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From Waste to Wealth

Advancing ASEAN's Circular Economy through EPR Alignment


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About

This Report

From Waste to Wealth: Advancing ASEAN's Circular Economy through EPR Alignment is a joint report prepared by the EU-ASEAN Business Council and ASEAN Business Advisory Council. It presents a practical roadmap for strengthening Extended Producer Responsibility (EPR) frameworks across Southeast Asia. Drawing on global best practices, regional case studies, and key design principles, the report outlines how ASEAN can build more effective, transparent, and aligned EPR systems to support a circular economy. It offers targeted recommendations for policymakers and industry leaders to foster investment, innovation, and cross-border collaboration—ensuring that EPR serves not only as an environmental obligation, but as an economic opportunity for the region.

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Abbreviations

3R Plan	Reduce, Reuse, Recycle Plan (Singapore)
ACEBA	ASEAN Circular Economy Business Alliance
AMS	ASEAN Member States
ARAIBA	ASEAN Responsible and Inclusive Business Alliance
ASEAN	Association of Southeast Asian Nations
COVID-19	Coronavirus Disease 2019
DRS	Deposit Refund System
EPR	Extended Producer Responsibility
ERIA	Economic Research Institute for ASEAN and East Asia
EU	European Union
EU-ABC	EU-ASEAN Business Council
GDP	Gross Domestic Product
HDPE	High-Density Polyethylene
KORA	Korea Resource Circulation Service Agency
KPRC	Korea Packaging Recycling Cooperative
LDPE	Low-Density Polyethylene
LEP	Vietnam Law on Environmental Protection
MAREA	Malaysia Recycling Alliance
OECD	Organisation for Economic Co-operation and Development
PET	Polyethylene Terephthalate
PP	Polypropylene
PRO	Producer Responsibility Organisation
PS	Polystyrene
rPET	Recycled Polyethylene Terephthalate
SME	Small and Medium-Sized Enterprise
USA	United States of America
VB4E	Vietnam Business for Environment
VEP	Vietnam Environmental Protection Fund
WWF	World Wide Fund for Nature

Executive

Summary

The ASEAN region generates millions of tonnes of packaging waste annually, with six ASEAN countries among the world's top contributors to marine plastic pollution. Despite growing sustainability commitments, waste collection and recycling rates remain low, with over half of ASEAN's waste uncollected and less than a quarter of collected waste recycled. A shift to a circular economy is essential, and Extended Producer Responsibility (EPR) is a key policy tool in this transition. By making producers responsible for the end-of-life management of the products they place on the market, well-designed EPR frameworks drive investment in waste collection and recycling infrastructure, incentivise sustainable product design, and reduce environmental impact.

ASEAN countries are at different stages of developing EPR regulations for packaging – Vietnam and the Philippines have implemented EPR laws, Indonesia has a Roadmap for Waste Reduction by Manufacturers, and Thailand and Malaysia are developing regulations. ASEAN's EPR landscape also remains fragmented regarding policy design, producer obligations, regulatory frameworks, and enforcement mechanisms. Without greater policy alignment, businesses face compliance uncertainty, while the potential for a regional circular economy remains untapped. To ensure EPR delivers impact, ASEAN must align EPR policy approaches around six key design principles:

Legislative frameworks with clearly defined objectives, responsibilities of stakeholders, scope and governance.	**Industry-led compliance** models through Producer Responsibility Organisations	**Multi-stakeholder action,** incl. inclusion of **informal waste workers** to ensure a just transition.
Measurable targets for waste collection and recycling	**Transparent and ringfenced fees** that cover net costs of waste management and related activities.	**Incentives for upstream solutions** like eco-design and recycled content

EPR progress in ASEAN is currently hindered by three key challenges:

- Underdeveloped national EPR frameworks and waste management infrastructure
- Regulatory misalignment that creates complex compliance landscapes
- Weak regional markets for recycled materials.

Addressing these issues will not only strengthen environmental outcomes but also enhance resource security by reducing dependence on virgin material imports, unlocking investment in recycling infrastructure, and stabilising the supply of high-quality recycled materials for local manufacturing.

ASEAN governments should take proactive steps to align national and regional EPR policies with internationally recognised principles, ensuring a predictable and scalable framework. Member states should also support EPR being a key provision in the negotiations for a Global Plastics Treaty to drive international alignment beyond the region. By embedding key EPR design principles into ASEAN's policy frameworks and fostering collaboration between governments, businesses, and civil society, EPR can become a driver of investment, innovation, and sustainability.

To achieve this, we make the following policy recommendations:

Summary of

Recommendations

Recommendation 1: Strengthen National-Level EPR Policies and Waste Infrastructure

- Develop clear, mandatory, sector-specific **EPR frameworks** based on internationally recognised **design principles** and managed by **industry-led PROs**.
- Promote **multi-stakeholder action** with clear roles and responsibilities for all stakeholders.
- **Define 'obligated producers'** to include domestic producers, importers, and e-commerce platforms.
- Guarantee **transparent, ringfenced EPR fees** to ensure financial stability and reinvestment into the circular economy.
- Promote **eco-design** via eco-modulated fees & recycled content standards.
- Mandate measurable & enforceable **waste collection and recycling targets**, supported by regionally aligned data tracking.
- Allow **circular economy investments** (e.g. recycling infrastructure or recycled content) to count towards EPR compliance.
- Strengthen **waste collection, sorting, and recycling infrastructure** through increased capacity and public-private partnerships.
- Integrate **informal waste workers** via responsible sourcing, social enterprise models, and inclusion in policy design.
- Enhance **consumer awareness** and community engagement via awareness campaigns and stakeholder collaboration.

Recommendation 2: Align EPR Policies Across ASEAN to Reduce Compliance Complexity

- **Align key policy elements across ASEAN** - incl. definitions, material scope, roles and responsibilities, reporting, fee structures, targets, and eco-design guidelines.
- Implement EPR actions under the **ASEAN Regional Action Plan** for Combatting Marine Plastic Debris (2021-2025).
- Support **cross-border interoperability** of EPR compliance systems, to reduce compliance costs and ease regional trade.
- Promote **bilateral and regional cooperation** through mutual recognition agreements, policy dialogues, and pilot projects to align EPR regulations.
- Support the **Global Plastics Treaty,** advocating for the inclusion of EPR principles in its core provisions.

Recommendation 3: Build a Regional Market to Enable Circular Economy Growth

- Align **recycled content standards** to boost market demand for recycled materials.
- Establish **mutual recognition of eco-labels** to standardise certification and streamline market access.
- Refine **trade classifications** to differentiate high-quality recyclables from low-value waste, to prevent trade barriers.
- Implement regional systems to verify **recycled content claims** to enhance supply chain transparency.
- Encourage **green financing mechanisms** - incl. green bonds and investment incentives - to expand recycling infrastructure and scale sustainable practices.

Introduction

The ASEAN region is grappling with a significant waste management crisis, especially concerning packaging waste, with far-reaching consequences for both human health and the environment. Globally, over one million tonnes of plastic waste are leaked into the ocean each year, with ASEAN economies accounting for more than half of this. Notably, 6 out of 10 ASEAN Member States (AMS) are among the ten largest marine plastic polluters.[1]

Annual Ocean Plastic Waste		
Country	**Tonnes**	**Global Share**
ASEAN	**576,829**	**57.0%**
India	126,513	12.5%
China	70,707	7.0%
Rest of the World	238,451	23.6%

A key driver of this is the region's underdeveloped waste management infrastructure that has not kept pace with rapid urbanisation, a growing middle class, and increased consumption trends. As a result, over 50% of waste generated in ASEAN remains uncollected.[2] Of the waste that is collected, over one third is dumped illegally after collection, and less than a quarter is recycled.[3] For most AMS plastic recycling rates range between 5-10% compared to over 30% in China, for example.[4] Despite policy efforts to curb plastic pollution, the problem may have worsened in recent years: Thailand, for instance, reported an increase in non-recyclable plastic of over 30% since the beginning of the COVID-19 pandemic.[5]

Waste Treatment in ASEAN

To tackle this issue, many governments and firms around the world are adopting a more circular approach to the economy. Unlike the traditional linear 'take-make-dispose' model, the circular economy aims to reduce waste and pollution by extending product lifecycles through recycling, reuse, and repair. By viewing waste as a valuable resource, this approach not only reduces environmental harm, but also creates significant economic opportunities. The transition to a green economy could add US$300 billion to the ASEAN GDP by 2030, 10% of which is driven by the industrial and waste sectors moving towards more circular practices.[6] Additionally, the Asian Development Bank estimates that Southeast Asia's circular economy could create 6.6 million jobs by 2030 if opportunities and investments are fully leveraged, while the Low Carbon Development Initiative predicts the circular economy transition could create over 4 million jobs in Indonesia alone between 2021-2030, 75% of which could be for women.[7]

A successful transition to a circular economy requires active collaboration among a diverse range of stakeholders. One policy mechanism to operationalise this is Extended Producer Responsibility which makes producers responsible for the entire lifecycle of the products they place on the market, thereby involving them in waste management and incentivising sustainable product design and improved resource management.

While EPR frameworks are being developed at national and regional levels, international action is also gaining momentum. Negotiations for a Global Plastics Treaty are underway, aiming to create a legally binding agreement to tackle plastic pollution — signalling growing alignment on global circular economy and EPR approaches.

Although EPR policies can apply to many types of products as part of broader circular economy strategies, this paper focusses specifically on EPR for all types of packaging waste, given its significant importance for the ASEAN region.

Key Concepts

Circular Economy

A circular economy is based on three principles:[8]

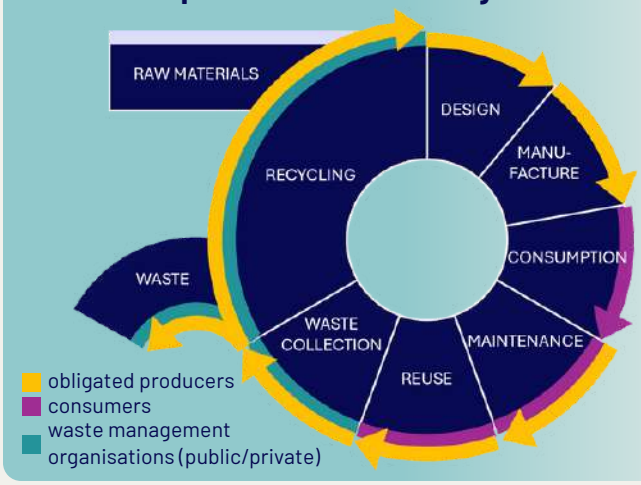
1. Minimising waste through sustainable product design and production methods
2. Maintaining high-value products & materials through reuse, refurbishing, and recycling
3. Relying primarily on and enhancing renewable inputs to regenerate natural systems.

Shifting towards a circular economy addresses climate and environmental concerns, as well as multiple economic and societal benefits, such as increases in competitiveness, innovation, and job creation opportunities, a lower reliance on raw materials, as well as health benefits.

Extended Producer Responsibility

EPR makes producers accountable for the entire lifecycle of the products they place on the market (see Figure 1 on the right), incentivising sustainable design, material recovery, and waste reduction. By integrating end-of-life management costs into product pricing, EPR encourages waste minimisation and the use of recyclable materials.

Fig 1: Shared Stakeholder Responsibilities in EPR Systems



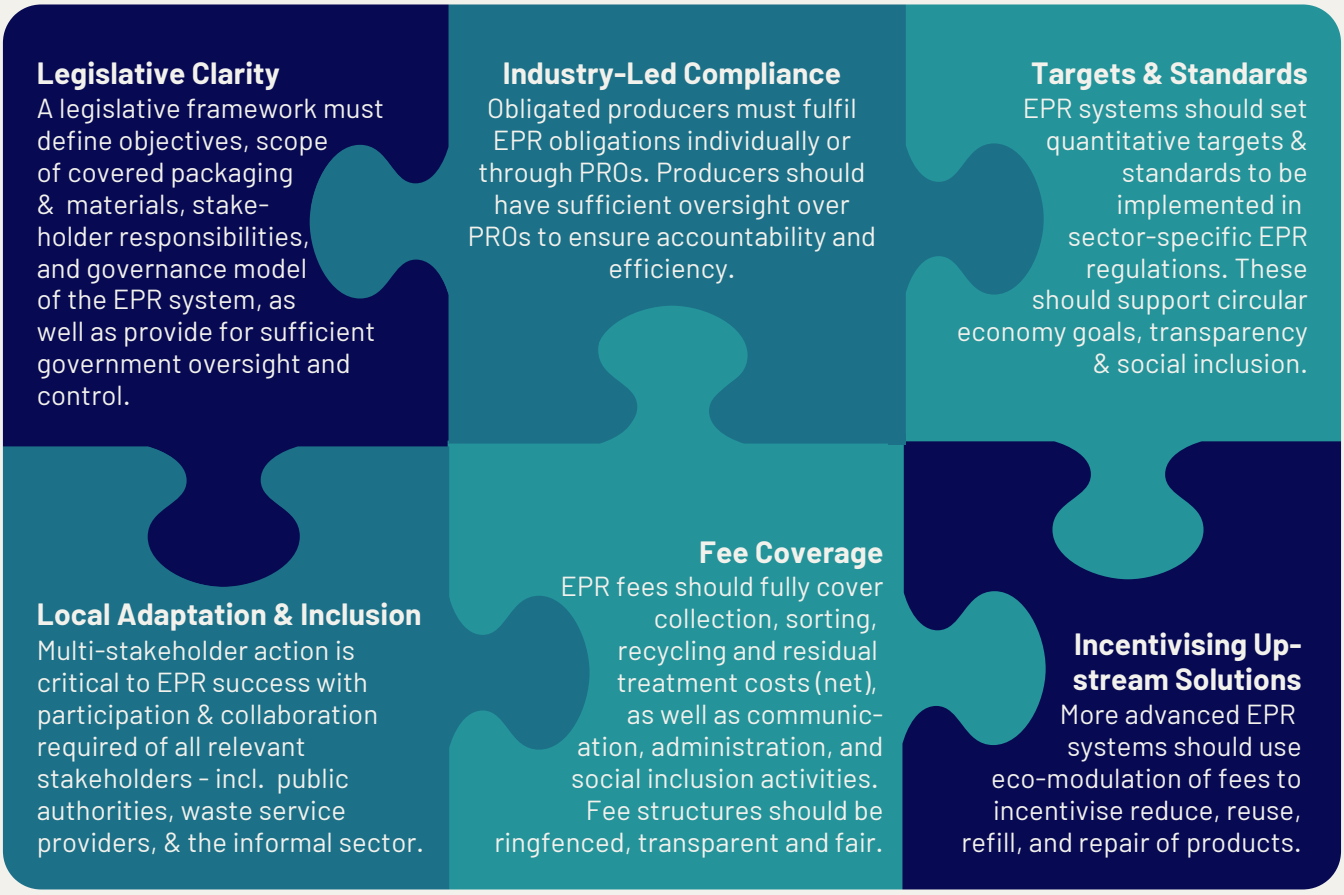
However, EPR does not reduce the roles of governments, consumers, and other stakeholders. Governments must support these efforts through clear policies, enforcement mechanisms, and investment in infrastructure, such as collection, sorting, and recycling systems. Consumers play a crucial role in waste sorting, product returns, and responsible consumption. A well-structured EPR framework ensures clearly defined yet interconnected responsibilities, making circularity a practical and scalable reality.

Considerations for Effective

EPR Policy Design

Key Design Principles

There is widespread agreement that a well-designed Extended Producer Responsibility system is essential for addressing plastic waste and promoting a circular economy, including from numerous organisations like the Organisation for Economic Co-operation and Development (OECD)[9], the World Wide Fund for Nature (WWF)[10], the Business Coalition for the Global Plastics Treaty (BCGPT)[11], the Consumer Goods Forum (CGF)[12], and the Producer Responsibility Coalition[13]. Drawing from global best practices, these organisations have identified core principles that should underpin effective EPR policies, providing a foundation for governments and industries to design systems that are fair, transparent, and harmonised. These principles include legislative clarity, industry-led compliance, targets and standards, local adaptation and inclusion, fee coverage, and incentivising upstream solutions.



The EU-ASEAN Business Council and its members support these principles as a pathway to efficient, industry-led schemes that drive accountability, improve waste management, and ensure a just transition for all stakeholders, including the informal sector.

ASEAN countries represent diverse local contexts, with varying levels of infrastructure, regulatory maturity, and informal sector involvement. While harmonised principles are key, their implementation must be adaptable to country-specific realities, balancing national flexibility with regional alignment. Effective EPR delivery requires multi-stakeholder collaboration — involving local governments, the informal sector, waste banks, religious institutions, civil society, schools, and the private sector beyond producers. This inclusive approach, referred to in some contexts as Extended Stakeholder Responsibility (ESR), reflects the importance of building socially embedded, community-enabled systems.

While financial responsibility remains with obligated producers, implementation is strengthened through shared ownership, capacity building, and social innovation. Inclusive policy design, with stakeholder participation and a phased approach to mandatory EPR, will support broad and effective uptake.

To promote ASEAN-wide interoperability, these principles should translate into key policy commitments, including:

A well-designed EPR policy with a core set of **harmonised principles** and **measurable environmental outcomes**, while recognising country-specific realities.

Sector-specific (and in some contexts, material-specific) and not-for-profit EPR schemes regulated by government and managed by obliged entities.

Mandatory participation in Producer Responsibility Organisations (PROs) where individual compliance is not feasible.

Financial integrity by ensuring that funds contributed by obliged entities are **ringfenced** for waste management and cross-subsidisation between materials is prevented. Ring-fencing is critical because it:

- Ensures stable, long-term funding for waste management infrastructure
- Enables transparent tracking of financial flows, building trust among stakeholders
- Encourages producer buy-in by linking contributions to visible outcomes
- Improves system effectiveness by securing resources for recycling and circularity
- Prevents misuse of EPR funds, safeguarding the system's credibility

Promoting **social inclusiveness** by integrating informal sector workers into formal EPR systems where applicable.

Prioritising **consumer awareness**, education, and user-friendly collection systems.

Fair access to recycled materials for obliged industries, supporting domestic closed-loop recycling and prevent downcycling.

Successful EPR Policy Examples

Norway

Norway's EPR system for packaging waste is considered a best-in-class industry-led and government-managed EPR and DPR model. It has achieved a packaging recycling rate of 63.1%[14] and a beverage container return rate of 92.3%.[15]

All companies producing or importing more than 1000kg of packaging materials on the market must comply with the EPR scheme and fully finance waste management of their products through joining non-profit and nationally operating PROs. Fees are eco-modulated based on the type of material and recyclability to encourage sustainable packaging design and penalise hard-to-recycle materials. Recycling targets are aligned with EU directives, providing measurable outcomes and supporting regional harmonisation. The system is further strengthened by Infinitum's deposit return scheme for PET bottles and aluminium cans, which is industry-led and supported by widespread consumer access, illustrating how strong governance, clear obligations, and effective incentives can together deliver a high-performing, circular EPR system.

Legislative Clarity	Industry-Led Compliance	Local Adaptation & Inclusion	Targets & Standards	Fee Coverage	Incentivising Upstream Solutions
					

South Korea

South Korea's EPR system has significantly improved packaging recovery and recycling, raising rates from 64% in 2003 to 78% in 2019 (incl. waste-to-energy recovery), under the Act on the Promotion of Saving and Recycling of Resources (2003).[16] While the act allows individual compliance, most obligated producers join the Korea Packaging Recycling Cooperative (KPRC), the main PRO for packaging. KPRC collects fees and data from members, while payments are made to the Korea Resource Circulation Service Agency (KORA), a government body under the Ministry of Environment. KORA oversees coordination with municipalities for collection and contracts with recycling operators.

A notable strength of South Korea's system is its eco-modulated fee structure, which penalises hard-to-recycle materials and rewards eco-friendly packaging, driving eco-design.[17] However, the system remains highly government-led, with municipalities managing logistics and KORA playing a central administrative role, limiting direct industry involvement in operations and innovation.

Legislative Clarity	Industry-Led Compliance	Local Adaptation & Inclusion	Targets & Standards	Fee Coverage	Incentivising Upstream Solutions
					

Mapping ASEAN's Current EPR Landscape

Country	Legislative Clarity	Industry-Led Compliance	Local Adaptation	Targets & Standards	Fee Coverage	Incentivising Upstream Solutions
Philippines	Law for plastics since 2022	Credit-based, with optional PRO-based	Mention, but no formal integration of informal sector.	Targets in place	No clear ringfencing	No eco-design or fee modulation
Vietnam	Law since 2022	Either PRO- or fee-based	No mention of informal sector	Targets in place	No clear ringfencing	No eco-design or fee modulation
Indonesia	Waste Reduction Roadmap - Ministerial Regulation since 2019, but not full EPR system and not yet fully enforced	Voluntary PRO-based	Mention, but no formal integration of informal sector.	Targets in place	No clear ringfencing	No eco-design or fee modulation
Singapore	Reporting & DRS only	DRS: industry-led, fee-based	Integrated into local waste system	Announced, not legally binding	DRS fee ringfencing in place	No eco-design or fee modulation
Thailand	Implementation aiming for 2027/2028	PRO-based	No mention of informal sector	Proposed	No clear ringfencing yet	Eco-design criteria mentioned
Malaysia	Implementation not before 2030	Fee-based	No mention of informal sector	No targets	No clear ringfencing	No eco-design or fee modulation
Cambodia	No EPR policy					
Myanmar	No EPR policy					
Brunei	No EPR plans					
Laos	No EPR plans					

ASEAN countries are at different stages of EPR implementation, with varied levels of alignment to key design principles. While some have enacted legislation, others remain in the drafting or early implementation stages, and a few have no formal EPR frameworks. The degree of producer responsibility also differs—some rely on financial contributions, while others mandate operational engagement through Producer Responsibility Organisations.

However, significant gaps remain. Weak enforcement, lack of financial ringfencing, and limited integration of informal waste workers are common challenges. Few countries incentivise upstream solutions like eco-design, and even where recovery targets exist, loopholes (e.g., plastic credits) may weaken their effectiveness. Without greater transparency and harmonisation, these disparities risk creating compliance burdens for businesses while limiting the overall impact of EPR policies.

At the ASEAN regional level, discussions on circular economy and EPR have gained momentum in recent years. While ASEAN's Framework on Circular Economy (2021) does not explicitly reference EPR, the ASEAN Regional Action Plan for Combatting Marine Plastic Debris (2021–2025) includes three key actions to facilitate EPR adoption:

1. Developing a regional guidebook on financial mechanisms for plastic waste management, including EPR fees and private-sector investment.
2. Establishing guiding principles for phasing out single-use plastics, with EPR as a potential mechanism.
3. Creating a regional platform for EPR knowledge-sharing and implementation support.

However, none of these guidelines have been published or implemented yet, leaving a gap in regional coordination.

Internationally, discussions on plastic waste governance are gaining momentum, particularly through the ongoing negotiations for a Global Plastics Treaty. While treaty negotiations are still underway, the business community recognises the importance of including EPR as a critical tool to addressing plastic pollution.

In parallel, non-governmental and business-led initiatives are advancing EPR and circular economy goals. These include national alliances like the Malaysia Recycling Alliance (MAREA) or the Vietnam Business for Environment (VB4E); regional knowledge hubs like the Regional Knowledge Centre for Marine Plastic Debris (ERIA); and cross-border initiatives such as the ASEAN Circular Economy Business Alliance (ACEBA) supported by the EU SWITCH-Asia programme – promoting business leadership in the circular transition by sharing best practices – and the ASEAN Responsible and Inclusive Business Alliance (ARAIBA) – supporting circular business models through advocacy, capacity building, and collaboration.

Business

Case Studies

Voluntary industry initiatives play a crucial role in advancing circular economy goals and can provide valuable insights for the design of effective EPR systems. By demonstrating innovative approaches to waste collection, recycling, and stakeholder collaboration, these initiatives highlight best practices that can be integrated into formal EPR frameworks to enhance impact, scalability, and long-term sustainability.

MAHIJA PARAHITA NUSANTARA FOUNDATION AND BANK SAMPAH[18]

An *Integrated Model for Responsible Sourcing*

In Indonesia, a non-profit initiative, initiated by Coca-Cola Europacific Partner Indonesia (CCEP Indonesia), co-founded by CCEP Indonesia and Dynapack Asia works with over 60,000 waste pickers and numerous community waste banks. This hybrid model connects households, waste pickers, and MSMEs (waste aggregators and waste banks) into a traceable recycling network. Used PET bottles are supplied to Amandina Bumi Nusantara, Indonesia's first food-grade rPET facility, a joint venture between CCEP Indonesia and Dynapack Asia, enabling a full bottle-to-bottle loop. Waste banks also act as community enterprises that promote women's leadership and financial inclusion. This model strengthens material traceability, social equity, and national SDGs targets, and offers a scalable blueprint for responsible sourcing across ASEAN.

#BIJAKBERPLASTIK[19]

Multi-stakeholder Collaboration

Launched in 2018, #BijakBerplastik (Be Wise with Plastic) is Danone Indonesia's flagship initiative to enhance plastic waste management through education, collection, and innovation. The programme includes consumer awareness campaigns across age groups in schools and the wider public, as well as collection points in a range of places including places of worship. Through partnerships with local governments, waste management facilities, waste banks, and the Indonesian Waste Pickers Association, the scheme collected over 22000 tonnes of plastic waste in 2023 alone, while engaging nearly 8000 informal waste pickers. Under the scheme's innovation pillar AQUA aims to use 100% recycled materials, reusable materials, or packaging materials that can biodegrade in the soil.

CCEP INDONESIA'S WASTE BANK TRANSFORMATION PROGRAMME[20]

Transforming *Waste Banks into Circular Micro-Enterprises*

Indonesia's Waste Bank Movement is a globally unique, community-led initiative that aligns strongly with inclusive EPR goals. CCEP Indonesia's Waste Bank Transformation Programme demonstrates how community-based waste banks can evolve their function beyond PET collection into decentralised hubs of circular economy innovation through a structured and scalable model:

- Multilayer plastics are repurposed into paving blocks, crafts, and construction materials.
- Organic waste is processed into compost, eco enzyme, bio pore solution, and maggot cultivation, reducing methane emissions and supporting local agriculture.
- Used cooking oil is collected and transformed into environmentally friendly soap and candles, generating additional income and raising awareness of reuse practices.
- Other recyclables (paper, metal, glass) are sorted and sold to formal recycling markets.

This transformation is enabled through four structured steps:

1. **Community Assessment & Champion Identification:** Local mapping of waste types, volumes, infrastructure readiness, and identifying motivated local leaders to co-create custom solutions.
2. **Formalisation & Legitimacy:** Support for village decrees, business permits (incl. taxation), and environmental permits to secure legal standing and access to formal financing.
3. **Operational System Strengthening:** Standard operating procedures, appropriate facility design (infrastructure development), and digital traceability tools (developed in partnership with academia) to track material flow and ensure transparency.
4. **Technical & Business Capacity Building:** Training programs covering composting, eco enzyme production, bio pore creation, soap and candle-making from used cooking oil, and product innovation (especially from low-value plastics), and small enterprise management.

The programme uses a Nona-Helix collaboration model, involving local governments, academia, banks, NGOs, Media, KOL, and private sectors to build systemic capacity, enhance traceability, and create income-generating opportunities from materials previously considered non-recyclable. CCEP Indonesia has supported the transformation of over 160 community-based waste banks across 11 provinces turning them into legally recognised & formalised and women-led collection and processing enterprises. These transformed waste banks have become not only practical EPR compliance platforms for producers, but also inclusive platforms as local sustainability engines, supporting environmental goals while improving livelihoods at the community level.

CARETON[21]

High-value recycling from multi-material packaging

The CAREton Project, launched in 2012 by Tetra Pak and Nestlé Malaysia, is a voluntary recycling initiative that collects used beverage cartons and transforms them into sustainable building materials. With over 600 collection points and over 70 collection partners nationwide, the programme enables consumers to return their cartons for recycling. Carton fibres are recycled into paper reels, while plastic and aluminium components are processed into roof tiles and panel boards. The building materials are used to support housing initiatives for underprivileged communities, including the Orang Asli. By 2023, the initiative had collected over 374 million used beverage cartons (4700 tonnes), which have been converted into building materials sufficient for over 1500 homes.

STRATEGIC COOPERATION BETWEEN FRIESLANDCAMPINA VIETNAM, DONG TIEN BINH DUONG PAPER, AND TRUONG THINH CONSTRUCTION MECHANICAL[22]

Building indsutry-led collection networks

In 2023, FrieslandCampina Vietnam (FCV) partnered with Truong Thinh Construction Mechanical Co., Ltd. and Dong Tien Binh Duong Paper Co., Ltd. to scale up the collection and recycling of milk cartons and carton-based packaging in Vietnam. The initiative establishes a cooperation model between producers, waste collectors, and recyclers, with FCV committing to long-term annual recycling targets as part of its 2030 sustainability goals. Truong Thinh is expanding its collection network across residential areas, schools, industrial zones, and apartment buildings, ensuring proper waste sorting and processing, while Dong Tien is leveraging its advanced recycling facilities to produce high-quality recycled paper. The partnership also includes technical assistance and safety training for waste collectors, laying the groundwork for wider implementation.

TAPON TO IPON: BASTA KLARO, PANALO! (DISCARD TO EARN: IF IT'S CLEAR, IT'S A WIN)[23]

Collaborating with informal workers to recycle low-value packaging

Launched by Coca-Cola Beverages Philippines, Inc. in 2021, Tapon to Ipon: Basta Klaro, Panalo! is a nationwide PET recycling program that builds consumer awareness and drives collection aligned with EPR goals. Consumers can drop off clear PET bottles from any brand at designated collection points, such as Shell Select stations and almost 700 local sari-sari or small convenience stores, in exchange for Coca-Cola products. Additionally, the initiative collaborates with local governments in nearly 170 municipalities. For instance, in the province of Davao del Sur the initiative has been officially integrated into its local waste management systems, resulting in around 20 tonnes of PET collected. The collected bottles are sent to PETValue Philippines, a bottle-to-bottle recycling facility co-developed by Coca-Cola and Indorama Ventures, where they are processed into food-grade recycled PET for new bottles.

PRO-THAILAND NETWORK[24] – *Piloting EPR for Packaging Recovery*

Launched in 2019 by seven major producers, the PRO-Thailand Network is a voluntary, industry-led initiative piloting EPR-aligned models for packaging recovery across PET bottles, UHT cartons, and multi-layered plastics (MLPs). Over five years, it has collected over 40,000 tonnes of packaging and engaged 13 recycling facilities. The initiative also partners with informal waste collectors—such as the Saleng and Recycle Trader Association. PRO-Thailand has tested fee calculations, cost-sharing models, and collection systems to inform future regulation. Its operational insights have supported the Ministry of Natural Resources and Environment in developing Thailand's forthcoming Sustainable Packaging Management Act, positioning it as a key reference for mandatory EPR design.

PRECIOUS PLASTICS PHILIPPINES[25] – *Decentralised recycling & digital traceability*

Precious Plastics Philippines empowers local communities to recycle plastic waste through decentralised recycling workspaces. It manufactures and sells shredders, injection moulders, and sheet press machines capable of processing up to 150 kg of plastic per day. These machines enable communities, local governments, and NGOs to establish small-scale recycling centres that convert plastic waste into durable consumer products. Between 2018 and 2022, Precious Plastics sold over 300 recycling machines, leading to the creation of 15+ recycling hubs across the Philippines. To support financing, it introduced an EPR credit system, allowing companies to purchase credits at PHP 8 per kg of recycled plastic. By February 2024, the initiative had diverted 8,000 kg of plastic waste in a single month. This is supported by a tracking app to ensure traceability and accountability along the value chain.

TONTOTON[26]

Collaborating with informal workers to recycle low-value packaging

TONTOTON is a social enterprise tackling ocean-bound plastic pollution in Cambodia and Vietnam by collecting and repurposing all types of plastic waste that would otherwise remain unmanaged. This includes low-value plastics such as multilayer packaging and flexible plastics, which are typically excluded from conventional recycling systems.

The initiative partners with informal waste collectors and local communities, providing them with stable income opportunities. TONTOTON's collected waste is then processed into board products, building materials, or alternative fuels for the cement industry.

To ensure financial sustainability and scalability, TONTOTON operates a certified plastic credit system under Zero Plastic Oceans' Ocean Bound Plastic Certification. Businesses can purchase plastic credits to offset their plastic footprint, incentivising further collection efforts.

ROBRIES INDONESIA[27]

Strengthening demand for recycled materials & preventing downcycling

Robries Indonesia, founded in 2018, recycles plastic waste into stylish home décor and furniture. The company repurposes polypropylene (PP), low-density polyethylene (LDPE), and high-density polyethylene (HDPE) from sources such as bottle caps and plastic cups.

Robries collaborates with waste banks, local scavengers, as well as with restaurants and coffee shops to collect plastic waste, transforming it into durable polymer sheets for furniture and decorative items. Their furniture items are made from 100% recycled materials without virgin resin or acrylic blends.

By 2023, Robries had processed 110 metric tonnes of plastic waste, creating over 10,000 products. With growing international partnerships in Singapore, Malaysia, Australia, Europe, and the USA, Robries is proving that circular economy solutions can drive both environmental impact and business success.

Challenges & Recommendations

EPR is increasingly recognised as a key policy tool for advancing the circular economy in ASEAN, but uneven implementation risks undermining its potential. Many ASEAN countries are still developing EPR policies, leading to inconsistent regulations, unclear obligations, and fragmented enforcement. These issues are compounded by underdeveloped waste management infrastructure, limiting effective collection, sorting, and recycling systems.

At the regional level, a lack of policy alignment reduces the economic potential of EPR. Divergent reporting requirements, fee structures, and compliance mechanisms add complexities and hinder economies of scale in recycling, while the absence of harmonised targets and standards prevents ASEAN from unlocking the full value of waste as a resource. Weak oversight of Producer Responsibility Organisations, limited ringfencing of EPR funds, and insufficient multistakeholder action undermine long-term system viability.

To realise the full environmental and economic benefits of EPR, ASEAN countries must adopt clear government-mandated and industry-led frameworks. When designed well, EPR drives investment across the value chain—from waste collection to local manufacturing—while also supporting social inclusion through job creation and improved conditions for informal workers.

EPR is also central to ASEAN's resource security, reducing reliance on virgin material imports by keeping high-quality recycled feedstocks within domestic markets. Harmonised specifications and eco-modulated fees can accelerate investment in recycling infrastructure, promote waste prevention, and create economic savings for businesses and consumers.

Ultimately, aligning EPR frameworks with the design principles outlined in this paper is critical. A robust, coordinated approach can transform waste from a liability into a strategic resource, driving circular economy growth, regional cooperation, and sustainable development.

Challenge 1: Underdeveloped National Policy Frameworks and Infrastructure

Challenge 1a: Gaps and Ambiguities in National EPR Regulations

A major barrier to effective EPR implementation across many ASEAN countries is the **lack of legislative clarity** on stakeholders' roles and responsibilities. Uncertainty over who qualifies as a 'producer' — and is responsible for a product's end-of-life management — creates compliance challenges and weakens enforcement, while a lack of clarity on other stakeholders' responsibilities can undermine multi-stakeholder action. Also, while some countries exempt SMEs, others impose obligations without clear guidance on how to comply. To ensure industry-led compliance, regulations must define different stakeholders' responsibilities, the structure of obligations, and how compliance is enforced.

Another issue is the **unequal treatment of domestic and imported packaging**. In some ASEAN markets, only local producers are subject to EPR, giving importers an unfair advantage and undermining the system's integrity. Harmonised regulations should ensure equal obligations for all producers, including importers and e-commerce platforms, with consistent rules on recycled content, eco-design, and waste contributions.

Beyond legal clarity, **effective governance structures** are critical. EPR depends on cooperation between governments, PROs, waste management service providers, businesses, and consumers. Governments must provide clear regulations, establish enforcement mechanisms, and ensure transparency. PROs and waste operators must collaborate to deliver effective collection, sorting, and recycling services, while consumers must be engaged through awareness campaigns and user-friendly systems. Without clear roles, financial transparency, and oversight mechanisms across stakeholders, EPR systems risk fragmentation.

Many national frameworks also **lack measurable recovery targets**, making it difficult to track progress or guide business strategies. Inconsistent or vague commitments—such as "increase packaging waste collection" without defining specific percentages, treatment pathways, or enforcement measures—make it difficult for businesses to develop structured compliance strategies and for policymakers to track progress and policy impact. Importantly, while all packaging types should be covered under EPR, the level of obligation may differ depending on material characteristics, market share, and regulatory feasibility, such as food safety restrictions on recycled content in certain plastics.

Moreover, **upstream incentives**—such as eco-modulated fees—must be embedded within EPR systems to encourage sustainable product design, contributing to waste prevention and strengthening demand for recycled materials. Without such incentives, EPR systems risk focusing only on waste management rather than reducing waste generation at the source.

In countries without binding EPR laws, these challenges are even more pronounced. Voluntary measures lack enforcement, leading to free-riding and competitive imbalances. Without legal obligations, compliance data is inconsistent, and infrastructure investments lack scale and coordination, raising costs and discouraging participation. To unlock EPR's full potential, ASEAN countries must establish legally binding frameworks with clear obligations, transparent fee structures, and accountable PROs. This process should be led by governments but informed by structured dialogue with industry and other stakeholders. Without these foundations, EPR cannot deliver meaningful circular economy outcomes.

Challenge 1b: Weak Waste Infrastructure and Uneven System Coverage

Even with well-designed policies, EPR systems can't succeed without adequate waste management and recycling infrastructure. Across ASEAN, **collection, sorting, and recycling systems remain underdeveloped**, particularly in rural areas and for low-value materials. In Indonesia, for example, over 70% of plastic pollution comes from regions outside major cities, where infrastructure is scarce.[28] PROs must often absorb high costs to establish collection services and transport waste to distant recycling hubs—often in Java—adding strain to compliance efforts.

Urban areas face infrastructure challenges too. Issues like **irregular collection, poor source separation, and recyclables being sent to landfills** are widespread.[29] Consumer efforts to sort waste are often undermined by operational inefficiencies or lack of training among collectors. Even in advanced markets recycling infrastructure is limited — for instance, only 16% of glass waste can be processed by the Singapore's sole glass recycling plant.[30] Meanwhile, lower-value materials, such as multi-layer plastics, are often excluded from collection systems entirely.

A major barrier to closing these infrastructure gaps is the **lack of ringfenced EPR funding**, which means producer fees are not always reinvested into waste management systems. In many cases, **limited collaboration between public authorities and the private sector** further slows infrastructure development, particularly in areas where market incentives alone are insufficient. Without structured investments, financial transparency, and cross-sector coordination, EPR systems will fall short of their environmental and economic goals.

Challenge 1c: Misalignment with Local Realities

A major challenge in implementing EPR across ASEAN is designing policies that work with, rather than against, local economic realities. In many ASEAN countries, the informal sector forms the backbone of waste management systems, yet EPR frameworks often **fail to recognise or integrate informal waste workers**. This creates inefficiencies and missed opportunities. Examples like the **Mahija Foundation, #BijakBerplastik** and the **Responsible Sourcing Initiative** from The Circulate Initiative show how social enterprise models and responsible sourcing can be used as a strategic enabler to integrate informal workers into formal waste value chains as well as uplift workers – especially women and marginalised groups – that face unsafe working conditions, low wages, and limited access to social benefits, supporting both environmental goals and social equity. These programme's collaboration with waste banks, religious institutions, and small-scale aggregators demonstrates how trust-based local networks can accelerate inclusive EPR implementation.

Beyond the informal sector, EPR policies in ASEAN often overlook social realities of the waste value chain. Even in formal systems, many workers—especially women and marginalised groups —face **unsafe conditions, low wages, and limited access to social benefits**.

To **facilitate a just and equitable transition**, governments must embed fair, safe, and inclusive labours standards, as well as ensuring policy inclusion, structured collaboration, and formal participation pathways for both informal and formal sector waste workers.

At the same time, **consumer behaviour** presents its own challenge. In many ASEAN markets, small-format plastic sachets remain dominant due to affordability and convenience. While problematic for recycling, banning such formats without viable alternatives could harm low-income communities. EPR policies must balance waste reduction with social equity, ensuring sustainable packaging is accessible to all.

Recommendation 1: Strengthen National-Level EPR Policies & Waste Management Infrastructure

Develop clear and legally binding national EPR frameworks

- Establish mandatory, sector-specific, industry-led EPR systems for all packaging materials.
- Ensure legislative clarity and promote multi-stakeholder action with clearly defined roles and responsibilities for all stakeholders, including producers PROs, public authorities, municipalities and waste management & recycling service providers.
- Define 'obligated producers' to include domestic producers, importers, & e-commerce platforms.
- Align national policies with international best practices (sources: OECD, WWF, BCGPT, Consumer Goods Forum, etc.), including the following principles:
  - A clear legislative framework, incl. clear roles and responsibilities for all stakeholders
  - Compliance through industry-led PROs
  - Sector-specific and not-for-profit EPR schemes
  - Clear target and standard setting, including a prevention of downcycling of material
  - Ring-fenced & transparent EPR fees that prevent material cross-subsidisation
  - Participation of & collaboration with local stakeholders incl. informal sector & consumers.
- Enable investments in circular solutions - such as recycling infrastructure or recycled content - to count toward EPR compliance
- Support capacity development for all relevant stakeholders.
- Align policies across ASEAN to facilitate compliance and waste management.

Incentivise sustainable product and packaging design

- Eco-modulate fees in EPR systems to encourage sustainable material use and recyclability.

Mandate measurable and enforceable waste collection and recycling targets

- Introduce structured roadmaps with incremental, enforceable targets for both waste collection and recycling, ensuring alignment with circular economy principles. Ensure these are clear at both the national and the firm level.
- Create transparent monitoring and reporting frameworks to track progress effectively.
- Align data collection and tracking within ASEAN to support regional sustainability progress.

Strengthen waste collection, sorting, and recycling infrastructure

- Enhance infrastructure through public-private partnerships (PPPs) involving PROs.
- Expand local recycling capacity, particularly for low-value and hard-to-recycle materials, by providing financial incentives and investment support.
- Ensure adequate infrastructure for the proper management & disposal of non-recyclables too.
- Support decentralised, community-based waste management based on social enterprise models to facilitate traceable inclusive supply chains, particularly in underserved areas.

Ensure a just transition by integrating informal waste workers into formal EPR systems

- Ensure informal waste workers have a seat at the table in the design of EPR legislation.
- Scale-up social enterprise-driven waste management models that integrate informal workers into EPR systems through partnerships with PROs & companies.
- Support responsible sourcing pathways through which manufacturers engage with ethical recycling networks, strengthening the market for recovered materials, ESG outcomes, and supporting the economic viability of waste collection efforts.

Enhance consumer awareness & community engagement for effective circular practices

- Conduct public awareness campaigns to educate consumers on waste segregation & recycling.
- Foster multi-stakeholder collaboration, involving community leaders, local governments, media, and waste operators, to support efficient waste collection and behavioural change.
- Strengthen on-the-ground collection efforts through community-driven waste initiatives, incl. waste banks that support formal EPR while building trust, local ownership, & traceability.

Challenge 2: Fragmented EPR Regulations Across ASEAN

One of the key barriers to effective EPR implementation in ASEAN is the **lack of regulatory alignment**, resulting in inconsistent definitions, scopes, and compliance requirements across countries. EPR frameworks vary in how they define obligated producers—some include only manufacturers and importers, while others also cover brand owners, retailers, or distributors. **Material coverage** also differs, with some policies targeting only specific plastics or product types, and others including multi-material or non-plastic packaging. These inconsistencies create major compliance challenges for regional businesses, which must navigate multiple, non-aligned frameworks instead of operating under an aligned regional system.

Producer responsibilities also differ widely. Some countries impose financial obligations — requiring obligated producers to pay fees—while others mandate operational responsibilities, such as managing waste collection and recycling. The lack of standardisation in EPR fees—whether based on material type, product weight, recyclability, or other criteria — adds further complexity. The use of credit systems in some markets — such as the Philippines — allows financial offsets in place of actual waste recovery, raising concerns about long-term impact and accountability. While credit-based systems can play a role, they should be complemented by additional compliance pathways that support both downstream investments in waste management infrastructure and upstream measures such as recycled content uptake.

Inconsistent **eco-design incentives** across ASEAN further complicate sustainable packaging efforts. When only some countries reward recyclable or compostable materials, companies may default to meeting the lowest standard rather than designing for circularity. At the same time, **fragmented data reporting** requirements increase compliance burdens and limit opportunities for regional benchmarking, best practice sharing, and collective target-setting. Without standardised reporting formats, it is difficult to assess national progress or promote regional collaboration. Inconsistencies also hinder consumer understanding thereby reducing the efficiency of waste management systems.

Stronger regulatory alignment is essential to building scalable, industry-driven EPR systems across ASEAN. A harmonised approach — with consistent definitions, producer obligations, financial structures, and reporting standards — would simplify compliance, support eco-innovation, and improve waste outcomes. By aligning with key principles outlined in this paper, ASEAN EPR systems will be both effective and scalable across diverse national contexts. It would also position ASEAN to align more effectively with global policy developments, such as the **Global Plastics Treaty**, and to attract regional investment in circular economy infrastructure.

Recommendation 2: Improve Regional Regulatory Alignment in EPR Policies

Establish regional alignment on key EPR policy elements

- While full harmonisation may be difficult, ASEAN member states should work towards greater policy alignment based on key EPR standards to reduce compliance complexity for businesses. Important areas for alignment include:
  - Definition of 'producers' to include all domestic producers, importers and e-commerce platforms
  - Roles and responsibilities of various stakeholders
  - Sector-specific EPRs with clearly defined scope of coverage, including packaging types, materials, and product categories covered
  - Specific time-bound targets
  - EPR fee calculation methodology
  - Reporting requirements, including data collection and tracking methodologies
  - Eco-design standards.

Develop an ASEAN EPR Alignment Framework under existing regional initiatives

- Implement the actions set out in the ASEAN Regional Action Plan for Combatting Marine Plastic Debris (2021-2025), incl. the publication of guiding principles associated with EPR.
- Support follow-up frameworks to extend EPR coordination efforts beyond the current plan.
- Encourage collaboration with relevant regional bodies (e.g. ASEAN's Circular Economy Working Group, World Bank's SEA-MaP) to leverage existing initiatives.

Promote bilateral and regional cooperation mechanisms for regulatory alignment

- ASEAN countries should establish structured dialogues for policy coordination, such as mutual recognition agreements, knowledge-sharing platforms, and pilot projects to test aligned EPR models before broader regional adoption.

Support interoperability of EPR compliance systems

- Explore mechanisms for cross-border compliance recognition, where businesses that meet EPR obligations in one ASEAN country can have elements of their compliance recognised in others. This would reduce administrative burdens, encourage consistency, and facilitate smoother regional trade.

Ensure ASEAN EPR policies align with global sustainability standards

- ASEAN should actively engage in global EPR discussions to align with international best practices while maintaining regional flexibility.
- ASEAN member states should support the Global Plastics Treaty as a platform for cooperation on circular economy issues between ASEAN and non-ASEAN partners.
- ASEAN member states should advocate for EPR to be a core mechanism in the Global Plastics Treaty to ensure strong global commitments on producer responsibility. By shaping the GPT's EPR provisions, ASEAN can facilitate greater policy alignment with international partners, improving cross-border trade in recycled materials and investment in circular economy infrastructure.

Challenge 3: Market Barriers for Recycled Materials

A major barrier to effective EPR implementation in ASEAN is the **underdeveloped demand for recycled materials**, which reduces incentives for circular waste management. Many businesses continue to favour virgin materials due to concerns over cost, quality, and supply, while consumer awareness of recycled-content products remains low. Without stronger policy incentives—such as eco-design requirements or recycled content targets—domestic recycling markets struggle to scale and attract investment. Several EU-ABC member companies are already demonstrating leadership by incorporating recycled content into their packaging in markets such as Indonesia and the Philippines, helping to build demand and momentum for high-quality recycled materials across the region.

At the regional level, **fragmented recycling standards and material classifications** further hinder development. Unlike the EU, ASEAN lacks harmonised definitions, content thresholds, and quality standards for recycled materials. This makes it difficult for businesses to trade or use recycled materials across borders, increasing compliance costs and slowing regional circular economy growth. Inconsistent recognition of **recycled content certifications** adds to the challenge, creating uncertainty for firms integrating secondary materials into supply chains.

Trade restrictions on recyclable materials also pose a challenge. While some ASEAN countries have imposed import bans to prevent illegal dumping, these often fail to distinguish between high-quality recyclables and low-value waste. This discourages investment in recycling infrastructure due to uncertain market access. In parallel, the **export of recycled PET (rPET) into lower-value applications** — such as textile fibres or industrial uses like strapping — diverts high-quality material away from closed-loop bottle-to-bottle recycling, reducing material circularity. While ASEAN's recycling trade should be efficient and accessible, it is also important to guard against the downcycling of valuable material.

To build circular packaging systems, ASEAN must expand local production of high-quality post-consumer recycled (PCR) materials. Currently, limited domestic supply makes PCR more expensive than virgin plastic, limiting uptake. Without targeted policy support, businesses face high costs and low availability. For example, EU-ABC members are already investing in domestic bottle-to-bottle recycling infrastructure, but the economic viability of these operations is challenged by the export of PET to lower-value fibre applications. Facilities such as Amandina and Hiroyuki demonstrate food-grade rPET production, signalling market potential for scaling local circular systems. To support these efforts, governments should mandate recycled content targets and introduce incentives for using domestically sourced PCR, helping to close the loop on packaging materials. Additionally, regional alignment on recycled content standards and certification systems is essential to stimulate demand, enable cross-border trade, and create stable markets. Safeguards should also be introduced to prevent excessive downcycling that removes valuable materials from the recycling loop.

Recommendation 3: Develop a Regional Market for Recycled Materials

Align on standards for recycled content to drive market demand

- Establish minimum recycled content standards in product and packaging design, and develop harmonised standards to ensure consistency across markets. This will stimulate demand for secondary raw materials and encourage businesses to integrate recycled materials into production.
- Where feasible and approved, allow the use of certified recycled content in food-grade packaging.

Create regional or bilateral mutual recognition agreements for eco-labelling

- Develop mutual recognition agreements (MRAs) for eco-labels to streamline market access for sustainable products, and to improve consumer trust in sustainability claims.
- Enhance consumer trust in sustainability claims by ensuring consistent certification standards across ASEAN

Standardise tracking and verification mechanisms for recycled content claims

- Implement regionally aligned tracking, certification, and verification systems to ensure credibility, consistency, and comparability of recycled content claims across ASEAN.

Review and refine trade classifications for recyclable materials

- Conduct a review of trade classifications for recyclable materials to differentiate between high-quality recyclables and low-value waste, to prevent unnecessary trade barriers, reduce the risk of misclassification, and facilitate smoother cross-border trade in secondary raw materials.

Encourage green financing mechanisms to expand regional recycling capacity

- Promote sustainability-linked financing such as green bonds, tax incentives, and investment grants to attract private sector investment in recycling infrastructure and circular economy initiatives.

Conclusion

The transition to a circular economy is an urgent priority for ASEAN, as rising waste generation and pollution pose growing environmental and economic risks. Extended Producer Responsibility is a pivotal tool in this transition, ensuring that producers take responsibility for waste management while driving upstream solutions. However, ASEAN's current EPR landscape remains fragmented, with misaligned policies, varying producer obligations, weak enforcement, and infrastructure gaps limiting the effectiveness of existing frameworks. Without alignment with key policy design principles and regional coordination, businesses face regulatory uncertainty, and circular economy initiatives struggle to scale.

To close the loop and accelerate ASEAN's circular transition, three key areas require urgent attention. First, national EPR frameworks must be strengthened, with clear legal mandates, transparent financial mechanisms, and robust enforcement. Second, EPR policies must be regionally aligned to facilitate cross-border compliance, harmonise definitions and standards, and create economies of scale in waste management. Third, ASEAN must establish a regional market for recycled materials, supported by harmonised quality standards, financial incentives, and trade facilitation to increase the availability of high-value secondary materials and reduce reliance on virgin resources.

Achieving this requires action from all stakeholders — governments, businesses, waste management operators, civil society, and consumers. Policymakers must engage industry in policy design, ensuring that EPR schemes are both ambitious and practically enforceable. Businesses must proactively lead in PRO governance, eco-design, and collaboration with other stakeholders through social enterprises. Civil society and communities must be empowered to participate in waste collection, segregation, and circular business models.

Looking ahead, ASEAN has a unique opportunity to integrate EPR into broader circular economy strategies. The ASEAN Regional Action Plan for Combatting Marine Plastic Debris provides a foundation for further policy alignment, while global developments, such as the ongoing Global Plastics Treaty negotiations, could create additional momentum for stronger, internationally harmonised EPR frameworks. By embedding key EPR design principles—legislative clarity, industry-led compliance, measurable targets, financial transparency, upstream incentives, and social inclusion—ASEAN can transform EPR from a regulatory burden into a driver of innovation, investment, and sustainability.

Appendix

Reference Table: EPR Principles from Key Publications

Key Design Principle: Legislative Clarity	
Business Coalition for a Global Plastics Treaty: Extended Producer Responsibility (Policy Briefing)	The objectives, scope and governance model of EPR systems must be clearly determined in the legislative framework to ensure sufficient government oversight and control.
OECD: EPR, updated guidance for efficient waste management	National governments are generally, though not always, responsible for providing the legal framework, as well as for monitoring and enforcement.
	A comprehensive analysis of the EPR programme should be made (e.g. which products, product categories and waste streams are appropriate for EPR, [...]).
WWF: 15 basic principles for EPR	Clearly define all packaging materials and/or products within the system's scope in a way that makes it easy to identify eligible products.
Consumer Goods Forum: Optimal Extended Producer Responsibility	Scope of covered materials: all major consumer goods packaging materials (all plastics, fibres, glass, and metals) should be collected
Producer Responsibility Coalition: Key tools to include EPR in the Treaty	The EPR instrument should cover the entire plastics value chain (as well as other materials like glass, aluminium, steel, paper...) not only the waste management.
Key Design Principle: Industry-Led Compliance	
Business Coalition for a Global Plastics Treaty	Businesses who cannot comply with their legally defined EPR obligations individually, should be required to join efforts to establish a shared system, in which collective responsibilities are fulfilled through Producer Responsibility Organisations (PROs) that are managed in partnership with the relevant industries and in ongoing consultations with the government. Obligated 'producers' should participate in the overall management of the PRO and have sufficient oversight to gauge performance, ensure compliance, and promote efficient EPR systems for circular material use and strong environmental outcomes.
OECD	Producers are usually ultimately responsible for achieving EPR policy objectives, whether individually or collectively, and whether through a single or competing PROs.
	Responsibilities should be well defined and not be diluted by the existence of multiple actors across the product chain.
WWF	Clearly defined responsibilities, e.g. obligation to pay fees or ensure recyclability of packaging.
	The PRO is the key coordinating stakeholder responsible for operating the EPR system within the legal framework's boundaries. The PRO is ideally an industry-led nonprofit organisation. Initially, only one monopolistic PRO is recommended; thoroughly regulated competitive PROs can be established once the EPR system solidifies.
Consumer Goods Forum	Governments have a responsibility to ensure waste management systems are in place to provide a foundation on which recycling and a circular economy can be built. Under the right conditions, we favour systems that are encouraged and enabled by government but left to producers to govern and manage, especially in cases where industry is providing substantial funding.
	The management of an EPR programme should be commensurate with how the financial responsibilities are assigned. [...] When launching an EPR programme, the programme should be managed by a professional PRO.
Producer Responsibility Coalition	In order to meet the principles of EPR, producers usually organise themselves collectively to fulfil their obligations within the framework of PROs, in different business models (single-provider or PRO in competition, non-profit/for profit) which are all authorised by responsible government oversight bodies.
	Contributions from producers should be directly used by the PRO to improve the environmentally responsible end-of-life management of the products they cover.
Key Design Principle: Local Adaptation & Inclusion	
Business Coalition for a Global Plastics Treaty	The establishment and the operation of EPR systems must take into account the local context, and its development should include participation from and collaboration with relevant stakeholders such as public authorities and municipalities, waste management service providers, and organisations representing workers in informal and cooperative settings.[31]
OECD	A consultation of stakeholders should be conducted to discuss goals, objectives, costs & benefits.
WWF	Stakeholder mapping and understanding of the whole plastics value chain, ensuring the participation of all sectors (including the informal sector).
	Need to be inclusive and enable the integration of all stakeholders.
Consumer Goods Forum	Social inclusiveness and fairness, especially in transitional markets with informal sector involvement.
Producer Responsibility Coalition	Collaborate with organised waste pickers communities through cooperatives or other types of organisations to be able to participate in the formal waste management system or participate with the traditional waste management companies.

Key Design Principle: Targets & Standards	
Business Coalition for a Global Plastics Treaty	EPR systems should be designed to complement integrated waste management systems and accelerate the transition to a circular economy ideally by setting quantitative targets and defining minimum requirements to be implemented in sector-specific EPR regulations. Provisions in the sector-specific EPR legislation should ensure transparent information and collaboration, social inclusion planning and impact assessment, as well as robust reporting, monitoring, and enforcement.
OECD	Clearly define objectives, based on analysis and consultation with all relevant stakeholders. EPRs usually aim to achieve one or more of four main goals: reducing the use of (virgin) resources and materials; waste prevention; reducing the environmental impacts of products; and closing material use loops ("circular economy").
	EPR for the product's lifecycle should be done in a way to increase communication between actors across the product chain.
WWF	Steer the transition from a linear to a circular economy with a set of material-specific quantitative targets for reduction, reuse and recycling.
	Have a clear and detailed set of quantitative targets for reduction, reuse, and recycling developed for each of the objectives (ideally for each packaging type).
	Transparent process of collaboration and open sharing among key stakeholders; transparency of information; control bodies in place.
Consumer Goods Forum	EPR programmes should have strong environmental outcomes.
	Collection for recycling targets that are measurable, achievable and cost-effective, while seeking strong environmental performance.
	EPR should be efficient, cost-effective, transparent, and accountable.
Producer Responsibility Coalition	The contributions of producers will ensure the sustainable coverage of costs that are both sustainable and entirely dedicated to improve the circularity of products.
	Define, in conjunction with industry/producers, national and local authorities, mandatory minimum targets for reuse, recycling, or recovery when and where relevant.
	Create mechanisms for knowledge, monitoring, and support of EPR [...]: A harmonised and robust monitoring framework of reciprocal contributions would allow for better reporting on policy and operational developments of EPR.
Key Design Principle: Fee Coverage	
Business Coalition for a Global Plastics Treaty	The use of EPR fees must cover the net costs of collection, sorting, recycling, and residual waste treatment as well as related communication activities and administration costs of the EPR system. Additional costs to be covered could include adequate measures to promote social inclusiveness and fairness, especially in transitional markets. Obligated producers should be involved in the process of setting EPR fees, and have access to a transparent breakdown of them.
OECD	The full end-of-life costs should be internalised in EPR producer fees to apply the polluter-pays-principle.
WWF	Financial resources collected under the EPR scheme should be used exclusively for the purpose of collecting, sorting and recycling, as well as related communication activities and administration costs of the EPR scheme.
	The fees set by the PRO should cover all net costs for waste management of the products or packaging.
Consumer Goods Forum	Definition of included costs: activities for which producers are financially responsible should be clearly identified and limited to an appropriate share of post-consumer collection and sorting costs for the residential sector.
	"Net cost" principle: EPR fees paid by producers should reflect the actual cost of collection and sorting as well as material revenue.
Producer Responsibility Coalition	Dedicated funding: the funds collected by the producers' contributions are entirely dedicated to the objectives set by a Producer Responsibility Organisation.
	EPR should play a social role in integrating semi-formal and informal workers into the waste sector and thereby institutionalising and improving their working conditions and livelihoods.
Key Design Principle: Incentivising Upstream Solutions	
Business Coalition for a Global Plastics Treaty	More advanced EPR systems should incentivize upstream solutions such as reduce, reuse, refill and repair of plastics and plastic products through the modulation of EPR fees and reward efforts going beyond the minimum product design requirements to be established in the treaty.
OECD	EPR policies and programmes should be designed to provide producers with incentives to incorporate changes upstream at the design phase in order to be more environmentally sound.
WWF	Prioritise actions according to the waste hierarchy, e.g. through fees modulation.
Consumer Goods Forum	Incentives for sustainability: EPR fees should incentivise design for recyclability and the use of materials with strong end markets.
Producer Responsibility Coalition	Modulate EPR in a way that reflects defined environmental criteria of the product – for example its recyclability – to incentivize producers to optimally design their products / packaging.

EPR Policy Status in ASEAN

Country	Policy Framework	Key Features	Policy Type	Policy Status	Implement-ation Status	Scope of Coverage	Incentives for Sustainable Design	Enforcement and Compliance
Indonesia	Roadmap of Waste Reduction by Producers (Regulation No. 75/2019).	Companies must submit a strategic plan for 30% waste reduction by 2029, as well as annual implementation reports. Waste reduction strategies must include collection or take-back schemes, which may be done individually or through cooperations with waste banks. Expected bans and restriction to PP and PS packaging of less than 50g/ 50ml from 2030.	Individual or collective operational responsibility and reporting.	Since 2019.	Since 2020.	Plastics, aluminium cans, glass, and paper.		No clear penalties to date. Reporting rates not known.
Singapore	Resource Sustainability Act 2019.	Obligated packaging producers or importers must report information on their packaging production/import and a reduce, reuse, recycle plan (3R Plan).	Reporting only.	Since 2019.	Since 2022.	Limited to packaging (reporting), and beverage containers.	Only basic fee modulation and no eco-design policies.	Clear penalties for non-compliance.
	Beverage Container Return Scheme (Resource Sustainability (Amendment) Bill 2023).	Under the Beverage Container Return Scheme, a refundable 10 cent deposit will apply to pre-packaged beverages sold in Singapore. Coverage includes only plastics and metal (aluminium and steel) beverage containers between 150ml and 3 litres. Scheme operators are responsible for waste management, while costs will be borne by producers.	Financial responsibility with basic fee modulation.	Since 2023.	Start scheduled April 2026.			
Philippines	Extended Producer Responsibility Act of 2022 (Republic Act No. 11898).	Obligated producers must meet progressive plastic recovery targets, starting at 20% in 2023 and increasing annually to 80% by 2028. This responsibility can be fulfilled through plastic buy-back or waste collection either individually or through PROs as well as through sustainable design. Annual audit reports must be submitted.	Individual or collective operational responsibility.	Since 2022.	Since 2023.	Plastic packaging.	Sustainable design is encouraged as one solution for waste reduction but not mandated.	Clear penalties for non-compliance exist, and overall 2023 target was reached, but not all companies have reached their targets.[32]
Vietnam	Law on Environmental Protection (LEP) 2020 (No. 72/2020/QH14); Decree No. 08/2022/ND-CP (guidance on LEP).	Responsibilities of obligated producers and importers can be fulfilled either by organising recycling individually or collectively, or by paying a fee into the Vietnam Environmental Protection (VEP) fund.	Choice between financial responsibility (basic fee modulation) or operational responsibility (individual or collective).	Since 2020/ 2022.	Depending on goods category: either since 2022 or start between 2024-2027.	Broad coverage, including packaging and 9 categories of goods.	Basic fee modulation, but discussion on recycling cost constant for different materials.[33]	Lack of adequate infrastructure, and difficulty establishing effective compliance and enforcement mechanisms.[34]
Thailand	Draft Sustainable Packaging Management Act.	The draft act requires producers to recover and recycle packaging waste. This responsibility can be delegated to a certified PRO.	Individual or collective operational responsibility.	Scheduled for 2027.		Packaging waste.	Draft Act includes sustainable design guidelines.[35]	No information yet.
Malaysia	Legal framework under development based on Malaysia Plastics Sustainability Roadmap 2021-2030.	Packaging producers must pay a fee to cover the costs of waste recovery and recycling. This scheme will be overseen by an independent PRO.	Financial responsibility with basic fee modulation.	Drafting of legislation to commence in 2025. Mandatory EPR to commence not before 2030.		Packaging.	Only basic fee modulation and no eco-design policies.	No information yet.
Cambodia	EPR policy under development.			Draft in progress.				
Myanmar	EPR policy under National Plastic Action Plan under development.			Draft in progress.				
Brunei	No EPR policy exists.							
Lao PDR	No EPR policy exists.							

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About the EU-ASEAN Business Council

The EU-ASEAN Business Council (EU-ABC) is the primary and sole voice for European business covering all of the ASEAN region. It is recognised by the European Commission and the ASEAN Secretariat and is an accredited entity under Annex 2 of the ASEAN Charter. Independent of both bodies, the Council has been established to help promote the interests of European businesses operating within ASEAN and to advocate for changes in policies and regulations which would help promote trade and investment between Europe and the ASEAN region.

The Council works on a sectorial and cross-industry basis to help improve the investment and trading conditions for European Businesses in the ASEAN region through influencing policy and decision makers throughout the region and in the EU, as well as acting as a platform for the exchange of information and ideas amongst its members and regional players within the ASEAN region.

The EU-ABC's membership consists of large European Multi-National Corporations and the nine European Chambers of Commerce from around Southeast Asia. The EU-ABC represents a diverse range of European industries cutting across almost every commercial sphere from car manufacturing through to financial services and including Fast Moving Consumer Goods and high-end electronics and communications. Our members all have a common interest in enhancing trade, commerce and investment between Europe and ASEAN.

About the ASEAN Business Advisory Council

Launched in April 2003, ASEAN-BAC was set up with the mandate to provide private sector feedback and guidance to boost ASEAN's efforts towards economic integration.

Aside from providing private sector feedback on the implementation of ASEAN economic cooperation, the Council also identifies priority areas for consideration of the ASEAN Leaders.

Accordingly, ASEAN-BAC's activities are primarily focused on reviewing and identifying issues to facilitate and promote economic cooperation and integration.

Our Vision

As the APEX private sector body of ASEAN, the ASEAN Business Advisory Council (ASEAN-BAC) serves as the principal platform for business leaders across the region to engage with policymakers.

Our Mission

- Take the lead in coordinating Inputs from established business councils and entities in their interactions with various ASEAN sectoral groups.
- Implement a more inclusive and consultative process involving the private sector.
- Assist private sector groups to initiate actions.
- Implement a more inclusive and consultative process involving the private sector.
- Harness the collective resources of the private sector.


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