

# Extended Producer Responsibility (EPR) Law Toolkits for the Philippines

Toolkit 4: The EPR System,  
Civil Society, and General Public

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## Acronyms and Abbreviations

|              |  |
|--------------|--|
| <b>ADS</b>   | Alternative Delivery Systems                       |
| <b>DENR</b>  | Department of Environment and Natural Resources    |
| <b>EPR</b>   | Extended Producer Responsibility                   |
| <b>EPS</b>   | Expanded Polystyrene                               |
| <b>GDP</b>   | Gross Domestic Product                             |
| <b>HDPE</b>  | High-Density Polyethylene                          |
| <b>IEC</b>   | Information, Education, Communication              |
| <b>IWS</b>   | Informal Waste Sector                              |
| <b>LDPE</b>  | Low-Density Polyethylene                           |
| <b>LGU</b>   | Local Government Unit                              |
| <b>MRF</b>   | Materials Recovery Facility                        |
| <b>NACI</b>  | Nationwide Association of Consumers, Inc.          |
| <b>NGO</b>   | Non-Government Organization                        |
| <b>NSWMC</b> | National Solid Waste Management Commission         |
| <b>PET</b>   | Polyethylene Terephthalate                         |
| <b>PP</b>    | Polypropylene                                      |
| <b>PRO</b>   | Producer Responsibility Organization               |
| <b>PS</b>    | Polystyrene  |
| <b>PVC</b>   | Polyvinyl Chloride                                 |
| <b>RA</b>    | Republic Act                                       |
| <b>SLF</b>   | Sanitary Landfill                                  |
| <b>SUP</b>   | Single Use Plastics                                |
| <b>SWM</b>   | Solid Waste Management                             |
| <b>SWMP</b>  | Solid Waste Management Plan                        |
| <b>UNEA</b>  | United Nations Environment Assembly                |
| <b>UNEP</b>  | United Nations Environment Programme               |
| <b>WWF</b>   | World Wide Fund for Nature                         |
| <b>BIR</b>   | Bureau of Internal Revenue                         |
| <b>BOI</b>   | Bureau of Investments                              |
| <b>BSMED</b> | Bureau of Small and Medium Enterprises Development |
| <b>CDA</b>   | Cooperative Development Authority                  |
| <b>DA</b>    | Department of Agriculture                          |
| <b>DENR</b>  | Department of Environment and Natural Resources    |
| <b>DepEd</b> | Department of Education                            |
| <b>DILG</b>  | Department of the Interior and Local Government    |
| <b>DOH</b>   | Department of Health                               |
| <b>DOST</b>  | Department of Science and Technology               |
| <b>DTI</b>   | Department of Trade and Industry                   |
| <b>EMB</b>   | Environmental Management Bureau                    |
| <b>EPR</b>   | Extended Producer Responsibility                   |
| <b>EPS</b>   | Expanded Polystyrene                               |
| <b>FDA</b>   | Food and Drug Administration                       |
| <b>FMCGs</b> | Fast-Moving Consumer Goods                         |
| <b>GDP</b>   | Gross Domestic Product                             |
| <b>HDPE</b>  | High-Density Polyethylene                          |
| <b>IEC</b>   | Information Education Communication (campaigns)    |
| <b>IWS</b>   | Informal Waste Sector                              |
| <b>LDPE</b>  | Low-Density Polyethylene                           |
| <b>LGU</b>   | Local Government Unit                              |
| <b>MMDA</b>  | Metro Manila Development Authority                 |
| <b>MRF</b>   | Materials Recovery Facility                        |
| <b>MSMEs</b> | Micro, Small and Medium Enterprises                |
| <b>NEC</b>   | National Ecology Center                            |
| <b>NGA</b>   | National Government Agency                         |
| <b>NGO</b>   | Non-Government Organization                        |
| <b>NSWMC</b> | National Solid Waste Management Commission         |

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|             |   |
|-------------|---|
| <b>OEs</b>  | Obliged Enterprises                           |
| <b>PET</b>  | Polyethylene Terephthalate                    |
| <b>PIA</b>  | Philippine Information Agency                 |
| <b>PP</b>   | Polypropylene                                 |
| <b>PRO</b>  | Producer Responsibility Organization          |
| <b>PS</b>   | Polystyrene                                   |
| <b>PVC</b>  | Polyvinyl Chloride                            |
| <b>RA</b>   | Republic Act                                  |
| <b>SUP</b>  | Single Use Plastics                           |
| <b>SWM</b>  | Solid Waste Management                        |
| <b>ULAP</b> | Union of Local Authorities of the Philippines |
| <b>WACS</b> | Waste Analysis and Characterization Study     |
| <b>WWF</b>  | World Wide Fund for Nature                    |

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## 1.0 INTRODUCTION

### 1.1 State of Global and National Plastic Pollution

Plastic pollution has reached gigantic dimensions worldwide. The current projected growth in plastic pollution is said to cause significant ecological risks, with certain pollution hotspots like the Mediterranean, the East China and Yellow Seas, and the Arctic ocean ice already exceeding an ecologically dangerous threshold of microplastic concentrations. The negative impacts of plastic pollution are already detectable in most species' groups, while the productivity of several of the world's most important marine ecosystems, like coral reefs and mangroves, are under significant risk.<sup>1</sup>

The estimated global plastic use in 2019 was 459.75 million tons (Mt). Considering population and economic growth, and structural and technology change, the projected global plastic use by 2060 is estimated to increase up to 1,230.63Mt, and countries in Africa and Asia are seen to have the largest contribution. More than 30% of the global plastics are used for packaging. This is estimated to increase by 2.5 times in 2060.<sup>2</sup>

Based on the same report, about 76.84% (353.29Mt) of the plastic used in 2019 is estimated to become waste. Among the plastic wastes, about 40.18% (141.96Mt) are plastic packaging. Only about 9.26% (32.83Mt) of the 2019 global plastic wastes are recycled, while 22.44% (79.29Mt) are estimated to be mismanaged. Considering these amounts, it is estimated that about 22.06Mt of plastics were leaked to the environment in 2019, and it is estimated to double by 44.15Mt in 2060.



Figure 1. Summary of Global Plastic Production, 2019<sup>2</sup>

In the Philippines, it was found that the amount of plastic items consumed by Filipinos was 2.15 million tonnes per annum. Thirty-five percent (35%) of the consumed plastics leak into the open environment, 33% are disposed of in sanitary landfills and open dumpsites, and only 9% are recycled because of our lack of capacity to recycle both high and low-value plastics<sup>3</sup> (Figure 1).

<sup>1</sup> Tekman, M. B. , Walther, B. A. , Peter, C. , Gutow, L. and Bergmann, M. (2022): Impacts of plastic pollution in the oceans on marine species, biodiversity and ecosystems, 1–221, WWF Germany, Berlin. Doi: 10.5281/zenodo.5898684

<sup>2</sup> Organisation for Economic Co-operation and Development (OECD) (2022).

[https://www.oecd-ilibrary.org/sites/aa1edf33-en/1/3/2/index.html?itemId=/content/publication/aa1edf33-en&\\_csp\\_=ca738cf5d4f327be3b6fec4af9ce5d12&itemIGO=oe&itemContentType=book](https://www.oecd-ilibrary.org/sites/aa1edf33-en/1/3/2/index.html?itemId=/content/publication/aa1edf33-en&_csp_=ca738cf5d4f327be3b6fec4af9ce5d12&itemIGO=oe&itemContentType=book)

<sup>3</sup> WWF Philippines, Inc., cyclos GmbH, & AMH Philippines, Inc., 2020

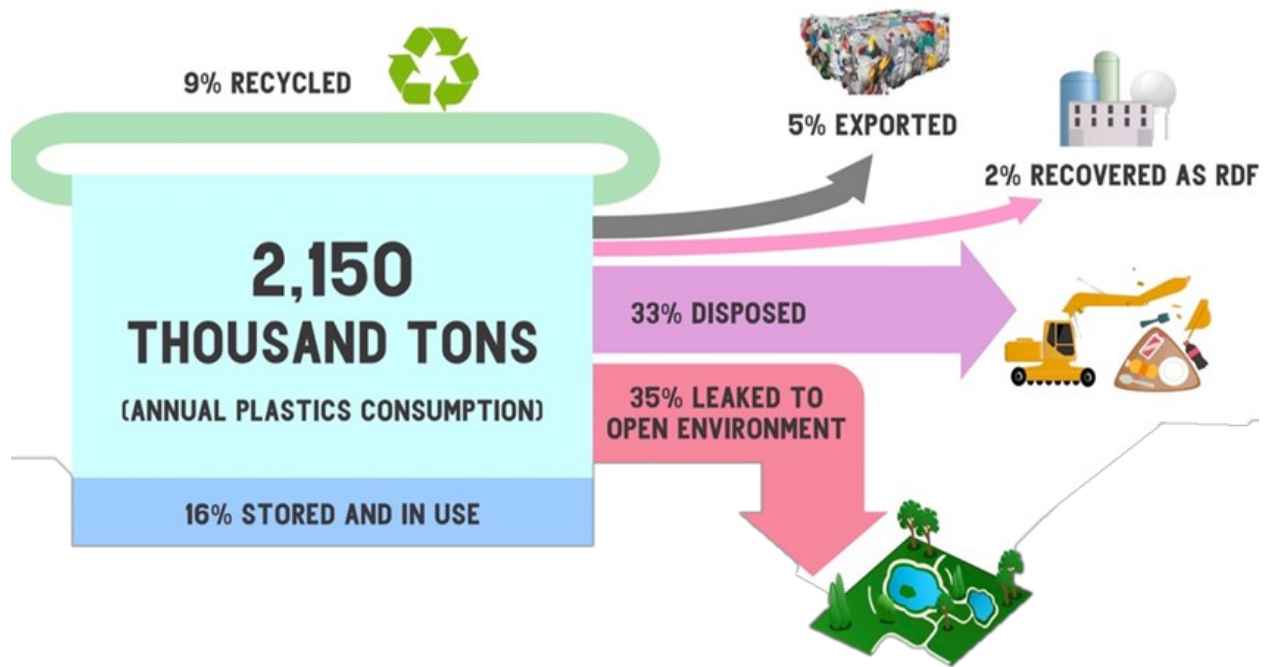


Figure 2. Flow of plastic materials in the Philippines in 2019 (WWF Philippines, Inc., cyclos GmbH, & AMH Philippines, Inc., 2020)

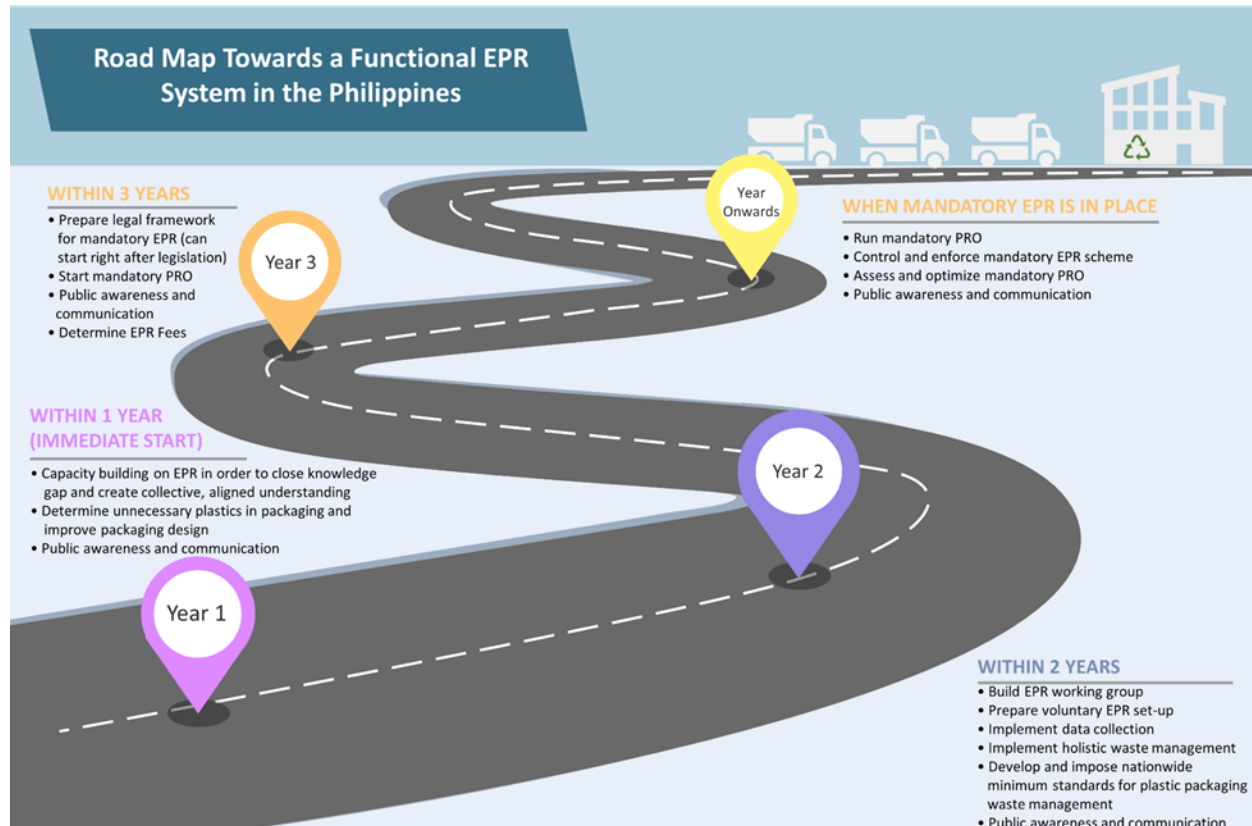
Further, for every dollar that producers pay for plastic, governments and society will pay at least 10 times as much to remedy its countless negative impacts, with the lifetime cost of ONLY THE plastic produced in 2019 estimated at US\$3.7 trillion (+/-US\$1 trillion), 10 times the Gross Domestic Product (GDP) of the Philippines.<sup>4</sup>

In 2020, the WWF-Philippines commissioned a comprehensive study to understand the plastic materials flows, legal framework, and current solid waste management system as inputs for assessing the applicability of the EPR scheme in the country. The study showed that there was a need to improve the implementation of RA 9003, or the Ecological Solid Waste Management Act of 2000. Challenges faced in its implementation include the following:

1. There are **limited separation and recycling activities at the source** (particularly household level). Recovery is mostly applied to high-value plastics but is still largely informal-led (e.g., waste pickers who go from house to house to collect for recyclable wastes), leaving a sizeable volume of high-value recyclable packaging ending up in disposal sites or leaked to the environment.
2. Despite the large volume of high-value recyclable plastics, they often end up not being recycled due to the **limited number of recycling facilities** which are mostly concentrated in the central parts of the country. Coupled with the low recovery rate, some large recyclers and aggregators end up importing plastics to process.
3. There is a **high volume of low-value plastics and non-recyclables** (e.g., flexible films, sachets, composites) which are hard to collect as waste pickers need to spend a long time to reach the minimum weight and bought at a cheap price. Recycling sachets also require new equipment for processing. These scenarios make these sachets end up in disposal sites or leaked into the environment.

<sup>4</sup> [https://wwfint.awsassets.panda.org/downloads/wwf\\_pctsee\\_report\\_english.pdf](https://wwfint.awsassets.panda.org/downloads/wwf_pctsee_report_english.pdf)

These factors lead to identifying EPR as a policy tool in aiding the RA 9003 implementation and improving the waste management system. Hence, in 2021, another study was commissioned to further study how EPR could be contextualized in the Philippine setting, in particular, forming the roadmap (see **Figure 2**) to incorporating/mainstreaming EPR with the existing solid waste management system and facilities in the country.



**Figure 3. Roadmap Towards a Functional EPR System in the Philippines (WWF Philippines, Inc., cyclos GmbH, & AMH Philippines, Inc., 2020)**

Results of the study were provided to policymakers and DENR to use as technical guidance for the approval of House Bill No. 10696 and Senate Bill 2425 or the EPR Bill of 2022 into law. Now that the said bill has lapsed into law (i.e., RA 11898 or the Extended Producer Responsibility Act of 2022 or EPR Law), the WWF-Philippines has been active in complementing efforts by the DENR in crafting the IRR including this toolkit.

## 1.2 What is the Purpose of the Toolkit?

This toolkit aims to communicate the EPR law and its Implementing Rules and Regulations (IRR). WWF conducted a series of dialogues with various stakeholders (i.e., corporations, NGOs, recyclers, Local Government Units, government agencies, and the informal waste sector) to gather inputs on the details that the IRR should provide for them to carry out their roles in the EPR law implementation.

WWF developed four toolkits, each catering to a specific stakeholder—i.e., policymakers, businesses, civil society organizations, and waste management operators. Among the toolkits that were developed, this **EPR Toolkit 4 aims to inform the consumers and general public about the EPR Law and increase their participation in this new scheme.**

The RA 11898, or the Extended Producer Responsibility (EPR) Act of 2022, amends RA 9003 to incorporate the implementation of EPR programs to ensure that plastic products do not end up in the waste stream.

As the EPR is a policy tool that is relatively new to the country, this toolkit will tackle the following items which are deemed important for the law:

- Salient points of the EPR law and its framework;
- Roles and responsibilities of the consumers, civil society, and academe;
- EPR programs, compliance, monitoring, reporting, and audit;
- Target plastics and labelling; and
- Target reduction and recovery rate;

This document is designed in a way that a wider audience, such as researchers, students, government officials, private sectors, and the general public, among others, can still use it.

### 1.2.1 Presentation and structure of this toolkit

The EPR Toolkit for the Philippines is designed into four categories targeting different sectors to make the adoption of EPR schemes faster and easier in the country.

- **Toolkit 1: The EPR Landscape.** Designed for the policy makers to support them in crafting the IRR of RA 11898;
- **Toolkit 2: All About Business.** Designed for business establishments of all sizes to assist them in shifting to a circular economy model of operations;
- **Toolkit 3: Waste Management Sector.** Designed for the Local Government Units (LGUs) facilitating the management of their wastes and the informal and formal waste system sectors to ensure that EPR system is aligned with the current solid waste management system on the ground; and
- **Toolkit 4: Civil Society and General Public.** Designed to increase public awareness and support for EPR.

The structure of Toolkit 4 is presented in **Figure 4.**



### **Section 1.0: INTRODUCTION**

Brief introduction on the state of the plastic pollution  
Introduction on the purpose of Toolkit 4

### **Section 2.0: ABC'S OF EPR**

Key concepts of EPR and their definitions

### **Section 3.0: WHAT DO YOU NEED TO KNOW ABOUT RA11898?**

Salient points of the EPR Law  
How can the Consumer, Civic Society, and Academe help?  
Some Initiatives to Address Plastic Problems

### **Section 4.0: CALL TO ACTION**

Statement for next actions to take

### **Section 5.0: WORLD WIDE FUND FOR NATURE'S WORK ON PLASTICS**

Summary of WWF-Philippines' No Plastic in Nature Initiative  
UNEP's SEA Circular Project

Figure 4. Structure of Toolkit 4

## 2.0 ABC'S EPR

The EPR is an environmental policy approach that emerged in the 1990s and is now increasingly recognized globally as a useful tool for accelerating the transition to sustainable waste management and a circular economy.

The EPR aims to reduce the economic and environmental burdens of waste management by extending the responsibility of producers to the end-of-life of their products. Producers and importers pay a fee upfront when their packed goods are placed on the market. The fee is used for collecting, recycling, and disposing of the packaging waste and other costs arising from maintaining the system. It is not used as a contribution to the general public budget of a state.

To help users of this toolkit familiarize themselves with various concepts and key terms of EPR, **Table 1** shows the ABCs of the EPR and their relevant explanations.

**Table 1. ABCs of EPR**

|          |  |
|----------|--|
| <b>A</b> | <b>Alternative Delivery Systems (ADS)</b><br>A management system or mechanism where consumers are encouraged to buy products using refillable containers or other means without using SUPs and/or unnecessary packaging.   |
| <b>B</b> | <b>Bonus</b><br>These are reduction in fees or discounts applied for packaging that have more recycled content and less virgin material in its formulation, use less material overall, have designs that further increases its viability for recycling, or have proof of compostability.   |
| <b>C</b> | <b>Collective</b><br>Refers to a group of Obligated Enterprises that have organized themselves, not as a PRO, to implement a common platform for the implementation of their EPR program.  |
| <b>D</b> | <b>Department of Environment and Natural Resources (DENR)</b><br>In the EPR scheme, the DENR, together with the NSWMC, will supervise and oversee the effective implementation of the EPR scheme, receive and audit data sent by the PRO, and monitor and evaluate compliance of the obliged companies and PROs with the registration of their EPR programs. |
| <b>E</b> | <b>Eco-modulation</b><br>One of the means of encouraging OEs to transition into more sustainable and environmentally friendly product development is incentivizing (like reduction of EPR tax/fees) the use of recyclable packaging and penalizing those that do not (an increase of EPR tax or fees).   |
| <b>F</b> | <b>Fees</b><br>The EPR fees are an important component of the EPR. EPR Fees shall be collected by the PRO from the obliged companies. The fees are paid to the PRO in return for carrying out the producers' responsibilities. The rate of fees shall be determined with the PRO and will be eco-modulated (considering the basic fee, bonus, and malus).    |
| <b>G</b> | <b>Government</b><br>National Government Agencies (NGAs) are one of the important stakeholders in EPR implementation. Their roles vary depending on the office that they represent.  |
| <b>H</b> | <b>High-value plastics and High recyclability</b><br>Those with high value for consumers and high recycling potential. High recyclability refers to a condition wherein the value of recovery and reprocessing of a product is high, due to its design, composition, content, and density, among other things.   |
|          | <b>Human rights-based approach (HRBA)</b><br>This approach focuses on those who are most marginalized, excluded, or discriminated against. In the EPR, it is ensured that the IWS and waste diverters are properly included and involved in the implementation process, and guards against gender discrimination, child labor, and other discriminations.    |
| <b>I</b> | <b>Informal Waste Sector</b>   |

|          |  |
|----------|--|
|          | Individuals engaged in services with the primary objective of generating employment and income for the individual concerned, and typically operate with a low level of organization without formal contractual arrangements. This may include individuals who are formally employed but engage in sideline activities to supplement income on top of formal employment.  |
| <b>J</b> | <b>Junk Shops</b><br>They usually belong to the informal waste sector and are considered vulnerable sectors in the waste recovery chain. Junk shops are considered one of the important actors in ERP implementation because their contribution to recovery efforts is significant as long as there is an economic motivation for them to do so.   |
| <b>K</b> | <b>Kinds of Plastics</b><br>Plastics are categorized into seven kinds marked with triangles (and sometimes three arrows) with numbers inside to indicate its type. The categories of plastics are: (1) PET, (2) HDPE, (3) PVC, (4) LDPE, (5) PP, (6) PS, and (7) Others.   |
| <b>L</b> | <b>Low-Value Plastics</b><br>Those with little to no value for consumers and little to no recycling potential. In the EPR law, the collection of low-value plastics will be increased by proving it with higher value.   |
| <b>M</b> | <b>Materials Recovery Facilities (MRFs)</b><br>Solid waste management facility that includes a solid waste transfer station or sorting station, drop-off center, composting facility, and a recycling facility.  |
| <b>N</b> | <b>National Solid Waste Management Commission (NSWMC)</b><br>The NSWMC is the main government agency created to implement RA 9003 and is directly under the Office of the President. In the implementation of the EPR, together with the DENR, NSWMC will supervise and oversee the effective implementation of the EPR scheme, receive and audit data sent by the PRO, and monitor and evaluate compliance of the obliged companies and PROs with the registration of their EPR programs. The commission also maintains an EPR Registry that contains the registered EPR programs submitted by the obliged companies or PRO; and provides an assessment of the volume or footprint of other generated wastes, for priority inclusion in the EPR scheme. |
| <b>O</b> | <b>Obligated Enterprises</b><br>These are product producers that are required to implement an EPR program based on RA 11898.   |
| <b>P</b> | <b>Producer Responsibility Organization (PRO)</b><br>The central element for the organization of all tasks associated with the EPR system. Allows producers and importers to assume responsibility by combining their efforts and jointly managing the arising waste through collective responsibility. The PRO is the most important stakeholder (organization) and is responsible for setting up, developing, and maintaining the system as well as the take-back obligations of the OEs.  |
| <b>Q</b> | <b>Quality recycling</b><br>An output is achieved after following a recycling standard and/or guideline usually set by the government or an international organization. The presence of high-quality recycled plastic resin can encourage brands to use recycled materials or increase recycled content in the packaging.  |
| <b>R</b> | <b>Reduction</b><br>This is the practice of using less material and energy to minimize quantities of generated waste and preserve natural resources. Includes ways to prevent materials from becoming waste before they reach the recycling state. Also includes reusing products.   |
| <b>S</b> | <b>Segregation</b><br>A solid waste management practice of separating different materials found in solid waste promotes the recycling and reuse of resources and reduces the volume of waste for collection and disposal.  |
| <b>T</b> | <b>Targets</b><br>These are the reasonable and measurable end points of the sorting, recycling, and recovery of plastic wastes under the EPR implementation that needs to be met on a certain timeline.  |
| <b>U</b> | <b>Unnecessary Plastics</b>  |

|   |   |
|---|---|
|   | <p>These plastics are those that are considered not necessary for product integrity which, once eliminated, will not affect the use of the product. According to South African Plastics Pact (2021), these are items that can be avoided (or replaced by a reuse model) while maintaining utility. They have limited social utility, for which no alternative is required and which can be phased out without significant behavioral or infrastructural change.</p> <p>In contrast, necessary plastics are otherwise considered to require alternatives before being removed, as they may cause significant behavioral or infrastructural change.</p> |
|   | <p><b>Upstream vs Downstream solutions (waste management)</b></p> <p>Upstream solutions, such as material redesign, plastic reduction, and substitution, are also known as the pre-consumer. Eco-design is done at the upstream where environmental aspects are incorporated in the product development and design while balancing economic requirements. Eco-design, as an upstream solution, addresses environmental attributes in the early phase of the product development, thereby reducing negative impact throughout the plastic products' life cycle.</p> <p>In contrast, downstream, such as recycling and disposal, is post-consumer..</p> |
| V | <p><b>Virgin material</b></p> <p>These are materials that are sourced from new raw materials. A virgin plastic material means that the plastic resin is newly created and does not have any recyclates. In the EPR law, it is highly encouraged to use fewer virgin materials and more recyclates.</p>  |
| W | <p><b>Waste management</b></p> <p>This is the storage, collection, transportation and disposal of solid wastes. It is also described as a practice by which several waste management techniques are used to manage and dispose of specific components of solid waste. Waste management techniques include avoidance, reduction, reuse, recycling, recovery, and disposal.</p>   |
| X | <p><b>Local conteXt</b></p> <p>The EPR scheme varies from one country to another; hence, to increase the success rate of the new system, the EPR scheme for the Philippines was contextualized. This ensured that the EPR scheme will complement and be mainstreamed with the current solid waste management system in the country.</p>   |
| Y | <p><b>You</b> (consumers are essential to EPR)</p> <p>You and the rest of the stakeholders are important actors in the implementation of the EPR in the Philippines. The general public, in particular, is encouraged to be educated about correct practices and benefits of proper waste management; practice waste minimization; segregate at source, and participate in take-back schemes, deposit refund schemes, home composting, and other practices.</p>   |
| Z | <p><b>Zero plastics in nature</b></p> <p>Zero or No Plastics in Nature Initiative is a global initiative to stop the flow of plastics entering nature by 2030 through the elimination of unnecessary plastics, doubling reuse, recycling, and recovery, and ensuring that the remaining plastic is sourced responsibly. Providing support to develop EPR policy here in the Philippines is one of the key areas of activities of WWF-Philippines.</p>   |

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### 3.0 WHAT DO YOU NEED TO KNOW ABOUT RAI1898?

#### 3.1 Obligated Enterprises (OEs) and Micro, Small, Medium Enterprises (MSME)

*Obligated Enterprises, according to the Law (Section 6 - Section 44-B), are product producers that are considered large enterprises generating plastic packaging waste. Provided, however, that micro, small, and medium enterprises defined under Republic Act No. 9501 shall not be covered. Provided, further, that in case the total value of assets of all enterprises carrying the same brand, label, or trademark exceeds that of medium enterprises stated under Republic Act No. 9501, these enterprises shall be deemed obligated enterprises.*

*Notwithstanding the provisions of the immediately preceding paragraph, micro, small, and medium enterprises are encouraged to practice EPR voluntarily, or become part of the network of obligated enterprises or producer responsibility organizations practicing EPR.*

Prior to the EPR Law, the management of the end-of-life of packaging wastes and other types of wastes was left to the LGUs. With technical, institutional, and financial challenges, the management of these wastes, as mandated by RA 9003, makes it hard for them, hence the increase of plastic leakage to the environment. Nevertheless, with the EPR Law, the management of the plastic packaging will now be shared with the manufacturers and producers.

The basic approach of EPR is based on obliging enterprises (i.e., manufacturers, importers, and sellers) to assume full responsibility for the products they offer to the public not just during consumption but also during product conceptualization and the end-of-life phase or once their products have become waste. The law already defined the parameters that will qualify a certain enterprise as obliged or not. Once identified as OEs, they are required to develop and implement an EPR Program, as mandated by the EPR Law.

The same goes for the MSMEs. Although they fall under voluntary EPR participation (EXCEPT when they carry the same brands, labels, or trademarks, and their cumulative assets are ₱100M and more, in which case they ALL are obliged enterprises), most of the plastic packaging management and disposal of non-participating MSMEs will fall under the jurisdiction of the LGUs.

The MSME accounts for 99.58% of the business establishments in the country<sup>5</sup> which, if they can participate in the program, can also be a factor in lessening and eventually eliminating the use of plastic packaging that can lead to pollution, according to the DTI- Bureau of Small and Medium Enterprise Development (BSMED).

According to the Asia-Pacific Economic Cooperation (APEC), the following strategies/actions may be considered to encourage the participation of MSMEs in the EPR law:

- Raising green awareness for enhancing competitiveness among stakeholders;
- Providing training and skills development for MSMEs;
- Promoting compliance with related international standards and the development of an integrated policy framework, at the regional and domestic levels;
- Providing incentives and promoting science, technology, and innovation (STI) and internet and digital economy to expand MSME market reach; and
- Promoting green supply chain development and establishing networks for green, sustainable, and innovative MSMEs.

<sup>5</sup> Philippine Statistics Authority (2021), as mentioned by DTI-BSMED during their interview meeting with WWF on 11 October 2022

### 3.2 Target Plastic Recovery Rate

In addressing plastic packaging wastes and pollution, it is vital that we level off with the understanding of the types of plastics, whether they are recyclable, how they affect the environment, what makes them pollutive, and which among them are the target for management.

A detailed discussion on the Categories of Plastics and Target Plastic Packaging are provided in **Annex B**.

*The EPR Law has provided target recovery rate and compliance period for reduction of plastic product footprint (**Section 6 – Section 44-F**). This gives the obliged enterprises and PROs sufficient period to adjust to their EPR duties and responsibilities and improve their performance over time. Obligated enterprises shall likewise establish and phase-in recovery programs that will achieve plastic neutrality. The programs may include the activities stated in the National Framework for the EPR.*

*For this purpose, obliged enterprises that generate either rigid or flexible plastic packaging shall recover or offset their respective plastic packaging footprint.*

*The following targets for the recovery of plastic product footprint generated during the immediately preceding year are hereby set:*

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

*For this purpose, obliged enterprises shall submit the report of their compliance including appropriate documentation to DENR.*

With RA 9003, the responsibility of recovering plastic wastes (together with other types of wastes) are given to the LGUs. The means how recovery will be done is provided in their 10-year Solid Waste Management Plan (SWMP, sample template, see **Annex C**). Now, with the EPR Law, this responsibility can now be shared with the OEs (through their respective EPR Programs). Such changes should also be reflected in the 10-year SWMP of the LGUs and the OEs (or through their collective or PRO) should coordinate with their LGUs.

The EPR Law only mentions plastic product footprint “recovery” and does not distinguish the difference between reuse, recycling, and reduction. Waste recovery means the diversion of plastic waste from the downstream waste streams. The reduction of the plastic product footprint is a good plan, but it might be better if there is a mechanism to mandate the reduction or diversion of plastic packaging wastes not only on the downstream portion but also the upstream. In one of our consultations with the business sectors, it was raised that it is unclear if ‘plastic footprint’ covers plastic sales volume or if it includes all manufactured and imported products. The recovery of plastic product footprint needs to balance upstream measures with downstream measures. With this, recovery of plastic packaging wastes shall be categorized into three to meet the targets further:

- **Reduction of unrecyclable, unnecessary, and single-use plastic packaging.** As stated previously, the law only mentions ‘recovery’ which seems to cover downstream wastes. On the other hand, a reduction in the use of unrecyclable and unnecessary plastic packaging could be better as it means the diversion of plastic wastes (categories I to IV) from the upstream portion

of the waste stream which may also require the change in the use of these categories of plastics from the supply chain of the OEs.

- **Increase the recyclability of the plastic packaging.** The EPR encourages making plastics recyclable more than those that are not. It is in the best interest to advocate for the use of recyclable materials in the supply chain of OEs so that the generation of unrecyclable and unnecessary plastics (usually found in the category I to IV plastics) are permanently reduced or phased-out.
- **Increase the reuse of recyclable plastic packaging.** The reuse of recyclable plastic packaging materials should be increased in the upstream portion of the waste stream. In this way, the use of virgin plastic materials will be reduced while increasing the reuse of recyclable plastic materials thereby supporting a circular economy.

Nevertheless, in addressing plastic packaging pollution, OEs should remember that regardless of downstream reduction targets, their EPR Program should still **consider the waste hierarchy**, i.e., reduction, reuse, recycling, and disposal, as last resort.

### 3.3 Plastic Labelling

Putting labels on plastic packaging is important to help consumers know and identify how plastic packaging should be disposed of or managed. Labelling is an important aspect to facilitate re-use, recycling, return to manufacturer, and other means to circulate the material in the system. This shall be improved as mandated by the law. With this, we suggest that certain standards for plastic labelling be enforced and implemented, with the help of DTI and FDA. Labels, logos, and/or symbols shall be displayed in the packaging in a manner visible to the consumer showing the following:

- **Resin Identification Code.** It is suggested that all plastic packaging be mandated to put the 2013 updated RIC symbol in their products (i.e., triangle and not the three arrows). This RIC symbol, however, is more useful for the producers, recyclers, and aggregators (among others) to assist them in the recovery and recycling process, but not intended to be useful for the consumers.
- **Recyclability code.** Not all plastics are recyclable; some could be reused; while others need to be disposed of. This information should also be put into the plastic packaging and each component to aid the consumers in how to manage the plastic packaging wastes after their use thereby increasing participation in the EPR law. Compared with the RIC symbols, the recyclability code will be useful for consumers. With this, in addition to the RIC symbols, we advocate the inclusion of additional code for the EPR implementation that is not complicated and easily understood.

### 3.4 Expansion to other Types of Wastes in the EPR National Framework

The EPR Framework is trying to set a standard that can be applied to all products, not only plastics.

A representative of waste collectors/cooperative shared that they saw value in plastics and even tires, hence the processing of these types of wastes. The textiles are usually donated to other organizations where they are turned into other materials or products (e.g., rugs). However, some textiles are considered for disposal already due to their materials, or there is no other use yet (e.g., polyester, jersey). Meanwhile, for used batteries, they do not usually recycle or manage it; but due to a partnership with a university near their cooperative, they are now collecting it.

The EPR Framework covers various types of waste products that can be included in the EPR law in the future. There are no further suggestions on the type of waste products to be included in the EPR framework.

### 3.5 What are the Roles of the Civil Society Organizations, Consumers, and Academe?

Civil society, consumers, and academia are important actors in the SWIM because they act as the end-users of the products and they can also participate in various projects, activities, and even policy-making.

The following subsections provide the roles of the general public particularly the schools and universities, civil society, and consumers.

#### 3.5.1 Civil society

Many non-governmental organizations (NGOs) and social enterprises in the Philippines are quite active in the field of plastic waste management. They play an important role in supplementing the efforts of the national and local governments and providing perspectives to the OEs to address waste management concerns.

- Provide a wide variety of programs to support physical collection and recycling services, especially in remote areas, and advocate and create awareness among consumers;
- By conducting programs such as the “Aling Tindera” by PCX, “Basura Bangka” by Pure Oceans, “Waste Watchers” project of Save Philippine Seas, and “Bin Exchange” by Clean Our Oceans, people can be encouraged to proactively recycle and be responsible for the waste they generate and even be financially incentivized for their efforts. Such NGOs involved in environmental protection and mobilization of the informal sector shall be part of the PRO; and
- The integration of informal sectors shall also be assigned to civil society in the implementation of the EPR system.

#### 3.5.2 Consumer

Consumers are often perceived as the direct contributors to plastic consumption and plastic waste leakage into the environment. However, proper implementation of policies, capacity building, and availability of waste management facilities play a bigger role in the observance of consumers to the EPR scheme. Consumers, for their part, are expected to cooperate with local solid waste management programs, including practices of reduction of waste generated, proper waste segregation and disposal.

- Consumers form the market’s core and are therefore perceived as direct contributors to plastic waste leakage in the environment. However, proper implementation of policies, capacity building, and availability of waste management facilities play a bigger role in the participation and compliance of consumers to waste management laws such as RA 9003;
- Consumers are expected to actively participate in the EPR scheme and established SWM systems and programs. Through this, individuals can be educated about strategies, correct practices and benefits of proper waste management, segregating, handling, collection, and disposal of waste;
- They shall also be encouraged and motivated to practice waste minimization by opting for recyclable or unpackage goods and products, as well as reusing and recycling packaging and products as often as possible in their homes and areas;
- Waste separation is critical because high-quality recycling of packaging materials requires that packaging waste be collected separately from residual waste; the better the fractional collection, the easier and less expensive the subsequent sorting. Hence, separation at source by consumers is highly important in transitioning to sustainable management of packaging waste;
- Consumers shall also be encouraged to participate in programs such as take-back programs, deposit-refund schemes, plastics in exchange for currency or commodity, and biodegradable waste converted to either biomass energy or compost; and
- Some short-term resistance is expected from the side of consumers due to changes in established consumer habits. Thus, IECs provided by the government and the PRO, as well as consumer groups such as the Nationwide Association of Consumers, Inc. (NACI), may further



convince everyone to play a role in addressing plastic pollution and waste in general by participating in the EPR scheme.

### 3.5.3 Academe

Educational institutions play a major role in the promotion of the EPR scheme as a means to achieve sustainability in our society. Schools and universities are some of the best outlets for promoting solid waste management education, raising awareness, and educating the public about the impact of the use and improper disposal of waste on the environment.

- By developing programs, workshops, seminars, and other awareness-raising campaigns, children and youth can be educated and become future productive members of society with the desired consumer values and good waste management practices; and
- Universities and researchers specifically also play a key role in the continuous development of various scientific, social, and economic approaches to address plastic waste pollution through their research. Research geared toward these aspects should be given much attention, encouragement, and support from both the public and private sectors.

### 3.6 Some Initiatives to Address Plastic Problems

Even before the passing of EPR law, various movements were already observed in the Philippines made by different groups and organizations.

The WWF developed an Alternative Materials Decision tool (<https://plastic-action.asia/alternative-materials-tool/>) to guide businesses in selecting plastic packaging alternatives. The tool guides businesses to choose the material with the lowest possible footprint for single-use packaging. Although prepared solely for business, the general public may also use this to identify which alternative plastics are possible.

This Alternative Materials Decision Tool ranks the top 10 materials with the least environmental impact. This tool uses context-specific waste management statistics and information particular to Malaysia, the Philippines, Singapore and Thailand, as well as life cycle environmental data from Ecoinvent and other scientific literature to assess over two dozen materials commonly used for packaging. These materials are assessed based on product type (e.g. rigid/flexible, food/non-food), size, and function. The environmental impacts calculated cover raw material extraction, manufacturing, and waste treatment in the country where the packaging will be used.

The following provides some activities that are being done to address plastic wastes which can be used or referred to by the civil societies as they participate in the EPR implementation. People are encouraged to create their programs, or partner with various organizations, civil groups, or school groups.

- Partnership with local communities for plastic collection and keeping it from going into the ocean. Some plastics are recycled and upcycled to create new packaging materials, thereby assisting the circular economy;
- Partnership with local waste collectors and junk shops to become collection points or branches of various organizations;
- Some organizations and groups conduct an education campaign to selected communities to empower the people and mobilize them to become a partner in combating plastic packaging pollution;
- Conduct clean-up drives, waste audits, and plastic-to-cash or plastic-to-food programs in partnership with organizations, civil groups, schools and universities, local government units, and communities, among others;
- Seek local and international funding to conduct local plastic pollution action programs and waste-reduction programs; and
- Assist local communities in creating small to medium social enterprises to combat plastic packaging pollution and aiding them in creating livelihood at the same time.

## 4.0 CALL TO ACTION

We commend the authors of the law and DENR for leading the drafting of the IRR in close consultation with relevant stakeholders in the plastic value chain. The work on implementing this law now begins.

### WHAT CAN YOU DO?

We urge the consumers to reduce plastic consumption and consider alternative material that is more environmentally friendly. We also encourage the civil society organizations and the academe to continue their advocacies in combating plastic waste pollution, spreading education to the general public, and conducting research and development on alternative and more eco-friendly plastic packaging.

In the course of the EPR implementation, we urge everyone to learn the different types of plastics (i.e., based on seven categories, see Annex B) and manage its disposal through proper segregation at the household level.

While we advocate for an improved labelling of the plastic packaging, we encourage everyone to dispose of your wastes properly and support the waste management workers. In the future, should plastic labelling be mandated and put into use, we urge everyone to follow it (i.e., as recyclable material or not) in order to further increase the recovery rate of plastics.

Finally, we need to be vigilant and to continue reminding ourselves and everyone to partake in this new law, as everybody is one of the main important actors that will lead to the success of its implementation.

We need to work together to address plastic pollution and it begins now.

## 5.0 WORLD-WIDE FUND FOR NATURE'S WORK ON PLASTIC POLLUTION

Plastic pollution is a systems problem that requires a holistic approach that addresses gaps in the entire plastics lifecycle (from production, usage, collection, and treatment, to secondary markets).

As part of the World Wide Fund for Nature's (WWF) No Plastic in Nature Initiative, a global initiative to stop the flow of plastics entering nature by 2030 through the elimination of unnecessary plastics, doubling reuse, recycling, and recovery, and ensuring that the remaining plastic is sourced responsibly, the organization has been working with various sectors such as:

- Cities, municipalities, and communities in implementing their 10-year Solid Waste Management Plans through identifying, piloting, and showcasing waste reduction and management solutions that can be adopted nationally and globally;
- Policy makers in pushing the Philippines' support to the global treaty on plastic pollution, and the Extended Producer Responsibility (EPR) scheme in the country;
- Ports and businesses in making public commitments, setting waste reduction and management goals, and implementing waste reduction and management solutions that can be adopted nationally and globally; and
- The general public to raise awareness and action to address plastic pollution.

The WWF-Philippines' work in EPR is part of the initiative of the UN Environment Programme's (UNEP) SEA circular project, funded by the Government of Sweden. The SEA circular project aims to:

- promote circularity of plastics through extended producer responsibility;
- form producer responsibility organizations (PRO) in the Philippines;
- address challenges and opportunities in the informal sector, recyclers, collection, and recycling of valuable and non-valuable plastics; and
- enable policies that can support the recycling industry with locally-sourced materials.

This project is part of the EPR initiative by the SEA circular project which is implemented together with the UN Environment Programme and The Coordinating Body on the Seas of East Asia (COBSEA). The project is funded by the government of Sweden.<sup>6</sup> Further information on how WWF helps in addressing plastics pollution can be seen in this link <https://wwf.org.ph/what-we-do/plastics/>

<sup>6</sup><https://wwf.org.ph/what-we-do/plastics/wwf-continues-its-work-on-extended-producer-responsibility-with-unep-sea-circular/>

## ANNEXES

### Annex A. RA 11898 or the Extended Producer Responsibility Act of 2022

#### [Republic Act No. 11898]

AN ACT INSTITUTIONALIZING THE EXTENDED PRODUCER RESPONSIBILITY ON PLASTIC PACKAGING WASTE, AMENDING FOR THIS PURPOSE REPUBLIC ACT NO. 9003, OTHERWISE KNOWN AS THE "ECOLOGICAL SOLID WASTE MANAGEMENT ACT OF 2000"

*Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:*

SECTION 1. *Short Title.* - This Act shall be known as the "Extended Producer Responsibility Act of 2022".

SEC. 2. Section 2 of Republic Act No. 9003 is hereby amended to read as follows:

"SEC. 2. *Declaration of Policies.* - It is hereby declared the policy of the State to adopt a systematic, comprehensive and ecological solid waste management program which shall:

"x x x

i) Integrate public participation in the development and implementation of national and local comprehensive and ecological waste management programs;

(j) Strengthen the integration of ecological solid waste management and resource conservation and recovery topics into the academic curricula of formal and non-formal education in order to promote environmental awareness and action among the citizenry; and

k) Institutionalize the extended producer responsibility mechanism as a practical approach to efficient waste management, focusing on waste reduction, recovery and recycling, and the development of environment-friendly products that advocate the internationally accepted principles on sustainable consumption and production, circular economy, and producers' full responsibility throughout the life cycle of their product."

SEC. 3. Section 3 of Republic Act No. 3003 is hereby amended to read as follows:

"SEC. 3. *Definition of Terms.* - For the purposes of this Act:

"x x x

"(d-1) Circular economy shall refer to an economic model of creating value by extending product lifespan through improved design and servicing, and relocating ways from the end of the supply chain to the beginning. This intends to efficiently utilize resources by its continual use, and aims to retain the highest utility and value of products, components and materials at all times, through sharing, leasing, reuse, repair, refurbishment, and recycling in an almost closed loop;

"x x x

"(m-1) Extended producer responsibility (EPR) shall refer to the environmental policy approach in practice that requires producers to be environmentally responsible throughout the lifecycle of product, especially its post-consumer or end-of-life stage;

"x x x

"(p-1) High recyclability shall refer to a condition wherein the value for recovery and reprocessing of a product is high, due to its design, composition, content, and density, among other things;

"(p-2) High retrievability shall refer to a condition wherein after use of a product, a significant volume of its waste can be recovered, properly recycled, processed or disposed of, on account of its high value for recovery, recycling, or reprocessing;

"(p-3) Importer shall refer to a natural or juridical person engaged in bringing consumer goods into the Philippines, intended to be sold, whether in original packaging or to be repackaged for distribution to the general public;

"(p-4) Large enterprises shall refer to any business entity whose total assets, inclusive of those arising from loans but exclusive of the land on which the particular business entity's office, plant and equipment are situated, are exceeding that of medium enterprises stated under Republic Act No. 9501, otherwise known as the "Magna Carta for Micro, Small, and Medium Enterprises";

"x x x

"(s-1) Obligated enterprises shall refer to product producers that are required to implement an EPR program under this Act;

"x x x

"(v-1) Plastic shall refer to a synthetic material made from a wide range of organic polymers such as polyethylene terephthalate, high density polyethylene, low density polyethylene, polypropylene, polystyrene, PVC and nylon that can be processed to form solid objects of various shapes;

"(v-2) Plastic neutrality shall refer to a system or its desired outcome where, for every amount of plastic product footprint created, an equivalent amount thereof is recovered or removed from the environment by the product producers through an efficient waste management system;

"(v-3) Plastic packaging shall refer to the polymer material designed to protect a product from environmental factors, or carry goods for transportation, distribution, and sale, including service necessities and more particularly described under Section 44-C;

"(w-1) Product footprint shall refer to a measure of the amount of goods produced, imported, distributed or supplied by a product producer, and deemed to cause damage to the environment;

"(w-2) Product producer shall refer to any of the following persons:

(1) brand owner who sells or supplies any commodity under a brand, label or identity using a product it produced, or a material supplied to it by another manufacturer, or supplier; and

(2) product manufacturer or importer that supplies its commodities for the use of the general consumer, or distributes the same as a material product of a brand owner." *Provided*, That for purposes of Article 2 of Chapter III-A, in case the commodities are manufactured, assembled or processed by a product manufacturer for another obliged enterprise which affixes its own brand name, the latter shall be deemed as the manufacturer;

"x x x

"(qq-1) Sustainable consumption and production shall refer to the use of services and related products that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources and toxic materials, as well as the emission of wastes and pollutants over the life cycle of the service or product, so as not to jeopardize the needs of future generations;

"x x x

SEC. 4. Section 4 of Republic Act No. 9003 is hereby amended to read as follows:

"SEC. 4. *National Solid Waste Management Commission*. - There is hereby established a National Solid Waste Management Commission, hereinafter referred to as the Commission, under the Office of the President. The Commission shall be composed of eight (8) members from the government sector and five (5) members from the private sector. The government sector shall be represented by the heads of the following agencies in their *ex officio* capacity:

"(1) Department of Environment and Natural Resources (DENR);

"(2) Department of the Interior and Local Government (DILG);

"(3) Department of Science and Technology (DOST);

"(4) Department of Health (DOH);

"(5) Department of Trade and Industry (DTI);

"(6) Department of Agriculture (DA);

"(7) Metro Manila Development Authority (MMDA); and

"(8) Union of Local Authorities of the Philippines.

"The private sector shall be represented by the following:

"(a) Three (3) representatives from non-government organizations (NGOs) with a track record on solid waste management or waste reduction, recycling and resource recovery;

"(b) A representative from the recycling, composting, or resource recovery and processing industry;  
and

"(c) A representative from the manufacturing industry, packaging industry, or obliged enterprises;

"x x x

"*Provided*, That representatives from the private sector shall be appointed by the President for a term of three (3) years.

"x x x

SEC. 5. Section 7 of Republic Act No. 9003 is hereby amended to read as follows:

"SEC. 7. *The National Ecology Center.* - There shall be established a National Ecology Center (NEC) under the Commission which shall provide technical expertise, information, training, and networking services for the implementation of the provisions of this Act. As part of its oversight function, the NSWMC shall have direct supervision over the NEC.

"In this regard, the NEC shall perform the following functions:

"(a) Facilitate training and education in integrated ecological solid waste management;

"(b) Establish and manage a solid waste management information database, in coordination with the DTI and other concerned agencies:

"(1) on solid waste generation and management techniques as well as the management, technical and operational approaches to resource recovery;

"(2) of processors/recyclers, the list of materials being recycled or bought by them and their respective prices; and

"(3) on the rate of recovery of each type of plastic waste, updated semi-annually;

"(c) Promote the development of a recycling market through the establishment of a national network that will enhance the opportunity to recycle;

"(d) Maintain an EPR Registry that contains the registered EPR programs submitted by obliged enterprises or Producer Responsibility Organizations (PROs);

"(e) Monitor and evaluate the compliance of obliged enterprises and PROs, with the registration of their EPR programs;

"(f) Develop and maintain a database, which includes digital formats, subject to the provisions of Section 44-G, and ensure that it is reliable, effective, secure, transparent, and accessible to the public;

"(g) Receive sampling and assessment reports submitted pursuant to second paragraph of Section 44-H and undertake the necessary action on such reports, or complaints from any

citizen against a waste generator, an obliged enterprises, PRO, or waste management entity, for the purpose of improving compliance with the law;

"(h) Provide or facilitate expert assistance in pilot modeling of solid waste management facilities;

"(i) Develop, test, and disseminate model on waste minimization and reduction auditing procedures for evaluating options; and

"(j) Within one (1) year after the effectiveness of the Extended Producer Responsibility Act of 2022, provide an assessment on the volume or footprint of other generated wastes, for priority inclusion in the EPR scheme.

"The National Ecology Center shall be headed by the Assistant Director of the Bureau in his/her *ex officio* capacity. The Assistant Director shall regularly submit reports as may be required by the NSWMC in its monthly meetings. The reports of the NEC shall be consolidated by the NSWMC Secretariat for submission to the NSWMC. The NEC shall maintain a multi-sectoral, multi-disciplinary pool of experts including those from the academe, inventors, practicing professionals, business and industry, youth, women, and other concerned sectors, who shall be screened according to qualifications set by the Commission."

SEC. 6. Republic Act No. 9003 is hereby further amended by inserting a new chapter after Chapter III to read as follows:

"CHAPTER III-A

"EXTENDED PRODUCER RESPONSIBILITY

"ARTICLE 1

"National Framework for All Types of Product Wastes

"SEC. 44-A. *National Framework for Extended Producer Responsibility.* - Unless otherwise provided under Article 2 of this Chapter, within three (3) months following the effectivity of the Extended Producer Responsibility Act of 2022, the Department, in consultation with the NSWMC, shall formulate a national framework on EPR for all types of product wastes. The framework shall include the following components:

"(a) Reduction of non-environment friendly products which may include the following activities and strategies:

"(1) adoption of reusable products, or redesign of the products to improve its reusability, recyclability, or retrievability;

"(2) inclusion of recycled content or recycled materials in a product;

"(3) adoption of appropriate product refilling systems for retailers;

"(4) viable reduction rates plan;

"(5) information and education campaign schemes; and

"(6) appropriate labeling of products, including the information thereon for the proper disposal of the waste product.

"(b) Product waste recovery programs aimed at effectively preventing waste from leaking to the environment, which may include the following activities:

"(1) waste recovery schemes through redemption, buy-back, offsetting, or any method or strategy that will efficiently result in the high retrievability, high recyclability, and resource recovery of waste products;

"(2) diversion of recovered waste into value chains and value-adding useful products through recycling and other sustainable methods;

"(3) transportation of recovered waste to the appropriate composting, recycling, or other diversion or disposal site in the country;

"(4) clean-up of waste leaked to coastal areas, public roads, and other sites;

"(5) establishment of commercial or industrial scale recycling, composting, thermal treatment, and other waste diversion or disposal facilities for waste products, when investment therein is viable; and

"(6) partnership with H<sup>o</sup>GUs, communities, and the informal waste sectors.

## "ARTICLE 2

### "Extended Producer Responsibility for Plastic Packaging

"SEC. 44-B. *Obligated Enterprises Under This Article.* - Product producers obliged to implement EPR under this Article shall refer to large enterprises that generate plastic packaging waste: *Provided, however,* That micro, small and medium enterprises defined under Republic Act No. 9501 shall not be covered: *Provided, further,* That in case the total value of assets of all enterprises carrying the same brand, label or trademark exceeds that of medium enterprises stated under Republic Act No. 9501, these enterprises shall be deemed obliged enterprises.

"Notwithstanding the provisions of the immediately preceding paragraph, micro, small, and medium enterprises are encouraged to practice EPR voluntarily, or be a part of the network of obligated enterprises or producer responsibility organizations practicing EPR.

"SEC. 44-C. *Plastic Packaging Covered by EPR.* - For the purpose of Article 2 of Chapter III-A of this Act, plastic packaging shall refer to products utilized to carry, protect, or pack goods for transportation, distribution, and sale.

"Plastic packaging shall include the following:

"(a) Sachets, labels, laminates and other flexible plastic packaging products, whether single layer or multi-layered with plastics or other materials;

"(b) Rigid plastic packaging products, whether layered with any other materials, which include containers for beverages, food, home, personal care and cosmetic products, including their coverings, caps, or lids and other necessities or promotional items, such as cutlery, plates, drinking straws, or sticks, tarps, signage, or labels;

"(c) Plastic bags, which include single-use plastic bags, for carrying or transporting of goods, and provided or utilized at the point of sale; and

"(d) Polystyrene.

"SEC. 44-D. *EPR Mandates.* - Notwithstanding the provisions of Section 44-A, obliged enterprises shall, within six (6) months following the effectivity of the Extended Producer Responsibility Act of 2022, establish or phase-in EPR programs for plastic packaging to achieve efficient management of plastic packaging waste, reduced production, importation, supply or use of plastic packaging deemed low in reusability, recyclability of retrievability, and plastic neutrality through efficient recovery and diversion schemes.

"The programs under this section may include the activities and strategies stated under paragraphs (a) and (b) of Section 44-A: *Provided,* That their mechanisms and strategies are submitted to the NSWMC, through the Department. Obligated enterprises shall institute an EPR program either individually or collectively, whether with or without a PRO.

"SEC. 44-E. *EPR Registration.* - An obliged enterprise or the PRO shall register EPR programs with the NSWMC, through the Department.

"The NSWMC shall ensure that the EPR programs submitted by an obliged enterprise or PRO, as the case may be, include the following information:

"(a) Obligated enterprise or PRO information, and contact information of the person responsible for its EPR;



"(b) Specific type of packaging materials as covered by Section 44-C, and product brands;

"(c) Whether the EPR program is to be implemented individually, collectively, or through a PRO;

"(d) Verifiable volume or weight of the plastic packaging brought into the market within a specified period;

"(e) Target volume or weight of plastic packaging waste for recovery, reuse, and recycling;

"(f) Other EPR programs, such as the redesign of plastic packaging to improve reuse or recyclability;

"(g) Labeling of packaging materials to facilitate recovery, reuse, recycling or proper disposal of packaging materials;

"(h) Status of implementation of the EPR mechanisms; and

"(i) Status of compliance.

"As an initial compliance with the provisions of this section, obligated enterprises or PRO shall submit and register their EPR program to the NSWMC, through the Department, within six (6) months upon the effectiveness of the Extended Producer Responsibility Act of 2022.

"The Department, through the Environmental Management Bureau, and in coordination with the NSWMC, shall monitor and evaluate the compliance of obliged enterprises or their PROs with their respective EPR programs. For this purpose, obliged enterprises or their PROs shall be required to submit annual compliance reports.

"SEC. 44-F. *Compliance Period for Plastic Packaging Recovery Programs.* - Notwithstanding the provisions of the immediately preceding Article, and to give the obliged enterprises and PROs sufficient period to adjust to their EPR duties and responsibilities and improve their performance over time, obliged enterprises under this Article shall likewise establish and phase-in recovery programs that will achieve plastic neutrality. The programs may include the activities stated under paragraph (b) of Section 44-A.

"For this purpose, obliged enterprises that generate either rigid or flexible plastic packaging shall recover or offset their respective plastic packaging footprint.

"The following targets for the recovery of plastic product footprint generated during the immediately preceding year are hereby set:

"December 31, 2023 - twenty percent (20%);

"December 31, 2024 - forty percent (40%);

"December 31, 2025 - fifty percent (50%);

"December 31, 2026 - sixty percent (60%);

"December 31, 2027 - seventy percent (70%);

and

"December 31, 2028 and every year thereafter - eighty percent (80%).

"For this purpose, obliged enterprises shall submit the report of their compliance including appropriate documentation to the Department.

"SEC. 44-G. *Audits.* - Obligated enterprises or their PROs shall establish and implement an auditing system to monitor and assess their compliance performance with this Act and their EPR programs. For this purpose, the obliged enterprises or their PRO shall engage 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. The audited report shall be submitted by the obliged enterprises or their PROs to the Department.

"The certified reports on plastic product footprint generated and recovered by the obliged enterprises shall be made available to the public through the website of the Department: *Provided*, That a record, report, or information, or particular portion thereof deemed by the Department as confidential, shall not be made public when such would divulge trade secrets, production or sales figures, or methods and processes unique to the enterprise that would otherwise tend to adversely affect its competitive position.

"SEC. 44-H. *Producer Responsibility Organization (PRO)*. - Obligated enterprises may voluntarily organize themselves to form or authorize a PRO for the purpose of establishing a viable platform to implement their EPR program under this Article.

"For this purpose, the Department, in consultation with the NSWMC and obliged enterprises or their PRO, shall establish a system or parameters necessary to make the PRO sustainable and compliant with the purposes of this Act. These shall include standards, rules or guidelines for the following:

"(a) Organizational structure and leadership;

"(b) Membership requirements;

"(c) Duties and responsibilities, to include:

"(1) implementation parameters of the EPR program;

"(2) financing mechanisms;

"(3) cooperation mechanism with other stakeholders, waste management entities, distributors, retailers, grocery and store owners, junkshop operators, and individuals or entities in the informal sector involved in waste management; and

"(4) implementation strategies;

"(d) Setting standards towards plastic neutrality;

"(e) Reporting, verification, and auditing of waste footprint generation, recovery, and diversion; and

"(f) Data collection and database maintenance."

SEC. 7. Section 45 of Republic Act No. 9003 is hereby amended to read as follows:

"SEC. 45. *Incentives*. -

"(a) Rewards and recognitions, monetary or otherwise, shall be provided to individuals, private organizations and entities, obliged enterprises, and PROs, including non-government organizations, that have undertaken outstanding and innovative projects, technologies, processes and techniques or activities in reuse, recycling, and reduction. Said rewards shall be sourced from the Fund herein created.

"(b) An incentive scheme is hereby provided for the purpose of encouraging LGUs, enterprises, or private entities, including obliged enterprises, PROs, and NGOs, to develop or undertake an effective solid waste management, including recovery and diversion of plastic product footprint, or actively participate in any program geared towards the promotion thereof as provided for in this Act, as amended.

"(1) Fiscal Incentives

"(a) Tax incentives - Any provision of law to the contrary notwithstanding, obliged enterprises or PROs acting on their behalf, and other registered business enterprises may apply for incentives following the approval process provided under Title XIII (Tax Incentives) of the National Internal Revenue Code of 1997, as amended, for eligible activities: *Provided*, That such activities shall undergo the standard processes in the identification of qualified activities under the Strategic Investment Priority Plan (SIPP).

"(b) The EPR expenses of obliged enterprises, PROs, and private enterprises shall be considered as necessary expenses deductible from gross income subject to the substantiation requirements for necessary business expenses deductible from gross annual income in accordance with Section 34(A)(1) of the National Internal Revenue Code of 1997, as amended.

"(c) Tax and Duty Exemption of Donations, Legacies and Gift - x x x."

SEC. 8. Section 49 of Republic Act No. 9003 is hereby amended to read as follows:

"SEC. 49. *Fines and Penalties.* - (a) x x x

"(g) Any obliged enterprise that fails to register under Section 44-E or fails to comply with Section 44-F shall be imposed with the following fines:

"(1) a fine of not less than Five million pesos (P5,000,000.00) but not exceeding Ten million pesos (P10,000,000.00) for the first offense;

"(2) a fine of not less than Ten million pesos (P10,000,000.00) but not exceeding Fifteen million pesos (P15,000,000.00) for the second offense; and

"(3) a fine of not less than Fifteen million pesos (P15,000,000.00) but not exceeding Twenty million pesos (P20,000,000.00) for the third offense and automatic suspension of business permit until the requirement of the law is complied with.

"In case of failure to meet the targets set under Section 44-F, the obliged enterprise shall pay the same fines set above, or a fine twice the cost of recovery and diversion of the footprint or its shortfall, whichever is higher.

"The penalty shall be imposed whether or not the noncompliance is the result of the failure to register under Section 44-E, falsification of documents, misdeclaration of generated or recovered footprint, employment of any scheme to maliciously evade the responsibility of an enterprise under the Extended Producer Responsibility Act of 2022, or tamper its compliance with the provisions of Section 44-F.

"The Pollution Adjudication Board of the Department shall hear and adjudicate cases of violations or offenses under this section, and impose appropriate fines therefor."

SEC. 9. *Mandatory Review.* - Within five (5) years after the effectivity of this Act, or as the need arises, Congress shall review the accomplishments, and impact of this Act, as well as the performance of its implementing agencies, and the compliance of obliged enterprises to achieve the objectives of this Act, for the purpose of determining the necessity of a remedial legislation mandating for more stringent footprint recovery targets, higher incentives, or phase-out of certain types of single-use plastic packaging.

Within one (1) year after the effectiveness of this Act. The NEC shall further identify, review, and update the list of non-environmentally acceptable products and plastic packaging material that shall be phased out, especially those that are highly unnecessary or replaceable, or cannot be efficiently reused, recovered, or recycled, consistent with the provisions of this Act.

SEC. 10. *Appropriations.* - The sum necessary for the effective implementation of this Act shall be charged against the appropriations for the DENR under the General Appropriations Act: *Provided*, That obliged enterprises and the respective PROs shall be responsible for the funds necessary to operationalize and maintain the EPR programs, in compliance with this Act and its implementing rules and regulations.

SEC. 11. *Implementing Rules and Regulations.* - The DENR, in consultation with relevant government agencies, representatives from obligated enterprises, and other stakeholders shall formulate the rules and regulations necessary to implement the provisions of this Act within ninety (90) days from its effectiveness.

SEC. 12. Section 60 of Republic Act No. 9003 is hereby amended to read as follows:

"SEC. 60. *Joint Congressional Oversight Committee.* - There is hereby created a Joint Congressional Oversight Committee to monitor the implementation of the Act and to oversee the functions of the implementing agencies. The Committee shall be composed of five (5) Senators and five (5) Representatives to be appointed by the Senate President and Speaker of the House of Representatives, respectively. The Oversight Committee shall be co-chaired by the Chairpersons of the Committee on Environment, Natural Resources and Climate Change of the Senate and the Committee on Ecology of the House of Representatives."

SEC. 13. *Separability Clause.* - If any portion or provision of this Act is declared unconstitutional, the remainder of this Act or any provision not affected thereby shall remain in force and effect.

SEC. 14. *Repealing Clause.* - Any law, presidential decree or issuance, executive order, letter of instruction, rule or regulation inconsistent or contrary to the provisions of this Act is hereby repealed or modified accordingly.

SEC. 15. *Effectivity.* - This Act shall take effect after fifteen (15) days following its complete publication in the *Official Gazette* or in a newspaper of general circulation.

Approved,

sgd.

**LORD ALLAN JAY Q. VELASCO**  
Speaker of the House of Representatives

sgd.

**VICENTE C. SOTTO III**  
President of the Senate

## Annex B. Plastic Packaging Waste Management

In addressing plastic packaging wastes and pollution, it is vital that we level off with the understanding of the types of plastics, whether they are recyclable, how they affect the environment, what makes them pollutive, and which among them are the target for management.







### Categories of Plastics







Plastics are categorized using the Standard Classification of Plastics (using the resin identification code or RIC) developed by the Society of Plastic Industries in 1998. Depending on its material and how it is produced, plastics are categorized into seven types. It should be noted as well that each type of plastic corresponds to a unique code which is usually mandated to be put in the plastic product in other countries. Further, the RIC is never meant to be confused as the “recyclability” code for plastics but rather, the type of its plastic hence, in 2013, ASTM International updated the RIC symbol<sup>7</sup> from the three arrows into a triangle.



**Table B-1** shows information on the different types of plastics. Plastics also have the potential for reuse and recycling and are not entirely disposable (or single-use) thereby, the table also provides the details on the recyclability of each plastic type.

<sup>7</sup> <https://www.plasticsnews.com/article/20130611/NEWS/130619978/say-so-long-to-recycling-code-arrows>

Table B-1. Summary of Plastic Types, Characteristics, Sample, and Recyclability

| Resin Identification Code   | Polymer Type and Characteristics  | Products   | Recyclability   | Illustration   |
|---|---|--|---|--|
|    | <p><b>Polyethylene Terephthalate (PET)</b><br/>Used with petroleum-based polymer and is commonly used for beverage packaging due to its properties such as transparency, light weight, a barrier to gas and water, impact strength, and unbreakability, among others.</p>   | Bottles and jars for water, detergent, juice, food.  | Can be recycled and reused as food storage (unless previously used for non-food) caution must be observed to avoid potential hazardous content contamination due to repeated use. |   |
|    | <p><b>High-Density Polyethylene (HDPE)</b><br/>Considered versatile (especially for packaging) and has a low risk of leaching. Has a higher density and is stronger than the LDPE and has strong chemical resistance, hence its use for storing a variety of chemicals.</p> | Crates and boxes, bottles for milk, food products, detergents, cosmetics, food storage containers, chemicals and pesticides, | Can be easily recycled into new items and is not recommended to be reused as food storage.  |   |
|  | <p><b>Polyvinyl Chloride (PVC)</b><br/>PVC is a tough material that is usually used for pipes and other equipment. Due to its affordability, this is also used as packaging for many types of products. PVCs are formed into either rigid, soft flexible, or liquid.</p>    | Clear jars and bottles for toiletries, food, and medication cling film. PVC pipes and other industrial use.                  | Recycling is challenging due to the high chlorine content and other additives like plasticizers.  |  |

| Resin Identification Code   | Polymer Type and Characteristics  | Products   | Recyclability   | Illustration  |
|---|---|--|---|---|
|  <p>4<br/>LDPE</p> | <p><b>Low-Density Polyethylene (LDPE)</b><br/>Lighter and more flexible than HDPE. Usually used for packaging or bags/containers (e.g., plastic labo) because of its thin nature/film and even liner of other types of materials.</p>   | <p>Single-use lightweight bags, bags for frozen vegetables, bread, garbage and toilet paper, milk sachets, and shrink and stretch wrap.</p>  | <p>Challenges in the collection and its lightweight nature make it less competitive in terms of recycling price.</p>  |    |
|  <p>5<br/>PP</p>   | <p><b>Polypropylene (PP)</b><br/>A versatile material that is easier to mold and has a high melting point making it suitable for holding hot liquid.</p>  | <p>Yoghurt and margarine tubs, ice cream containers, bottle tops and closures and clear, microwave dishes, single-use face masks, and metallized films for confectionery and sweets.</p> | <p>Recycling is difficult and expensive. In many cases, it's hard to get rid of the smell of the product this plastic contained in its first life. Usually ends up being black or grey, making it unsuitable for packaging and sometimes for recycling.</p>   |    |
|  <p>6<br/>PS</p> | <p><b>Polystyrene (PS)</b><br/>Commonly used for food packaging and protective and display packaging. It can be formed into rigid or foam products. PS is characterized as lightweight, good as an insulator and resistant to heat.</p> | <p>Yoghurt cups, clamshells, food trays for meat, fruit and vegetables, vending cups.</p>  | <p>Can sometimes be recycled and is challenging to do so. This depends on the locality and the presence of infrastructure that does so. recycled but only in small amounts because it is difficult to do. Most flexible PS materials like plastic boxes, cutlery, and coffee cups are usually disposed of, but some are recycled and used as thermal insulation in buildings. Most of the rigid PS like CD or other clear cases</p> |  |

| Resin Identification Code   | Polymer Type and Characteristics  | Products   | Recyclability  | Illustration   |
|---|---|--|--|--|
|   |   |  | are also rarely recycled while high-impact PS like plastic cabinets are not recycled.  |  |
|  | <p><b>Others</b><br/>A plastic type that does not fall into the six types is considered 'others'. There are multilayered plastics or those that have more than one type of plastic in one product or packaging.</p> | <p>In packaging, it could be multilayer materials for long-life products like sachets for sauces, juices, processed meats, and other food and non-food products.</p> | <p>Due to its nature, 'other' types of plastics have low market value for recycling since their type of plastic is usually unknown and cannot easily be recycled. The same applies to multilayered plastics, where recycling is challenging, since the plastic composition does not have the same melting point.</p> |  |

**Sources:**

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### Target Plastic Packaging under the law

The EPR scheme encourages waste reduction through the elimination of unnecessary packaging of products and the development of more environmentally friendly packaging designs. As recommended in the previous EPR study, the EPR scheme should be applied to **all household packaging of any material and as much as possible, service packaging and specific single-use plastic items**. On the other hand, this does not mean that other sources of waste should not be addressed; but rather, giving more focus on the household level may improve and increase the rate of recovery of plastic packaging wastes.

In addition to this, it is suggested that the types of plastic packaging to be covered in the EPR law will be formed into categories. In this way, the monitoring and reporting on the recovery, reuse, recycling, and reduction of the type of plastic packaging will be more structured/standardized. For reference, **Table B-2** shows the suggested categorization and the illustration of plastic packaging types.

**Table B-2. Suggested Plastic Packaging Categorization**

| Category | Coverage  | Sample Plastic Illustration  |
|----------|---|--|
| I        | Sachets, labels, laminates and other flexible packaging products, whether single-layer or multi-layered with plastics or other materials.                     |  <p><a href="https://www.industrialpackaging.com/hs-fs/hubs/Blogging_Images/flexible-packaging-materials-bofu.jpg?width=600&amp;name=flexible-packaging-materials-bofu.jpg">https://www.industrialpackaging.com/hs-fs/hubs/Blogging_Images/flexible-packaging-materials-bofu.jpg?width=600&amp;name=flexible-packaging-materials-bofu.jpg</a></p>  <p><a href="https://s.imimg.com/data5/SELLER/Default/2021/2/BA/WP/RQ/57468957/sun-plus-packaging-plastic-pouch-500x500.jpg">https://s.imimg.com/data5/SELLER/Default/2021/2/BA/WP/RQ/57468957/sun-plus-packaging-plastic-pouch-500x500.jpg</a></p> |
| II       | Rigid plastic packaging (including containers for food, beverages, home and personal care products, cosmetics, and their coverings, necessities, and labels). |  <p><a href="https://www.asdreports.com/media/PR_29631.jpg">https://www.asdreports.com/media/PR_29631.jpg</a></p>  |



| Category          | Coverage  | Sample Plastic Illustration  |
|-------------------|---|--|
|                   |   |  <p><a href="https://marketresearch.biz/wp-content/uploads/2019/02/rigid-plastic-packaging-market.jpg">https://marketresearch.biz/wp-content/uploads/2019/02/rigid-plastic-packaging-market.jpg</a></p>        |
| <p><b>III</b></p> | <p>Plastic bags/sheets (including SUP bags).</p>                                    |  <p><a href="https://recyclecoach.com/wp-content/uploads/2021/04/how-to-recycle-plastic-bags-600x600.png">https://recyclecoach.com/wp-content/uploads/2021/04/how-to-recycle-plastic-bags-600x600.png</a></p> |
| <p><b>IV</b></p>  | <p>Polystyrene (such as flexible PS materials boxes, cutlery, and coffee cups).</p> |  <p><a href="https://www.echotape.com/wp-content/uploads/2017/06/tapa-challenge-polystyrene-foam.jpg">https://www.echotape.com/wp-content/uploads/2017/06/tapa-challenge-polystyrene-foam.jpg</a></p>        |