

Extended Producer Responsibility (EPR) Landscape in ASEAN

2023 Biannual Tracking Report



Presented By

US-ASEAN Business Council
Sustainability Committee

Last Updated: June 22, 2023



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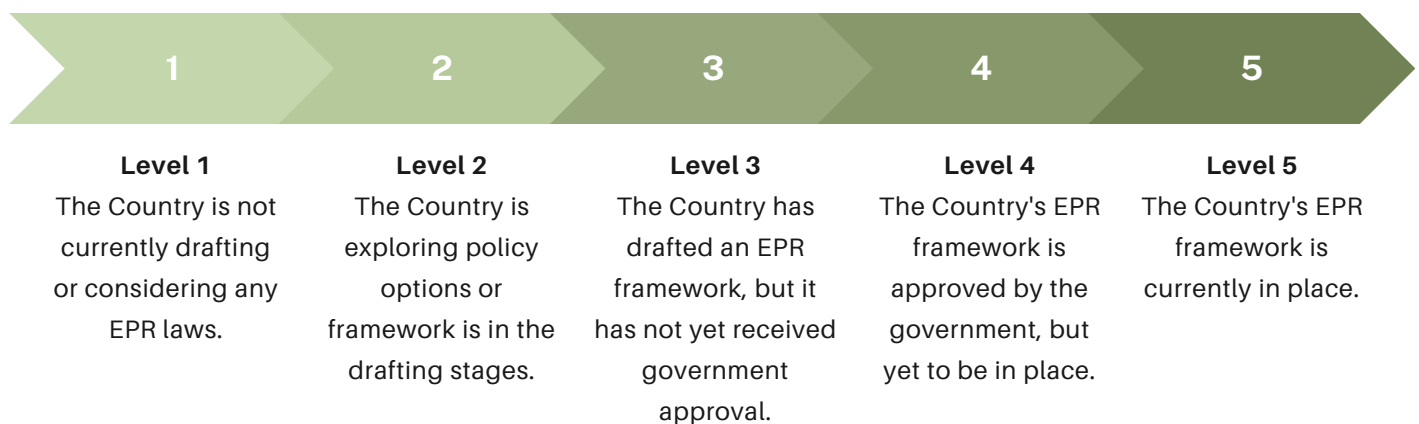
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[Extended Producer Responsibility \(EPR\)](#) is a policy approach that places a significant responsibility for the treatment or disposal of post-consumer products into the hands of the producers and manufacturers. Assigning such responsibility is perceived to increase incentives to prevent waste at the source, while promoting product design for the environment as well as supporting the achievements of public recycling and materials management goals. In ASEAN, states are primarily considering EPR to combat plastic waste leakage, particularly into waterways and the natural environment. This document is a snapshot of the current EPR policy landscape in ASEAN for Q1 and Q2 of 2023.

US-ABC EPR Status Scale



The US-ABC Sustainability Committee has created an EPR Status Identification Scale to better understand the current progress of EPR in ASEAN countries. Reference the table below for a snapshot on EPR in the region.

Significant Updates in this Report since Q4 2022

Additions to Country Profiles:

The US-ABC Sustainability Team has added the following feature to each country profile (where applicable):

- **Financial Incentives:** Tax or financial regulations to combat plastic waste in non-EPR countries.






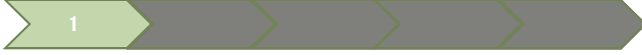




Country Additions:

- **The Philippines:** Addition of the Implementing Rules and Regulations (IRR) of the EPRA (includes *Activities and Strategies, Detailed Information on the Registration Process, EPR Compliance Monitoring and Sustainability Collaboration.*)
- **Memorandum of Understanding with Philippines DENR:** In April 2023, the US-ASEAN Business Council signed a Memorandum of Understanding (MOU) with the Philippines' Department of Environment and Natural Resources (DENR) to strengthen collaborations on sustainability, climate change, green finance, and environmental protection. Read more on [page 17](#).



Summary of EPR Frameworks in ASEAN: Q1 & Q2, 2023

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ASEAN Nation	Current EPR Frameworks Implemented	EPR Status
Brunei	N/A	
Cambodia	N/A	
Indonesia	Based on the Law on Waste Management No. 18/2008 ; Articles 12-15 of Government Regulation No. 81/2012	
Lao PDR	Ha Noi 3R Declaration (2013-2023) .	
Malaysia	12th Malaysia Plan	
Myanmar	N/A	
The Philippines	The Extended Producer Responsibility Act (EPR Act) of 2022 or Republic Act No 11898	
Singapore	E-Waste Management System	
Thailand	Roadmap on Plastic Waste Management 2018-2030 ; the Action Plan on Plastic Waste Management 2020-2022 ; Ministry of Public Health PET Regulation	
Vietnam	Decree 08/2022/ND-CP	

Brunei

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EPR Landscape



Brunei does not currently have any EPR regulations in place.

- **Plastics Situation:** In 2021, plastic waste made up [29%](#) of Brunei's landfill and was the second most disposed product. Furthermore, 80% of waste collected from beaches were plastic, a majority of which were plastic bottles. Smaller Asian developing countries like Myanmar have typically been net exporters of plastic waste because they do not have sufficient industries producing recycled products from plastic waste. As such, the sorting and treatment of plastic in the country is very limited and majority of the wastes end up in landfills or discharged to water bodies.
- **Environmental Consequences:** According to the United Nations Environment Programme (UNEP), if Brunei was to continue its “business-as-usual” scenario, the annual plastic wastes entering aquatic ecosystems could nearly triple from 9-14 million tonnes in 2016 to 23-37 million tonnes by 2040.
- **Existing Plastics Regulations and Initiatives:** To further strengthen waste management in Brunei, the government has been undertaking the following [measures](#):
 - Development of Waste Management Regulation under the [Environmental Protection and Management Order \(2016\)](#).
 - Amendment of the [Hazardous Waste \(Control of Export, Import and Transit\) Order, 2013](#) to include plastic waste considerations
 - Increase in excise duty on plastic product imports by 3%
 - Tackle zero waste strategies under the Brunei Vision 2035 ([Wawasan Brunei 2035](#)).

The government has also launched specific community-level initiatives such as the Sungai Brunei Clean Up, Floating Waste & Debris Booms, Nationwide Coastal Clean-Up, Plastic Bottle Free Initiative, and the No Plastic Bag Everyday Initiative.

Cambodia

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EPR Landscape



Cambodia does not have any EPR regulations in place.

- **Current Plastics Situation:** Although Cambodia is not a major producer of plastic products and imports most of its plastics, it generates 94 000 tonnes of plastic/year, with plastic waste making up around 21% of waste that ends up in landfills. Out of 4 million metric tonnes of waste generated annually in Cambodia, only 63% (2.5 million metric tonnes) of waste ends up in landfills, while most of the remainder is dumped in public areas or in waterways. In terms of plastic waste, the figures are unknown as to where the plastic waste ends up.
- **Environmental Consequences:** The coastal region of Cambodia constitutes 7.1% of its total population, and features beaches, forests, mangroves, and offshore coral reefs. Threats to the Cambodian coastal ecosystem and wildlife are much the same as those encountered in neighboring countries in the region. In major cities Phnom Penh and Sihanoukville, plastic waste has led to [heightened risks of flooding](#). Waterways are being blocked by plastic waste and sewage and drainage systems are getting clogged.

Existing Plastic Initiatives:

- **EPR Roadmap:** Though there is currently no EPR framework in place, the National Council for Sustainable Development (NCSD) is proposing an EPR scheme for Cambodia to promote efficient collection and recycling of plastic waste. The Sustainable Consumption and Production (SCP) roadmap proposes to include EPR schemes by 2022. In October 2022, Cambodian officials visited Vietnam on an EPR study tour, meeting with the Ministry of Natural Resources and Environment (MONRE) and the packaging Responsible Organization & Bioplastics), UNDP (innovation challenges), with the aim of putting together a roadmap for EPR.

- **4R Framework:** Since 2018, Cambodia has promoted the 4R's: Refuse, Reduce, Reuse, and Recycle. The 4R framework aims to prevent and minimize plastic waste pollution throughout the country. In 2018 the Ministry of Environment (MOE) also developed sub-decree 168 to introduce a levy on plastic bags and is currently drafting a new regulation on plastic management.
- **E-Waste Battery Collection:** Another motive for Cambodia to implement an EPR framework is their growing electronic waste (e-waste). In October 2022, Cambodian Ministry of Environment began a pilot battery collection project with Ecobatt, an Australian company, to organise the safe collection of electronic waste. The project has thus far collected almost one tonne of disposed batteries from nearly 100 locations across the country. Cambodia does not currently have an e-waste processing plant, but its partnership with Ecobatt is meant to determine the business viability of setting up such a processing plant.

Challenges with EPR Implementation: The capacity of law enforcement officials are limited in Cambodia, and data collection on e-waste is very costly and time consuming. Without the appropriate technological resources and sponsorship, it is very difficult to build an EPR framework.

Financial Incentives: In an effort to combat plastic pollution and reduce plastic waste, [the Ministry of Environment \(MoE\)](#) has implemented financial incentives such as requiring supermarkets and shopping malls to [charge KHR 400 per bag \(USD 0.10 per bag\)](#) since 2017. This levy has led to an [over 50% decrease in the use of plastic bags](#) for major supermarkets. Although there is no national fee for plastic bags, vendors in the country are [encouraged to stop providing plastic bags for free](#) to consumers.

Details of Emerging EPR Regulation: Cambodia is currently proposing a phased approach from voluntary to mandatory EPR.

- First, EPR efforts will focus on “low hanging fruit” products, including plastics such as PET, HDPE, and LDPE which are easier and faster to introduce for EPR. There are currently some existing recycling systems in place. There will also be measures to ban “non-essential products” such as straws, cups, cutlery, and expanded polystyrene. Cambodia will call for voluntary contributions to EPR pilots, particularly from large corporations, and develop simple PROs to facilitate waste collection and treatment with waste management companies/operators.
- In the longer term, Cambodia needs to develop and enforce regulations, EPR instruments and performance standards, including specifying the obligations of producers with mandatory collection and recycling targets, and deciding on performance guidelines and standards (eg. requirements for minimum recycled amounts for plastics, food-grade standards). UNDP has also proposed that Cambodia explore measures such as take-back and deposit refund systems, advanced disposal fees, refills and refunds, and an EPR fund.

Indonesia

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EPR Landscape

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Indonesia's existing EPR frameworks are enshrined in various legislations.

- **Current Plastic Situation:** Indonesia is the world's second largest plastic polluter, producing 63 million tons of waste in 2021, wherein plastic was the second largest in waste composition at 9.8 million tons. Even though more plastic is generated than needed domestically, Indonesia still relies on imported plastic residues to utilize the existing recycling capacities in its factories. Indonesia's existing waste management system is inadequate and underfunded. Rural areas generate the largest amounts (two-thirds) of mismanaged plastic waste (MPW) due to very limited waste collection rates. Limited collection services and access to disposal infrastructure hinder improvement in waste handling behaviors.
- **Environmental Consequences:** The amount of waste has been increasing with population growth. The impact of waste looms the sustainability of human life and the environment in Indonesia as it threatens greenhouses, land use, water, and energy. Environmental and social costs are difficult to quantify, but recent estimates suggest that Indonesia faces roughly USD 459 million in direct costs to its fishing/aquaculture, shipping, and tourism industries due to marine debris (including non-plastic debris, although plastic products make up the majority of marine debris).

Details of the EPR Regulation: The Indonesian government has made [several policies](#) to reduce and manage plastic waste through EPR. The various legislations are described below:

- **[Waste Management Law of 2008:](#)** The concept of EPR was first introduced in the Waste Management Law of 2008, which defines producer's responsibility as an "obligation to manage their packaging and/or products that are produced that cannot easily decompose by natural processes" (see Article 15). The law however provides no further explanation of what this would mean for companies and how they should comply with this regulation.

- [Regulation 81/2012](#): 81/2012 gives producers the responsibility to reduce, recycle, and reuse their packaging and/or products. This regulation mandates producers to develop and implement a waste reduction roadmap, mainly for the purpose of reducing container and packaging waste.
- [Regulation 97/2017](#): This regulation builds on the aforementioned policy by formulating targets for waste reduction and specifying possible measures on how to achieve these targets. Accordingly, until 2025 household waste shall be reduced by 30 percent and 70 percent of the remaining amount shall go through a treatment process. Municipal governments were requested to develop concrete waste reduction and treatment plans to contribute to the overall targets. The municipal targets must be reported to Indonesian Ministry of the Environment and Forestry (KLHK).
- [Waste Reduction Roadmap](#): On December 5, 2019, Indonesia enacted the Regulation of the Minister of Environment and Forestry No. 75 of 2019 (75/2019) on Producers' Waste Reduction Roadmap. The regulation aims to enforce the detailed implementation requirements of Article 15, paragraph 2 of Decree 81 of 2012 on the Management of Household Waste and Waste Similar to Household Waste.
 - **Coverage**: Producers are classified as belonging to a particular industry, mainly from three industry sectors: manufacturing, food and beverage service, and retail. The following characteristics of packaging or containers are subject to waste reduction requirements: difficult to decompose through a natural process, unavailable for recycling, and unable to reuse. More specifically, it covers plastic, aluminium cans, glass, and paper.
 - **Waste Recovery Options**: The regulation requires producers to collect and recycle. To achieve the targets outlined in the regulation, producers, operators of restaurants, hotels, shopping centers, and public markets can enter into cooperative agreements with (i) formally registered waste banks, (ii) landfills with adequate recovery systems, and (iii) recycling centers. At present no collective collection efforts have been specified in this regulation. Producers have the individual responsibility to organize the collection of the required amounts of recycle resources. In 2020 the Indonesia Packaging Recovery Organization has been set up by private sector operators.
 - **Targets**: The roadmap aims to reduce the packaging waste of goods, products and containers, especially plastic wastes by 30% over the next 10 years.
 - **Effectivity**: The Waste Reduction Roadmap is to be developed for a 10-year period from 2020 to 2029.
 - **Auditing**: After the planning phase, the government agencies and the producers will be in contact on a bi-annual basis, as producers need to monitor their activities and the government will need to review the process and support the producers to achieve their targets.
 - **Incentives**: Direct financial incentives or disincentives have not yet been considered for producers. Instead, municipal governments can receive additional financial support from the central government for waste management related activities if they perform well. Producers must finance their activities by themselves.

Indonesia

Challenges with EPR Implementation: Indonesia [struggles](#) to implement this EPR legal framework due to technical feasibility issues, limited government funding, unsupportive cultural and social conditions, and lack of commitment amongst stakeholders. To ease these issues, the [German-Indonesian Chamber of Industry and Commerce \(EKONID\)](#) launched a new online [portal](#) for Indonesia. The website aims to serve as the primary source of all information on activities related to EPR in Indonesia, allowing visitors to not only browse the latest news and events on EPR but also allow companies and organisations to list their EPR projects and initiatives.

Ground Sentiments: Overall, the country has implemented quite an extensive legal framework, but enforcement is [weak](#). The Waste Management Law of 2008 and regulation 75/2019 did not have sufficient provisions for enforcement. For instance, there is no explicit enforcement mechanism (e.g., through fines or administrative penalties). Public awareness of the issue is also expected to play a crucial role in a country as vast as Indonesia.



Lao PDR

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EPR Landscape

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Lao PDR (Laos) currently is not considering any EPR laws.

- **Plastics Situation:** Though Laos is not a main producer of plastic in ASEAN, it struggles with effective plastic waste management. Waste management is largely limited to [urban centers](#), where only 40-60% of waste is collected. Uncollected waste is burned or openly dumped, often into waterways. The country is experiencing an increase in the amount of waste generated [due to urbanization and a growing trend of consumerism in rural areas](#). People in the country are now [generating twice as much household waste](#), with the limited number of sanitary landfills and poorly managed community dumps exacerbating the issue.
- **Environmental Consequences:** According to a [2021 World Bank Study](#), environmental health factors such as air pollution have been responsible for 10,000 deaths in Laos each year. Environmental risks have also resulted in over 100 million days of illness, devastating the Laos economy. Additionally, approximately 25% of the waste discovered in cities in Lao is comprised of plastic, which is leading to negative environmental and ecosystem impacts such as [obstructing drains, polluting the air, damaging tourism sites, and affecting the catch of fish](#). On the other hand, the understanding of the detrimental effects on the environment due to leaching harmful substances into water and soil and the health risks posed by inhaling smoke from burning materials like plastics and batteries [remains low among the population of the country](#).
- **Ha Noi 3R Declaration (2013-2023):** Laos is a signee of the Ha Noi 3R Declaration, which provides 33 sustainable 3R (reduce, reuse, recycle) goals for Asia and the Pacific, as well as transition towards a resource-efficient and green economy. Notably, Goal 15 details the progressive implementation of EPR via encouraging producers, importers, and retailers to fulfil their responsibilities for properly disposing new and emerging waste streams. Measures of Goal 15 include implementing new EPR policies or strengthening existing policies, as well as listing the number of products and/or product groups targeted by EPR nationally.

Lao PDR

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- **Circular Economy Strategies for Lao PDR:** In 2017, the Institute of Renewable Energy Promotion (IREP) collaborated with the United Nations Development Program to identify circular economy strategies for Laos. Laos's core CE strategic priorities are circular manufacturing, circular construction materials from forests, and circular agriculture and hydropower. Additional waste sector policies include the 2012 Environmental Protection Law, 2015 Hazardous Waste Management, and 2016 Import and export of UEEE/e-waste banned in Laos.



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Malaysia

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EPR Landscape

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Although there are currently no EPR schemes in place in Malaysia, the government has implemented policies on plastic waste as well as endorsed EPR as effective next steps in their plastic waste solutions.

- **Plastics Situation:** As one of the biggest producers of plastic in ASEAN, Malaysia faces many challenges regarding the disposal of plastic waste. A recent [WWF study](#) showed that 1,848,000 tons of plastic are generated in Malaysia, of which 433,080 tons are recycled, and 136,682 tons end up in informal recycling farms. This leaves 1,366,920 tons of plastic in landfills or open dumps. Among the countries in Asia, Malaysia has the [second highest percentage of plastic in solid waste](#), following the Philippines.
- **Environmental Consequences:** Climate priorities have been left out of many political campaigns for the 2022 Malaysia General Elections (GE15). Locals are concerned, especially with GE15 being held during the monsoon season, creating significant barriers in locals' ability to vote.

Existing Plastics Regulations and Initiatives:

- [Malaysia Plastic Pact](#): In 2018, the Ministry of Environment and Water launched the Malaysia Plastic Pact, which encourages all stakeholders along the plastic supply chains to commit to national targets and discuss EPR.
- [Malaysia Plastics Sustainability Roadmap](#): The Malaysia Plastics Sustainability Roadmap was launched by the Ministry of Environment and Water (KASA) in 2021 to manage plastic production, consumption, recycling, and waste holistically. The Roadmap aims to transition the plastic economy to a circular one and mitigate emerging risks by setting six time-bound national targets. One of its targets is to collect 76% of plastic waste for recycling by 2030.
- [Malaysia's Roadmap towards Zero Single-Use Plastics 2018–2030](#): Malaysia's Roadmap towards Zero Single-Use Plastics was implemented by the Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC), imposing pollution charges on consumers and manufacturers of single-use plastics.

- **[National Cleanliness Policy](#)**: The Ministry of Housing and Local Government announced the formulation of the National Cleanliness Policy, which relies strongly on EPR. Through this policy, the government [aims to promote proper waste disposal](#) by implementing waste-to-money initiatives, encouraging 3Rs, promoting source separation of wastes, and reducing plastic packaging. However, these efforts have had minimal impact on public awareness, possibly due to poor enforcement.
- **[Waste-to-Energy Initiative](#)**: The government has started a waste-to-energy initiative and is drafting policies, with the Housing and Local Government Ministry (KPKT) currently working towards the establishment of the [National Circular Economic Council \(NCEC\)](#). The NCEC will specialize in bringing together stakeholders and industry leaders to set a beneficial agenda and channel funds.
- **[Solid Waste Management Enactment 2022](#)**: The first legal frameworks have been approved. Sabah's Legislative Assembly approved the Solid Waste Management Enactment 2022, which will regulate and monitor solid waste and public cleansing in the state.
- **MAREA Engagements**: The [Malaysian Recycling Alliance \(MAREA\)](#) is one of the best examples of the private sector proactively engaging with the government's sustainability goals and the plastic issues in Malaysia. The alliance [aims to promote recycling advocacy](#) towards a more effective packaging waste management by working with the Malaysian government and other external stakeholders. The non-profit, established in January 2021, is led by 10 Fast-Moving Consumer Goods (FMCG) companies and aims to improve the waste collection and recycling infrastructure.
- **Pollution Charge on Plastic bags**: Malaysia has implemented [a pollution charge of at least MYR 0.20/bag at the state level](#) for fixed premises, with states deciding when to start implementation between 2019 and 2021. The charge will also extend to non-fixed premises by 2025.

Challenges with EPR Implementation: Despite the government's efforts and EPR awareness, a legally binding treaty or system is currently not being implemented. The current policies and policy drafts demonstrate that the Malaysian government requires help from the industrial sector to achieve its goals around plastic.

Details of Emerging EPR Regulations: As the government envisions the future under the current [12th Malaysia Plan \(2021-2025\)](#), it established sustainability and circularity as key goals and identified EPR schemes as a core strategy. The Malaysia Plastics Sustainability Roadmap (2021-2030) targets development of an EPR governance framework in 2022-2024. The adoption seeks to implement voluntary EPR in 2023-2025, followed by mandatory EPR for packaging (2026) and minimum thresholds for recycled content for the automotive (2027) and construction (2030) sectors. Under an EPR system, the producer's [responsibilities](#) will include waste collection, recycling, financial contributions, and innovation along supply chains. Further details on the Plan's EPR fee structure, penalties, and incentives are yet to be announced.

Myanmar

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EPR Landscape

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Myanmar does not currently have any EPR regulations in place.

- **Current Plastics Situation:** Myanmar is on the verge of a plastic crisis. Every day, [80 million plastic bags](#) are used and 119 tons of plastic waste leaks into the ocean from the Irrawaddy River – the country's largest river and as of 2019 the ninth most polluted river in the world. A [2021 survey](#) was carried out by the World Bank in cooperation with the Ministry of Natural Resources and Environmental Conservation finds that the top 10 most abundant plastic items leaking into the environment make up 76% of all waste, and the top five plastic items are responsible for 71% of the waste leakage. Plastic bags alone account for over 30% of the plastic pollution.
- **Environmental Consequences:** Without regulations and infrastructure that effectively control plastic waste, any global crisis can exacerbate the country's threats posed by plastic waste. During the COVID-19 pandemic, a sharp increase in household plastic waste overburdens Yangon's near-capacity landfills and poor waste management systems. These sites are prone to closure because of the accumulation of toxic or flammable gases under the soil and an increased rate of respiratory infection.

Challenges with EPR Implementation: Because the country currently does not have any EPR or tax regulations for plastic packaging, Myanmar has [few funding sources](#) for any recycling projects. Without the financial resources present, it is thus difficult to build any recycling infrastructure in the nation.

Due to the evolving political situation and crisis of legitimacy in Myanmar's governing structure since the February 2021 military coup, the Council advises member companies to not publicly engage any government entities or take on new initiatives that would require high-level government approval at this time. Doing so could come with significant political and security risks to member operations in Myanmar, as well as reputational risks internationally.

The Philippines

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EPR Landscape

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The Philippines has a specific EPR Law in place.

- **Plastics Situation:** The Philippines is the third largest plastic waste contributor with an estimated 0.75 million metric tonnes of mismanaged plastic entering the ocean every year. According to a report by the World Bank, 1.1 million tonnes of key resins were consumed in the Philippines and only 28% of the key plastic resins were recycled in 2019. The heavy-use of single use plastics, notably sachets, has exacerbated the problem in the recent years. In 2018, the plastic industry contributed an estimated USD 2.3 billion to the national economy.
- **Environmental Consequences:** The mismanaged plastic waste disproportionately threatens local economies: livelihood of vulnerable coastal communities, tourism, and fishing and shipping industries. Additionally, 78% of the material value of plastics is lost to the Philippines economy each year - discarding rather than recycling plastics leads to a loss of USD 790-890 million revenue per year.

Details of the EPR Regulation:

On July 23, 2022, The Extended Producer Responsibility Act (EPRA) of 2022 or [Republic Act No 11898](#) lapsed into law. The EPRA is an act institutionalizing the extended producer responsibility on packaging waste, amending Republic Act No. 9003, also known as the Ecological Solid Management Act of 2000. With the implementation of the EPR Law, stakeholders expressed confidence that the Philippines will no longer be tagged one of the world's largest plastic litterers.

The law is meant to address the country's contribution to the global plastics pollution problem, where 40% of global waste ends up in the ocean. The framework calls on all sectors to lessen the use of products that are bad for the environment. Primarily, the law mandates large corporations, defined as enterprises with total assets over PHP 100 million (~USD 1.75 million), to process their plastic waste used to carry, protect, or pack goods for transportation, distribution, or sale and ensure that these plastic wastes do not end up in the environment.

The Philippines

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- **Coverage:** Products not made of plastic are not covered the law. The recovery requirement applies to plastic packaging such as sachets, labels, laminates, single or multi-layered plastics, beverage and food containers, personal care and cosmetic containers, lids and caps, plastic forks and spoons, plates, straws, sticks, tarps, signages.
- **Waste recovery options:** Buying back the material or waste from consumers, putting up collection points where the material or waste can be dropped off after consumption then collected for reuse or recycling, clean-up of waste from coastal areas, public roads, other places, establishment of recycling, composting, thermal treatment, and other waste diversion or disposal facilities.
- **Target recovery rates:**
 - December 31, 2023: 20%
 - December 31, 2024: 40%
 - December 31, 2025: 60%
 - December 31, 2026: 70%
 - On and after December 31, 2027: 80%
- **Effectivity:** Within 6 months following the effectivity of the EPR Law, covered enterprises, must phase-in EPR programs and register such programs with the [National Solid Waste Management Commission](#) by February 12, 2023.
- **Auditing:** Large enterprises or their [Product Recovery Organizations \(PROs\)](#) must get an independent third-party auditor to certify the veracity of the reported plastic product footprint generation, recovery, and EPR program compliance, using uniform standards established by the Department of Environment and Natural Resources (DENR). The audit report is to be submitted to the DENR and posted on a website accessible to the public.
- **Penalties:** Non-compliant large enterprises will have to pay twice the cost of recovery and diversion of their plastic footprint its shortfall, or the appropriate fine based on the table below, whichever is higher:
 - P5 million to P10 million – 1st offense
 - P10 million to P15 million – 2nd offense
 - P15 million to P20 million – 3rd offense
- **Incentives:** Large enterprises can apply for tax incentives for their EPR activities, under the section on tax incentives ([Title XIII](#)) of the [National Internal Revenue Code](#).

The Philippines

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On January 24, 2023, the DENR issued the [Implementing Rules and Regulations](#) (IRR) of the EPRA. The IRR outlines the powers and functions of the DENR and other concerned agencies and LGUs as well as the rights and obligations of stakeholders facilitate the implementation of the EPRA. Important information on the IRR include (but are not limited to) the following:

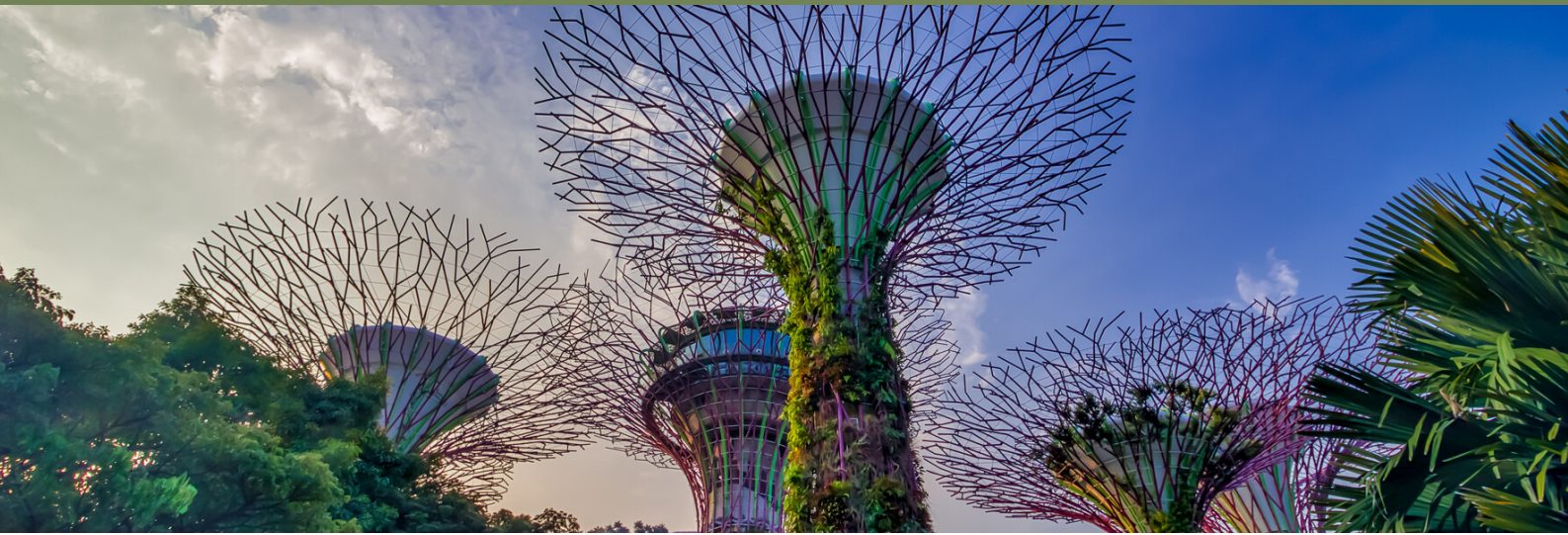
- ***Activities and Strategies Under the Proposed EPR Program (National Framework for Extended Producer Responsibility on Plastic Packaging Waste):***
 - Reduction of Non-Environment Friendly Packaging Products
 - Recovery Programs Aimed at Effectively Preventing Waste from Leaking to the Environment
- ***Detailed Information on the Registration of EPR Programs:***
 - Application Process
 - Documentary Requirements
 - Components of an EPR Program
 - Amendments to the Registered EPR Program
 - Changes in the Mode of Compliance with the EPR Act of 2022
- ***EPR Compliance Monitoring and Sustainability Collaboration***

Ground Sentiments: Many legislators hailed the enactment of EPRA, which will usher practical approaches to waste management, waste reduction, recovery and diversion, and the development of environment-friendly products. However, critics emphasized that the EPR alone is not enough and could in fact, undermine environmental goals. Environmental groups cited that because the current legislation focuses on recovery, it does not hold the producers of plastics substantially responsible for reducing the use of plastic. As such, they are calling for a nationwide ban on single-use plastics.

Additional Information: In April 2023, the US-ASEAN Business Council signed a Memorandum of Understanding (MOU) with the Philippines' Department of Environment and Natural Resources (DENR) to strengthen collaborations on sustainability, climate change, green finance, and environmental protection. Through this collaboration, the U.S. private sector and the Philippine government can support each other in the development of environmental initiatives as well as cooperate in identifying best sustainability practices and solutions that are consistent with global standards. As part of the MOU, the Council is working closely with the DENR on the Department's creation of a Project Management Office (PMO), which will be responsible for the oversight of the implementation of the Extended Producer Responsibility (EPR) Act of 2022 in the Philippines.

Singapore

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EPR Landscape

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Singapore's EPR regulations are enshrined under the Resource Sustainability Act (RSA). Singapore plans to extend EPR laws to both packaging and e-waste by 2025.

- **Plastics Situation:** Packaging waste, including plastics, forms up about one-third of Singapore's total waste, and has low recycling rates. About a third of domestic waste disposed of is packaging waste, and about 60% of this is plastic waste. In 2021, only 6% of plastic waste disposed of was recycled.
- **E-Waste Situation:** Singapore also generates over 60,000 tonnes of electrical and electronic waste (e-waste) per year, with the rate of e-waste expected to increase as the city continues to bolster their economic growth.
- **Environmental Consequences:** With limited land, Singapore currently relies mainly on incineration in its waste disposal – around 40% of total trash generated annually. While incineration reduces waste and saves landfill space, it also contributes to increased carbon emissions and air pollution. The ash by-product from incineration is used to fill the offshore landfill island, Pulau Semakau. However, it is estimated that by 2035, Pulau Semakau will be filled. The Singapore government is thus keen to extend the longevity of the landfill through measures such as recycling.

Details of the EPR Regulation: Singapore's EPR regulations are enshrined under the Resource Sustainability Act (RSA) which was passed in Parliament on 4 September 2019. One of the main pillars of the Resource Sustainability Act was the introduction of the Extended Producer Responsibility (EPR) scheme for electronic waste by 2021. The framework for circular economy was further emphasized and detailed in the Zero Waste Masterplan 2019 launched on 30 August 2019 by the Ministry of Sustainability and the Environment (MSE). A key target of the Zero Waste Masterplan is to reduce waste sent to the landfill by 20% per capita per day, by 2026.

- **E-Waste Management:** To combat rising e-waste, the Singapore National Environment Agency (NEA) has introduced a regulated e-waste management system (2021) to ensure proper handling of e-waste as well as the extraction of valuable resources from the e-waste. This new e-waste management system is based on the Extended Producer Responsibility (EPR) approach, in which producers are responsible for the collection and treatment of their products once ready to be disposed. Implementation measures include e-waste collection points for ICT equipment, batteries, and light bulbs, as well as e-waste collection drives and doorstep collection for ICT equipment, large household appliances (air-conditioners, dryers, refrigerators, etc), electronic mobility devices, batteries, and light bulbs.
- **Producer Responsibility Scheme:** The NEA also has the license to operate a Producer Responsibility Scheme (PRS) in Singapore to ALBA E-Waste Smart Recycling Pte Ltd (ALBA). As the PRS Operator, ALBA collects the regulated electrical and electronic waste across Singapore for proper treatment and recycling on behalf of producers from July 1, 2021, to June 30, 2026. Measures include the following:
 - Develop programs to encourage the public to recycle e-waste
 - Provide a variety of e-waste collection avenues for e-waste recycling (e.g. e-waste receptacles in public areas, scheduled collection drives, and ad-hoc door-step collection services)
 - Collect and transport the e-waste to NEA-licensed e-waste recyclers
 - Set up a data management system to track and report to NEA the amount of e-waste collected for treatment
- **Mandatory Packaging Reporting:** The NEA has implemented a Mandatory Packaging Reporting (MPR) scheme, requiring brand owners, manufacturers, importers, and retailers to submit packaging data and Reduce, Reuse, Recycle (3R) plans to the NEA. Required details for the 3R plans include plans for packaging reduction, packaging collection for reuse or recycling, consumer or industry outreach related to packaging 3Rs, use of recycled content in packaging material, and improvements in recyclability of packaging. Companies must also meet the following criteria to comply with the MPR requirements under the Resource Sustainability Act:
 - Carries on a business of supplying regulated goods in Singapore
 - Meet the prescribed threshold criteria which is an annual turnover of over S\$10 million (\$7.2 million USD)
 - Imports or uses specified packaging
- Once compliant with the MPR, companies must also submit annual reports on specified packaging that is used in Singapore, submit 3R plans for packaging annually, and keep records related to reports and plans for a period of five years. For reports in 2022, producers with an annual turnover of over S\$10 million in 2020 must report data for packaging imported and used in 2021, as well as develop 3R plans by March 2022.

Challenges with EPR Implementation: As a resource-poor nation that imports most of its food, Singaporeans are big consumers of packaged goods. Singapore's current value chain for products need a revamp as the domestic waste stream ends in incineration. The challenge remains in extracting value from recycling and improving recycling rates (and changing habits).

Details of Emerging EPR Regulations: Singapore is also considering a Beverage Container Return Scheme, likely to be effective in 2024.

- The Scheme will be the first phase of an Extended Producer Responsibility (EPR) approach to manage packaging waste. Under the proposed Scheme, a small deposit will be applied to metal and plastic beverage containers when consumers buy a pre-packaged beverage. Consumers can then claim a refund of their deposit by returning their empty beverage container to a return point.
- The proposed Scheme is a key initiative to address packaging waste and will contribute towards Singapore's targets set under the Zero Waste Masterplan and Singapore Green Plan.



Thailand

USABC 2023 Biannual Tracking Report



EPR Landscape

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Thailand's EPR policies remain in the drafting stage and are yet to be passed into laws. EPR is still on a voluntary basis in Thailand.

- **Plastics Situation:** Thailand is among the major plastic importers in Southeast Asia and the 6th polluter of mismanaged marine waste. Uncollected waste and mismanagement remain significant problems. Despite Thailand's plastic waste production reaching [two million tonnes in 2018](#), merely 25% of it was recycled, with a primary focus on plastic bottles. Out of the total 27.8 million tonnes of plastic waste generated in the country, a minimum of [27% was disposed of improperly](#), which included the method of open dumping. 47.6% of mismanaged waste, about 100 – 300 thousand tonnes of plastic waste that ends up in the rivers is discharged into the marine environment. 10 districts (of 247 in total) account for 51.7% of the total exposed mismanaged plastic waste in the high-priority catchments.
- The 2022 [“Plastic Waste Material Flow Analysis for Thailand”](#) by the World Bank states that most mismanaged plastic waste that is available for wash-off to rivers and the marine environment is generated in rural areas (70.1%), which have lower collection rates and contain the most disposal facilities, Bangkok contributes 18.4% of exposed mismanaged plastic waste due to the large overall volumes of waste generated and uncollected. The disparity of plastic debris primarily stems from consumer behavior and waste mismanagement. Also, it poses a chronic issue of ocean pollution as it adds complexities to the sorting system at the local level.

Environmental Consequences: Uncollected plastic waste is piled up in many districts in or near Bangkok and is relatively close to the marine environment and populated communities. A large amount of uncollected garbage in the Chao Phraya catchment is disposed of directly into waterways, polluting the river and deteriorating the scenery of those tourist hotspots. Plastic waste floats across borders, joining other countries' marine debris, clogging the oceans, harming marine lives and ecosystems, and prompting global concerns and efforts to combat plastic pollution.

Existing Plastics Regulations and Initiatives:

- Roadmap on [Plastic Waste Management 2018-2030](#) and [the Action Plan on Plastic Waste Management 2020-2022](#): The Royal Thai Government is prioritizing finding both short-term and long-term solutions to tackle the nation’s plastic waste issue. Pilot projects are in line with the national policy on economic and social development, including Bio-Economy, Circular Economy, and Green Economy (BCG Model). The projects also outline plans to halt various plastics products and the reduction of marine plastic debris by 50% in 2027.
- [Thailand Public-Private Partnership for Plastic and Waste Management \(PPP Plastic\)](#): Two pilot projects have been established to study and improve plastic waste circularity. 388 of 2,786 municipal solid waste disposal/transfer sites are privately operated.
- [Regulations to Eliminate Plastics Imports by 2025](#): This ban, which was first considered in 2020, will be executed in phases, commencing in 2023 and fully taking effect in 2025. Phase one, starting next year, will allow companies to import the needed scraps for their plastic-fuelled production. Phase two will curb the imported plastic allowed to 50%, leading to a total ban in 2025.

Details of Emerging EPR Regulations:

- [Circo Hub Thailand](#) hosted a seminar to produce innovative circular economy ideas. The company acts as a tool supporting Thai firms in their transformation to sustainable business. As another supplementary action, multiple Thai [agencies](#) are launching their own campaigns to fight plastic waste.
- The Thailand Institute of Packaging and Recycling Management for Sustainable Environment (TIPMSE) has introduced an EPR campaign called PackBack. The Board of Investment (BOI) offers investment incentives and 3-8 years of tax breaks to businesses implementing EPR, minimizing their environmental impact.
- On the funding side, Thailand has initiated the “Private Investment in State Undertaking Act (PISU Act)” which allows for private sector funding in the waste sector, and the Program Management Unit for National Competitiveness Enhancement (PMU-C) established a funding program dedicated to research. Second Life Thailand is also supporting several waste collection stations in generating [plastic credits](#) that can be sold to companies. Overall, though Thailand has many of the elements necessary to implement an official EPR scheme, it is still lacking an official policy on EPR.

Thailand Pollution Control Department will consider laws in the future that support EPR.

Intervention	Low	Mid	High
Measures	Public information + Auditing	Incentives + Comfort + Enforcement	Clean-up activities + Market creation
Setting	Low	Mid	High
Collection	Soft commercially	Working waste management	High leakages
Treatment	Established technologies for commercialized projects	Potentially polluting technologies for commercialized projects	Unproven technologies with limited demands

Vietnam

USABC 2023 Biannual Tracking Report



EPR Landscape

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Vietnam's EPR regulations are in progress towards implementation.

- **Current Plastics Situation:** Most plastics polluting Vietnam's waterways are single-use, low-value items such as plastic bags, food containers, and straws, according to a World Bank study, "[Vietnam: Plastic Pollution Diagnostics](#)," launched on July 25. The study shows that plastic waste is by far the most abundant type of waste collected in river and coastal sites, accounting for 94 percent of the number of items and 71 percent by weight. The top ten most common plastic items account for more than 80 percent of the total plastic waste ending up in waterways. Most of these items are single use.
- **Environmental Consequences:** An estimated 3.1 million metric tons of plastic waste is discharged on land in Vietnam annually. At least 10 percent of this mismanaged waste leaks into the waterway, making Vietnam one of the top five plastic polluters of the world's oceans. With rapid economic growth, urbanization, and changing lifestyles in Vietnam, plastic consumption has rapidly increased beyond the country's current waste-process capacity, prompting a pollution crisis. Currently, the country's environment is facing severe consequences as [approximately 85 percent of waste](#) produced is disposed in landfills without undergoing any treatment.

Toward Implementation "Decree 08/2022/ND-CP": EPR concept was introduced in Articles 54 and 55 of the Law on Environmental Protection 2020, which came into effect on 1 January 2022. Vietnam Ministry of Natural Resources and Environment (MONRE) also announced the drafting of a decree detailing EPR implementation, declaring that the decree is set to be implemented by January 1, 2024.

Background: [Decree 08/2022/ND-CP](#), introduced earlier in 2022, guides the implementation of various articles of the Law on Environmental Protection (“Decree 08”), followed by MONRE issuing Circular 02/2022/TT-BTNMT on the Detailed Implementation of some articles in the Law on Environmental Protection (“Circular 02”), both effective on 10 January 2022. The new EPR regime [places](#) responsibility on producers and importers to manage waste associated with the full life-cycle of their products, [including](#) the recycling and treatment of discarded products and packages.

EPR in Vietnam is implemented via Decree 08 in the form of the following mandatory frameworks:

- **Recycling framework for packaging waste management and products (“Recycling Obligations”):** This framework umbrellas the two recycling obligations that are subject to the process of packaging (“Packaging Recycling Obligations”) and the products (“Product Recycling Obligations”). Although Decree 08 came into effect on its signing date, the application of the recycling obligation is scheduled to begin in 2024, 2025, or 2027 depending on the type of product/package. Mandatory recycling rates will increase every three years following the beginning of implementation.
- **Waste management framework for products that are difficult to recycle or that cannot be recycled (“Waste Treatment Obligations”):** Producers and importers of products subject to Waste Treatment Obligations and single-use products and packages (e.g. single-use batteries, chewing gum, cigarettes, etc.) will be required to make a financial contribution to the VEP Fund to support waste treatment activities. Article 84 specifies that all producers and importers subject to Waste Treatment Obligations will be required to declare their contribution to the VEP Fund every year before 31 March and make a payment prior to 20 April. The level of financial contribution to the VEP Fund shall be adjusted every five years and gradually increased according to environmental protection requirements

Financial Incentives: In August 2022, the Vietnamese government enforced [Decree 45/2022/ND-CP \(Decree 45\)](#), which details regulating fines in the field of environmental protection to domestic/foreign individuals/organizations of all forms. Businesses are expected to classify waste at the source, register for permits/licenses on their waste treatment systems, as well as provide regular check-ups on their solid waste, wastewater, and gas emission control. The maximum fine is US \$42,808 (VND 1 billion) for individuals and US \$85,616 (VND 2 billion) for organizations.

In Vietnam, since 2019, [a tax of VND 50,000 per kilogram \(approximately USD 2 per kilogram\)](#) is imposed on bags or packaging made from High, Low, and Linear Low-Density Polyethylene, but environmentally-friendly certified bags are exempt and receive government support. To discourage improper waste disposal, Ho Chi Minh City has introduced [fines of up to VND 20 million \(over USD 850\) for households and businesses](#) that do not properly sort their waste. In some subnational areas, such as Quang Nam province, the use of ecological bags, plastic baskets, cloth bags, and other alternatives have resulted in an 85-90% reduction in plastic bag usage.

Existing Plastic Regulations and Initiatives:

- [USAID Project to Reduce Environmental Pollution](#): In November 2022, the U.S. Agency for International Development (USAID) and the Ministry of Natural Resources and Environment (MONRE) launched a USAID project to reduce environmental pollution via Vietnamese collective action. The five-year project is a \$11.3 million effort that aims address multiple sources of environmental pollution, whilst encouraging collaboration and action. To further combat environmental pollution, the project will provide grants to local entities for each initiative.
- [National Action Plan for Management of Marine Litter by 2030](#): Vietnam aims for a 50% reduction in marine plastic litter by 2025, increasing to 75% by 2030. The country also aims for no more single-use plastics or disposable plastic bags in 80% of coastal tourism amenities by 2025, increasing to 100% by 2030. Vietnam aims to collect 50% of abandoned, lost or discarded fishing gear by 2025, increasing to 100% by 2030.
- [The revised Law on Environmental Protection \(LEP\)](#): The revised Law on Environmental Protection came into effect in January 2022, emphasizing the need for ministries and localities to integrate the circular economy into their planning strategies, waste management, and recycling efforts through introducing the extended producer responsibility (EPR) policy. Most notably, Articles 54 and 55 outline the responsibility of producers and importers for recycling as well as waste collection and treatment.



Acknowledgements

This paper is a collaborative effort by many thought leaders, spanning from our country teams to our Sustainability co-chairs.

Specifically, we are grateful to the following individuals:

Sustainability Co-Chairs:

- 3M - Jannik Termansen
- Coca-Cola - Claudia Chan, Shea Flynn, Kristen van Zandwijk
- Exxon-Mobil - Peter Lavoy, Catherine Bray Griffith
- Kimberly-Clark - Lorraine Riffle-Caron, Macon Field
- PepsiCo - Busba Wongnapapisan, Jon Danilowicz

As well as:

Marc Mealy, Hai Pham, Lilibeth Almonte-Arbez, Mega Valentina, Jack Myint, Le Nguyen, Pimpoy Vivatanapaiboonlap, Jileen Yong, Taufikurrahman, Steven Gunawan, Marcella Suwandhi, Ben Djanuar, Celine Kusnadi, Salsabil (Bella) Afifa, Tina Jamaluddin, Emma Tabatabai, Maxie Crébassa, Margie Lim, Angelica Takashima, Praab Pianskool, Saravadee Homsub, Vu Tu Thanh, Bui Thi Viet Lam, Minh Vu, Nguyen Hoai Phuong, Nguyen Hien Chi, Bernard Baskin, Dylan Kean, Lisa Schroeter, Anne-Marie Corominas, Russell Mahoney, Angelica Ortega, Jan Wenger, Anh Vu, Maya Crowden, Nay Lin Thu, and all of our members who gave us the additional support and feedback we needed.