Case Study – EPR Implementation

22 November 2018

Agenda

- Introduction
- Case study background
- Challenges with existing practices
- Our EPR approach
- Project highlights
- Sustainable packaging through circular economy
Introduction

- Godrej Consumer Products Limited (GCPL)
  - Part of 120 year young Godrej group
  - Leading emerging markets FMCG company based out of India
  - Presence in 3 geographies – Asia, Africa, Latin America
  - 3 categories of products – home care, hair care, personal care
  - 1.1 billion consumers across the world
  - 12,000+ employees

2020 Goals

- Achieve zero waste to landfill
- Carbon neutrality
- A positive water balance
- Reduce specific energy consumption by 30%
- Increase renewable energy utilization to 30%

ENSURING EMPLOYABILITY

Train 1 million youth in skills that will enhance their earning potential

GOOD & GREEN PRODUCTS

Generate a third of our portfolio revenues from ‘good’ and/or ‘green’ products

GOOD & GREEN INDIA

- Achieve zero waste to landfill
- Carbon neutrality
- A positive water balance
- Reduce specific energy consumption by 30%
- Increase renewable energy utilization to 30%

Annnounced in 2010-11 with a vision to create more inclusive and greener India
Case Study Background

• Himachal was the first state to ban single use plastic
• After the decision was challenged in the Apex court, there were discussions around to ban MLP (multi-layer plastic) as well due to environmental concerns
• Initiated a pilot project through IBHA in 2015
  ➢ To demonstrate collection and processing of MLP waste
  ➢ Engaged with NGOs working with rag pickers in all Metro cities for collection
• Prepared a report and submitted to the Ministry demonstrating technical feasibility of collection and processing

Case Study Background

• Applications of MLP waste:
  ➢ Co-firing in cement kilns
  ➢ RDF for waste to energy plants
  ➢ Conversion into liquid fuel through thermal de-polymerisation
  ➢ Road construction
• Key challenges:
  ➢ Poor/No segregation of waste ➔ High cost of collection – INR 15–20 per kg
  ➢ Lack of infrastructure ➔ increased transportation cost and emissions
  ➢ Lack of support from local bodies to utilize for road construction
Case Study Background

• PWM Rules 2016:
  ➢ Notified on 18th March 2016
  ➢ Clause 9 (2) mandates the brand owners to collect post-consumer used plastic packaging waste
  ➢ Referred to as Extended Producers Responsibility (EPR)
  ➢ Plan of collection to be submitted to PCBs within 1 year of publication of the rules i.e. by 18th March 2017
  ➢ Implementation within 2 years thereafter i.e. by 18th March 2019

EPR Initiative

• Initially, lack of clarity in the Rules
  ➢ While seeking clarifications through CII and IBHA, we have initiated our own EPR activities

• Major issue of collection is with flexible plastics due to high volume and low mass
  ➢ Single layer and multi-layer plastic (MLP)
    ✓ Recycling of MLP back into granules is a challenge
  ➢ Most of the rigid plastic is recycled through informal sector
    ✓ Has its own challenges in terms of Human Rights
Existing Waste Management Practices

- Waste Accumulation at Household
- Transit point for transportation
- Waste Collected and Transported
- Transported to Dump yard
- Processing & Disposal

Centralized Waste Management

Challenges With Existing Practices

C - Waste Accumulation in Household Collection
T - Transit Point Transportation
D - Processing & Disposal Disposal

- Mixed waste
- No segregation
- No Incentive/Infrastructure for segregation
- Mixed waste leading to only 5% material recovery, which is either re-used/re-cycled
- Large volumes makes it difficult to segregate
- High costs due to inefficient practices
Challenges With Existing Dry Waste Collection

Our EPR Approach

• Alternate approach:
  ➢ PPP model
  ➢ GHMC came forward to tie up with GCPL
  ➢ GCPL identified Dharthi Sustainables as implementation partner
  ➢ Signed up an MOU
• GHMC: To provide land
• GCPL: To financially support to establish dry waste collection centres and processing facility
• Dharthi Sustainables: Co-fund the project, setup processing facility and operate
Our EPR Approach

- **Segregation** – Establishment of dry waste centres at transit points to support segregation
- **Awareness** – Creation of awareness in households to do segregation at source
- **Incentivize** – Incentivize Rag Pickers to collect all dry waste and transport to dry waste centres
- **Process** – Transportation to state of the art processing facility for scientific recycling

Challenges Faced

- GHMC offered land within its territory to setup processing facility
  - Consent to Establish was not provided by the PCB because it falls under ‘red’ category
  - Had to be relocated to Pashamylaram industrial area
  - Created additional financial burden for the land
Highlights of the Project

10 Swatch Resource Centers for Dry Waste
18,000 MT of dry waste per year capacity
2400 MT of Plastic waste is recycled every year
150 livelihoods created
INR 9 Cr Budget
50,000 Households being positively impacted

• Recyclable Post Consumer Plastic waste to Plastic Granules – 6 TPD
• Non-Recyclable Post Consumer Plastic Waste to Liquid Fuel – 5 TPD
• Green Waste/ Agri Residues to Bio Briquettes – 100 TPD
• Self Sustaining Model
Highlights of the Project

Waste Accumulation in Household
- Awareness to segregate at household level
- Dry waste disposal once in a week
- Wet waste disposal everyday

Transit Point
- Created infrastructure to segregate and store dry waste
- Monetary incentives to Rag Pickers to source and deliver to dry waste collection centres directly
- Ability to deliver appropriate materials to appropriate scientific re-cyclers

Highlights of the Project

Processing & Disposal
- Better material recovery rate due to segregation
- Segregated recyclable plastic is converted into plastic granules
- Non-recyclable plastic is converted into liquid fuel
- Near Zero environmental damage as this process would ensure extremely low volumes reaching dump yards
- Cuts down logistics cost by diverting dry waste from reaching dump yards, thus saving fuel

Sold to generate revenue
Stakeholder Value Proposition

Corporates
• Reduction in overall cost
• Compliance to law

Rag pickers
• Improvement in their economic conditions

Consumer
• Better living conditions

Waste management companies
• Self sustainability
• Growth through better practices

ULB
• Reduction in transportation cost
• Reduction in landfill footprint

Helps us to achieve 2400 MT per annum toward EPR compliance

Sustainable Packaging through Circular Economy

Municipal Solid Waste

Dry Waste

Recyclable Plastics
Granules

Non-Recyclable Plastics

Oil
Sustainable Packaging through Circular Economy

Plastic Granules

Plastic Products

Polybags

Sustainable Packaging Targets

• We have also announced our sustainable packaging targets FY 2024-25
  ➢ Reduce packaging intensity by 20%
  ➢ Replace at least 10% virgin plastic with PCR plastic
  ➢ Have 100% of packaging material recyclable, reusable, recoverable or compostable
THANK YOU FOR YOUR TIME AND CONSIDERATION