

Ministry of Environment, Solid Waste Management & Climate Change (Solid Waste Management Division)

# MANAGEMENT OF POST-CONSUMER PET BOTTLES

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### **Overview of Presentation**

- Solid Waste Generation
- Solid Waste Composition
- Solid Waste Management
- Facts about PET bottles
- Management of Beverage Post-Consumer PET Bottles
- Incentive Scheme
- > Recycling Rate for post-consumer PET bottles
- Assessment of Measures
- Post "Les Assises de l'Environnement"
- > What is EPR?
- Basic Principles of EPR

#### Current waste generation and forecasted values



# **Solid Waste Composition**



PET represents 3.7% of the plastic wastes fraction

# **Facts about PET Bottles**

- Introduced in Mauritius in the 1990's, PET bottles have over the past years become the container of choice in the beverage and food industries replacing substantial quantities of glass bottles/ containers.
- About 130 million PET bottles are generated annually by the beverage industries (manufacture + importation) - Representing about 90% of total PET bottles generated.
- > Most successful recyclable plastic in the world but poses problem as waste.
- Littered PET bottles cause eyesores and clog drains, which in turn aggravate flooding incidences.
- As waste, PET bottles also occupy precious landfill space thereby seriously reducing recycling opportunities and the creation of green jobs.

# **Recycling Rate of post-consumer PET bottles**

Year	PET bottles produced (tonnes)	PET exported for recycling (tonnes)	<b>Recycling Rate</b>
2011	2,823	1,058	37%
2012	2,915	924	32%
2013	2,707	1,112	41%
2014	2,946	1,202	40%
2015	3,164	1,219	39%
2016	3,305	921	28%
2017	3,564	1,052	30%
2018	3,887	1,211	31%
2019	4,014	1,713	43%
2020	3,322	1,342	40%

### **Assessment of the measures**

- The Environment Protection (Polyethylene Terephthalate (PET) bottle Permit) Regulations 2001 and fiscal measures introduced did not boost up the collection rate for recycling as it remained around 30- 40% since the last 10 years.
- The 60 % of post-consumer PET bottles littered in the environment or disposed of in the waste stream causes environment degradation and cost associated.
- As per MRA data, there is no recycling of post-consumer PET bottles in Mauritius and we are dependent on external market for PET recycling
- Public participation to use dedicated bins to dispose used PET bottles has been weak in-spite of sensitisation campaigns carried out by the Ministry of Environment. Furthermore, majority of the public has adopted an attitude of throwaway after use in the absence of incentives to dispose used PET in dedicated bins.

#### Post "Les Assises de l'Environnement"

- After several lengthy consultations with stakeholders, Ministry established a Technical Committee to work on a centralised system for the management of beverage post-consumer PET bottles/ containers and prepare a draft regulation.
- Post Consumer consumer pays for what he/she consumes . Not the tax payer
- The system being proposed is a Deposit Refund System on post consumer PET containers based on the principles of Extended Producer Responsibility (EPR)

# What is Extended Producer Responsibility?

>EPR is an environmental policy approach in which producers take responsibility for the management of products after becoming waste, and this includes:

≻Collection;

>Pre-treatment, e.g. sorting, dismantling or de-pollution; (preparation for) reuse;

>Recovery (including recycling and energy recovery); or

- ≻Final disposal.
- >Several actors along the supply and disposal chain.

>EPR may be applied to additional categories of waste materials

>Electrical and Electronic Equipment (EEE), Packaging, End-of-Life Vehicles, etc.

>Over <u>400</u> EPR systems are operating worldwide.

EPR..."Extended Producer Responsibility schemes are a vital part of any nation's path towards achieving a circular plastics economy."

- Extended Producer Responsibility (EPR) regulations require that producers organize and pay for treatment and recycling of waste arising from their products at end of life.
- EPR is needed to translate principles into action and is therefore crucial for a circular economy, contributing to sustainable development.
- The achievements through EPR have been financed by producers (and ultimately the consumer) rather than taxpayers.

### **Basic Principles of the EPR mechanism**



# What is being proposed ?

- A centralised system operator also known as the Producer Responsibility Organisation (PRO), a non profit making organisation ( not free of charge!) will be responsible to set up and run the Deposit Refund System ( DRS)
- The centralised system operator will take over the EPR responsibilities of the beverage companies (producers / importers) who will make
  - ▶ a deposit on each PET container and
  - an eco-contribution based on the company's market share
- ALL producers / importers must adhere to the PRO to be able to put their products in the local market

## **The Deposit Refund System**





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#### Thank you for your attention

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