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Environmental Management Bureau, Philippines





Status:

- Waste Generation**
- Waste Management**
- Circular Economy through SWM, EPR and other interventions**





Waste Generation Rate

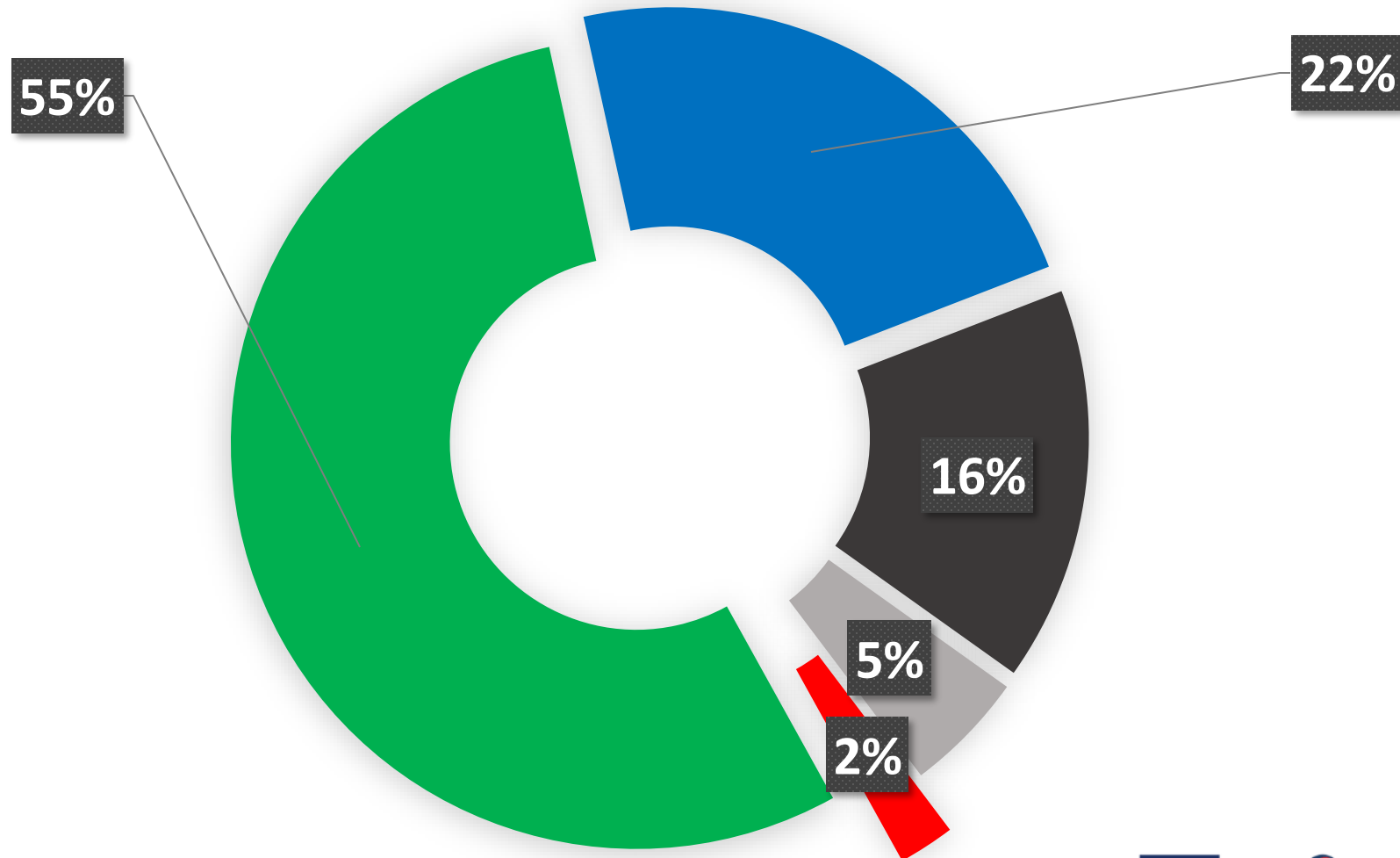
0.40 kg/cap/day

Waste Generation:

61,700 tons per day

Waste Analysis and Characterization Study

■ BIODEGRADABLE ■ RECYCLABLE ■ RESIDUAL ■ RESIDUAL WITH POTENTIAL ■ SPECIAL



REPUBLIC ACT 9003

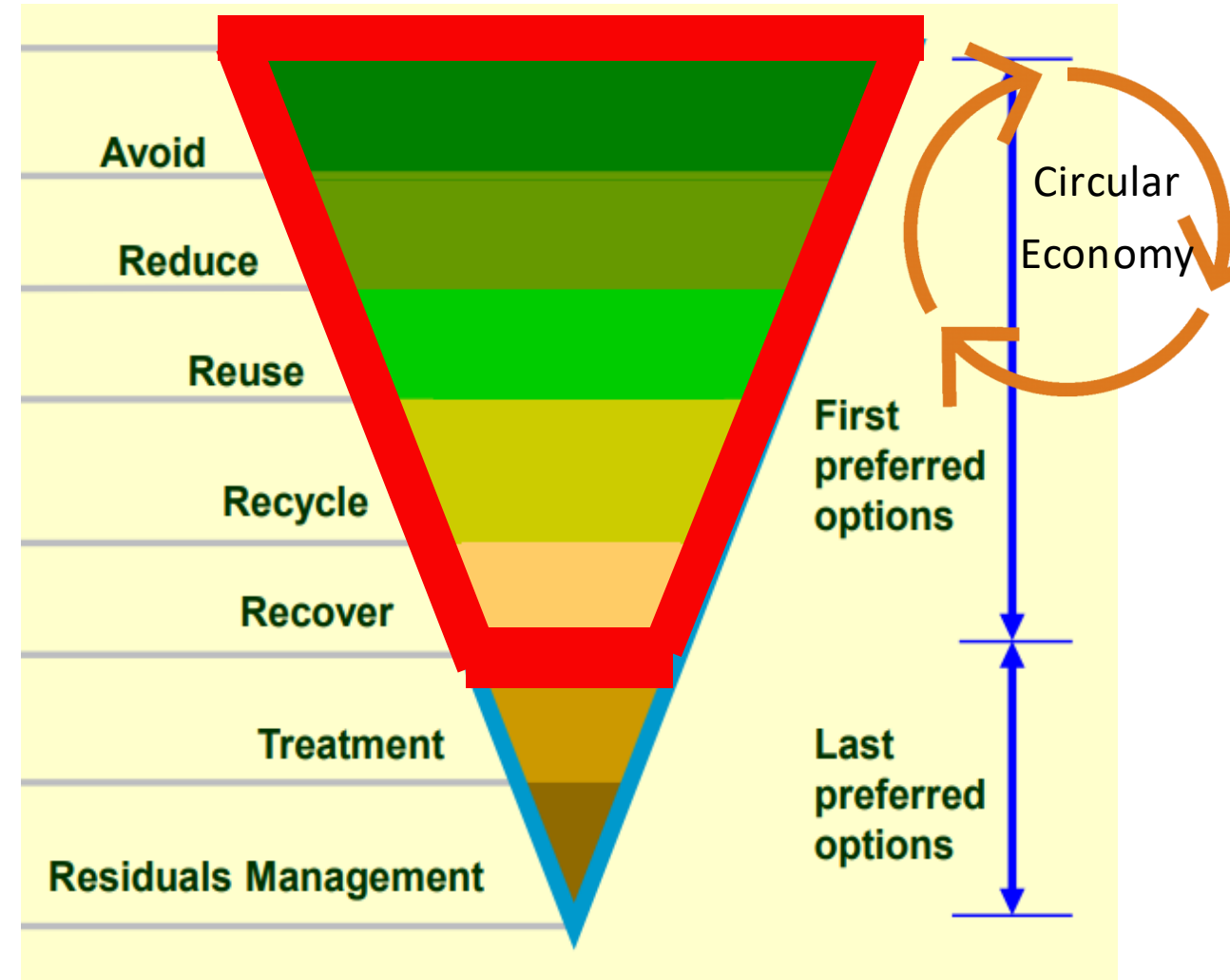
THE ECOLOGICAL SOLID WASTE MANAGEMENT ACT OF 2000

Department of Environment and Natural Resources (DENR)
National Solid Waste Management Commission (NSWMC)

PROPER SEGREGATION OF SOLID WASTE

Types of Waste	I. Recyclables	What You Should Do
PAPER • Clean and dry paper such as folders, bond paper, newspaper, magazines, etc. • Corrugated boards, carton boxes of pizzas, soap, toothpaste, shoes, etc.		• Separate white paper from colored paper • Fold carton boxes to save space • Do not let garbage collectors gather paper wastes when it rains. Paper, once wet, becomes compressible.
PLASTIC • Softdrink PET bottles, bottles of mineral water, vinegar, soy sauce, cooking oil, noodles, shampoo, alcohol, polystyrene (styrofoam/styrofoam), etc. • Broken manoblock tables and chairs, basin, PVC pipes, and other hard plastics		• Let the plastics dry before placing them in a recyclable container • Wash or soak your plastics, cans, bottles and broken plates in water recycled from washings to clean and prevent insect infestation
STEEL • Aluminum containers like softdrinks-in-cans, ice cream and biscuit cans, etc. • G.I. Sheet (Yero), aluminum gutter, brass, copper, weather, stainless steel, soap metal, etc.		• Fold or cut the steel to save space
BOTTLES OR GLASSES • Bottles of beer, gin, softdrinks, juice, vinegar, soy sauce, sarsap, peanut butter, coffee, etc. • Broken glasses and bottles		• Place bottles/broken glasses in a sturdy container • One glass color per container
GARDEN WASTE • Dried leaves and grass, plant stems, branches, and cut-offs • Extracted plants • Animal wastes		II. Compostables  • Compost or bury all garden wastes • If to be collected by authorized garbage collectors, place your garden wastes in tightly tied plastic bags • Dry/dry leaf twigs • Do not place leftovers in plastic bags • Place leftovers in covered containers (like ice cream cans) • PLASTIC AND PAPER BAGS ARE NOT KITO-EN WASTES
KITCHEN WASTE • Leftovers, fruit and vegetable seeds and peelings, etc. • Leaf and shells (crabs, lobsters, clams, etc.) • Eggshells, fishbone, inward	III. Residuals • Separate residuals from kitchen wastes and recyclables • Place residuals in old plastic bags, NOT in sacks/cartons. • Sharp, pointed objects should be placed and carefully tied in hard cardboards to prevent injuring garbage collectors	
PROHIBITED ACTS 1. Littering, throwing, and indiscriminate dumping of wastes in public places such as in roads, sidewalks, canals, rivers or parks	FINES AND PENALTIES ₱200 to ₱1,000 or cost (1) to 15-day community service, or both	*Useless

SOLID WASTE MANAGEMENT HIERARCHY



Waste Management / Circular Economy

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.



SOLID WASTE MANAGEMENT

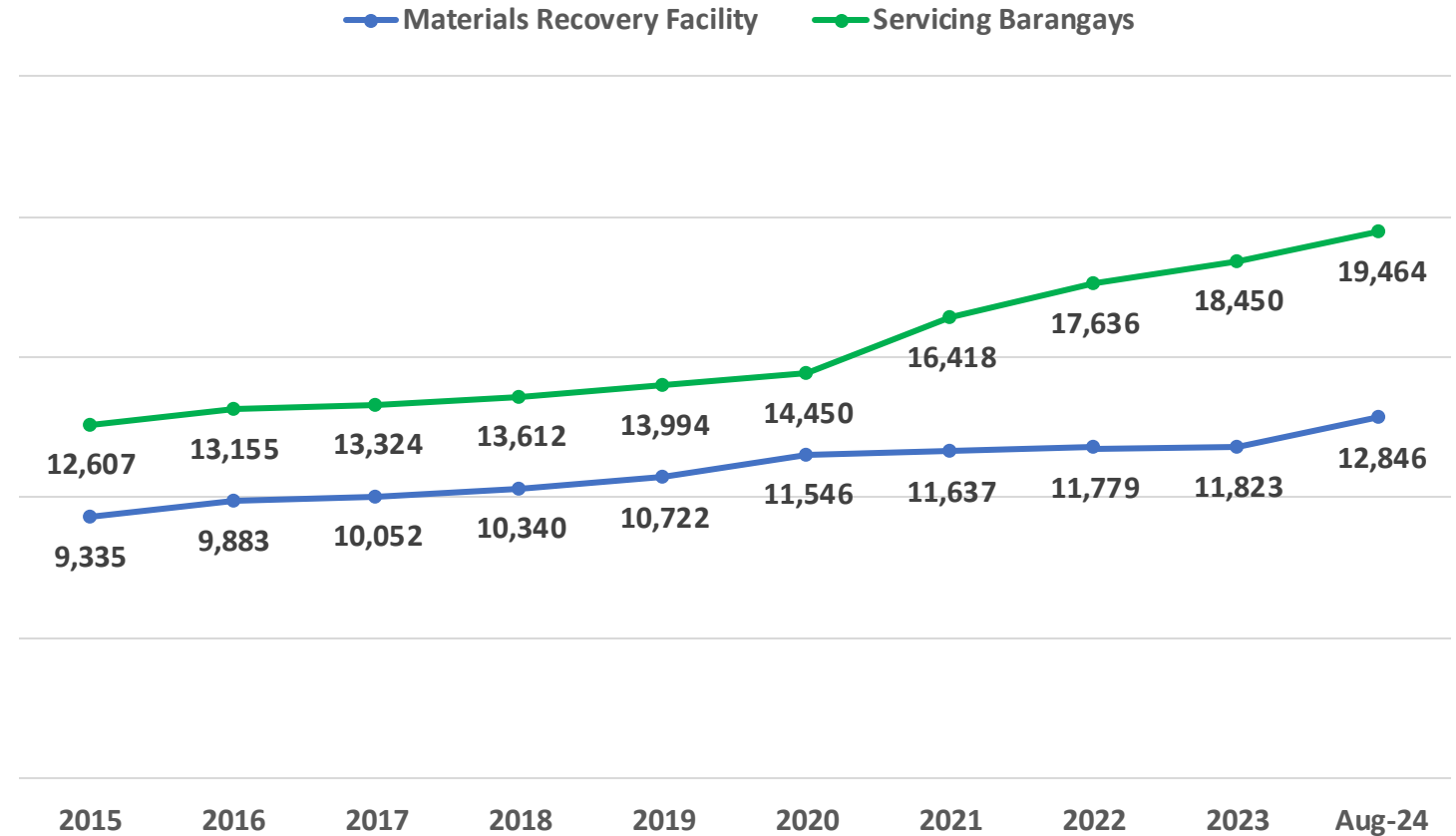
Where are we now in the management of Solid Wastes?

- **Materials Recovery Facility (MRF)**

- 12,846 MRFs** established servicing **19,464** or **49%** of the total barangays nationwide.

- **10-Year Solid Waste Management Plan (SWMP)**

- 87% or 1,392** Solid Waste Management Plans approved.



Philippine National Plan of Action for the Prevention, Reduction, and Management of Marine Litter

NPOA-ML STRATEGIES

PROGRAMMATIC CLUSTER



1. National Marine Litter Baseline



3. Recovery and Recycling



5. Shipping and Fisheries Waste Control



2. Circular Economy and SCP



4. Collection and Disposal



6. Cleanup of Riverine and Marine Environments

ENABLING/CROSS-CUTTING CLUSTER OF ACTIONS



7. Policy and Enforcement



9. Sustainable Financing and Resource Allocation



8. Social Marketing and Communication



10. Strengthening Local Actions



Support to Strategy 2: Mainstreaming Circular Economy (CE) and Sustainable Consumption and Production (SCP) Initiatives

Mainstreaming the NPOA ML Support Activities in the Key Result Area in the EMB Work Program



Roadmap for the Management of Plastic Waste and Reduction of Non-recyclable Single-use Plastics

1. Closing Plastic Leakage Pathways



2023-2028

2. Enabling Plastic Recycling



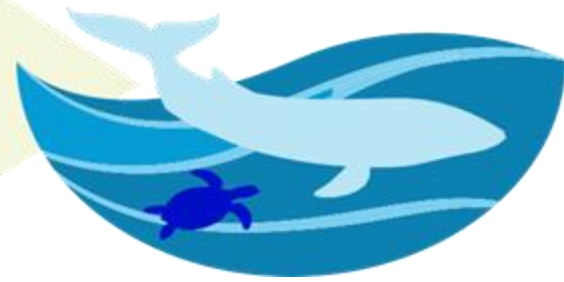
2023-2034

3. Managing Plastic Demand



2023-2040

ZERO PLASTIC WASTE!



Extended Producer Responsibility Act of 2022

(Republic Act 11898)
and its Implementing Rules
and Regulations

WHO ARE OBLIGED ENTERPRISES?

Product producers that generate plastic packaging wastes:

Large – scale enterprises such as *brand owner* and *product manufacturer or importer*

Micro, Small, and Medium Enterprises (MSMEs) where the total value of assets of all enterprises carrying the same brand, label or trademark exceeds that of medium enterprises (₱100 Million) under Republic Act No. 9501

*MSMEs not included herein are encouraged to practice EPR **voluntarily** or be a part of the network of obliged enterprises or producer responsibility organizations practicing EPR.*



HOW MAY OBLIGED ENTERPRISES INSTITUTE AN EPR PROGRAM

- 01 ➤ **Individually** (Large Enterprises)
- 02 ➤ **Collectively**, but not as a Producer Responsibility Organization (PRO)
- 03 ➤ Collectively to form, or **authorize a Producer Responsibility Organization (PRO)** for the purpose of establishing a viable platform to implement their EPR program

PLASTIC PACKAGING COVERED



FLEXIBLE PACKAGING: Sachets; Labels; Laminates & other flexible plastic packaging products, whether single layer or multi-layered with plastics or other materials



RIGID PLASTIC PACKAGING PRODUCTS, whether layered with any other materials



PLASTIC BAGS, which include single-use plastic bags, for carrying or transporting of goods, and provided or utilized at the point of sale



POLYSTYRENE



ESTABLISHMENT OF EPR PROGRAM

Obligated Enterprises shall 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 or retrievability, and plastic neutrality through efficient recovery and diversion schemes, such as:

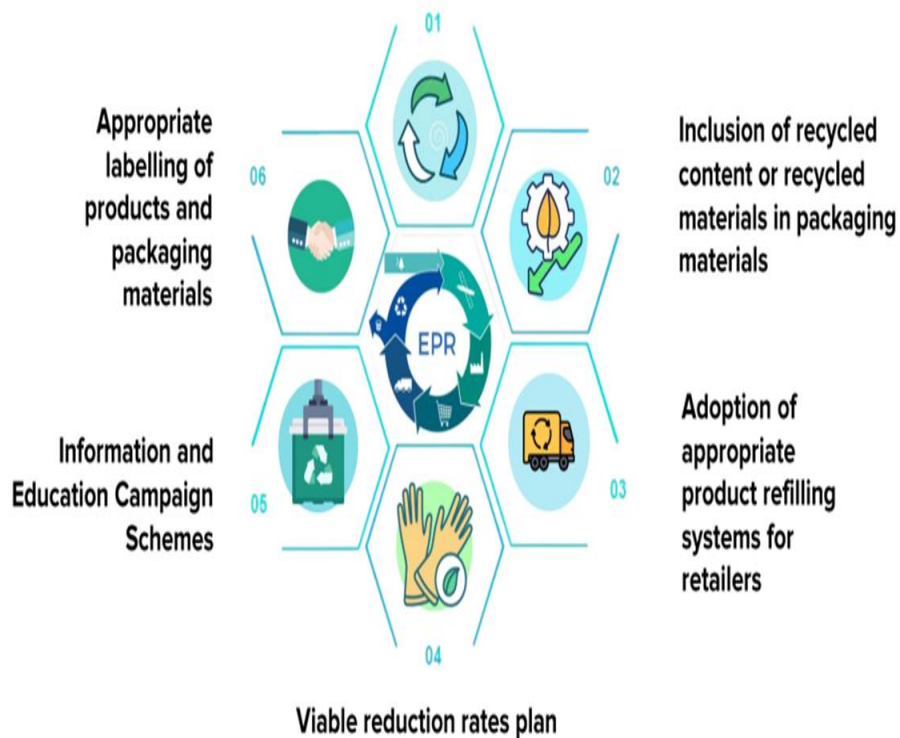
- 01 Reduction of non-environment friendly packaging products
- 02 Recovery programs aimed at effectively preventing waste from leaking to the environment



MODES OF EPR PROGRAM

Recovery programs aimed at effectively preventing waste from leaking to the environment

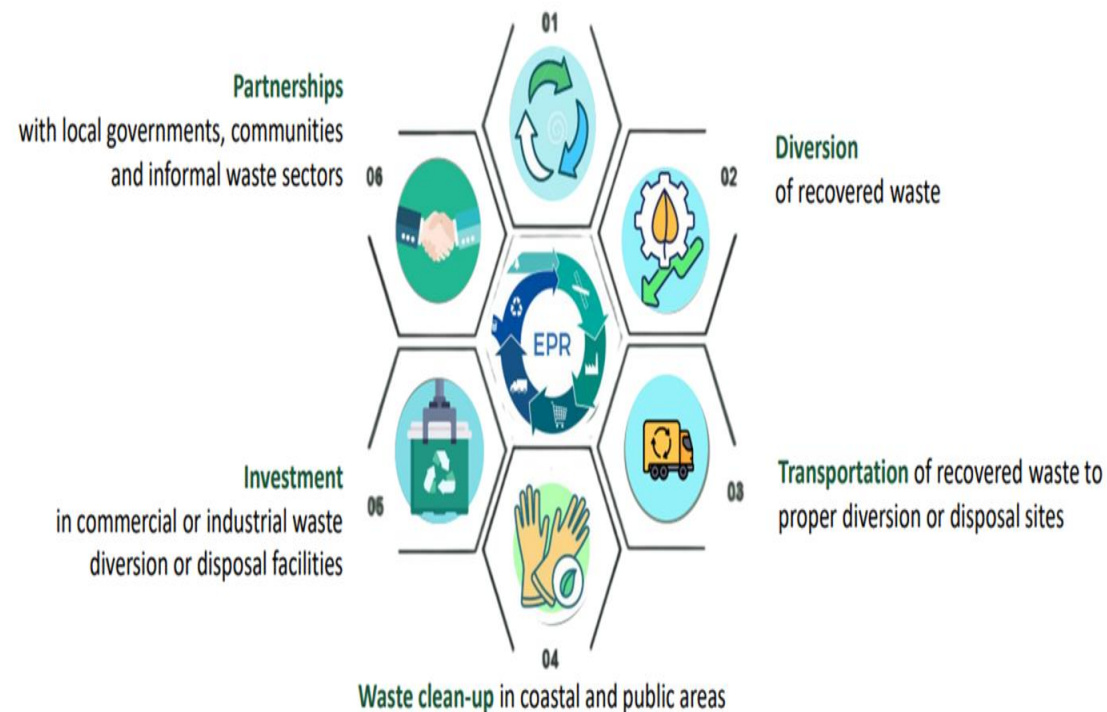
Reusable Packaging products or packing design



MODES OF EPR PROGRAM

Recovery programs aimed at effectively preventing waste from leaking to the environment

Waste recovery schemes through redemption, buy-back and offsetting



Modes of EPR Program - Reduction of Non-Environment Friendly Packaging Products



ADOPTION OF APPROPRIATE PRODUCT REFILLING SYSTEMS FOR RETAILERS





VIABLE REDUCTION RATES PLAN



Packaging reduction



Lighter color



Designed for Recycling



Stretch film elimination



Paper straws, bands, sachets



100% Plastic Neutrality

Photos from Nestle Philippines





INFORMATION AND EDUCATION CAMPAIGN (IEC) SCHEMES

REDUCE, REUSE, RECYCLE CAMPAIGN WITH GMA NETWORK



GOVERNMENT AND ACADEME PARTNERSHIPS



VOLUNTEER PROGRAMS WITH CLIMATE CHANGE COMMISSION AND GMA NETWORK



Photos from Nestle Philippines



Modes of EPR Program - Recovery programs aimed at effectively preventing waste from leaking to the environment



WASTE RECOVERY SCHEMES THROUGH REDEMPTION, BUY-BACK, OFFSETTING, OR ANY METHOD OR STRATEGY





INCLUSION OF INFORMAL WASTE SECTOR

**INVEST IN
RESILIENCE**



**IMPROVEMENT
ON THE
INFORMAL
WASTE SECTOR**



**PUBLIC AND PRIVATE
PARTNERSHIP**



COLLABORTION WITH OTHER NATIONAL GOVERNMENT AGENCIES

Information hub for cleaner technologies on solid waste management

Policies on fiscal incentives



Standards and rules /
safeguard systems on fair
wage policies

Development and
mandatory
adoption of eco –
labels

Standards /
safeguards for social
inclusion (e.g.
informal waste
sector)

Collaboration with LGUs, communities and
informal waste sector



COMPONENTS OF AN EPR PROGRAM

Geographical Implementation Program or Roll-out Plan

COMPLIANCE YEAR	GENERAL AREAS
2023	Metro Manila, Metro Cebu, and Metro Davao
2024	Other Metropolitan Areas: (Metro Angeles, Metro Bacolod, Metro Baguio, Metro Batangas, Metro Cagayan de Oro, Metro Dagupan, Metro Iloilo–Guimaras, Metro Naga, and Metro Olongapo)
2025	Other Highly Urbanized, Independent Component Cities, and 1 st Class Component Cities
2026	2 nd to 6 th Class Component Cities
2027	1 st to 3 rd Class Municipalities
2028	4 th to 6 th Class Municipalities

Illustration only



Milestones in Extended Producer Responsibility (EPR) Implementation

Setting up of Online EPR Registry and Portal



Track & Trace

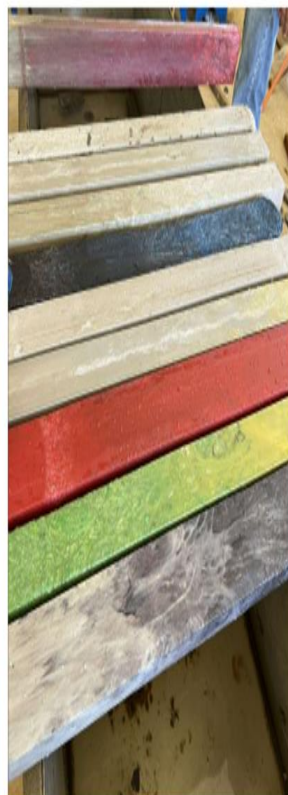
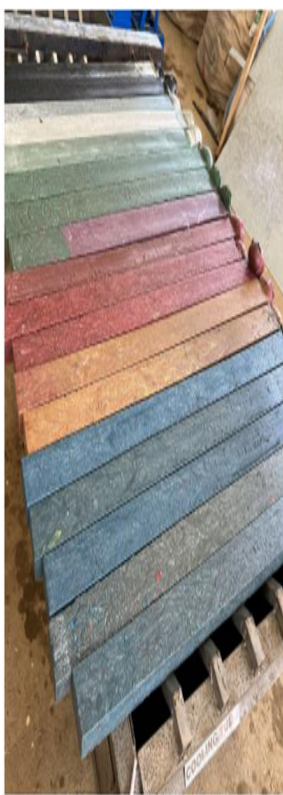
Collection

Transport

Diversion

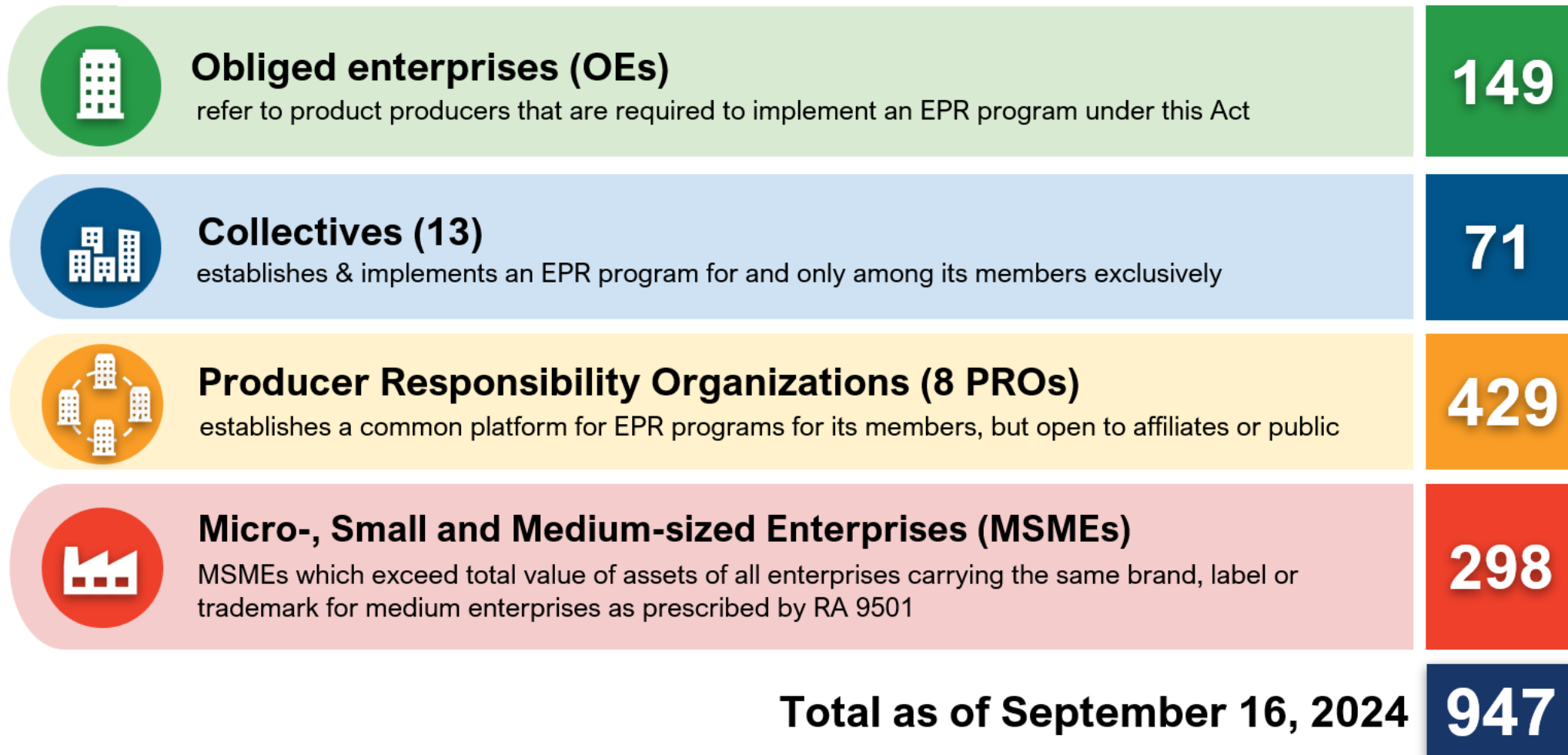
Certification

Evergreen Labs offers the same support to EMB and the implemented LGU facilities and is confident that it can activate the unused facilities, improve the operating facilities and facilitate sustainable operations.

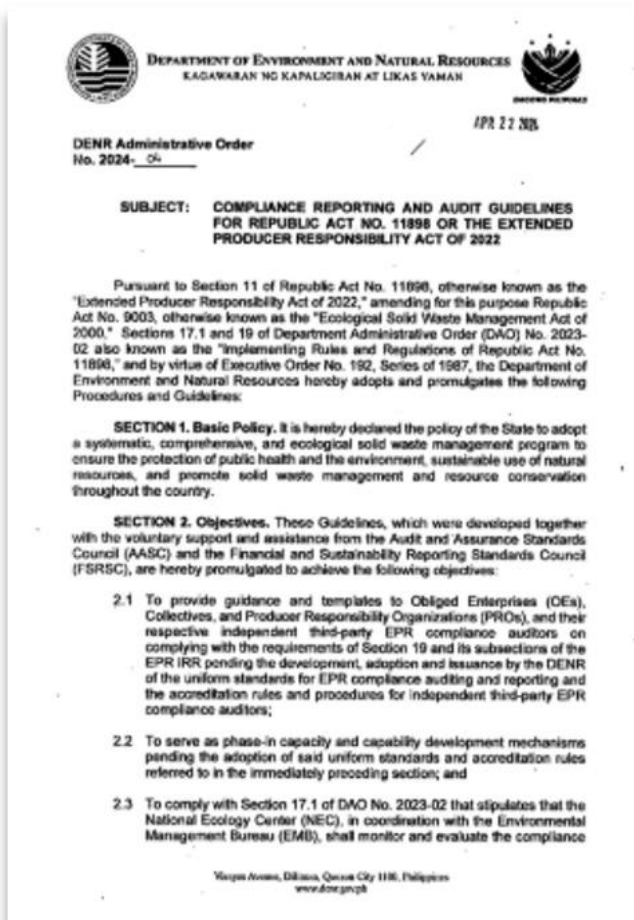


Milestones in Extended Producer Responsibility (EPR) Implementation

Status of Submission of EPR Programs



Compliance Reporting and Auditing Guidelines



DA) Resolution 57 Series of 2023 – Quality they are also reminded of their possible

ordinate closely with the PRBOA through its Standards Council of the Philippines and its the formulation of standards on the EPR reflected in the balance sheets and other PROs.

ENR DAO No. 2023-02. This Administrative ed to as Annex A of DENR DAO No. 2023- the Implementing Rules and Regulations of Standards of EPR Compliance Reporting id by the Department, it shall replace this RR, EPR Act of 2022.

is. If any provision of this Order shall be held or provisions hereof which are not ffect.

All Administrative Orders and other similar hereby revoked, amended, or modified

Administrative Order shall take effect fifteen newspaper of general circulation and upon copy thereof by the Office of the National

MARIA ANTONIO S. LOYZAGA
Secretary
OFFICE OF THE SECRETARY
DENR-DOH-103

Reporting Year	Basis for the Plastic Footprint	Basis for the Diversion	Target Diversion	ECAR Due Date
2023	2022 or 2023*	2023	20%	01 July 2024 (Mon)
2024	2023	2024	40%	30 June 2025 (Mon)
2025	2024	2025	50%	30 June 2026 (Tue)
2026	2025	2026	60%	30 June 2027 (Wed)
2027	2026	2027	70%	30 June 2028 (Fri)
2028	2027	2028	80%	02 July 2029 (Mon)
t	t-1	t	80%	t+6 months

Submission of EPR Compliance Audit Report



Obliged enterprises

refer to product producers that are required to implement an EPR program under this Act

62



Collectives (13)

establishes & implements an EPR program for and only among its members exclusively

8

50



Producer Responsibility Organizations (8 PROs)

establishes a common platform for EPR programs for its members, but open to affiliates or public

7

370



Micro-, Small and Medium-sized Enterprises (MSMEs) Under PRO (MSME/Voluntary Not Required for EPR Audit)

MSMEs which exceed total value of assets of all enterprises carrying the same brand, label or trademark for medium enterprises as prescribed by RA 9501

290

Total as of September 16, 2024

772

Interventions of Local Government of Manila

- 1) City Plan of Action on Marine Litter (CPOA-ML)
- 2) City operated Materials Recovery Facility (MRF)
- 3) Plastics incentivized collection
 - Kolek, Kilo, Kita Para sa Walastik na Maynila
 - Alaskalikahan Wrapper Redemption Program
 - Aling Tindera: A Waste to Cash Program
 - Tapon to Ipon Project
- 4) IEC Campaign on Solid Waste Management
- 5) Regular and daily clean up operations of water bodies



MANILA CITY MATERIALS RECOVERY

FACILITY



ACE PROJECT



UPCYCLED PRODUCTS





Challenges:





Recycling capacity remains inadequate exacerbated by **insufficient facilities and funding** for local governments and stakeholders.

The **informal sector, crucial in this chain, still operates apart from formal systems**, which hampers livelihood improvement within the sector.

The **lack of organization and proper data and information management** results in the poor quality of information needed to evaluate proper cost-recovery and disposal mechanisms for waste management.

City of Manila

- Lack of space for MRF Establishment
- Lack of SWM equipment/technologies





Regional Cooperation:

- Sharing of best practices and other relevant information**
- Partnership and collaboration**





ADB Support:

- More Capacity Building and other similar activities**
- Technical assistance to Local Government Units**



