

Government Regulation No. 81 of 2012 on the Management of Household and Household-like Waste envisaged the establishment of a framework for developing waste management policies and strategies, recommending the preparation of a structured roadmap every ten years to enable the phased implementation of waste reduction strategies. In support of introducing reuse solutions, the regulation proposes several measures to limit waste generation, including the use of recyclable, reusable, and biodegradable goods or packaging, restrictions on plastic bags, and the avoidance of single-use products and packaging.

Further reinforcing the life cycle approach to waste management and the principles of 3Rs, the Ministry of Environment and Forestry issued Guidelines for implementing reduce, reuse, and recycle through waste banks for municipal waste (The Minister of State for Environment Regulation No. 13 of 2012). This Regulation was replaced by the Minister of Environment and Forestry Regulation No. 14 of 2021 on Waste Management at Waste Banks which provides more comprehensive provisions concerning the requirements for waste banks, and expands the definition of waste banks beyond simple waste management facilities based on the 3R principles. Under this updated regulation, waste banks are also recognised as means for education and behavioural change in waste management and as mechanisms for implementing circular economy practices. This new regulation recognises the circular economy approach in waste management through coordinated efforts among national and regional governments, as well as the community, to ensure economic benefits, public health, and environmental safety.

To implement the provisions of Government Regulation No. 81 of 2012, Presidential Regulation No. 97 of 2017 on the National Policy and Strategy on Household and Household-like Waste Management and Ministerial Regulation No. 75 of 2019 on the Roadmap for Waste Reduction by Manufacturers were introduced. These regulations set a target of reducing household waste by 30% by 2025 through measures such as limiting waste generation, promoting reuse, and encouraging recycling.

Presidential Regulation No. 97 of 2017 outlines a broad set of strategies for waste reduction, including strengthening coordination across different levels of government, enhancing community participation through information, education, and communication (IEC) initiatives, introducing systems of incentives and disincentives, and establishing an EPR framework. Ministerial Regulation No. 75 of 2019, on the other hand, forms the basis of Indonesia's formal EPR scheme. It requires manufacturers to submit waste reduction plans to the Ministry of Environment and Forestry, and monitor and evaluate their implementation. The regulation also sets a future ban (effective on January 1st, 2030) on the use of certain non-environmentally friendly materials, such as PVC, small sachets, various plastic packaging types, single-use plastic straws, single-use plastic bags, and disposable eating and drinking utensils. These materials are expected to be replaced by recyclable non-plastic bags, reusable packaging, and reusable utensils.

Annex 3A: Country case studies Indonesia

While the document identifies limiting waste generation, recycling, and reuse as three primary strategies for waste reduction, it does not assign specific targets to each. Instead, it allows producers flexibility to adopt approaches best aligned with their capacities and available technologies. According to interviewees, however, this flexibility results in limited incentives for enterprises to experiment with reuse solutions, leading most to focus predominantly on recycling.

"[...] we do have an EPR law but it's mostly focused on redesign and recycling. Not so much on the reuse."

NGO, P39

More importantly, the existing EPR framework is weak in implementation as it is currently only a ministerial decree and lacks penalties or sanctions for non-compliance.

"I think the existing EPR regulation that the Ministry of Environment has right now does not give an emphasis on the reuse options for the producers to select in their waste reduction plan. Basically, the producers can select the methods of waste reduction that they deem appropriate for this business. And my concern is that the producers will choose recycling as their main option."

NGO, P47

"And also looking at the current regulation, that is the closest to EPR here, this law by the Ministry of Environment and Forestry. You can see how unfortunately ineffective because it requires companies to have this road map until 2029 to reduce 30% of packaging waste, it doesn't have any sanctions really and no strong incentives. In the end it has become a toothless regulation."

International development agency, P46

"In Indonesia, we only have a regulation that asks the producer to have a roadmap for them to reduce the impact of plastic. [...] currently, the discussion is to make this regulation to become stronger because it is now only under the ministerial decree. And then the wish is to make it like the presidential decree or higher than that and then to make sure that this regulation applies to every producer. Because currently even though it is said that it's going to be mandatory for every business and the brand owners to comply with the regulation, it seems that people consider this as voluntary, not mandatory. For example, as a matter of fact, out of hundreds of brand owners in Indonesia, only 22 or 26 that already comply with the regulations and submitted waste reduction plans to the Ministry as required by the regulation."

Retailer, P44

Several interviewees opined that a more stringent and mandatory implementation of EPR, supported by clear sanctions and penalties, would be more effective than the current voluntary approach in promoting reuse and refill businesses. They suggested that reuse and refill solutions need to be more prominently integrated into Indonesia's EPR framework, particularly as the regulation is expected to undergo revision in the near future. Such measures could make reuse and refill solutions more cost-competitive compared to single-use products and, in turn, encourage consumers to shift towards them.

"These [changes in EPR provisions] are of course very useful for encouraging refill and reuse. I think deposit return can be an element of an EPR system in a way that it can help the producers to actually fulfil their requirements."

International development agency, P46

Annex 3A: Country case studies Indonesia

“EPR is one of the strong forces if you want to install reuse. For example, the people who are still using single-use have to pay more. Because they have to manage their waste. And then how do they manage the waste? Maybe it's by implementing the EPR. The company can put a price for any grams of the plastic they use. So it will be added to the price of single use. It makes the reuse products cheaper, when the reuse product becomes cheaper because Indonesia is price sensitive, it will help the shift.”

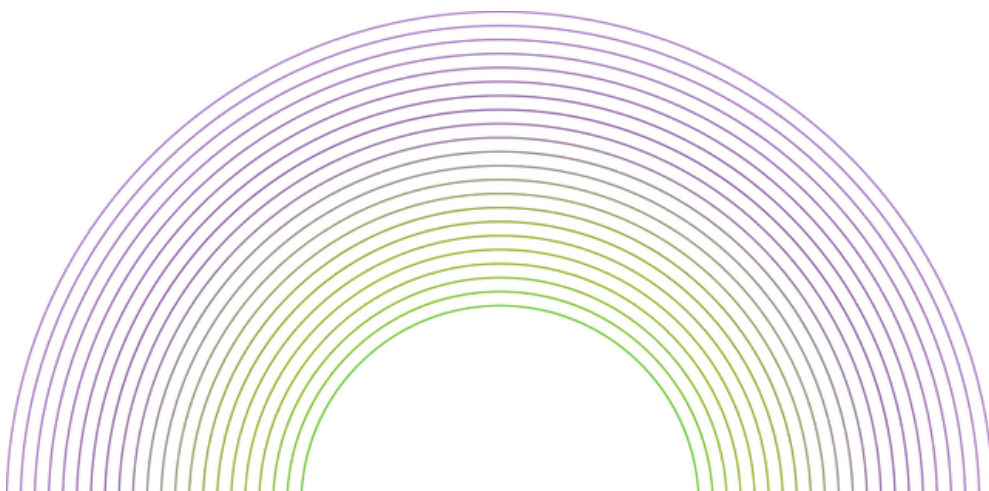
Reuse business, P49

An important initiative to address plastic pollution in Indonesia emerged in 2020, when the Ministry of Environment and Forestry, in collaboration with the United Nations Environment Programme (UNEP) and the Institute for Global Environmental Strategies (IGES), developed the National Plastic Waste Reduction Strategic Actions for Indonesia. While it is only an action plan and not a mandatory legislative measure, this initiative sets a national target to reduce plastic waste by 70% by 2025 and emphasises the importance of adopting a life cycle approach to address plastic waste more effectively. However, the plan places primary focus on recycling, with comparatively limited attention given to the principles or systems of reuse.

In 2024, Indonesia took a significant step toward advancing its sustainable development policy by drafting the National Roadmap & Action Plan – Circular Economy Indonesia 2025–2045, led by the Ministry of National Development Planning. The roadmap is designed to facilitate the transition to a green economy and introduces a 9R Framework to guide the shift, with reuse identified as one of the key strategies. Among the five priority sectors identified for building a circular ecosystem, the retail sector, particularly plastic packaging, is highlighted as a critical area of intervention. By implementing circular economy measures in this sector, the roadmap projects a 21% reduction in plastic waste generation and the creation of approximately 107,000 new jobs by 2030.

Demonstrating a clear policy alignment toward establishing a formal reuse ecosystem, the roadmap acknowledges the role of refill stations and reuse practices in reducing single-use plastic (SUP) packaging waste. It proposes a phased and detailed plan to promote reuse systems and refill facilities, recognising the development of a reuse packaging ecosystem as one of the strategies to achieve its goals. While noting the presence of several refill and reuse businesses already operating in Indonesia, the roadmap emphasises the importance of strengthening the reuse ecosystem by developing greater collaboration between government, circular businesses, and the public. As part of its action plan, the roadmap sets voluntary milestones for expanding the availability of refill providers and facilities for personal care and cosmetics products, as well as enhancing the use of reusable packaging for home care, food, and beverage products. However, although the roadmap adopts a broader and more comprehensive approach to circularity and reuse, it currently remains at the policy level, and translating it into binding legislation may take time.

The recent introduction of the Food and Drug Supervisory Agency (BPOM) Regulation No. 12 of 2023 on the Supervision of Cosmetic Manufacturing and Distribution is generally viewed as a preliminary step toward recognising and formalising reuse and refill approaches in Indonesia. Although not primarily intended to govern reuse businesses, but rather to establish comprehensive requirements for the manufacturing and distribution of cosmetics, the regulation includes provisions that require cosmetic refill facilities to meet specific standards of safety, efficacy, and quality for the benefit of the public.



Annex 3A: Country case studies Indonesia

Along with this national level policy landscape, since 2018, several provincial and municipal governments across Indonesia have implemented local regulations aimed at reducing different forms of SUP consumption, which can in a way support the growth of reuse solutions (Dietplastik Indonesia, n.d.-a; The Regional Knowledge Centre for Marine Plastic Debris, n.d). However, many of the interviewees pointed out the weak enforcement and the practical challenges in implementing these regulations at the provincial level in the absence of a national-level regulatory framework banning SUP.

"We have more than 100 cities that have regulations on single use plastic bans. Not all of them are really implemented because of the governance, the financing [...] Most of the waste management budget in Indonesia, whether it's national or at the city level, mostly goes to transport the waste from the city to the landfill. Even if that is not the case the budget is not enough [...] That's why it's also impacted to why the single use plastic ban is not really implemented, because there's not enough money to force the producers to stop using plastics in their establishments."

NGO, P39

"The government banned single use plastic bags in supermarkets and mini markets. But in traditional markets, it's kind of hard. There's cultural things too here. And then, because of the ban, the supermarkets start to sell this multi use fabric, but not so good one. [...] here it's called spunbond fabric. It's actually multi-use, but it's cheap. These spunbond fabric bags in supermarkets and mini-markets are only being sold at 2000 rupiah, and many people will just buy them. So it's actually become single use again, because they just take it and it becomes waste [...] at home."

Reuse business, P49

In summary, the evolution of Indonesia's reuse policy reflects:

- A policy inclination towards a circular economy approach for waste management.
- Growing recognition of the significance of waste reduction alongside waste handling.
- Recognition of the need to ensure hygiene and safety standards for reuse and refill models.

Table 2. Major policies promoting reuse and refill in Indonesia.

Policy	Year	Relevance
Law No. 18 of 2008 on Waste Management	2008	Serves as the foundational or umbrella legislation for waste management in Indonesia. The document defines waste management as encompassing both reduction and handling of waste, including through reducing, reusing, and recycling.
Government Regulation No. 81 of 2012 on Management of Household and Household-like Waste	2012	Focuses on the technical management of municipal solid waste, including waste reduction based on the 3R principle, as well as waste handling. The explanation of Article 11 highlights the need to limit the use of plastic bags and avoid single-use products and packaging. The Regulation also outlines the principles of EPR.
The Minister of State for Environment Regulation No. 13 of 2012 for Implementing Reduce, Reuse, and Recycle through Waste Banks	2012	Acknowledges the need to implement waste management in a comprehensive and integrated manner, from upstream to downstream, to deliver economic benefits, protect public health, ensure environmental safety, and encourage behavioural change within communities. Envisions the integration between waste banks and EPR mechanisms.

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Table 2 (continued). Major policies promoting reuse and refill in Indonesia.

Policy	Year	Relevance
Presidential Regulation No. 97 of 2017 on the National Policy and Strategy on Household and Household-like Waste Management	2017	Sets a target to reduce municipal solid waste by 30% by 2025 through measures such as limiting waste generation, promoting reuse, and encouraging recycling.
Presidential Regulation No. 83 of 2018 on Marine Waste Handling	2018	Introduced to formally adopt and provide legal force to Indonesia's National Action Plan for Handling Marine Debris 2018–2025, which sets a national target to reduce marine plastic debris by 70% by 2025. The Action Plan outlines several strategies including behavioural change, reducing land- and sea-based plastic leakage, cutting plastic production and use, improving funding mechanisms, reforming policies, strengthening law enforcement, and enhancing waste management infrastructure to achieve this target.
The Minister of Environment and Forestry Regulation No. 75 of 2019 about Roadmap for Waste Reduction by Manufacturers	2019	Establishes Indonesia's EPR framework. Mandates that producers reduce waste from their products and packaging by 30% by 2029. The regulation requires manufacturers to submit waste reduction plans to the Ministry of Environment and Forestry, as well as monitor and evaluate their implementation. Sets a future ban on the use of certain non-environmentally friendly materials including small sachets, various plastic packaging types, SUP straws, SUP bags, and disposable eating and drinking utensils.
National Plastic Waste Reduction Strategic Actions for Indonesia	2020	Outlines a multi-stakeholder approach to achieving the national target of a 70% reduction in plastic waste by 2025. Proposed measures include the phased ban of single-use plastics, development of clear and concrete regulations, establishment of measurable targets, issuance of detailed implementation guidelines, strengthening of EPR systems, compilation of the data on plastic waste reduction efforts, promotion of the development of locally tailored ICE materials, introduction of incentives and disincentives to support plastic waste reduction, and advancement of sustainable alternatives to SUP and packaging.
Minister of Environment and Forestry Regulation No. 14 of 2021 on Waste Management at Waste Banks	2021	Replaces Ministerial Regulation No. 13 of 2012. This updated regulation recognises the circular economy approach in waste management through coordinated efforts among national and regional governments, as well as the community. In addition to being viewed as facilities for waste management, waste banks are also recognised as means for education and behavioural change and as mechanisms for implementing circular economy practices.
Food and Drug Supervisory Agency Regulations, No. 12 of 2023 on Supervision of Cosmetic Manufacturing and Distribution	2023	Sets out comprehensive requirements for the manufacturing and distribution of cosmetics, including stipulating specific standards for cosmetic refill facilities.
National Roadmap & Action Plan - Circular Economy Indonesia 2025-2045	2024	Promotes the adoption of a 9R Framework (Refuse, Rethink, Reduce, Reuse, Repair, Refurbish, Remanufacture, Repurpose, and Recycle) as a guiding approach toward achieving a circular economy. The roadmap identifies the retail sector, particularly in relation to plastic packaging, as a priority area for targeted interventions, and emphasises the significance of strengthening the reuse ecosystem.

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2. Policy implementation and outcome

Policy outcomes

Currently, Indonesia has no reuse-specific policy, making it difficult to evaluate policy impacts in this area. While the National Roadmap & Action Plan–Circular Economy Indonesia 2025–2045 estimates that the retail sector, particularly plastic packaging, has a circular material input rate of 6.92% and a recycling rate of 9.16%, the document acknowledges limitations in measuring the implementation of reduction and reuse strategies due to data and methodological gaps. However, several documents offer broader insights into the implications of existing policy measures such as SUP bans, provide perspectives on public attitudes towards reuse practices, and highlight the impact of business models adopting reuse or refill solutions.

Underscoring the role of regulatory bans in reducing plastic pollution, a notable reduction in SUP consumption at the household level was observed two years after the Governor's Regulation banning SUP bags, straws, and polystyrene which came into effect on July 1, 2019 (Dietplastik Indonesia, n.d.-b). Evidence suggests that the development of reuse systems can generate a higher net positive impact compared to SUP alternatives. Economic gains from expanding reuse solutions, together with social benefits from reduced plastic waste, can offset economic contractions resulting from the decline in plastic sachet and pouch consumption (Dietplastik Indonesia, 2024).

Several reuse business initiatives and civil society interventions have successfully diverted or reduced plastic waste. Through its reuse and refill programs, Enviu prevents the leakage of 25 million SUP items into the environment (Enviu, 2024). Specific initiatives such as Pokka Refilling Stores, run by the Ecological Conservation and Wetland Observation (ECOTON), are estimated to divert 9,500 pieces of 10 ml sachets, serving an average of 50 unique monthly users and providing 15% cost savings per transaction (GAIA, 2024). Toko Cura has diverted approximately 56,285 pieces of plastic. Alner, on average, helps customers avoid 20 to 40 SUP items per month per person, resulting in savings of approximately USD 3–6 per customer (GAIA, 2024). In 2024 alone, Alner is estimated to prevent 7,767 kg of plastic waste from being generated (Enviu, 2024).

Regarding consumer behavior, studies indicate a growing public interest in systematic reuse systems in Indonesia. A relatively high enthusiasm was observed among Greater Jakarta residents, especially those with higher income and education levels, to participate in reuse solutions (Dietplastik Indonesia, 2024). However, barriers such as the lack of home delivery services and the limited presence of reuse businesses in modern shopping locations may discourage potential consumers (Dietplastik Indonesia, 2024). The Indonesia Plastic Bag Diet Movement (Gerakan Indonesia Diet Kantong Plastik, now Dietplastik Indonesia) published two reports examining attitudes toward returnable, reusable food containers, particularly in initiatives led by Allas, a start-up developing reuse solutions for online food deliveries. Despite limitations in survey scope and design, the findings indicated a gradual increase in Allas's customer base (Gerakan Indonesia Diet Kantong Plastik, 2022a, 2022b).

Stakeholder perceptions

Generally, interviewees expressed dissatisfaction with the absence of targeted policies or laws supporting reuse systems and refill practices in Indonesia.

"[...] we don't have a specific policy for refill systems, and reuse systems. The government generally thinks that it's something unhygienic to do."

Reuse business, P40

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They identified several reasons for the slow progress in enacting national-level binding legislation to address plastic pollution and promote reuse/refill solutions in the country. These included lobbying by petrochemical and recycling industries; lack of political will and bureaucratic corruption; government's limited financial capacity to fund infrastructure for reuse systems and enforce compliance by the businesses; and weak public push, with many consumers prioritising convenience and low cost over environmental concerns.

According to interviewees, the government's prioritisation of economic development and job creation, at the expense of environmental protection, is another factor slowing the development of effective policies.

"Indonesia aims to be the biggest petrochemical producer in Southeast Asia. [...] if we also push the environmental objective, it will inhibit economic development. That's one of the root causes of these things."

NGO, P39

Practical challenges within Indonesia's specific socio-economic and geographical context were also highlighted. These include the competitive pricing of SUPs, coupled with the high cost of implementing refill and reuse solutions, which make such products unaffordable for a large segment of the population.

"It would be a bit difficult for the alternative solutions to compete with the problematic packaging like sachets, because they are just so cheap."

Reuse business, P41

"It will be far too hard to implement and enforce any regulation on a national scale. You have such different conditions in and around the country. We're looking at such a vast country with an archipelago and island setup. If you ban single-use plastics, people need to have an alternative. [...] it doesn't make sense to have a blanket policy on all of Indonesia. In areas where you can't even supply any alternatives to single-use, that wouldn't be enforceable, and then you will end up with an unenforceable, unworkable policy."

International development agency, P46

One interviewee noted that, given the large volume of existing waste, the government is more focused on short-term solutions than on long-term vision, prioritising waste management over waste reduction.

"[...] maybe the government looks at the current problem as we already have very abundant waste already, like in the landfill. [...] Maybe they think the short term solution would be how we can manage the existing waste. So they're really focused on the recycling or very downstream solutions like upcycling, recycling, incineration. [...] if you want to reduce the waste at the source, including plastics packaging, reuse, refill, reduce solutions must be implemented there."

Reuse business, P41

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Another interviewee highlighted the absence of regional-level mandates in ASEAN, unlike in the EU, which reduces external pressure for stronger national policies. In his view, this lack of harmonisation between countries could also create barriers for cross-border trade if Indonesia introduces strong domestic reuse policies.

"If we come to Europe, because of the EU regulations, it's easier for the region to have a similar mandate. Similar regulation. Or maybe each country can go beyond. In our region, ASEAN doesn't have that. It's only a declaration, which will go nowhere. So it's very hard to harmonise with other countries. [...] we see that reuse is cross border because most of the products are not manufactured in Indonesia. Mostly it's from Thailand or Vietnam. How to connect these manufacturing facilities with the reuse system that is happening in Indonesia is also a big question."

NGO, P39

"In there [the Circular Economy Roadmap] actually, we already have a plan to increase the reuse [...] It already includes the reuse in the medium and also in the long term planning development plan. So reuse is part of the policy in the near future."

International development agency, P46

Nevertheless, although not fully satisfied with the current pace of policy development on reuse and plastic reduction, interviewees expressed hope about steps being taken and indicated their faith in the potential emergence of a more supportive policy environment in Indonesia in the near future.

"[...] fortunately, two years ago, the Indonesian FDA [BPOM], passed a new law- the FDA law on Cosmetics Distribution. They mentioned in one article that some types of cosmetics like shampoo or hand wash, conditioner, body wash can be delivered in our refillable systems. So it's good news for us also as it helps facilitate both big FMCG companies and startups to start doing it."

NGO, P39

With Indonesia preparing to revise its EPR law and showing interest in a circular economy, including the promotion of reuse and refill practices, interviewees generally believed that wider stakeholder consultations are essential before any concrete policies or legislation are finalised. However, divergent views emerged regarding the potential involvement of informal waste pickers in these discussions and in the reuse system itself.

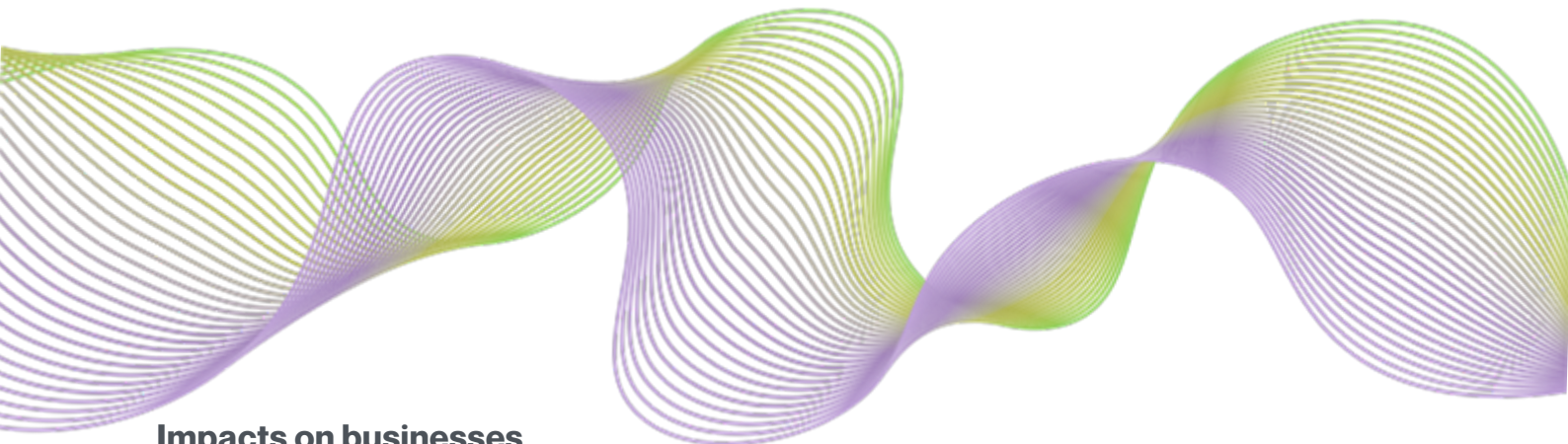
"[...] consultations of these legislation are not implemented correctly because certain kinds of groups are being left behind. For example, the biggest absence of this conversation is coming from the informal sectors. The waste pickers groups are not really involved in this kind of conversation. So we have two kinds of challenges: one the government isn't really aware about the importance of involving this marginalised group like the waste pickers groups. But on the other hand, there is also a challenge where the waste pickers groups are not well built in terms of their capacity on this kind of legislation development."

NGO, P42

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"[...] practically in Indonesia, the informal sector only deals with the recycling issue. So I'm not sure if we can integrate the informal sector into our reuse system. But maybe we can talk about this, but I think at the beginning we should deal with the formal first. Of course the formal system. Because in Indonesia the informal sector mostly deals with the recycling system, not the legal system."

Policy implementor, P47



Impacts on businesses

Despite the absence of a supportive policy environment, a number of start-ups are experimenting with reuse and refill solutions in Indonesia. While viewing these initiatives as encouraging, interviewees generally felt that such sporadic efforts, which rely heavily on external grants or pilot funding, may not be sustainable in the long term.

"It's also supported by the lack of finance for the reuse business. [...] most of the startups got the grant money to do this, which is not really healthy for the business. It's very hard to convince the investors, banks to support them because from what I heard it's that they don't see a future in reuse. They don't see that reuse is profitable."

NGO, P39

"On the startup level, I think there's still a lot of funding going into this area, and also the spirit to really make this happen. But I'm not sure if there is no external funding whether or not this is going to be continued."

Retailer, P44

Interviewees also noted that, in the absence of financial support from the government, some small businesses find reusable packaging systems unaffordable, particularly in the food and beverage sector where higher upfront costs limit adoption. In these cases, targeted subsidies or public-private support, for example through partnerships with schools or universities, could help lower entry barriers. However, for FMCG-related reuse models, smaller retail points and community actors like warungs or waste banks can benefit from lower refill packaging costs and participation in decentralised reuse networks, making these models more financially viable even without direct government funding.

"[...] there are many SMEs, for example small restaurants, small merchants, who will not be able to afford this kind of reusable packaging if there is no government intervention. To be very specific, like subsidies, I couldn't imagine merchants who are selling small foods have to switch their styrofoam or single-use plates to the reusable ones, if there is no support provided with initial assets of reusable packaging."

Reuse business, P41

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Interviewees also emphasised the need for targeted financial measures, such as subsidies or tax incentives, to help reuse and refill businesses compete with SUPs and thus create a level playing field.

“The reuse model does not get financial incentives like a lower tax or a simple permit especially for them to work. And without those kinds of support, they face a huge barrier from the consumer aspects because consumers are still enjoying the status quo model where they can get cheaper options through existing options. [...] the national government, even the local government does not really provide an incentive for them. It's hard for them to penetrate more to a bigger market in their area.”

NGO, P42

“Marketing in the beginning is really hard for small business, and then it's way harder for reuse business. And mostly reuse businesses are small, so it's double the obstacles. As a business, we need help in reducing costs, and second is to move the market activation.”

Reuse business, P49

Interviewees also noted certain constraints within existing policies which continue to challenge the growth of circular business models in Indonesia. One such constraint relates to the Indonesian Standard Industrial Classification (KBLI). While circular economy practices advance among both established industries and start-ups, the newly emerging refill and reuse business models are not yet accurately categorised within the current KBLI framework. For example, a prominent start-up selling household products in returnable and reusable packaging is presently classified under the KBLI category for ‘Packaging Activities’, due to the absence of a specific classification for reuse system operators (Ministry of National Development Planning, 2024). This misalignment limits the incentives or benefits that such businesses might otherwise be able to access.

“It's very hard to add new items to the code- to the permission code. So some of our startups are identified as logistics, or something else—which is quite strange. I mean like it's maybe not that, but it's like the closest code that they can get”

NGO, P39

Another concern relates to the stringent standards and criteria imposed by current regulations, whether explicitly or implicitly, on reuse and refill businesses, which can make compliance especially challenging for small start-ups.

“There are many things, including the definition of a production facility. Because currently we cannot refill our packaging in new reuse packaging if it's not conducted in a production facility. It is just recently that the FDA issued a special permit for a refill facility [...] But there are several standards of packaging that are hard to achieve if one wants to obtain optimal recyclable design which is still not aligned yet with the Regulation on Product Safety. Even based on the expertise of the experts on product safety, there's actually no need for that very strict regulation.”

International development agency, P45

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To promote reuse and refill practices in Indonesia, interviewees felt that large companies, FMCGs, retailers, financial institutions, and investors should support start-up initiatives, as relying solely on start-ups would have a very limited impact. In their view, ensuring the sustainability of start-ups requires them to ultimately generate profit, which could also encourage more entrepreneurs to enter the reuse and refill sector. However, to achieve this, a more conducive policy environment is essential.

“Big companies, FMCGs and also the retailers should support these initiatives to accelerate the behaviour change because if only the startups do it, it will be very low. [...] I want to see the finance institutions, banks, investors, capital investment bankers adding reuse in their planning so our startups can scale up, and can be strengthened with the business and see the profits in the future.”

NGO, P39

“[...] on a larger scale, these businesses will not really be able to succeed if you don't have these conducive regulations in place by local government, by national government, etc. And this is where I think there's a lot of upside and a lot of potential, especially for local and provincial governments in Indonesia to take more action to actually incentivise reuse, refill solutions. But this all links to strong regulations that are enforced and enforceable.”

International development agency, P46

3. Lessons learned and recommendations

Lessons learned: enablers

Since there are no reuse-specific policies currently in place in Indonesia, a comprehensive analysis of policy enablers is not possible. However, this research identifies two positive aspects of the existing policy landscape that help enable reuse and refill businesses and offer hope for the emergence of a more supportive policy framework in the future.

There are no regulatory barriers to starting reuse businesses. Under the current policy framework, particularly following the introduction of BPOM (Indonesian FDA) regulations, there are no significant barriers to start a reuse or refill enterprise. The main challenges arise at the stage of scaling up, especially in terms of competition with single-use products and the difficulties faced by SMEs in meeting higher regulatory standards.

Policy vision documents are beginning to emphasise reuse systems. Emerging policy frameworks, such as the National Roadmap and Action Plan – Circular Economy Indonesia 2025–2045, have begun to place greater emphasis on reuse systems, although they are not legally binding. These initiatives may pave the way for the development of more reuse-focused policies in the future.

Lessons learned: barriers and challenges

The absence of national targets or incentives limits the competitiveness of reuse systems. No specific targets, timelines, or incentives (such as tax breaks, subsidies, or simplified permits) related to reuse have been incorporated into national policy. This absence of policy support makes it difficult for businesses to compete with cheaper single-use plastic (SUP) products, limiting the accessibility of reuse solutions for low-income consumers. Consequently, many businesses are discouraged from investing in reuse or refill systems, and those that have adopted such models often struggle to sustain operations or scale up.

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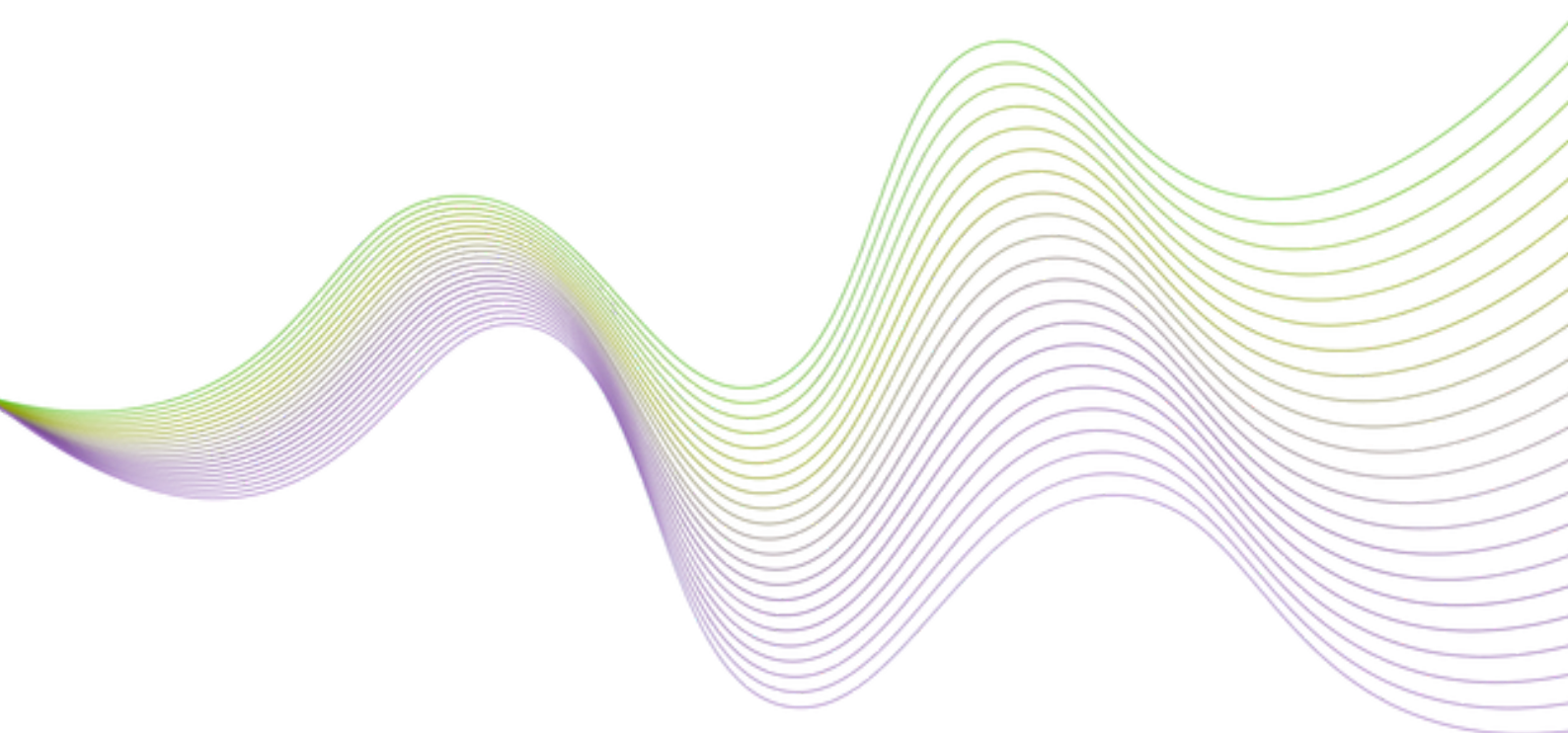
Weak regulation and inconsistent enforcement of SUP restrictions undermine progress on reuse. There are no national-level SUP bans, and enforcement of existing local-level bans remains weak. This creates an uneven playing field, as reuse and refill businesses struggle to compete with cheaper SUP packaging.

A narrow regulatory definition of reuse constrains the development of circular systems. Current regulations often define reuse merely as a downstream activity, i.e., reusing materials after they have already become waste, rather than an upstream approach that proactively prevents waste by establishing reuse systems.

The current EPR framework does not create strong drivers for reuse. Although reuse is mentioned in Regulation of the Minister of Environment and Forestry No. 75/2019 on the Roadmap for Waste Reduction by Manufacturers (the current EPR framework), it is again defined narrowly in terms of waste reuse rather than as part of a broader reuse system. The regulation also lacks specific reuse targets and is largely voluntary, giving producers flexibility to choose between waste reduction, reuse, or recycling. In practice, this flexibility results in businesses often opting for recycling as the easier strategy (Pairunan & Rabbow, 2022).

Reuse business models are poorly integrated within existing industrial classifications. The Indonesian Standard Industrial Classification (KBLI) does not provide a distinct category for reuse businesses, making it harder to formally recognise and support reuse business models.

Stringent product safety regulations limit participation of small reuse businesses. Current FDA regulations, which apply only to cosmetics, are particularly strict. This creates compliance challenges for small-scale businesses and discourages their participation in reuse and refill models.



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Recommendations for designing an effective reuse policy framework

In the specific socio-cultural context of Southeast Asian countries such as Indonesia, a large share of the population lives in low-income conditions and small and medium enterprises together with street vendors play a dominant role in the economy. Informal waste pickers depend on waste for their livelihoods, and geographical challenges often hinder the consistent implementation of regulations across the country. For these reasons, replicating models from economically advanced countries, particularly those in Europe, may not be feasible. Policies need to be therefore locally adapted, gradually implemented, and designed to provide adequate support for SMEs while protecting the livelihoods of those currently engaged in waste management. At the same time, given the relatively higher cost of switching to reusable alternatives compared with continued use of SUPs, the low-income profile of much of the population, and limited environmental awareness among consumers, policies should also include provisions to ensure fair competition between SUPs and reusable alternatives.

Drawing on lessons from Indonesia's reuse policy experience, the following recommendations are proposed to strengthen the national reuse policy framework:

- **Introduce a national-level ban on selected SUPs.** A carefully considered and practically feasible ban on certain SUPs can help create a level playing field for reuse and refill business models. This ban may be supported by strong enforcement mechanisms and adequate budget allocations for local government units to ensure effective implementation. Legislation or local ordinances can require hotel, restaurant, and catering (HORECA) providers to offer reusable options and accept consumer-brought containers. To set an example, regulations can prohibit the use of avoidable SUPs (such as bottled water and disposable utensils) in government offices and at government-organised events at both national and local levels, replacing them with reusable alternatives. Linking existing local-level regulations and adapting them into a unified national framework that is practical and implementable across the country can further strengthen enforcement.
- **Broaden and clarify legal definitions in the existing policies.** Existing laws and regulations may be revised to provide clearer, more comprehensive definitions that encompass upstream applications of reuse. These definitions can focus on products and systems rather than just materials, and explicitly cover the terms Reuse, Refill, Repair, and Reuse Systems.
- **Strengthen the existing EPR framework.** The existing EPR framework may integrate reuse systems as a core component. This can include adopting a broader, system-level definition of reuse, incorporating a dedicated article on reuse, and specifying achievable reuse targets for feasible products. The framework can clearly delineate how and in which sectors and products refill or reuse systems may be adopted. Rather than allowing businesses to freely choose among reduce, reuse, or recycle strategies, EPR can set mandatory obligations and targets for both reuse and reduction, ensuring businesses actively implement reuse measures as well instead of relying solely on recycling. EPR can also be used as a tool to incentivise reuse by offering lower fees for businesses introducing reusable products.
- **Promote and support business collaborations to build shared reuse infrastructure.** Regulations could encourage businesses to collaborate in implementing reuse and refill initiatives. For instance, shared infrastructure for cleaning and washing reusable packaging can be developed, potentially integrated with existing waste management facilities to reduce cost. Businesses selling similar products could be encouraged (or, where feasible, required) to adopt uniform packaging, enabling more efficient utilisation of shared reuse infrastructure across brands. Policies can further incentivise standardisation in product design, system design, and equipment usage to optimise shared facilities.

Continues on the next page.

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Recommendations continued:

- **Provide more direct government support.** Beyond financial incentives, the government can actively build a conducive ecosystem for reuse and refill businesses. This could include establishing shared infrastructure for logistics and reverse logistics, such as common collection/drop-off points and standardised washing and cleaning facilities for reusable packaging, that can enable startups and SMEs to enter the market without heavy infrastructure investment. Policies can be formulated to make it obligatory for national and local governments to organise capacity-building programmes and provide technical assistance to those wishing to enter reuse or refill businesses. Conducting stronger and decentralised IEC campaigns can also be made obligatory at different levels of government to raise public awareness of the environmental and health benefits of reuse. As one of the largest consumers, government departments can be mandated to prioritise reuse and refill models in procurement for offices and events, thereby supporting market shift.
- **Ensure wider stakeholder consultation and cross-ministry collaboration.** Policies promoting reuse and refill need to be developed and implemented through wider stakeholder consultations, including marginalised yet critical groups such as informal waste pickers and street vendors. Provisions can be included to integrate informal waste workers into reuse systems, such as by providing them employment opportunities. Such inclusive processes would help ensure social acceptance and a just transition. Successful policies require cross-ministry collaboration among the Ministry of Environment, Tourism, Industry, and others, rather than isolated efforts, to ensure coherent and effective enforcement.

In summary, the following recommendations represent key components for advancing reuse and refill in Indonesia:

- Introduce a practically feasible national-level ban on selected SUPs, supported by strong enforcement mechanisms and adequate budget allocations.
- Broaden the definition of reuse in existing policies to explicitly include reuse systems.
- Strengthen the existing EPR framework by integrating reuse systems as a core component.
- Introduce new policies that incentivise reuse and refill solutions.
- Promote collaboration between businesses to develop shared reuse and refill infrastructure.
- Ensure wider stakeholder consultation and cross-ministry collaboration during policy design and implementation and integration of informal waste pickers into reuse systems.

5. Strength of evidence

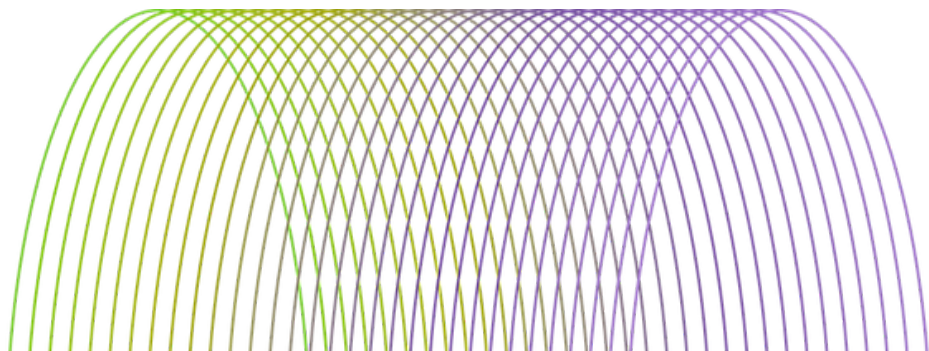
The Global Plastics Policy Centre is committed to transparency in our research findings, which includes identifying specific and persistent knowledge or evidence gaps. The following table summarises the state of evidence available for Indonesia during the research period.

Literature search	Interviewees	Peer review	Total evidence strength
Moderate - Key national policies, policy reports, reports produced by NGOs, some websites and blog posts. Moderate peer-reviewed resources.	8 interviews from 8 organisations - strong	Peer review completed by 2 reviewers	Strong

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Annex 3: Country case studies

Annex 3B: Reuse policy in Thailand

1. Reuse context

Similar to other Southeast Asian countries, reuse has long been embedded in Thailand's culture through local and community-based initiatives. Traditional practices once included keeping drinking water in large clay pots outside homes for passing travelers (Intatthep, 2014), and the widespread presence of repair shops and second-hand markets (Win et al., 2023). A number of start-ups have emerged as a modern extension of these practices. For instance, pinto boxes are a traditional Thai lunch box made from metal, used to transport meals. Recently, these boxes have been experimented by a startup in the food delivery sector. Delivery drivers bring the food in the pinto boxes to the consumers, whilst bringing back the empty containers to the restaurants (Renaud & Kampe, 2021). These practices illustrate that reuse has long been part of Thai daily life; the challenge lies not in introducing reuse, but in maintaining and adapting it within modern consumption systems. Concerns over cost and convenience have limited the reach of reuse models at a national scale, particularly in food businesses, which is one of the most important business sectors in Thailand (Cruecha-Em et al., 2025).

There are no reuse specific policies mandating targets or offering incentives currently in force in Thailand. At present, packaging and household waste management in the country are primarily regulated under the Public Health Act B.E. 2535 (1992) and the Act on the Maintenance of Cleanliness and Orderliness of the Country B.E. 2535 (1992). However, these laws deal only with broad and general practices of waste management (Lekfuangfu, et al., 2023) and do not cover any specifics relating to reuse. While Thailand's Roadmap on Plastic Waste Management 2018–2030 and the accompanying Action Plans emphasise the importance of reducing the production and consumption of single-use plastics (SUPs), as well as the need for establishing refill systems and deposit-refund schemes, these goals are neither legally binding nor prioritised (EJF, 2024a). A dedicated Packaging Act is now in development, and is expected to be finalised in 2027, with an aim to reduce the environmental impact of packaging waste and strengthen Thailand's circular economy, though no specifics relating to reuse systems have been included so far (Lekfuangfu, et al., 2023).

Despite the absence of a supportive policy environment, several start-ups adopting reuse and refill models have begun to emerge, alongside interventions by CSOs (EJF, 2024b; Renaud & Kampe, 2021). However, these initiatives remain limited in both number and scale.

Reuse history

Like many other Southeast Asian countries, Thailand has long integrated reuse, waste reduction, and circular economy practices into everyday life and community exchange. In earlier times, before the rise of convenience stores, it was common for households to leave drinking water outside for passersby to freely help themselves (Intatthep, 2014). Repair and reuse have deep roots in Thai culture, once evident in the widespread presence of repair shops and the popularity of second-hand markets where people regularly bought, sold, and exchanged used items (Win et al., 2023). However, these traditional practices have declined in recent years, coinciding with the influx of cheaper imported goods.

Building on this cultural foundation, several large beverage companies in Thailand have implemented reusable models, such as selling drinks in glass bottles supported by reverse logistics and deposit–refund systems. Nonetheless, these initiatives have also been in decline. Interviewees recalled early examples of beverage reuse:

"When I was young coca-cola provided consumers with a glass bottle and then when you return to the shop near your house, you can get back like 5 baht. I feel like people in the countryside still practise on this one."

NGO, P56

"Coca-Cola has two companies producing the beverage. One is in the North, the bigger one, and the smaller one in the South. They have a policy of using reusable glass bottles."

NGO, P68

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In recent years, although still limited in scale and quantity, several private sector initiatives led by startups or NGOs have been experimenting with reuse and refill solutions in the country (e.g., EJJ, 2024a; GAIA, 2024; Renaud & Kampe, 2021).

In summary, Thailand's reuse history is characterised by:

- Strong regional traditions rooted in local culture.
- A recent wave of NGO- and startup-led initiatives experimenting with reuse and refill solutions.

Reuse system structure

While Thailand currently lacks formal, nationally coordinated reuse systems, reuse itself remains embedded in everyday life. Many sectors still rely on informal but functioning reuse practices such as restaurants serving meals with washable crockery, cafes using durable cups, and households reusing containers. These everyday systems demonstrate that reuse is not new, but rather a long-standing social norm that has been eroded by the spread of single-use packaging and the low cost of disposability. Recent civil-society and private-sector initiatives therefore represent an attempt to protect and expand existing reuse practices, rather than to invent them. Start-ups and NGOs are testing deposit-return, refill, and shared-container models that adapt traditional behaviours to modern consumption patterns. However, interviewees noted that these efforts operate largely without coordinated government support or enabling infrastructure. The absence of clear regulations, fiscal incentives, or shared logistics networks limits their ability to scale or to compete with single-use systems that remain cheaper and more convenient for both producers and consumers.

Evolution of policy landscape

Thailand currently does not have a comprehensive or binding policy that promotes reuse or sets mandatory targets for reuse systems. In the absence of reuse-specific policies, this section outlines the existing regulatory frameworks and policy approaches in Thailand that aim to address the wider issue of plastic waste from the full life cycle perspective (Table 1).

The country's legal framework for waste management is primarily governed by the Public Health Act, B.E. 2535, 1992 and the Act on the Maintenance of Cleanliness and Orderliness of the Country, B.E. 2535, 1992. However, these legislations do not incorporate the concept of the waste hierarchy and mainly address waste management with a focus on disposal. They also lack specific provisions for plastic waste. Consequently, they neither promote waste prevention nor define reuse. This legislative gap has resulted in a policy environment where reuse is discussed largely within waste management narratives rather than as a distinct strategy for waste prevention.

The Roadmap on Plastic Waste Management 2018–2030 represents Thailand's primary national framework on plastics, articulating a vision for sustainable plastic management within a circular economy. The Roadmap establishes two key targets: (1) reducing and replacing certain types of SUPs (including oxo-degradable plastics, cap seals, microbeads, foam food containers, plastic straws, thin plastic bags, and cups under 100 microns), and (2) ensuring 100% of target plastic waste is managed within the circular economy. The Roadmap is structured in three phases, with accompanying action plans. However, reuse and refill solutions receive very limited attention in these documents; instead, they focus on banning certain types of problematic SUPs, replacing them with biodegradable alternatives, and encouraging recycling.

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This policy orientation reinforces the perception that reuse is informal, rather than a strategic component of waste prevention. Following the introduction of the Roadmap, some national-level efforts have been introduced to regulate problematic SUPs and promote biodegradable substitutes. For instance,

- In 2019, the Ministry of Public Health prohibited the manufacture, import, and sale of cosmetics containing plastic microbeads.
- In 2022, the Department of National Parks, Wildlife and Plant Conservation banned foam containers and SUP packaging in national parks. However, the ban is weakly enforced.
- A campaign led by the Department of Environmental Quality Promotion and the Pollution Control Department encouraged retailers to phase out plastic bags (Ministry of Natural Resources and Environment, 2022).
- The Ministry of Finance introduced tax incentives for businesses using biodegradable plastics (Deloitte, 2022).

Awareness campaigns were also carried out to inform the public about the issues of plastic waste (Ministry of Natural Resources and Environment, 2022). The private sector also became involved in efforts to achieve the goals outlined in the Roadmap. In 2018, the Public Private Partnership for Sustainable Plastic and Waste Management (PPP Plastics) was established. The objective of the partnership was to support and drive the implementation of the Roadmap by developing cooperation across government, private sector, civil society, international organisations, and academic institutions (PPP Plastics, 2021). Phase II of the Roadmap is currently being implemented. While the Phase II Action Plan document notes some progress from Phase I, no comprehensive assessment of Phase I's effectiveness in achieving its intended goals could be found. This absence of systematic monitoring limits understanding of whether the Roadmap's voluntary measures have led to structural reductions in SUP consumption or shifts towards reusable formats.

Apart from the Phase II Action Plan's recommendations to encourage deposit-refund schemes and the installation of refill stations, neither the Roadmap nor its Action Plans provides concrete steps to systematically create an enabling environment for the promotion of reuse systems. Interviewees highlighted the Roadmap's limited focus on plastic waste reduction as one of its weaknesses.

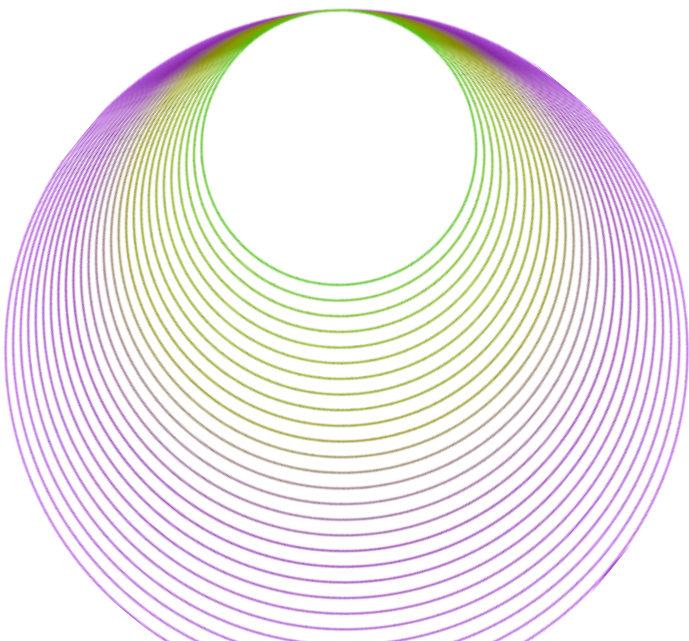
"There were plastic roadmaps and all these kinds of waste management roadmaps and so on and so on. But they make little effort to put plastic reduction into the agenda."

International development agency, P55

The Roadmap's voluntary nature and lack of legal sanctions have been observed to limit its effectiveness. Without proper planning and enforcement mechanisms, this voluntary approach creates significant challenges, making the initiatives under the Roadmap unlikely to be sustainable in the long term.

"[...] ultimately, there were no policy instruments and no enforcement mechanisms to make these bans really happen. So policy was there, engagement from the government was there, but no legislation, no instruments, nothing that follows up. Even the institutions were lacking."

International development agency, P55



Annex 3B: Country case studies Thailand

"[...] they [policymakers] started to implement with more strength these policies or the plastic roadmap. But the plastic bag ban was without strategy. They agreed with some companies to ban the plastic bags, but there was no strategy behind it. And of course they all returned with the plastic bags because there was no alternative or the alternative was even worse."

International development agency, P55

"The National Plastic Waste Management Action Plan, or the National road map doesn't have any legal obligation, not mandatory. When you hear the name, it doesn't mean anything in Thailand, no legal effect. So in the plan you may see to stop using Styrofoam. That is nonsense. Nothing happened. So you can still see a lot of Styrofoam [...] And no one can do anything because we don't have the law to ban it."

NGO, P68

"[...] we talk about policy in Thailand. It came out with only action plans. You know it is just voluntarily. But if you want to change the system you need laws and regulations to set a new rule."

Academia, P63

In June 2023, the Food and Drug Administration (FDA) operating under the Ministry of Public Health issued two notifications regulating refill systems for certain liquid-form cosmetics. These notifications established standards and approval mechanisms for businesses wishing to engage in cosmetic refilling. The conditions include requirements on personnel training, premises and equipment, hygiene and safety, as well as packaging and labelling standards. These high compliance standards, while designed to ensure consumer safety, have had the unintended effect of constraining market participation and discouraging small enterprises—a challenge explored further in Section 2c on business impacts.

The Thai government introduced the Plastic Scrap Import Control Policy in 2023, announcing a complete ban on plastic waste imports by 2025. This policy was phased in as follows.

- Phase 1 (2023): 14 manufacturers in Thailand's free trade zone using plastic waste as a raw material for their products were allowed to import 100% of the amount they had been importing, but an upper limit was set based on their production capacity.
- Phase 2 (2024): These 14 manufacturers were required to halve their imports.
- Phase 3 (2025): All plastic waste imports were prohibited.

This policy was introduced in response to China's 2018 ban on plastic waste imports (Switch Asia, 2025). In January 2025, Thailand's complete ban on plastic waste imports officially came into effect (Laville, 2025; Lodhi, 2025). While not directly linked to reuse, the policy signals growing political attention to upstream interventions in plastic management, which could help normalise more preventative approaches over time. However, reports of continued import activity indicate that implementation gaps remain, highlighting the difference between policy intent and enforcement in practice (OECD, 2025; Laville, 2025).

Annex 3B: Country case studies Thailand

In March 2024, the Thai Ministry of Natural Resources and Environment proposed the Draft Sustainable Packaging Management Act, which is expected to establish an institutional framework for future regulations to implement the principle of extended producer responsibility (EPR) (Envilience Asia, 2025; Lee, 2024; Switch Asia, 2025). The Act is not limited to plastic packaging but covers all packaging materials. The latest version of the draft mentions upstream and midstream stages of packaging management, along with post-consumer phases, and refers to the promotion of packaging reduction and reuse. However, it does not yet include any concrete measures or mechanisms to promote reuse systems or refill solutions. As the proposal remains in draft form, it cannot be regarded as a finalised or binding policy.

The Sustainable Packaging Management Act marks a potential turning point, providing Thailand's first opportunity to embed reuse within a national EPR system. However, the current draft stops short of doing so. Several interviewees reported involvement in the drafting process of this Act, including providing supporting evidence. While they generally welcomed the Act as an important first step toward a more stringent EPR mechanism, some expressed concerns about the likelihood of it becoming enforceable legislation and the lengthy time required to translate the draft into a binding policy.

"We're directly contributing to the Sustainable Packaging Act, which is a key regulation instrument that is being discussed currently in Thailand. It's an advanced stage of discussion, so there's a draft. It went through the ministries and it's in the cabinet now and afterwards it goes to the parliament. Of course it can be destroyed in the Parliament."

International development agency, P62

"They just submitted it (sustainable packaging management act) to the cabinet, just a few months ago. And it cannot be implemented now because you need the subordinate laws, regulation to explain the details of how to implement it. Because the draft act is quite broad, they don't have specific procedures for the producer to follow, so they must have detailed regulations."

NGO, P68

In summary, the reuse policy landscape of Thailand is marked by:

- The absence of policies that directly promote reuse systems or refill solutions that are safe and sustainable.
- Policy initiatives to control plastic waste that remain voluntary or in draft form.
- Fragmented efforts to reduce the use of certain problematic SUPs and replace them with biodegradable alternatives.
- Continued prioritisation of recycling and waste to energy over waste prevention and reuse.
- Regulatory measures that focus on compliance and safety rather than enabling business participation in reuse/refill models.

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Table 3. Major policies regulating plastic in Thailand.

Policy	Year	Relevance
Roadmap on Plastic Waste Management 2018–2030	2018	This roadmap was the first concrete initiative to address the issue of plastic waste. The roadmap sets out three phases to be implemented with the aim of reducing plastic pollution.
Notification of the Ministry of Public Health on the characteristics of cosmetics, criteria, methods and conditions for dividing cosmetics for sale at service points (Refill station) B.E. 2566	2023	Lays down standards, criteria, methods, conditions and approval mechanisms for businesses engaged in the refilling of certain types of cosmetics.
Announcement of the Cosmetics Committee on the labels of cosmetics packaged for sale at service points (Refill stations) B.E. 2023	2023	Specifies the labelling requirements for cosmetics packaged for sale at refill stations.
Plastic Scrap Import Control Policy	2023	Following the Chinese ban on plastic imports in 2018, Thailand has implemented this policy to gradually reduce the amount of plastic waste imports from other countries. This three phase plan reached its final stage this year by announcing a complete ban on plastic imports in January 2025.
Draft Sustainable Packaging Management Act	Latest draft: 2025	This draft Act aims to make packaging management more sustainable, systematic, and comprehensive, especially in the post-consumption stage. Intended to establish an institutional framework for future regulations to implement EPR principles.

2. Policy implementation and outcome

Policy outcomes

Since there are no reuse-specific policies currently in place in Thailand, there are no measurable impacts to note. This section therefore consolidates publicly available evidence to provide a broader picture of the progress and outcomes of policies and interventions aimed at reducing plastic waste. Exploring the effectiveness of these existing measures can offer indirect insights into how enabling conditions for reuse might emerge over time.

As noted earlier, no comprehensive evaluation of the achievements under Phase I of the Roadmap on Plastic Waste Management 2018–2030 is available. However, the Phase II Action Plan presents certain statistics on plastic use during the period, which likely reflect progress from concurrent ministerial initiatives to advance the Roadmap’s goals.

Phase I did not result in the introduction of substantial new regulations, laws, or legally enforceable incentives. Instead, it relied primarily on public awareness campaigns, advocacy, and voluntary measures, the implementation of which was further constrained by the absence of a detailed plan and a dedicated budget (Luther & Vassanadumrongdee, 2024). The initiatives under Phase I largely focused on promoting compostable, biodegradable, and recyclable plastics; regulating SUP consumption; conducting awareness campaigns to encourage voluntary reductions in plastic use; and improving post-consumer waste recovery and management. No initiatives were introduced to develop reuse systems or create an enabling environment for reuse and refill solutions.

Annex 3B: Country case studies Thailand

Target achievement at the end of 2021 was low. Regarding the Roadmap's first target of phasing out specific SUPs by replacing them with biodegradable alternatives, an overall 42% reduction was reported in 2021 versus a target of 75% reduction (Luther & Vassanadumrongdee, 2024). By product type, reductions were reported as follows: plastic bags (43%), plastic straws (33%), plastic cups (32%), and styrofoam food containers (20%) (Ministry of Natural Resources and Environment, 2022). While Phase I of the Action Plan on Plastic Waste Management introduced a nationwide 'ban' on certain problematic SUPs, this measure was diluted only four months after its introduction, as the language of 'banning' shifted to 'reducing' instead (Bangkok Post, 2022; Marks et al., 2023). On the second target of recycling plastic through the circular economy, recycling of the 7 target types of plastic did not exceed 25% in 2021, falling short of the 40% target (Luther & Vassanadumrongdee, 2024). Moreover, as these figures are based on periodic material flow data, the extent to which the reported reductions can be directly attributed to the Roadmap's interventions remains inconclusive. The absence of data disaggregated by sector or region further limits the ability to assess policy effectiveness or the equity of progress achieved.

Similarly, while fragmented bans on SUPs may have contributed to reducing plastic use, their effectiveness is often limited when introduced without clear guidance on alternatives, supportive measures, or consistent regulatory scope, as this creates challenges for both consumers and businesses (Sedtha et al., 2023).

Public campaigns launched to support the Roadmap have also reportedly contributed to reductions in plastic use. Between 2018 and 2019, the Ministry of Natural Resources and Environment introduced a campaign encouraging businesses to voluntarily reduce their plastic use. This initiative resulted in a reduction of 3,414 million pieces of plastic, equivalent to 9,824 metric tons. Building on this success, the campaign was expanded under the name "Everyday Say No to Plastic Bags" (January 2020–December 2022), which achieved reductions of more than 14 million pieces, or 81 thousand tons, of SUP shopping bags. Growing consumer support for these campaigns indicated an increasing public willingness to reduce plastic consumption (Swasdee Thailand, 2023). However, since participation in the campaign remains voluntary, its influence has declined over time, with many retailers now reinstating free plastic bags or offering them under purchase thresholds, while others impose small charges for plastic or spunbond alternatives. A nationwide poll found that more than 80 percent of respondents supported the government's ban on SUP bags at department stores and convenience stores (Bangkok Post, 2020). These results indicate responsiveness to behavioural measures but also underscore the lack of structural mechanisms to sustain long-term change.

Efforts have also been made to involve the private sector in advancing the plastic waste reduction goals proposed under the Roadmap. One example is the establishment of the Packaging Recovery Organisation Thailand Network (PRO-Thailand Network), created to promote private sector-driven management of post-consumer packaging. Between 2020 and 2024, the network collected 40,134.15 tonnes of post-consumer PET bottles, 466.14 tonnes of UHT beverage cartons, and 1,178.56 tonnes of multi-layer packaging. It partnered with 13 recycling plants across Thailand and also worked to raise public awareness about proper management of post-consumer packaging (RYT9, 2024). These efforts show strong engagement from producers and retailers, yet remain largely focused on recycling rather than reuse or packaging reduction.

With regard to civil society initiatives, in 2023 the Environmental Justice Foundation (EJF), in partnership with the Bangkok Metropolitan Administration and shopping mall owners, launched the Bottle Free Seas project. The project installed 10 pilot water refill stations across Bangkok. Although the project is still ongoing, early assessments indicate that it has reduced an average of 100,000 bottles per month, diverting an estimated total of 1.3 million plastic bottles as of November 2024 (EJF, 2024a; GAIA, 2024). While small in scale, such pilots demonstrate the potential of local partnerships to normalise reuse and refill behaviours.

Thailand is estimated to have the potential to reduce plastic production by at least 20% to 36% through banning unsafe, unsustainable, or non-essential plastics, implementing reuse and refill systems, or phasing out SUPs (EJF, 2024b). The combined outcomes of existing interventions, such as campaigns, SUP bans, and voluntary initiatives, indicate that reductions in disposable plastic use are achievable. However, these measures have not yet translated into the establishment of systemic, large-scale reuse markets in Thailand, which is an essential step for creating long-term, institutionalised solutions to reduce and eliminate plastic. In the absence of binding obligations or fiscal incentives to support reuse systems, progress remains confined to voluntary or pilot-level interventions.

Annex 3B: Country case studies Thailand

Stakeholder perceptions

Interviewees generally observed a lack of focus on reuse in existing national-level policies. While CSOs and the academic representative expressed concern over the limited attention given to reuse systems within Thailand's policy discussions, the government representative pointed to practical challenges in setting reuse-specific targets abruptly and the obstacles hindering the wider adoption of reuse and refill models in the country. Several stakeholders also noted that reuse remains framed as voluntary initiative rather than an integral part of waste prevention policy. At the same time, they noted that national discussions often overlook existing, everyday forms of reuse, framing it instead as a niche or novel approach. Overall, reuse still remains scarcely visible in national plans and lacks operational detail, measurable targets, or fiscal incentives. Government officials acknowledged these gaps but emphasised that establishing reuse targets requires groundwork on data, infrastructure, and behavioural readiness.

"National policy doesn't mention this [reuse] much, they just put some sentences in the national plan on waste management, but they just put it there for the sake of having it. And no target, no detail what to do."

NGO, P68

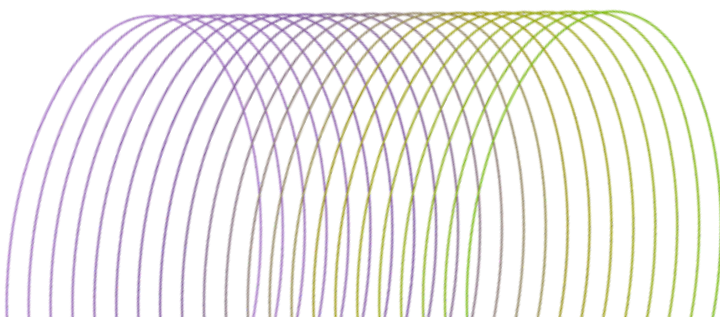
"It [reuse] has been integrated in some national policies like the Action Plan on Plastic Waste Management; but it is not enough in Thailand. Action Plan in this country means nothing, only voluntary. We need to translate the policy into laws. Policymakers are not aware of the importance of the reuse system and what they need to do such as providing infrastructure, setting some rules, incentives, creating networks, educating consumers etc."

Academia, P63

The Government representative viewed the absence of reuse targets as a deliberate choice linked to the need for stronger evidence and systems readiness. Their position suggests that the current efforts remain exploratory, focused on data collection, mapping of existing practices, and assessing consumer awareness. Pilot initiatives and incentive trials were seen as necessary precursors to future regulatory instruments, such as deposit-refund schemes or loyalty-based incentives.

"Thailand still lacks a specific law on sustainable packaging management, several practical challenges remain; many types of packaging currently produced cannot be reused, as most are designed as single-use plastic packaging rather than reusable packaging. Consumers often expect refill products to be cheaper, which creates pricing pressures. Limited distribution of refill stations and low levels of public awareness hinder uptake. Retailers and businesses face additional costs to establish container-cleaning facilities. As a result, refill station businesses in Thailand have yet to become widespread or popular. [...] Thailand currently lacks well-established public infrastructure for reuse systems. As a result, it is very challenging to set national reuse targets."

Government, P69



Annex 3B: Country case studies Thailand

Interviewees identified several reasons for the slow progress in enacting binding national legislation to address plastic pollution and promote reuse and refill solutions. These include industrial lobbying, a lack of political will, and the government's limited capacity to fully understand the root issues and develop long-term solutions.

"It's about the power of the industry. [...] in Thailand there is the Environmental Committee [sub-committee on plastic waste management under the National Environment. Board], and everything about the environment has to have to consult with the committee and most of the committee members come from the industry. So I think it is lobbying in the beginning."

NGO, P56

"I think one of the challenges is the capacities at the government level. [...] they [government agencies responsible for plastic-related policies] do their work, but they live in a system that is quite challenging [...] they don't have enough people. They don't have enough capacity, training, or background."

International development agency, P62

Weak coordination across ministries was seen as a systemic barrier. The Ministry of Natural Resources and Environment is primarily responsible for waste management policies, but lacks the authority to drive upstream measures such as waste avoidance or reuse, which fall under trade and industry portfolios.

"[...] there is no institution outside of the Ministry of Environment that is really responsible for reducing single use plastic because it's an environmental topic. The Ministry of Environment doesn't feel responsible for reuse because the unit created in the Ministry of Environment is responsible only for plastic waste management and not for reduction [...] a very important lesson learned that the institutional landscape doesn't really allow us to address the topic."

International development agency, P56

"[...] just talking about waste management and everything like every policy separated in each unit of the government."

NGO, P56

Annex 3B: Country case studies Thailand

Stakeholders noted that Thailand's street food culture and strong preference for convenience present practical constraints to scaling reuse, particularly for small vendors.

"Thailand has a culture of eating and we eat for 24 hours. So I think when the packaging comes from food, people see that it is convenient. [...] during this time there is the popular period of the delivery service as well. I think Thai food has many, many seasonings. So I think it is very challenging to implement reuse and refuse, and implement the refill practice. They have to think about the small portion of many, many seasonings as well."

NGO, P56

"Thailand is famous for its street food, where everything is packed in bags. This is an important change that has to take place. And this is a huge challenge now. [...] Street food is very affordable and good quality. So they grab some food in the street and then they get it definitely in a plastic bag or plastic packaging. [...] so it's cultural."

International development agency, P62

"[...] it's quite hard for consumers to take the empty bottle right from home to refill at the supermarket. [...] I think that if we have a small refill station at communal dorms, it would be convenient for residents to just go down and bring their empty bottle or shampoo to refill downstairs."

Academia, P63

Concerns about hygiene and convenience were repeatedly mentioned as key behavioural barriers, reinforcing the view that voluntary uptake of refill systems is unlikely without formal mandates or incentives.

"Refill is, to my opinion, a thing that can only work via mandates. Can only work via very top down approaches, if you don't want to wait for environmental awareness of the society. Consumer choices tend to favour non refillable solutions. And this has to do with hygiene. Very simple. The ultimate runner behind it is hygiene and comfort or convenience, right? So convenience and hygiene are the two elements that have to be addressed when you go with refills."

International development agency, P55

Interviewees proposed a mix of regulatory and incentive-based measures, including phased SUP bans, reuse obligations for dine-in establishments, shared infrastructure development, fiscal incentives for reuse businesses, and education campaigns to embed reuse behaviour.

"I think one quick move, which can be done is a clear ban for single use plastic. So when you're dining in restaurants, when you're sitting there, single use, plastic is not allowed. [...] these big food delivery companies, because they become massive in Southeast Asia, and work on alternatives to plastic with them.[...] the opt out would be the default option for minimum plastic and then opt in for if you want to have cutlery. So this would be a policy which I think the companies could all implement very simple, very fast."

International development agency, P55

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"We need the law to force the cafeteria, canteen or restaurants or cafe. If the customer dines in the restaurant and eats there, drinks there, you cannot serve the food in the single use container, so you have to use the reusable container. [...] At least we should ban giving away free plastic bags. So maybe you can have the law saying that you have to charge one baht per bag or something better than nothing. And also the problem of the cutlery. Now plastic forks and spoons are free when you order takeaway, come with you without asking. It should be made optional. If the customer wants, they have to request and pay."

NGO, P68

"[...] the government has to set up the infrastructure for the reusable system. [...] it can be the government that collaborates with the business sector because the government or the corporate has many, many resources to do this."

NGO, P56

"[...] they [the government] need to include some education too, not just the waste separation, but it's about including reuse in education"

NGO, P64

Currently, Thailand does not have an EPR policy or scheme. The proposed Sustainable Packaging Management Act, still in the draft stage, is expected to lay the foundation for a future mandatory EPR framework. Interviewees emphasised the importance of developing a mandatory EPR scheme with reuse integrated as one of its core components, and of complementing it with other supportive policies.

"That is that in the EPR laws, those companies that eliminate single use plastic or plastic in general through refill solutions and reuse solutions do not have to pay any fees for this fraction. [...] That means that the fees for the companies [using SUPs] have to be high in order to really reduce or encourage."

International development agency, P55

"Reuse targets should be included in EPR but need other policy instruments to complement too. Part of finances from EPR law can be used to support reuse infrastructure."

Academia, P63

"The highest-level approach to managing used packaging is to reduce packaging consumption. EPR schemes should be designed to incorporate strategies for reducing packaging use. Therefore, reuse targets should be included within the EPR framework and accounted for separately from the packaging collected for recycling."

Government, P69

Annex 3B: Country case studies Thailand

Some interviewees highlighted the need for policies dedicated solely to reuse and refill.

"[...] they can create the reuse policy to support our business growth or the kind of reuse business."

Reuse business, P64

"[...] we need another law to focus on reuse and refill."

NGO, P68

These views reflect wider calls for Thailand to move from fragmented plastic management towards a comprehensive reuse-enabling policy that integrates fiscal incentives, infrastructure, and public engagement.

Impacts on businesses

Despite the absence of a supportive policy environment, a limited number of businesses are experimenting with reuse and refill solutions in Thailand. While interviewees viewed these initiatives as encouraging, they generally agreed that such sporadic efforts, driven by individual environmental commitment and often dependent on international funding or private capital, struggle to scale or sustain themselves without a coherent policy framework and public infrastructure.

"But actually the nature of the business [reuse business] is that it will come and go. The consumer might not be ready to do that as well. But for the [name of a reuse business], they're so brave to do this one. so I feel like this is kind of the ambition of the individual. But there is no support from the government, so it means if you fail, you fail, you take your own risk."

NGO, P56

"[...] although we have the reuse, there are a lot of startups. Small companies, with cafes and some restaurants, some delivery. We try to develop new business models and these are often supported by some of these incubation things in the end, indirectly through international cooperation or private initiatives. But one of the conclusions I gained from working some years in this, is also that without regulation, it won't work."

International development agency, P62

As noted earlier, the 2023 FDA notifications regulating refill systems have placed stringent hygiene and compliance obligations on operators, which several interviewees described as prohibitive for small-scale businesses. While setting uniform standards could help mainstream and formalise refill activities and address consumer concerns about hygiene, these regulations can also act as barriers for businesses wishing to adopt refill models. In particular, the high standards stipulated make it difficult, especially for small-scale businesses, to comply and obtain approvals. These measures represent the first formal attempt to regulate refill systems, but they reflect a compliance-driven rather than enabling approach. The resulting administrative burden disproportionately affects SMEs and inhibits market experimentation.

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"[...] existing law, we cannot use it to promote the circular economy. I can give you an example of the refill station regulation, issued by FDA. [...] there's no promotion aspect to the business who do the refill, they just command them to do this. To do that. When I read the regulation on refill stations I think... Who can do it, and it's quite costly and quite troublesome to do it. So I also interviewed the SME's who used to open the refill station, they said it's quite hard to follow the laws because it is beyond their capacity to prepare a lot of things like labelling, or to ensure the safety of the container brought by the consumer [...] FDA has used its laws to regulate refill stations but no incentives at all."

Academia, P63

"Right now in Thailand the policy states that if you want to do the refill store, you have to establish your workplace for the government and the government can control that hygiene. But in their opinions [refill business], they say why do they have to establish this one? [...] they still think that why doesn't the government create the mechanism and allow everyone to do this thing equally. So it means it's kind of the discrimination as well that if you have to do it, you have to register first, otherwise you will be illegal. But not everyone can register with the government. You have to go to the commission and show something."

NGO, P56

"In the past we also had that [refill businesses] and then they went out of business because the FDA, they're like concerned about consumer safety and their regulation is so strict that it's not possible to follow the law. So the SMEs cannot survive with this kind of regulation."

NGO, P68

While the government representative acknowledged the challenges posed by FDA regulations, they emphasised the importance of such regulations in preventing potential harmful consequences.

"Existing laws pose barriers, such as those related to food and drug regulations and hazardous substances regulations. However, there are key concerns with packaging-free sales, such as cleanliness of refillable containers, consumers' limited awareness regarding the compatibility of containers with the product content, and liability for problems arising from the use of refill products. For these reasons, clear legal structures and standards are required to allow homecare products refills under the law."

Government, P69

Annex 3B: Country case studies Thailand

Interviewees highlighted that consumer participation remains a core determinant of business success, with behavioural habits deeply shaped by convenience and single-use norms. For reuse businesses, inconsistent consumer engagement undermines operational stability. Deposit–refund mechanisms were repeatedly identified as one of the most practical ways to address this behavioural gap.

“They [a reuse business] say that it's not successful because of the discipline of Thai people that do not return the packaging. [...] now they have a system that people have to pay for deposits and then you will get your deposit back when you return the bottle. It's running very well because the return rate is worth more than the not return.”

NGO, P56

At the same time, interviewees stressed that voluntary or localised schemes cannot achieve sustained behavioural change without regulatory and infrastructural reinforcement.

“If you have been to Germany, in all supermarkets you see this deposit return machine, you need a full system for that, from regulation and logistics, everything. Sometimes in this country, you see some initiatives and some company or some municipality installs these machines, but there's no system behind and it doesn't work and you need people to trust the system. Or you put a full system or nothing but things in that way. One machine here, one thing there, then people don't trust.”

International development agency, P62

“There should be a legal mechanism requiring a deposit scheme for packaging used in refill stations, ensuring proper return, reuse, and accountability. [...] Currently, Thailand does not have a law on deposit–return mechanisms for packaging recovery, which hinders scaling of reuse and return models.”

Government, P69

“[...] we must have a law to allow the deposit return system.”

NGO, P68

Beyond the lack of legal backing, interviewees identified structural barriers that limit the viability of reuse businesses, including restricted access to finance, the high upfront cost of reusable packaging compared to SUPs, and logistical challenges associated with retrieval and cleaning infrastructure.

“[...] for me the biggest challenge is the policy for sure. And the second one I think is about the capital, because if you want to run this business in Thailand, you need more capital because you need to subsidise cost to convince owners or even organiser to use your service. [...] I think it's about the infrastructure because if you don't have anything like a return station to do the reusable packaging system, you cannot do this one.”

Reuse business, P64

Annex 3B: Country case studies Thailand

“Logistics... Not only the cleaning, washing process, but to get the bottle back because the bottle is quite heavy and the transportation cost and maybe expensive. [...] the cost is the main factor. If they use plastic, it's cheaper than glass. They will choose plastic. And no matter what, whether the glass bottle is single use or reusable, they don't care. They just care about the price. So to make reusable competitive, that means you have to make it cheaper or you have to make single use plastic more expensive.”

NGO, P68

Addressing these barriers requires moving beyond ad hoc support and towards coordinated policy design. Interviewees proposed several targeted interventions, including introducing regulations that incentivise reuse and refill businesses, policies establishing standards and enforcement mechanisms, financial support for small and medium enterprises (SMEs) and start-ups, financial incentives for consumers and businesses, and raising consumer awareness.

“[...] legislation needs to be done. Institutions need to be served, standards need to be developed, enforcement mechanisms. All standards need to be developed.”

International development agency, P55

“[...] it should be the regulation that provides these financial incentives, economic incentives.”

International development agency, P62

“Also for the promotion, maybe we should have some tax privilege or tax deduction for those who invest in the reuse system.”

NGO, P68

“[...] the first one is policy. The second one is maybe funding or something that they can fund some start up or someone who wants to do reuse.”

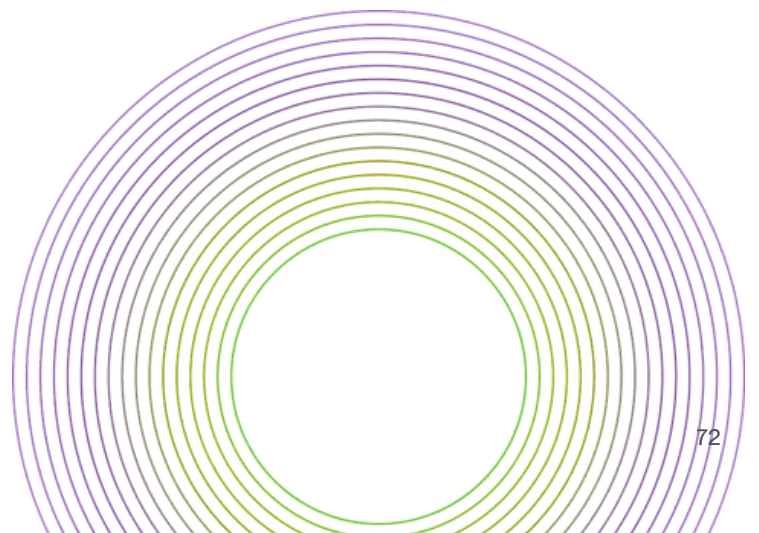
Reuse business, P64

“And maybe ease of doing business like maybe losing some regulation as I mentioned some regulation that's quite difficult for SMEs. Or maybe some loans or assistance to get a loan to upgrade the shop themselves maybe like that?”

Academia, P63

“Consumers need additional incentives such as loyalty points or discounts. And businesses operating refill stations should receive benefits such as carbon credits, plastic credits, or tax incentives to offset costs and encourage participation.”

Government, P69



Annex 3B: Country case studies Thailand

While an academic representative recommended a mandatory allocation of space in supermarkets for refill stations, the government representative highlighted the challenges involved in implementing such a system.

"Maybe some provision that the supermarket needs to spare some space for the refill station and then they can invite SME's to come and rent, right, maybe with a discount rental fee for SMEs to have more exposure to the customer."

Academia, P63

"Earlier discussions considered the feasibility of introducing small refill stations within convenience stores, but challenges persist regarding space limitations and financial viability."

Government, P69

3. Lessons learned and recommendations

Lessons learned: enablers

Although Thailand does not yet mandate reuse systems, the evidence points to several policy enablers that could be leveraged to build an effective reuse and refill framework.

Policy attention to plastic waste is increasing. The development of the Sustainable Packaging Management Act, along with various interventions and initiatives under the Roadmap on Plastic Waste Management 2018–2030, indicates increasing attention from policymakers to address plastic pollution. While these interventions do not currently focus on reuse or refill solutions, the Phase II Action Plan's suggestions to encourage deposit-refund schemes and refill models could lay the groundwork for future reuse-enabling policies and infrastructure. Thailand's policy attention to plastic waste provides an opening to recognise and institutionalise existing reuse practices, expanding them into system-level frameworks.

An emerging EPR framework can become a delivery vehicle for reuse. The proposed Act will house producer obligations for packaging, which can be expanded to include reuse targets, fee modulation and eligibility of reuse infrastructure as a compliance pathway.

Private-sector coalitions provide implementation capacity. Private sector initiatives supporting the roadmap, such as the establishment of the PRO-Thailand Network, the Public-Private Partnership for Sustainable Plastic and Waste Management, and businesses participating in campaigns to voluntarily reduce plastic use, reflect increasing recognition of the issue of plastics among businesses. These platforms already coordinate collection, logistics and business participation, which can be redirected to support reverse logistics for reuse when incentives align.

Donor-supported pilots offer de-risking and policy feedback. Programmes like EIJ's Bottle Free Seas demonstrate refill feasibility and generate demand and performance data that regulators can use to calibrate national instruments.

Standards work by the health regulator can underpin consumer trust if broadened and right-sized. FDA notifications on cosmetic refills establish hygiene and labelling baselines that, if made proportionate and extended beyond cosmetics, could help normalise refill across sectors.

City-level pilots can phase in reuse under manageable conditions. Municipal concessions for food courts or university campuses can mandate dine-in reusables and shared washing hubs, generating operational data for national scale-up.

Annex 3B: Country case studies Thailand

3. Lessons learned and recommendations

Lessons learned: barriers and challenges

Lack of focus of reuse in existing policies. Thailand's national frameworks, including the Roadmap on Plastic Waste Management, largely prioritise recycling and biodegradable substitutes rather than reuse. The absence of specific targets, timelines, or fiscal incentives for reuse reduces policy predictability for investors and limits the visibility of reuse as a viable waste prevention measure. Policy discourse tends to frame reuse as a new innovation rather than a continuation of existing practices, leading to under-investment in strengthening established reuse habits and informal systems.

Limited scope and follow-through existing SUP bans. Apart from isolated measures such as prohibiting certain types of problematic SUPs in national parks and campaigns encouraging retailers to voluntarily reduce SUP use, Thailand has no comprehensive national or local regulations to phase out SUPs. While the Roadmap on Plastic Waste Management recommended eliminating certain types of SUPs by 2022, this goal remains unmet, reducing the potential for bans to trigger uptake of reusable alternatives or stimulate markets for refill infrastructure. Moreover, problematic SUP bans without accompanying reuse policies or infrastructure often result in substitution with other single-use items, such as biodegradable plastics, rather than durable, reusable alternatives. This is particularly concerning given the limited availability of dedicated facilities in Thailand for the environmentally and socially sound management of bioplastics.

Absence of an operational EPR framework. Although the draft Sustainable Packaging Management Act proposes an EPR structure, the absence of an implemented scheme prevents Thailand from applying economic instruments such as eco-modulation, producer fees, or reuse credits that could shift business incentives away from single-use models. Also, the current version of the draft provides limited attention to the promotion or incentivisation of reuse or refill business models.

FDA regulations discourage small businesses participation in refill models. FDA regulations governing refills of cosmetics impose stringent standards for hygiene, labelling, and facility registration. While these rules enhance consumer safety, their design without proportionality clauses excludes small enterprises from participating in refill markets and stifles innovation.

Fragmented ministerial responsibilities weaken coordination. Plastic waste management, trade, health, and industrial regulation sit across multiple ministries with limited horizontal coordination (Luther & Vassanadumrongdee, 2024). This dispersion constrains Thailand's ability to design coherent reuse policy or align supporting measures such as fiscal incentives, public procurement, and infrastructure development.

Socio-cultural and structural constraints limit reuse adoption in the food sector. Thailand's extensive street food culture, reliance on takeaway packaging, and the small size of many vendors make operationalising reuse logistically and financially difficult. Without targeted subsidies or shared collection systems, SUP packaging remains the most convenient and affordable option for both businesses and consumers.

Annex 3B: Country case studies Thailand

Recommendations for designing an effective reuse policy framework

Drawing on lessons from Thailand's reuse policy experience, the following recommendations are proposed to strengthen the national reuse policy framework. In the specific socio-cultural context of Southeast Asian countries such as Thailand, duplicating models from economically advanced countries may not be practical. Policies must therefore be inclusive, locally adapted, supportive of a just transition, and implemented gradually.

- **Explicitly recognise reuse systems and refill solutions in national plastic policy frameworks.** Formal recognition in key strategies would help embed reuse within Thailand's broader waste prevention approach, giving legitimacy to business models and investor confidence to support them.
- **Develop a national law specifically addressing reuse and refill systems.** A dedicated legal instrument would move reuse from pilot-scale experimentation to formalised practice, providing a clear mandate and accountability for implementation.
- **Introduce a phased national ban or mandatory reduction of SUPs accompanied by the development of a reuse ecosystem.** Progressive elimination of items such as plastic bags and foam containers (starting with closed systems such as events venues, universities and hospitals) could stimulate demand for reuse alternatives while allowing SMEs time and support to adjust.
- **Establish a strong, mandatory EPR scheme with measurable reuse and reduction targets.** Integrating reuse obligations into producer compliance plans would shift current recycling-oriented mechanisms toward genuine waste prevention.
- **Define clear and proportionate safety and sanitation standards for reuse and refill operations.** Practical, risk-based guidelines would reduce liability concerns and promote consistency across sectors, supporting business and consumer confidence.
- **Revisit FDA regulations to enable SME participation.** Current hygiene and registration requirements could be simplified without undermining consumer safety, ensuring smaller operators are not excluded from emerging refill markets.
- **Support transition in the food sector through targeted incentives and shared infrastructure.** Measures such as banning disposable utensils for dine-in and requiring online food delivery platforms to set 'no cutlery' as the default option (making disposable cutlery a specifically requested choice) can help nudge behavioural change. Piloting shared washing facilities and providing subsidies for reusable packaging could reduce barriers for street vendors and small food businesses in transitioning to reuse systems.
- **Introduce legislated deposit–refund systems for packaging.** A formalised deposit mechanism, backed by regulation, would normalise reuse behaviour and improve return rates for packaging and containers.
- **Expand government support for reuse and refill enterprises.** Access to grants, tax credits, R&D funding, and shared infrastructure would allow SMEs and start-ups to scale economically viable reuse systems.
- **Encourage financial institutions to invest in reuse infrastructure.** Preferential loans, risk-sharing mechanisms, and blended finance instruments could mobilise capital for reuse beyond government and donor budgets.

Continues on the next page.

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Recommendations for designing an effective reuse policy framework

Recommendations continued:

- **Improve inter-ministerial coordination and policy coherence.** A joint platform between environment, industry, trade, and finance ministries could align incentives and avoid conflicting measures that fragment policy delivery.
- **Ensure inclusive stakeholder engagement and integration of informal workers.** Consultation processes and employment provisions for informal waste pickers would enhance legitimacy, equity, and implementation capacity.
- **Expand public education and communication on reuse.** Campaigns and curriculum integration could increase consumer understanding, address hygiene concerns, and shift habits from single-use convenience toward reuse acceptance.

4. Strength of evidence

The Global Plastics Policy Centre is committed to transparency in our research findings, which includes identifying specific and persistent knowledge or evidence gaps. The following table summarises the state of evidence available for Thailand during the research period.

Literature search	Interviewees	Peer review	Total evidence strength
Moderate- Key national policies, policy reports, reports produced by NGOs, some websites and blog posts. Limited peer-reviewed resources.	8 interviews from 7 organisations - strong	Peer review completed by 2 reviewers	Moderate

Annex 3B: Country case studies Thailand

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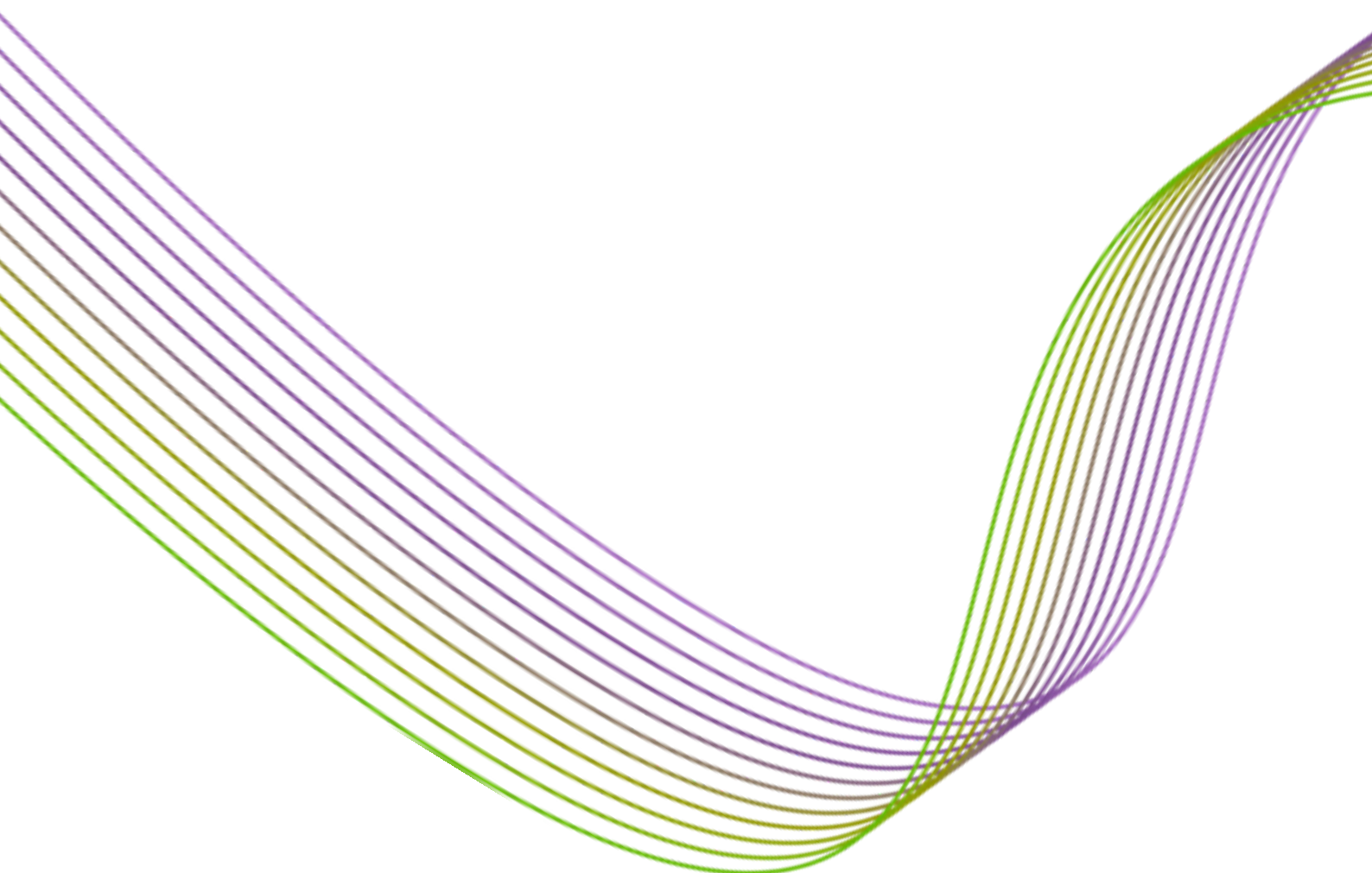
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Annex 3: Country case studies

Annex 3C: Reuse policy in the Philippines

1. Reuse context

Zero-waste is not a new concept in the Philippines. Traditionally, the Filipinos practiced a tingi culture, which implies buying or using products in small, exact quantities (Ledesma et al., 2024). As the country became a key market for fast-moving consumer goods, multinational corporations and large retailers capitalised on this habit by promoting single-use packaging (GAIA, 2020b). Like in many other low and middle income countries, the big businesses introduced sachets as a way to sell products in tingi (small quantities) at prices affordable to low-income households (GAIA, 2020b; Ledesma et al., 2024).

“Reuse is not really a new concept in the Philippines, because I’ve heard from old people and my sister. [...] they were talking about how when they were kids they would just bring their own containers and buy from the stores. And the candies would be wrapped in paper like from the Yellow Pages. And then if they need to buy condiments, they would just need to bring their own containers. But then during the 90s and 2000 onwards, there were the sachets that were introduced to the Philippines..”

Local elected representative, P58

Recently, however, there has been growing recognition, particularly within the private sector, of the potential to make use of tingi culture to promote reuse and refill systems (Ledesma et al., 2024). As a result, a number of private sector initiatives and social enterprises have begun establishing zero-waste refilling stations (GAIA, 2020b). Yet these efforts remain limited in scale and number, with most located in urban areas and rarely any options in rural or remote communities. Most interventions to address plastic pollution still focus on downstream solutions such as recycling (Bueta et al., 2023).

While refill and reuse business models have not yet gained significant attention in national policy in the Philippines, various reports by non-state actors highlight the importance of promoting and adopting alternative delivery systems, such as reuse and refill models (e.g., PCEPSDI, 2022; GAIA, 2019; World Bank, 2022, 2024). At present, the Philippines has no specific legal or policy instruments that set reuse targets. However, several policy documents, both binding and non binding, aim to encourage and regulate reuse and refill business models; e.g., Administrative Order No. 2024-0008, Extended Producer Responsibility (EPR) Act, 2022, the National Solid Waste Management Framework of 2004, and the National Plan of Action for the Prevention, Reduction, and Management of Marine Litter, 2021.

Reuse history

The circular economy has long been part of life of the Filipinos through tingi culture, supported by systems such as sari sari stores (neighbourhood convenience stores), junk shops, and repair and refurbish shops (Bueta et al., 2023). Well before the widespread use of sachets and other single-use plastics (SUPs), this practice encouraged customers to bring their own reusable containers to sari sari stores and community markets when buying everyday items. Shopping at local markets also involved the use of bayongs, traditional Filipino bags or baskets handwoven from bamboo or sturdy plant leaves. The essence of tingi culture lay in purchasing only what was needed, which minimised waste, avoided excess packaging, and kept goods accessible and affordable (Ledesma et al., 2024).

“Culturally, the Philippines have been integrating reuse in our daily practices, daily business transactions, and it is evident from our ancestors still in some parts of the Philippines. And you can also see it in some of the establishments.”

NGO, P60

“We used to have it here in the Philippines before the plastic pandemic. We used to have our bottles in glass bottles and we would return it to the store and then they would do deposit returns.”

NGO, P65

Annex 3C: Country case studies

The Philippines

Water refilling stations, which supply households and commercial establishments with drinking water in reusable 5-gallon containers, are also commonplace across the Philippines and are subject to regulation.

The beverage sector remains one of the few areas in the Philippines where reuse still operates at scale, although its market share has been gradually declining. As of 2019, refillable systems accounted for 59% of the overall beverage market, the highest level in Asia, though down from 86% in 1999 (Wilcox & Mackenzie, 2021). The Philippines is identified as one of only four out of 93 countries studied where a majority of beverages are sold in refillable bottles (Wilcox & Mackenzie, 2021). Beer in glass bottles remains relatively common, and in some provinces, carbonated drinks are still distributed through local bottling plants. However, while these reuse systems for bottled beverages continue to function, they are no longer part of the mainstream market.

In recent years, though still limited in quantity and scale, a number of private sector initiatives led by NGOs, retailers, and social enterprises have been experimenting with innovative reuse and refill business models in the country. One example is Kuha sa Tingi, conceptualised as a pilot project by Greenpeace Philippines in collaboration with two local government units (LGUs). The initiative aims to reduce, and eventually eliminate, the use of sachets by creating a zero-waste alternative delivery system with competitive pricing. With tingi culture at its core, Kuha sa Tingi integrates refilling stations into community based outlets such as sari sari stores and other small retail shops across the country (Ledesma et al., 2024). Although conceived only as a pilot, the initiative reportedly proved successful: during a six-week pilot in one city and an eight-week pilot in another, the project prevented the sale of approximately 56,000 sachets. Consumers also reported saving money on purchases, and community stores hosting the dispensers earned 15% more profit, demonstrating the viability of such initiatives (Ledesma et al., 2024).

In 2019, Unilever piloted the 'All Things Hair Refillery' in three shopping malls over a three week period. Customers were invited to bring used bottles from Unilever brands to refill with their preferred shampoos and conditioners. Those without suitable containers could exchange them for new '100 per cent recyclable' and reusable plastic bottles (GAIA, 2020b). Although this remained only a pilot project and revealed limitations, such as difficulties for customers switching variants because the refilling system only allowed refills of the variant matching their old bottle, such initiatives are particularly valuable for identifying gaps in implementing reuse and refill solutions and highlighting areas for improvement (GAIA, 2020b).

In summary, the Philippines reuse history is characterised by:

- Strong regional traditions rooted in local culture, where people buy only small quantities in reusable containers or bags to minimise waste and cost.
- Although still limited in quantity and mostly isolated efforts, the emergence of refill stores, supported by NGOs, retailers, and social enterprises.
- Policy shift toward supporting waste reduction and designing regulations for refill practices.

Reuse system structure

While the Philippines currently lacks formal, nationally coordinated reuse systems, reuse remains deeply embedded in everyday life, as discussed earlier. Many sectors, including the beverage industry, continue to employ refill and reuse models. These existing systems show that reuse is not a new concept but rather a long-standing social norm that has been undermined by the rise of single-use packaging and the low cost of disposability. Recently, a number of private sector initiatives led by NGOs, retailers, and social enterprises have begun experimenting with innovative reuse and refill business models. These efforts aim to preserve and expand existing reuse practices rather than create them anew. However, they largely operate without coordinated government support or enabling infrastructure. The absence of clear regulations, fiscal incentives, or shared logistics systems limits their potential to scale and to compete with single-use models that remain cheaper and more convenient for both producers and consumers.

Annex 3C: Country case studies

The Philippines

Evolution of policy landscape

The Ecological Solid Waste Management Act of 2000 (Republic Act No. 9003) is considered as the Philippines' primary legislation on solid waste management. It declares the policy of the State to adopt a systematic, comprehensive, and ecological solid waste management programme that protects public health and the environment while using environmentally sound methods to maximise resource use and promote conservation and recovery. A key provision of the Act is the mandatory solid waste diversion requirement, which obligates every LGU to divert at least 25 per cent of all solid waste from disposal facilities through reuse, recycling, composting, and other resource recovery activities. Each plan is required to feature a source reduction component with a programme and implementation schedule for reducing the volume of waste that needs disposal. This component is also required to outline programmes and economic incentives to decrease the use of non-recyclable materials, promote the replacement of disposable products with reusable alternatives, and reduce packaging waste. The Act stresses the need to consider local context and social concerns when selecting appropriate waste reduction strategies. However the Act defines reuse as the process of recovering materials intended for the same or different purpose without the alteration of physical and chemical characteristics. This interpretation is relatively narrow, framing reuse primarily as a downstream activity focused on repurposing waste or used materials, rather than as an upstream intervention integrated into reuse systems and product design. In addition to these measures, the Act also has a provision for identifying non-environmentally acceptable products and packaging (NEAPP). According to R.A. 9003, the list must be released and regularly updated taking into consideration the presence of alternatives and emerging scientific data. Inclusion on the NEAPP list would result in an item being banned a year after the list is approved and published. However, since the passage of R.A. 9003, only two items have been identified and a ban has yet to be implemented.

In 2022, the Philippines enacted the EPR Act, or Republic Act No. 11898, which aims to institutionalise EPR for plastic packaging waste. The law integrates the concept of a circular economy, defining it as an economic model that creates value by extending product lifespans through better design and servicing, and by shifting focus from the end of the supply chain to its beginning. Only large enterprises are mandated to implement EPR, while micro, small, and medium enterprises (MSMEs) are encouraged to adopt EPR practices voluntarily. The Act establishes following legally binding targets for obligated enterprises regarding the recovery of their plastic product footprint and imposes penalties ranging from five million to twenty million pesos (approximately £64000-£260000) for non-compliance.

- December 31, 2023 - 20%
- December 31, 2024 - 40%
- December 31, 2025 - 50%
- December 31, 2026 - 60%
- December 31, 2027 - 70%
- December 31, 2028 and every year thereafter - 80%

Although the EPR Act and its Implementing Rules and Regulations (IRR) narrowly define reuse as the reuse of waste (rather than reuse of products within systems) and set no specific reuse targets, they however identify reuse and refill systems as key strategies for reducing plastic waste. For instance, Section 44-A of the Act highlights adopting reusable products, redesigning products to enhance their reusability, recyclability, and retrievability, and establishing product refilling systems, as some of the strategies to reduce the amount of non-environmental friendly products. Section 12 of the IRR reinforces these strategies, where Section 12.1.3 clarifies that reductions in plastic packaging waste achieved through wider distribution or deployment of refilling systems can be counted as a measure to achieve plastic neutrality under the EPR Act.

To qualify as a plastic waste footprint reduction under the EPR Act, obligated enterprises, collectives, or Producer Responsibility Organisations (PROs) are required to submit a plan specifying the type of product and target volume to be distributed through refilling systems. The plan must also include an implementation timeframe, the modalities for establishing the refilling system network, and the estimated mass of single-use containers avoided. The IRR further requires that obligated enterprises, collectives, or PROs incorporate an information and education campaign (IEC) into their individual EPR programmes. This campaign is aimed at informing consumers about the refilling system options available under their EPR schemes, including details on products offered through refill systems, locations of participating distributors, requirements for reusable containers, and relevant contact information.

Annex 3C: Country case studies

The Philippines

However, interviewees felt that the EPR Act places greater emphasis on recovery rather than reduction and does not provide sufficient incentives for businesses to adopt reuse systems. They opined that reuse and refill solutions need to be more prominently integrated into the EPR framework.

"[...] if we're going to look at the EPR version of the Philippines, it's mostly on the recovery of the plastic waste, but less on the reduction."

NGO, P60

"[...] Our EPR is very limited in terms of recovery. There's no reduction, for example. But if they impose reduction then companies will really look for alternatives such as reuse."

Reuse business, P57

"At least the EPR should give them an incentive or require them to set up [reuse models]. [...] There should also be that part that requires them to do the reuse or at least the deposit refund system a requirement. If you give them options of course they will definitely choose the easiest route right? [...] I think the reuse system, right now, given the cost involved, is not really something appealing for the business sector. So instead of penalising them, make it a requirement. Maybe let's say, set aside part of their resources to do this kind of business model."

Reuse business, P54

An important legislative document related to refilling systems is the Administrative Order No. 2024-0008 on Guidelines on the Licensing of Establishments Engaged in Refilling Activity of Certain Cosmetics and Household/Urban Hazardous Substances (HUHS) Products issued by the Food and Drug Administration (FDA) of the Philippines. The Order seeks to mainstream refilling stations and sets out guidelines for regulating establishments involved in the refilling of regulated health products. The Order also outlines the criteria, measures, requirements, and standards that businesses engaged in refill operations must observe.

In addition to the enacted and legally binding legislations, the Philippine government has introduced several national-level action plans, frameworks, and roadmaps. Although not legally binding, these documents outline broader policy perspectives on addressing plastic waste pollution, and promoting circular economy solutions, highlighting waste avoidance through refill or reuse as one of the key strategies to achieve these. Key examples include the National Solid Waste Management Framework 2004, the National Solid Waste Management Strategy 2012–2016, the Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP) 2021, and the National Plan of Action for the Prevention, Reduction, and Management of Marine Litter 2021.

While there is no national ban on SUPs in the Philippines, as noted earlier, several LGUs have implemented regulations to ban or control the use of different types of SUPs, such as karashopping bags, styrofoam, and cutlery, replacing them with reusable alternatives (Amurao, 2020; Metropolitan Manila Development Authority, 2022; Schachter & Karasik, 2022). For instance, in 2012, Quezon City introduced a levy on plastic shopping bags used in retail establishments. To lead by example, the city also banned SUPs within the city hall complex and selected public hospitals. Subsequently, the city extended the ban to the distribution and use of SUPs throughout Quezon City. The City of San Fernando, recognised as a model city for zero-waste, passed its plastic bag ordinance in 2014, giving residents one year to prepare for the full ban. During the transition period, the city launched a public awareness campaign, introduced "Plastic Regulation Day" Fridays, and imposed levies on plastic bags. This gradual phase-out strategy was estimated to have contributed to a high compliance rate of 85% among residents (GAIA, 2020a; Schachter & Karasik, 2022). However, the varying levels of restrictions imposed by different LGUs make the implementation of these bans less effective in the absence of a national policy regulating SUPs. (Legaspi, 2024).

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"[...] it's [SUP ban] different from our city to the other city. So in our city it's only two [types of SUPs banned] [...] It will be better with the national policy because right now it's different for every city. That's why people are also getting confused because it's banned here, but it's not banned there. [...] The next city is just 10 minutes away from us. More types of plastics are banned there. But when they come here in our city, they're allowed. So sometimes they just bring whatever is there, they just send it to places which are still allowed. Even though there are policies in place, sometimes on the ground it's not really getting checked, monitored."

NGO & reuse business, P57

"There is this famous mall [redacted]. So this mall is divided into two cities and one city has the plastic ban and the other one doesn't. [...] So in one store, they give out plastics and in the others they give out boxes or paper bags. So it should be a national law, so that all of the LGUs would comply, and if LGUs would implement it, the businesses would follow."

Local elected representative, P58

Certain government departments have also taken proactive measures to restrict SUPs. For example, Office Order No. 2020-010 prohibits the use of SUPs within the Climate Change Commission, covering its daily operations, meetings, events, and other activities. The National Solid Waste Management Commission (NSWMC) established a Technical Working Committee tasked with phasing out non-environmentally acceptable products and packaging materials. It adopted a resolution providing guidelines for the phase-out, and issued a separate resolution directing the Department of Environment and Natural Resources (DENR) to develop and implement a ban on the use of unnecessary SUPs by national government agencies, LGUs, and other government-controlled offices (NSWMC, 2012). The NSWMC also issued Resolution No. 1428, Series of 2021, which declared plastic soft drink straws and plastic coffee stirrers as non-environmentally acceptable products. However, apart from banning the usage of SUPs, these measures do not directly promote reuse.

Table 4. Major policies related to reuse and refill in the Philippines.

Policy	Year	Relevance
Supplementing Implementing Rules and Regulations of Chapter - II - "Water Supply", of the Code on Sanitation of the Philippines (P.D. 856)	1999	Includes provision to regulate the water refilling stations for commercial purposes and includes sanitary permit requirements, sanitary structural requirements, sanitary facilities requirements, water quality monitoring, health requirements for those operating the refilling stations, etc.
Ecological Solid Waste Management Act of 2000 (Republic Act No. 9003)	2000	Establishes a mandatory waste diversion target of 25% for LGUs. LGUs are required to develop solid waste management plans that include a programme and implementation schedule for solid waste reduction. Implementing reusable alternatives and reducing packaging are mentioned as potential strategies to achieve this.
National Solid Waste Management Framework	2004	Provides guidance to LGUs to prepare and plan an ecologically sound solid waste management strategy to achieve the objectives outlined under Republic Act 9003. Underscores the importance of integrating source reduction in the preparation of local government solid waste management plans. One of the strategies proposed is the provision of economic incentives to consumers, such as the introduction of a deposit-return system.

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Table 4 (end). Major policies related to reuse and refill in the Philippines.

Policy	Year	Relevance
Executive Order No. 301, March 29, 2004, Establishing a Green Procurement Programme for all Departments, Bureaus, Offices, and Agencies of the Executive Branch of Government	2004	All government departments and agencies are mandated to submit their respective Green Procurement Programme (GPP) to the designated authority. These programmes need to include incorporating environmental criteria into public tenders, establishing specifications and requirements for products and services to be considered environmentally advantageous, and developing incentive schemes for suppliers offering environmentally sound goods and services.
National Solid Waste Management Strategy 2012-2016	2012	Outlines a medium-term plan for managing solid waste, recognising waste avoidance as one of the strategies.
Philippines Green Jobs Act of 2016 (Republic Act No. 10771)	2016	The Act aims to promote the creation of green jobs, defined as employment that contributes to preserving or restoring environmental quality, reducing energy, material, and water consumption, decarbonising the economy, and minimising or preventing the generation of waste and pollution. While the Act does not explicitly mention reuse, employment created through reuse-based business models clearly falls within this broader definition of green jobs.
Philippine Action Plan for Sustainable Consumption and Production	2021	Recommends conducting studies to develop alternatives to SUPs to facilitate their phase-out, creating business models for waste minimisation, such as refilling stations, and scaling up the adoption of innovative systems that promote circular economy solutions.
National Plan of Action for the Prevention, Reduction, and Management of Marine Litter	2021	Envisages achieving zero-waste in Philippine waters by 2040. Activities identified to meet this goal include the development of reuse and refill business models, promoting research and enhancing product and packaging design for improved reusability and recyclability, and encouraging innovative and sustainable practices to reduce disposable consumption in establishments and institutions such as hotels, restaurants, delivery services, and healthcare facilities.
EPR Act of 2022 (Republic Act No. 11898)	2022	Sets targets for obligated enterprises regarding the recovery of their plastic product footprint. The IRR of the Act mentions reuse and refill systems as one of the measures for reducing the plastic waste footprint.
The Philippine Green Public Procurement Roadmap	2022	Introduced as a voluntary instrument, providing guidance to public authorities on how to procure goods, services, and works with a reduced environmental impact throughout their life cycle.
Sustainable S&T Solid Waste Management Roadmap 2022-2028	2022	Envisions a circular economy and a solid waste pollution-free environment. Discusses the promotion of research and development (R&D), including the creation of alternative materials to plastic-based packaging and products, and conducting life-cycle analyses of SUPs with technological interventions. However, the document does not give focus to reuse systems.
Administrative Order No. 2024 - 0008 on Guidelines on the Licensing of Establishments Engaged in Refilling Activity of Certain Cosmetics and Household/ Urban Hazardous Substances (HUHS) Products	2024	Sets out guidelines for the regulation of establishments engaged in the refilling of certain cosmetics and household substances.

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Apart from the enacted legislation, several significant bills aimed at reducing the use of SUPs, and more explicitly encouraging reuse and refill practices, are currently under consideration in the Philippines. Although they are still awaiting approval from legislative bodies, the introduction of these Bills potentially indicates the growing public interest in plastic reduction, circular economy approaches, and reuse and refill solutions.

For instance, the Single-Use Plastic Products Regulation Bill seeks to regulate the production, importation, sale, distribution, provision, use, recovery, collection, recycling, and disposal of SUPs. It has been unanimously passed by the House of Representatives in 2021 (Cruz, 2021; Parkinson, 2021; SWITCH-Asia, 2025), but is still awaiting ratification by the Senate. The Bill also encourages establishments to implement effective in-store recovery programmes to facilitate and motivate customers to return used plastic products. The Single-Use Plastics Regulation and Management Bill of 2022 aims to regulate the manufacture, importation, and use of SUP products in the Philippines. It promotes reuse systems by defining reusable materials, plastics, or packaging as those specifically designed and manufactured for multiple uses and extended lifespans, and emphasising on source reduction. The term source reduction is defined in the Bill as the reduction of solid waste before it enters the waste stream through measures such as product design, material substitution, material reuse, and packaging restrictions, approaches that can support the development of reuse systems. The Philippine Circular Economy Promotion Bill of 2022 seeks to advance circular economy principles and sustainable consumption and production through improved reuse, recycling, and the reduction of plastic consumption. To achieve waste minimisation, the Bill supports research and technological development of alternatives to SUPs, introduces both regulatory mechanisms and fiscal or non-fiscal incentives to encourage environmentally responsible practices among producers and consumers, provides support to enterprises adopting zero-waste business models, encourages the use of refill systems and alternative delivery mechanisms, and promotes awareness-raising through IEC strategies. The Single-Use Plastic Bag Tax Bill of 2023 proposes imposing a tax on SUP bags produced.

In summary, the evolution of the Philippines reuse policy reflects:

- An absence of concrete policies and binding legislations that directly promote or incentivise reuse systems or refill solutions.
- National legislation that supports broader circular economy approaches and plastic-pollution reduction, directly mentioning or indirectly encouraging reuse and refill solutions.
- Non-binding national action plans and roadmaps that outline broader policy perspectives on addressing plastic-waste pollution and emphasise waste avoidance through refill or reuse.
- Although weakly enforced and lacking uniformity, several government departmental and local government initiatives that seek to regulate SUP use.
- Proposed Bills but not yet enacted legislation that introduce more concrete and ambitious measures to reduce plastic pollution and explicitly encourage reuse and refill models.

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2. Policy implementation and outcome

Policy outcomes

Since there are no reuse-specific policies currently in place in the Philippines, it is not possible to assess their direct impact. However, several documents offer broader insights into the implications of existing policy measures such as SUP bans, provide perspectives on public attitudes towards reuse practices, and highlight the impact of business models adopting reuse or refill solutions, which are discussed in this section.

In terms of the implementation of national legislation, the Ecological Solid Waste Management Act introduced a mandatory 25% waste diversion requirement. By 2016, only 36% of LGUs had fully complied (Akenji & Bengtsson, 2019). A recent report indicates the underperformance of materials recovery facilities by 22.07% of the 2020 national waste diversion target of 68.7% (UNDP, 2024). These outcomes reflect persistent capacity and resource gaps rather than the absence of legislation.

By 2022, 1171 of 1592 LGUs had approved ten-year solid waste management plans, and approximately 316 had ordinances regulating SUPs (NEDA, 2023). However, the implementation of these plans and policies has been hindered by the lack of dedicated environment and natural resource officers within LGUs, as well as by limited technical and financial capacity to establish and sustain treatment, storage, and disposal facilities (NEDA, 2023). Besides, the coverage of local-level bans remains inconsistent and fragmented. Reported outcomes vary significantly, with some cities achieving reductions in polystyrene and plastic waste of around 4% and others reporting compliance levels of close to 90% (Schachter & Karasik, 2022). This variability reflects the absence of harmonised national guidance and uneven enforcement across LGUs. While these ordinances demonstrate strong subnational initiative, they are rarely connected to reuse system development. The outcome has often been substitution with paper bags or other disposables rather than durable, reusable alternatives. In San Fernando, where the ban was phased in with awareness campaigns and levies, compliance reached 85% (GAIA, 2020a), suggesting that enforcement design can help shift behaviour towards reuse. However, inconsistent rules across adjacent LGUs create consumer confusion and weaken incentives for businesses to standardise packaging or invest in reusable options. Verbal reports from other LGUs with plastic bans reflect the same challenge, while several LGUs have also called for a comprehensive nationwide ban on single-use plastic (Oceana, 2021). This narrow scope limits the ability of bans to drive wider systemic change and reduces opportunities for reuse and refill systems to compete with low-cost single-use packaging.

"[...] a famous soft drink company. They're pretty famous for their glass bottles. But after a few years when plastics were introduced, their business model became selective. If a city is strictly implementing a plastic regulation, then they are happy to continue with the glass bottles. But if they identify a city that has weak enforcement or no presence of any plastic regulation or reuse policies, they do business as usual."

NGO, P60

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In terms of business and consumer responses, waste assessments (GAIA, 2019) show that strict enforcement of plastic bag ordinances leads to measurable reductions, though regulations without complementary awareness or alternatives achieve weaker results. Consumer surveys in 2019 indicated a willingness to shift, with many Filipinos expressing preference for products in recyclable or refillable containers over sachets (GAIA, 2020a). Pilot initiatives such as Kuha sa Tingi further demonstrate that reuse-oriented models can recover costs and build consumer participation when supported by enabling conditions (Ledesma et al., 2024).

Taken together, outcomes from bag bans suggest that while reductions in disposable use are possible, they have not yet translated into systemic reuse markets. Unlike harmonised approaches seen in other jurisdictions, the fragmented Philippine system dilutes the potential market signal for scaling reuse. The absence of a national framework connecting local restrictions to reuse infrastructure or targets means these ordinances currently function more as waste avoidance measures than as drivers of reuse systems.

Stakeholder perceptions

Interviewees generally noted the absence of a national policy framework banning SUPs or promoting reuse systems. Civil society groups in particular expressed concern over delays in passing pending bills, while business and government representatives emphasised the practical and financial barriers to implementing reuse and refill models at scale.

"[...] there are limited efforts to mainstream and promote and incentivise reuse because it's a part of our normal routine. [...] there are cities promoting reuse on local levels but our goal is how we can collectively connect all those local policies to transform into a national policy. And specifically, we're talking about the reuse bill. So this is one of the long term bills."

NGO, P60

"We are a developing country. A lot of plastic packaging is there in the Philippines. But in terms of reuse and refill, we still lack the policies to strengthen or to encourage more business establishments to go into reuse and refill. There's not much incentive for small businesses or even big businesses to go into this."

NGO, P65

Interviewees identified several reasons for the slow progress in enacting binding national legislation to address plastic pollution and promote reuse and refill solutions. These include a lack of corporate interest, resistance to change, a government focus on short-term measures such as recycling over upstream solutions, geographical constraints and limited government budgets to promote reuse and develop reuse infrastructure.

"We're in an archipelago country. How can you expect a business to collect glass bottles from small islands and bring it back? Cost wise, and logistical wise, obviously it wouldn't make sense for the companies."

NGO, P60

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Such logistical constraints highlight why some businesses advocate for flexible compliance pathways under the EPR Act rather than uniform reuse obligations.

Weak public pressure has been consistently noted, attributed to the widespread dependence on plastics. Interviewees generally observed that consumers tend to prioritise convenience and the low cost of SUPs and sachets over environmental concerns.

"[...] it's because we have a culture of convenience. That's one, consumerism. And the other thing. Plastic is very cheap because they don't take into consideration the environmental cost of plastic."

NGO, P65

"Filipinos are now used to the convenience, people would just buy in very small quantities that are contained in plastics. So when you go to the markets, they would just buy like 5 pesos for oils. And then in the groceries people would buy in packets like 30ML or 15ML or smaller than that, and then also with shampoos, we have the sachets."

Local elected representative, P58

This suggests that any policy promoting reuse must contend with strong consumer preferences for small, low-cost packaging, making economic incentives and affordability critical design features. Availability of alternatives in community stores and accessibility of these outlets will also be key in competing against sachets or SUPs, which are readily available in sari-sari stores.

Industry representatives highlighted that existing compliance options under the EPR Act make recovery more straightforward than investing in reuse. From their perspective, large upfront costs and the need for new infrastructure reduce the attractiveness of reuse models compared with credits or recycling projects.

"[...] the corporates have a lot to do with it, corporates, politics, and maybe resistance to change also. With these corporates, they're not keen on pushing policies. There's no business case for them [corporates] because what they have right now is working well actually, even with the EPR in place. [...] It's easier for them to comply with that. The plastic credit versus making refills and reuse. Making the reuse system is difficult because it will require new infrastructure, and it will entail another set of investments in the market."

Reuse business, P54

An elected representative of an LGU highlighted the difficulties LGUs face in creating and implementing plastic-related laws because of administrative hierarchies.

"[...] if the barangay [LGU in the Philippines] wants this ordinance [SUP ban] to be passed, then the city would hinder it, or a local ordinance or a national ordinance would hinder it. If those people on the top would not support it, it's kind of hard for us in the barangay levels too."

Local elected representative, P58

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The interviewees also noted the weak enforcement of existing legislations and its consequences.

"Even the law, the RA9003, it's already been 25 years since it was enacted into a law, but then not all barangays are implementing it. So I think it's the problem with the implementation of the national government. [...] We also have the Plastic Regulation Ordinance in the city. And it was created in 2013, but until now they haven't really implemented it. I think it's because a lot of businesses are relying on plastics."

Local elected representative, P58

"We have a law. The RA9003, which is the national solid waste Management Management Act. It says there that we are supposed to ban these non environmentally acceptable products and they are supposed to be identified by a committee. [...] They identified stirrers and straws. It's not enough. [...] Recently the Court of Appeals asked the Committee to add more to that list of products that are supposed to be banned, but until now they haven't come up with that list."

NGO, P65

The interviewees also opined that the narrow definition of 'reuse' in existing regulations limits the development of reuse systems. These regulations primarily interpret reuse as a downstream measure, focusing on the direct reuse of materials, without referring to wider reuse systems. For example, Republic Act No. 9003 and the IRR of the EPR Act define reuse as the process of recovering materials for the same or a different purpose without altering their physical or chemical characteristics.

"[...] they [current regulations] always interchange reuse and recycling. [...] when they are repurposing something they call it reuse. Yeah, it's really a matter of defining."

NGO & reuse business, P57

"[...] it [reuse] should be redefined and redefined in a way that showcases its potential to be a meaningful solution to this crisis?"

Reuse business, P54



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This narrow perspective, which excludes reuse systems, and the resulting ambiguity among policymakers about reuse solutions as an upstream measure, can also weaken investor confidence in supporting reuse and refill initiatives.

"In terms of changing the term with a reuse system it's gonna be hard to explain to Filipinos unless we can show them like for example. [...] I just understood last January what's the difference between reuse and reuse systems. But in our experience in the past years, reuse is just like recycling, like reusing the already existing plastics that we have, like the plastic ice cream tubs. We use it as containers for other food."

Local elected representative, P58

Interviewees generally believed that wider stakeholder consultations are essential before any concrete policies or legislation on plastic pollution and reuse systems are finalised. They particularly emphasised the importance of consulting informal waste pickers and integrating those who might be displaced into reuse systems to protect their livelihoods.

"They [informal waste pickers] should be the first one to be consulted because we need to incentivise them. If they keep on just collecting the plastic waste or the recyclable waste, they're not really earning a lot anymore. But if the reuse systems are established and if we incentivise them to get these bottles and then return to the companies, I think they would earn a lot more."

Local elected representative, P58

"We're also closely coordinating with the waste workers and waste pickers, which are one of the key stakeholders that we've seen that can really enhance and support this reuse system. [...] we cannot just transition without consulting and including these key stakeholders. Insights and recommendations should be co-created with the impacted stakeholders."

NGO, P60

"We have to take into consideration that there are some informal sectors like waste pickers who are now dependent on collecting plastic and then they bring it to the recyclers and then they earn from it. So there's got to be this just transition for them to be employed in other business endeavours such as for the reuse. [...] They have to be part of the decision making. And they have to be capacitated. [...] Part of the EPR should be dedicated to protect the livelihood of displaced workers. The PRO's must hire these people to do the cleaning or the collecting or to be part of the deposit return scheme."

NGO, P65

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Some of the interviewees expressed hope for the growth of reuse or refill solutions in the future, considering the geographical and cultural peculiarities of the Philippines. They also noted that the existence of local SUP bans indicates the potential for the emergence of reuse and refill solutions moving forward. Government interviewees noted that local ordinances on plastics could serve as a foundation for national reuse standards if harmonised, while businesses highlighted that scalable reuse systems would require both fiscal incentives and clearer national guidance.

“Recycling is going to be harder because the Philippines is an archipelago, so I think that’s why the value of the recyclables are getting lower because transportation and collection is getting harder. So I think reuse is a lot more possible. I have seen in our biggest market here in Metro Manila, reuse is really going back because I see a lot of stores selling different sizes of glass bottles, reusable bottles, so it is a system that has been happening.”

Local elected representative, P58

“But at least some practices are encouraging reuse. But in terms of like systems. It’s been existing before, like beer bottles? Which are still existing right now.”

NGO & reuse business, P57

“[...] you can see that there are a lot of plastic ordinances. So meaning to say, if there are plastic ordinances, chances are they’re also looking for an alternative, which is a reuse system.”

NGO, P60

Impacts on businesses

Interviewees noted that in the absence of policies mandating reuse targets or providing incentives, businesses face significant obstacles in adopting reuse and refill models. Large-scale enterprises have noted that the lack of mandated targets, support mechanisms and guidelines regulating reuse or refill practices creates a risk/liability without any incentives for companies. Small scale reuse enterprises identified regulatory gaps and uncertainty as major barriers to scaling.

At present, the only guideline regulating refill models is Administrative Order No. 2024-0008, which covers only a limited set of cosmetics and household products. No comparable guidance exists for many other sectors where reuse or refill systems could potentially be implemented, such as groceries or food service. Respondents from the reuse business sector indicated that this regulatory gap undermines business stability and discourages scaling, as there is concern that the sudden introduction of new regulations or standards could disrupt existing operations.

“Such structure or guidelines or policy would help us be more stable. Because right now we’re operating based on our own standards [...] we can’t find anything where we can follow certain rules, for example in terms of hygiene and sanitation. [...] There’s that fear of scaling up because if we do and then suddenly regulations come in and we’re not prepared for it.”

Reuse business, P54

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"We have a government agency who usually sets those standards. But since they don't have that standard for the kinds of business we have, it's hard to scale [...] if there are standards we can also improve on our setup, so that it would be more so that the public will be more open. It's safe, it's sterile because they went through the process of standardisation."

NGO & reuse business, P57

Multiple respondents emphasised that FDA standards appear designed with large manufacturers in mind, making compliance difficult for smaller operators.

"There was this one policy, guidelines from the FDA, but it's really not helpful for all of us, the small players. I think it's rather crafted for big companies in case they do a refill reuse system."

Reuse business, P54

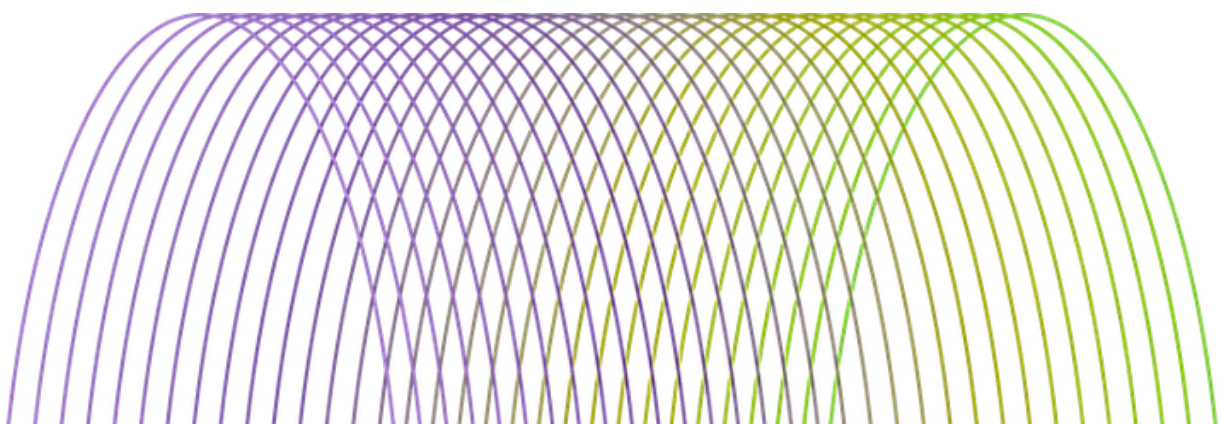
"If you're going to see and scan the existing policies on refill, it's quite big and limited to manufacturers and companies. And with this, the loophole is that, there are also the retailers and the small businesses which cannot afford that kind of packaging and there's no specific guidelines on how these groups can achieve transition from linear to sustainable business. [...] As of now, licensing is limited to medium size companies, and it's mostly on beauty products, some household products, but again it needs to cover more products that are being used on a daily basis by the community."

NGO, P60

Those engaged in the reuse business also voiced concerns about their limited resources for building reuse infrastructure and the high costs involved in implementing reuse models, such as transport, logistics, and reverse logistics.

"Fear sets in when it comes to putting in a lot of infrastructure. Because even now when we talk to suppliers for the reverse logistics, it entails cost. But of course it's because of the limited resources we have. We don't have economies of scale. But if there's a big investor who's willing to make the reuse infrastructure work and then the regulations are in place to support this infrastructure, I think it would really help the economy transition."

Reuse business, P54



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The interviewees also noted the lack of financial support from the government for the reuse or refill solutions, which often discourages small players from shifting to circular business models. They also highlighted that, because there are no comprehensive reuse or refill-specific policies, private investments in such models cannot be incentivised, limiting the financial resources available for these businesses to scale.

"In terms of financing, they [the government] are towards downstream solutions like recycling. Because it's easier for them to manage where the money will go instead of establishing a system. [...] When we talk to small businesses, they're already ready actually. But they're like we need support from the government on how to do the shift. Because right now it's very expensive. Maybe the cost, also because of our upfront cost"

NGO & reuse business, P57

"[...] there is uncertainty. So even if there are investors coming in... You know, and when it comes to regulations... I'm sure even if you're an investor, you wouldn't want to talk if it's something regulatory that's something you wouldn't want to risk."

Reuse business, P54

"[...] there's no existing policies that require them to invest in refills or in reuse? [...] there should be an incentive. There should be a point system. There should be an investment mechanism."

NGO, P60

To overcome these challenges faced especially by small businesses in entering reuse or refill solutions, the interviewees generally suggested provisions such as tax incentives, grants, R&D assistance, infrastructure support, and adequate time to enable a gradual shift from linear to circular business models. They also noted the need for capacity building of small businesses engaged in reuse and refill models, as well as the creation of a network of retailers.

"I guess they [reuse businesses] should have more incentives if they switch to reuse and refill systems [...] Maybe we can give them less tax."

Local elected representative, P58

"I mean tax incentives and other maybe a grant, and support from the science and technology team of the country. [...] and maybe a grace period to set up the infrastructure."

Reuse business, P54

A city-level policymaker noted that government resources are limited, and that responsibility for reuse infrastructure is largely expected to fall on private sector investment.

"Sorry, we cannot give support when it comes to infrastructure, it's the other way around. Yes, we are asking from the private sector when the government needs infrastructure or funds for the implementation of the system."

City-level policymaker, P67

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3. Lessons learned and recommendations

Lessons learned: enablers

Since there are no reuse-specific policies currently in place in the Philippines, a comprehensive analysis of policy enablers is not possible. However, this research identifies several areas of potential that could support the growth of reuse and refill practices in the country and offer hope for the emergence of a more supportive policy framework in the future.

Culturally embedded nature of reuse and small-quantity purchases. While there are no national policies on reuse, everyday practices such as *tingi* purchases and long-standing traditions of container reuse can provide an entry point for reuse systems. In some areas, traditional reuse and refill models, as well as DRS, continue to be practiced by local stores and even some large beverage companies. These practices indicate consumer familiarity with small-quantity purchases and deposit-return arrangements, which policy could build on rather than displace.

Emerging policy recognition of reuse systems. Although not legally binding, several policy documents, including existing legislation, directly mention reuse and refill systems as key strategies to reduce plastic waste. Moreover, while not yet been passed in the legislative houses, new bills are being introduced that more explicitly encourage reuse and refill practices. Their inclusion reflects growing recognition at policy level of the role that reuse could play in achieving circular economy and waste reduction goals.

The existence of local SUP bans can support national policy development. The majority of LGUs have implemented regulations to ban or control SUPs. While enforcement is variable, these subnational measures create a foundation for national-level policy design. With harmonisation and expansion to wider forms of packaging, they could inform a coherent framework that links local bans to national reuse and refill objectives.

Geographic characteristics create a rationale for reuse systems. The archipelagic nature of the Philippines makes transporting or shipping post-consumer plastic from small islands and communities in remote locations to recycling facilities costly (Akenji & Bengtsson, 2019). This geographic constraint makes upstream solutions such as reuse more attractive and could be leveraged to support policy measures that reduce dependence on long-distance waste transport.

Corporate pilots demonstrate feasibility of reuse models. Beverage companies continue to operate refillable glass bottle systems in some Philippine cities, particularly where enforcement of local ordinances is stronger. These practices show that reuse is technically and commercially viable in the current market, and can provide proof of concept for scaling. However, without policy measures to standardise and expand such systems beyond selected urban areas, their impact remains limited. National recognition of these pilots through incentives, public-private partnerships, or integration into EPR plans could help shift them from niche initiatives to mainstream practice.

Lessons learned: barriers and challenges

Absence of national-level policy targets and incentives to encourage reuse or refill. No specific targets, timelines, or incentives (such as tax discounts, subsidies, or simplified permits) related to reuse have been incorporated into national policy. This absence of support often discourages businesses from entering in reuse or refill models, and prevents private investors from investing in such business models.

Limited scope of existing bans. At the local level, regulatory restrictions have so far focused only on plastic bags, with a few additional items such as straws and stirrers identified under the Ecological Solid Waste Management Act. Other forms of packaging, including sachets and wider single-use containers, remain unregulated. The narrow scope of these bans, coupled with inconsistencies among LGUs in terms of which SUPs are restricted and the nature of the restrictions reduces their effectiveness in driving systemic change and constrains the potential for reuse and refill models to compete with widespread single-use packaging.

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Narrow definition of reuse in existing regulations. Existing binding legislations define reuse merely as a downstream activity, i.e. reusing materials after they have already become waste, rather than an upstream approach that prevents waste by establishing reuse systems.

The EPR framework prioritises recovery over reduction and reuse. Although the EPR Act, 2002 and its IRR mention reuse and refill systems as a strategy to meet obligations under the Act, the definition provided for reuse in the regulation is narrowly defined as material reuse. The regulation also lacks specific reuse targets, places greater emphasis on recovery rather than reduction and does not provide sufficient incentives for businesses to adopt reuse systems.

FDA guidance is limited in scope and restricts market penetration and scaling. Current FDA regulation, Administrative Order No. 2024-0008, provides guidelines only for certain cosmetics and household substances, leaving out many other products and sectors where reuse or refill could be implemented. This often creates uncertainty for reuse and refill businesses and investors, preventing them from scaling because they fear sudden new regulations could jeopardise their operations. Besides, the high standards set in the Order create compliance challenges for businesses, especially small enterprises, and discourage their participation in refill models.

Coordination between national, regional, and local governments is weak. The Philippines faces challenges in designing and enforcing policies on plastic pollution due to poor coordination among national, regional, and local governments, as well as among various stakeholders (SWITCH-Asia, 2025), combined by hurdles caused by administrative hierarchies.

Legislative processes to advance reuse are slow. Several bills explicitly promoting reuse and refill models have been introduced in the legislative houses, but the lengthy time taken for enactment slows the development of supportive legislation.

Sachet consumption patterns remain deeply entrenched. Aligned with the *tingi* tradition, Filipinos are accustomed to purchasing products in small sachets, resulting in widespread sachet use. The convenience and low cost of sachet culture make it difficult for reuse or refill business models to penetrate particularly among low-income consumers. Reuse models may have relatively higher costs, while refill models require containers making them less convenient.

Market concentration makes it difficult for SMEs to compete. Large FMCGs dominate the sachet economy, using their market power, distribution networks, and pricing strategies to lock in single-use systems. SMEs and social enterprises attempting to introduce refill or reuse models face high entry barriers, from logistics to consumer awareness, and often cannot compete on price. This concentration creates a structural disincentive for innovation. Policy interventions such as fiscal measures to rebalance costs, implementation of programmes/initiatives for capacity building and technical support for reuse, procurement frameworks that favour reusable delivery systems, or competition law scrutiny of anti-competitive practices could help open space for SMEs and level the playing field.

Recommendations for designing an effective reuse policy framework

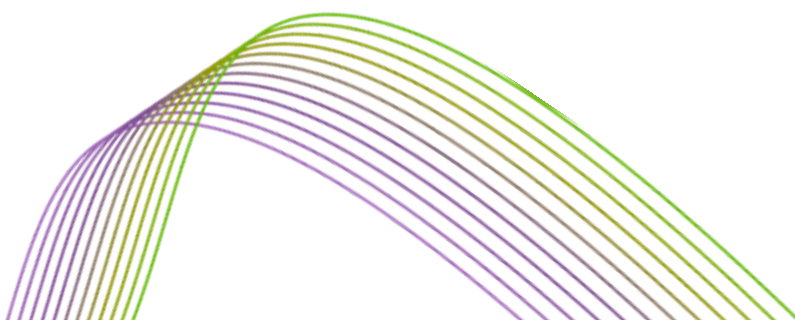
Drawing on lessons from the Philippine's reuse policy experience, the following recommendations are proposed to strengthen the national reuse policy framework. In the specific socio-cultural context of Southeast Asian countries such as the Philippines, duplicating models from economically advanced countries may not be practical. Unlike high-income countries, a large share of the Philippine population still lives in low-income conditions, SMEs and street vendors play a dominant role in retail, and informal waste pickers rely on waste collection for their livelihoods. The country's archipelagic nature also presents additional geographical challenges. Policies, therefore, need to be inclusive, allow for a just transition, be locally adapted, and gradually implemented. They also need to provide support for SMEs while safeguarding the livelihoods of informal waste workers. Given the relatively higher price of reusable alternatives compared with SUPs, the prevalence of sachets, and the low-income profile of much of the population, policies should also include provisions to ensure fair competition between SUPs and reusable options.

Annex 3C: Country case studies

The Philippines

The following recommendations represent key components for advancing reuse and refill in the Philippines:

- **A unified national ban on priority SUPs such as bags, sachets and selected containers would harmonise existing local ordinances, reduce enforcement gaps, and provide clearer signals to businesses, while ensuring LGUs are adequately resourced to implement it.** This would address the current fragmentation that undermines both enforcement and business certainty.
- **Enact national-level reuse-enabling legislation that is inclusive and grounded in local realities, offering incentives for reuse and refill solutions through tax discounts, subsidies, and simplified permitting processes.** Such incentives would help level the playing field for smaller actors competing against FMCGs.
- **Introduce regulations that establish safety and sanitation standards and guidelines for conducting refill business models across all potential sectors.** Clear standards would reduce liability concerns and give consumers greater confidence in reuse models.
- **Broaden the definition of reuse in existing policies (EPR Act, RA 9003) to explicitly include reuse systems.** This would remove ambiguity and align regulatory language with emerging business models.
- **The EPR framework could be strengthened by setting binding reduction and reuse targets, and by requiring producers to integrate reuse systems into their compliance plans.** Targets would move reuse from a voluntary option to a measurable compliance pathway.
- **Provide higher government support for reuse and refill business models, especially small businesses and start-ups, through grants, R&D support, investment in shared reuse infrastructure, and capacity-building programmes.** Without this support, SMEs face disproportionate costs that limit scaling of reuse systems.
- **Investors and financial institutions could be encouraged to direct capital into reuse infrastructure through guarantees, risk-sharing mechanisms, or preferential terms.** Mobilising private finance would reduce reliance on donor funds and government budgets.
- **Promote coordination and collaboration among national, regional, and local governments to effectively design and implement reuse-enabling policies.** This could help avoid fragmented responsibilities and provide more coherent policy signals. Cross-ministerial coordination is needed to prevent conflicting or duplicative regulations.
- **Ensure wider stakeholder consultation, including informal waste pickers and street vendors, during policy design and implementation and include provisions to integrate informal waste workers (such as by providing them employment opportunities) into reuse systems.** Inclusive processes would help ensure social acceptance and a just transition.
- **Information and education campaigns, including integration into school curricula, could build consumer acceptance of refill and reuse practices and reduce the dominance of sachet-based purchasing.** Public awareness is vital to shift behaviour where sachet use is deeply entrenched.



Annex 3C: Country case studies

The Philippines

4. Strength of evidence

The Global Plastics Policy Centre is committed to transparency in our research findings, which includes identifying specific and persistent knowledge or evidence gaps. The following table summarises the state of evidence available for the Philippines during the research period.

Literature search	Interviewees	Peer review	Total evidence strength
Moderate - Key national policies, policy reports, reports produced by NGOs, some websites and blog posts. Limited peer-reviewed resources.	6 interviews from 6 organisations - Moderate	Peer review completed by 1 reviewer	Moderate

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