

Country profile

INDONESIA

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Indonesia blends a deep cultural history of informal refill with a growing wave of new-age circular startups. To unlock true mass-market scale, the ecosystem now requires binding regulations and formal safety standards.

SNAPSHOT ON REFILL IN INDONESIA

No binding legal or policy instruments that sets reuse targets or directly regulate businesses adopting refill solutions.

Voluntary EPR scheme only.

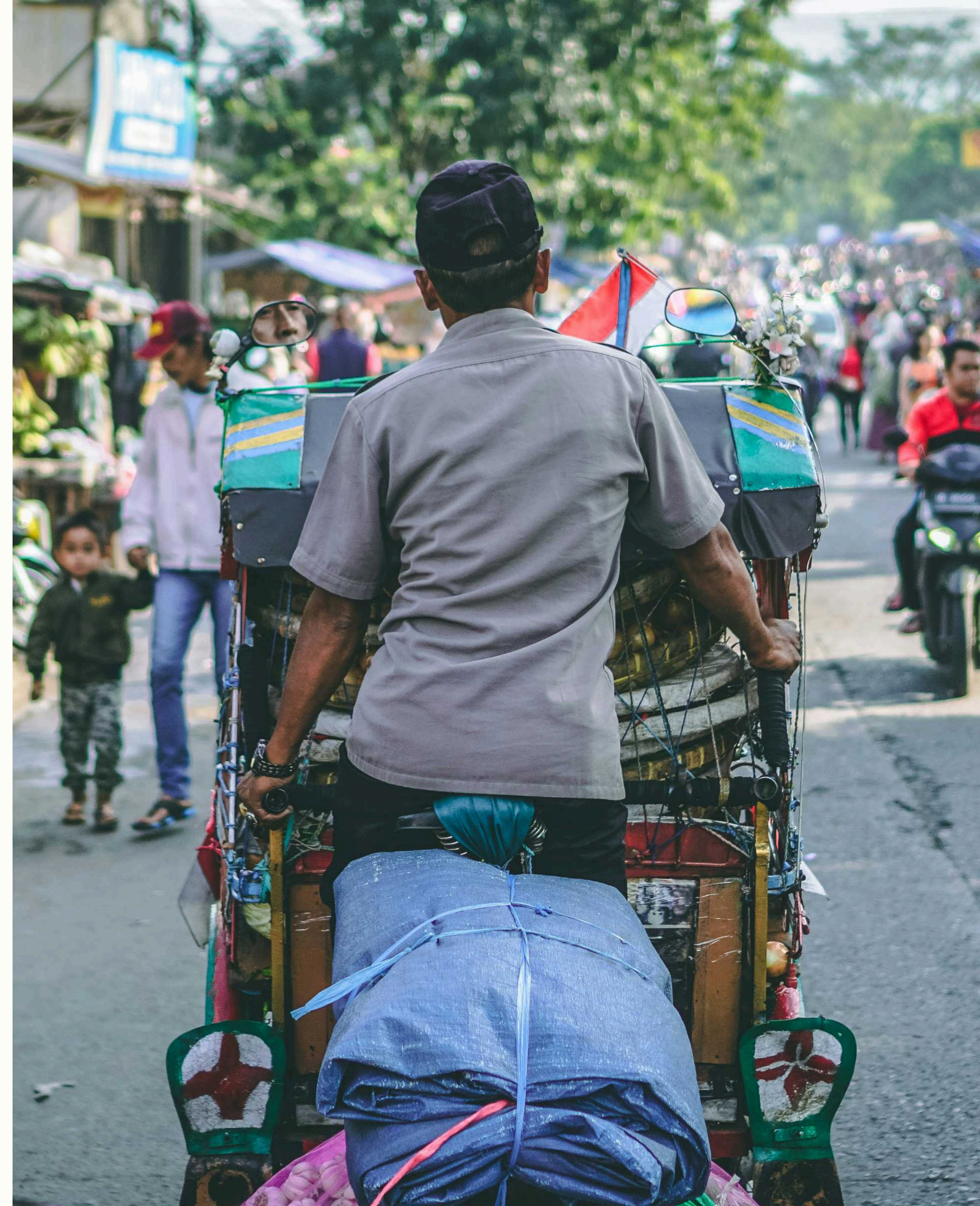
National Plastic Action Partnership (NPAP) present in country.

More than ten refill enterprises.

Brands show interest in scaling, but no real commitments yet.

Wide range of products included in refill, from home care to personal care to food and beverages (including water).

No formal deposit return scheme in place.





1. Refill context

Refill and reuse practices have long been embedded in Indonesia's daily life and culture, with widespread examples such as refillable water gallon systems and informal refill practices in traditional small shops and markets. In recent years, a growing number of startups have begun experimenting with refill solutions, often driven by strong environmental motivations. However, these models remain concentrated in urban areas and niche consumer segments.

Roundtable discussions conducted as part of this study indicate that the current ecosystem is still nascent and largely hidden within informal and small-scale channels. At the same time, increasing partnerships, pilot programmes, and customer engagement suggest growing momentum towards more structured and scalable models.

At the policy level, Indonesia does not yet have specific legal or regulatory instruments that set refill and reuse targets or directly regulate refill business models. Recent national strategies and roadmaps increasingly emphasise circular economy principles and recognise refill and reuse as part of the long-term transition. However, these frameworks remain largely strategic and non-binding, and concrete implementation mechanisms and incentives for businesses are still emerging.



2. History of refill

Culturally, refill and repurposing practices have long been embedded in Indonesia's daily consumption patterns. These practices are primarily driven by affordability, accessibility, and convenience rather than environmental awareness. Refill is often associated with lower-cost or lower-quality products, shaping consumer perceptions and limiting adoption among middle- and higher-income segments. These practices are also closely linked to Indonesia's long-standing sachet economy, where consumers purchase products in small quantities due to income variability and limited storage space Syam, 2025.

Traditional small shops (warung) continue to play a central role in enabling refill practices. Many warung sell bulk or unbranded products such as unrefined cooking oil (minyak curah), rice, detergents, shampoos, liquid soap, perfumes, and traditional herbal drinks (jamu). These systems allow consumers to purchase small quantities at lower prices and remain an important channel for lower-income households.

Another widely established system is the refillable water gallon model for drinking water, driven by branded manufacturers and supported by extensive last-mile distribution and collection networks. This model has become mainstream as tap water is generally not considered safe for direct consumption. Returnable glass packaging also has a long-standing history in Indonesia, extending beyond

beverages to selected food and condiment categories such as soy sauce (kecap). Products such as sweetened tea (e.g., Teh Botol by Sosro), beer (e.g., Bintang), and soda (e.g., Badak brand) continue to use returnable bottles, although many formats have gradually declined as producers shifted towards lighter and lower-cost plastic packaging.

In recent years, refill and reuse practices have begun evolving towards more formalised and technology-enabled formats, with startups and corporates piloting new models across personal care, home care, and food and beverage categories Min. of National Development Planning, 2024; Enviu, 2024.



3. Policy landscape

Indonesia faces significant challenges in solid waste management, particularly in relation to plastic waste. The country is among the world's largest contributors to ocean plastic pollution (Jambeck, et al., 2015; Meijer et al., 2021). Plastic waste constitutes the second-largest component of the municipal waste stream, with around one-third mismanaged and more than half left uncollected (World Bank, 2021). Despite the involvement of both formal and informal sector actors, the national plastic recycling rate remains relatively low at 10% (Zahrah et al., 2024). These challenges are compounded by fragmented governance, uneven municipal capacity, and a strong reliance on informal waste systems.

Indonesia does not yet have a binding legal framework that explicitly promotes refill and reuse solutions or sets mandatory targets for circular packaging. However, an increasing number of policies and national strategies signal growing alignment towards circular economy approaches and plastic reduction, creating an enabling environment for refill and reuse models.

Foundational legislation

A significant turning point in Indonesia's waste governance was the enactment of *Law No. 18 of 2008 on Waste Management*, which introduced the principles of waste reduction and circularity. The law promotes waste reduction at the source and prioritises resource management centred on the 3Rs (reduce, reuse and recycle) (Government of the

Republic of Indonesia, 2008). It also provides incentives for waste reduction and disincentives for non-recyclable, non-reusable, and environmentally harmful materials.

The law establishes the principle of extended producer responsibility (EPR), placing responsibility on producers to manage difficult-to-decompose packaging and products. However, this remains largely conceptual, with operationalisation developed through subsequent regulations. In practice, policy implementation has focused primarily on downstream waste management and recycling, with limited incentives to scale reusable packaging and refill systems.

Implementing regulations and EPR

To operationalise the foundational legislation, Indonesia introduced a series of implementing regulations aimed at strengthening waste management and resource recovery. These include *Government Regulation No. 81 of 2012 on household waste management*, *Presidential Regulation No. 97 of 2017 on the National Policy and Strategy for Waste Management*, and several ministerial regulations related to waste banks, infrastructure, and producer waste reduction roadmaps.

Ministerial Regulation No. 75 of 2019 is particularly relevant as a driver of producer action, outlining obligations for packaging waste reduction, redesign, and collaboration with

recyclers and waste banks. Implementation is gradually shifting towards collective action with industry-led producer responsibility organisations pooling resources for collection and recycling. However, the system remains fragmented and lacks standardised national fee structures or strong enforcement. As a result, financial incentives to scale reuse and refill systems remain limited.

In parallel, several provincial and municipal governments have introduced local regulations to restrict the use of single-use plastic items, including *Bali Governor Regulation No. 97 of 2018* and *Jakarta Governor Regulation No. 142 of 2019*. These initiatives have contributed to raising awareness and encouraging behavioural shifts towards reusable alternatives, although implementation remains uneven across regions.

National strategies, action plans and roadmaps

Indonesia has strengthened its policy ambition through national action plans and long-term roadmaps. *The National Plastic Waste Reduction Strategic Actions (2020)* set a national target to reduce plastic waste by 70% by 2025 and promote a life-cycle approach (Ministry of Environment and Forestry, 2020). The action plan, however, remains as a non-mandatory legislative measure and places greater emphasis on recycling and waste management than prevention.

In 2024, the Ministry of National Development Planning drafted the *National Roadmap and Action Plan for the Circular Economy (2025–2045)*, where the plastic packaging sector is highlighted as one of the five priorities Ministry of National Development Planning, 2024. For this particular sector, the roadmap projects a 21% reduction in plastic waste generation and the creation of ~107,000 jobs by 2030. The roadmap recognises refill stations and reusable packaging as priority interventions, particularly in personal care and cosmetics. While this signals strong policy alignment towards a formal reuse ecosystem, the roadmap remains strategic and non-binding, and translating these ambitions into enforceable regulation and large-scale implementation will require further institutional and industry commitment.

Standardisation pathways

The introduction of *BPOM Regulation No. 12 of 2023* is widely viewed as a preliminary step towards recognising and formalising refill and reuse approaches in Indonesia National Agency of Drug and Food Control, 2023.

While not primarily intended to govern reuse businesses and activities, the regulation establishes comprehensive requirements for the manufacturing and distribution of cosmetics, including safety, hygiene, and quality requirements for cosmetic refill facilities.

This provides an initial regulatory pathway for formal refill systems and helps address concerns related to product safety and consumer trust.

Industry collaboration and ecosystem development

Collaborative initiatives are also emerging to support Indonesia's circular transition. Indonesia convened the National Plastic Action Partnership (NPAP), which brings together government, industry, and civil society to align strategies, mobilise investment, and accelerate circular solutions.

At the same time, industry-led coordination around reuse is beginning to take shape. *Asosiasi Guna Ulang Indonesia* (Indonesian Reuse Association) aims to strengthen coordination among reuse enablers and stakeholders, facilitating collaboration, policy engagement, and knowledge sharing.

These developments signal growing ecosystem momentum. Compared to more advanced EPR markets, industry commitments in Indonesia remain less formalised, with limited measurable targets and pooled financing to support large-scale refill and reuse systems Systemiq, 2024.



4. Policy recommendations

Moving from policy ambition to implementation will be critical to enable refill and reuse systems in Indonesia. While circular economy principles and plastic reduction targets are increasingly reflected in national strategies, practical regulatory pathways and coordinated implementation mechanisms remain limited. Analysis from desk research and stakeholder engagement highlights the need for regulatory clarity, economic incentives, and stronger coordination across national and subnational actors.

Establish a regulatory safe zone for refill systems

Uncertainty around hygiene, safety, and liability remains a major barrier to scaling refill models in Indonesia. Developing operational standards and certification pathways for refill dispensing, bulk distribution, and reusable packaging could reduce legal risks and strengthen consumer trust. Clarifying responsibilities across producers, retailers, and refill operators would further enable businesses to experiment with refill systems while maintaining product safety and regulatory compliance.

Align economic incentives through EPR

Insights from stakeholder consultations suggest that scaling refill requires significant early investment in infrastructure, logistics, and consumer engagement. Indonesia's evolving EPR framework offers an opportunity to address these early-stage investment barriers by strengthening incentives for prevention-based solutions. Integrating refill targets, eco-

modulated fees, and fiscal incentives for producers and startups adopting refill models could redirect investment towards shared refill infrastructure and innovation.

Create a national coordination mechanism for refill implementation

Scaling refill will require stronger coordination across ministries, regulators, industry actors, and innovators. Stakeholders highlighted the need for a national roadmap outlining regulatory priorities, infrastructure needs, and stakeholder roles. Institutions such as Bappenas could play a central role in integrating refill into national circular economy strategies and coordinating implementation across agencies. Establishing a multi-stakeholder platform could further support knowledge sharing, evidence generation, and alignment between government, producers, and startups.

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