



## KEY MESSAGES

1. This study is the first comprehensive scientific assessment and material flow analysis of plastic packaging waste in the Philippines, done as a response to the global plastic pollution problem. Poor and weak implementation of waste reduction and management laws, and insufficient recycling capacities have resulted in the plastic waste crisis the country is experiencing.
2. The MFA findings reveal that 35% of plastics annually consumed are leaked into the open environment. 33% are disposed in open dumps or landfills, while only 9% is recycled.
3. EPR as an environmental policy and financial mechanism provides a systematic approach to reducing and managing plastic wastes, defining the key responsibilities of all stakeholders, and allows limited government resources to be focused on basic services.
4. Policy makers need to take a bold and decisive step to establish a clear, effective, and unambiguous EPR legal framework that outline clear objectives, responsibilities, enforcement mechanisms, and a timeline for implementation and targets.
5. Government action must be anchored on a system mandated by law and regulation, with sufficient provisions for capacity and knowledge building for all stakeholders. The mandatory EPR scheme must have clear timeframes and control mechanisms that cover all materials, operated by one non-profit producer responsibility organization (PRO), coupled with improving recycling capabilities.

## THE STUDY: DEALING WITH THE PLASTIC POLLUTION PROBLEM

This study, commissioned by the World Wide Fund for Nature (WWF) Philippines, serves as foundation for the proposed elements and components of an EPR scheme for the Philippines, including short- and medium- term actions that need to be taken to lay the foundations for EPR.

Plastic pollution has reached gigantic dimensions worldwide. Approximately 4.8 to 12.7 million tonnes of plastics are entering the ocean yearly. This has been attributed to continuous plastic production and the lack of sound waste management, especially in low- and middle-income countries, such as the Philippines - the top 3rd country in the world for plastic leakage.

<sup>1</sup>Plastic holds the third largest share in the overall generated waste in the Philippines. The country's plastic recycling rate is low at 9%. The average plastic waste generation in the Philippines has been estimated at 15.43 kg/cap/year. Increasing waste generation will thus continue to put a heavier strain on limited waste management resources and infrastructures in the country and increase leakage into nature.

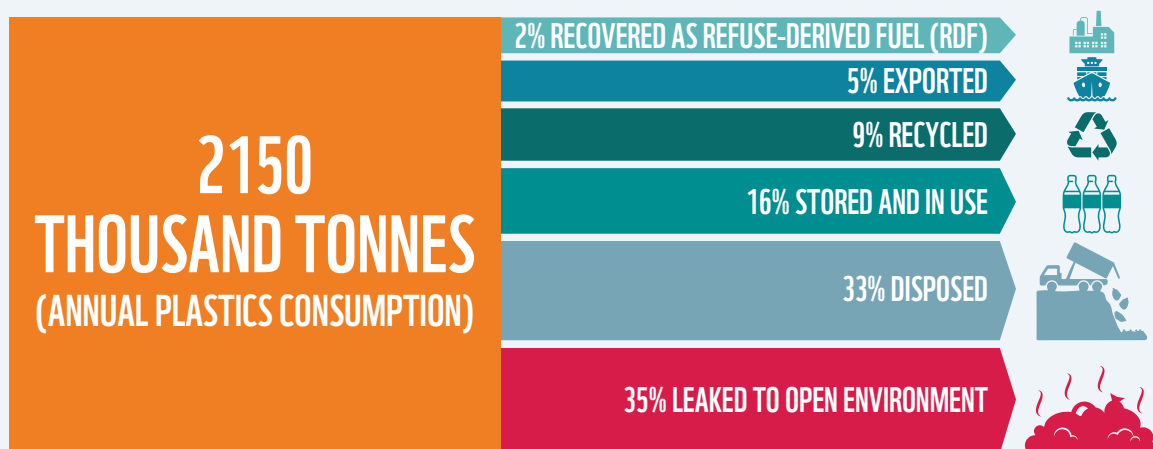
<sup>1</sup>Based on the extent of coastlines, coastal population, and waste management capacity (Jambeck et al., 2015).

## THE PLASTIC POLLUTION PROBLEM

The Study shows three significant characteristics of the current Philippine waste management:

- **High-value recyclable packaging is already separated from household waste to a limited extent** and transferred to recycling systems. **Extraction is largely informal** and the subsequent value chain is based on a functioning market. A **sizeable volume of these recyclables still ends up in disposal sites or leaked to the environment**.
- The **recycling capacities of the Philippines are insufficient** for locally generated, and high-value recyclables. Some recyclers and aggregators still process imported recyclables.
- **Low-value and non-recyclables** (e.g. all kinds of flexibles like films, sachets, and composites) **are mostly disposed of and collected together with other residual wastes**, without any systematic separation and recycling. These then end up in open dumpsites, in few sanitary landfills, or are littered in the environment

These characteristics are the reality despite the prevailing waste reduction and management legal framework which mandates source reduction, segregation, proper handling and storage, recycling, and disposal in sanitary landfills.



FLOW OF PLASTIC MATERIALS IN THE PHILIPPINES 2019

## THE PLASTIC MATERIAL FLOW ANALYSIS FINDINGS

### CURRENT LAWS AND POLICIES

ON WASTE MANAGEMENT ARE NOT BEING ADEQUATELY AND PROPERLY IMPLEMENTED

A Plastic MFA done by the Study highlight the following: **out of the annually 2,150k tonnes of plastic that are available for local consumption, approximately 760k tonnes or 35% are leaked to the open environment while 706k tonnes or 33% are disposed to landfills and dumpsites. Approximately 345k tonnes or 16% are stored and in-use. Only around 183k tonnes or 9% are considered recycled.**

The results of the MFA point to the fact that the Philippines has a serious plastic waste reduction and management problem and we are not doing enough. **Current laws and policies on waste management are not being adequately and properly implemented.** There is also a lack of proactive and innovative approaches to dealing with waste either at its source (e.g., eco-design and reduction techniques), and at disposal (e.g., segregation, collection, recycling).



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## WHAT IS EPR AND WHY IS IT FOR THE PHILIPPINES?

EPR is an environmental policy and financial mechanism that emerged in the 1990s and is now globally recognised as a useful tool for accelerating the transition to sustainable waste management and a circular economy. It encourages waste reduction and the development of more environmentally friendly packaging design. The basic approach of EPR is based on obliging businesses (i.e., manufacturers, importers, and sellers) to assume full responsibility for the products they offer to the public not just during consumption, but also at production (through the eco-design of products for better recyclability and/or the use of natural alternatives) and at disposal (once their products have become discarded). EPR then works alongside and complements general waste management systems, and other environmental concepts and regulations such as shifting to a circular economy, promoting eco-design, and transitioning to a more resource-efficient economy.

## WHY YOUR ROLE AS POLICY MAKER IS IMPORTANT

A clear, effective, and unambiguous legal framework is a key first step on the path to EPR. This can only happen if policy makers take a bold and decisive step to put this globally recognized waste reduction and management scheme in place. A legal framework for EPR should **outline clear objectives, responsibilities, enforcement mechanisms, and a timeline for implementation and targets**. The effectiveness of the EPR system relies on the active role of government to regulate and supervise the system and its operator through a legal framework.

Equally important is the government's role – from the national up to the local levels – to ensure the proper and full implementation of general waste reduction and management laws. An EPR system complements other SWM-related laws and policies; and it will only be fully effective if the general waste management system functions well and diverts recyclable content to the EPR infrastructure. Its success also depends on producer's willingness to redesign their products with reduction, reuse, and recovery in mind.

## SO WHY THEN SHOULD POLICY MAKERS MAKE A FIRM COMMITMENT FOR EPR?

- As a well-established and globally recognized scheme, EPR provides a **systemic approach** for producers to effectively reduce packaging use, improve packaging designs and increase resource recovery.
- EPR clearly **defines the key roles and responsibilities** of all the stakeholders in the value chain.
- EPR allows a developing country like the Philippines to **shift and focus limited government resources to other basic services** such as health, education, and other social services – all the more critical during this time of pandemic.
- **LGU's load and burden will be eased** by shifting responsibility to obliged companies to support the waste management system for packaging and plastic waste.
- EPR **creates an opportunity for society to work hand-in-hand** to deal with the plastic waste problem, a modern day ode to the bayanihan (i.e., the spirit of civic or communal unity) trait of the Filipino.



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## HIGHLIGHTS OF THE PROPOSED EPR SCHEME

- ✓ **Mandatory EPR scheme within a clear timeframe**
  - o Voluntary compliance phase (years 1-3):
    - Voluntary compliance for pilot projects to gather know-how on waste management measures, data collection, and system relevant mechanisms
    - Elimination of unnecessary plastic
    - Redesign of product packaging that cannot be eliminated
  - o Mandatory compliance phase (years 3+)
    - Obligated businesses (i.e., manufacturers, importers, sellers) assuming full responsibility for the products they bring into the market
  
- ✓ **Cover all materials from households and equivalent places of origin**
  - o Includes service packaging, those from offices, canteens, and restaurants, etc.
  
- ✓ **One, non-profit Producer Responsibility Organization (PRO)**
  - o Includes a wide range of stakeholders representing obliged members (local and MNC producers and importers), other members (plastic value chain including waste management operators), and government representatives from all levels, academia and representatives of the consumers who constitute an Advisory Board.
  
- ✓ **Strict monitoring and control systems**
  - o Strict and enforced monitoring, controls and penalties are indispensable and shall be carried out by the government (i.e., DENR).
  - o This is essential to keep a level playing field among obliged private industry, and to guarantee system transparency.
  
- ✓ **Building high-quality recycling capacity**
  - o Financial flows of the EPR system are directed towards measures for increasing both the quantity and quality of recycled plastics to enable closed-loop recycling (e.g. bottle-to-bottle recycling).
  - o This can also encourage eco-design and improved packaging materials using eco-friendly sources and/or for better recyclability.

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## WHAT NEEDS TO BE DONE NOW: IMPLEMENTATION PLAN

Government action must be anchored on a system mandated by law and regulation, with sufficient provisions for capacity and knowledge building for all stakeholders. The implementation plan for the proposed EPR scheme requires two main steps:

- ✓ **Build foundation for EPR with focus on capacity building**
  - o Prepare a medium-term system change based on an aligned understanding by all stakeholders, first by introducing the concept and then forming collaborations
  - o It should aim to establish a mandatory EPR framework and related organizations (i.e., the PRO) in the next 3 years
- ✓ **Stimulate a holistic, basic waste management**
  - o Basic waste management needs to be in place and improved, which can be re-organized according to the EPR scheme once the system is set for implementation

## CONCLUSION

The Study shows that EPR is a viable solution to deal with the plastic waste problem in the Philippines. Current laws and policies, coupled with poor implementation, are not enough to deal with this crisis. Therefore, **the first step is for policymakers to take a firm stand and mandate EPR in the country.**

This Study offers a science- and evidence-based analysis for supporting the development and implementation of a future EPR system. All sectors and stakeholders – including government leaders and policy makers – must work together to push forward EPR and make it a viable and real solution to the plastic waste problem in the Philippines.



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See WWF's global work on EPR: [panda.org/EPR](https://panda.org/EPR)

More information on the NPIN can be accessed here: <https://wwf.org.ph/resource-center/story-archives-2019/npin/>

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