

Plastic Free Mauritius: Defining the Roadmap

Recycling of Plastic Wastes- Session 5

Recycling of Plastic Wastes

Moderator: Associate Prof. (Dr.) D. Surroop, University of Mauritius

Panelists:

- Mr. D. Dookee, , Ministry of Environment, Solid Waste Management and Climate Change
- Dr. R. Sultan, University of Mauritius
- Mr. Corson, Plastic Industry (Mauritius) Ltd
- Mr. Li, EN Recycling Ltd

Rapporteur: Pooja Rago, Ministry of Environment, Solid Waste Management and Climate Change



Plastic Recycling: Current Situation Where we stand?

- ▶ 14.5 % of plastic fractions in our wastes
- Estimated 75 000 tons of plastics landfilled yearly in Mauritius
- Plastic recycling rate as low as 4 %
- Objective: Promote material recovery and reduce landfilling
- Not all plastics can be recycled!
 - Recyclable: PET, HDPE, LDPE, PP; Non-recyclable: PVC, E-waste plastics, thermoset plastics



Plastic Recycling: Current Situation Where we stand?

- 3000 tons of plastic wastes recycled/exported for recycling
- Local recyclers of plastic wastes: 3
 - ▶ PIMS Ltd, EN Recycling, Surfrider

Supporting measures:

- Economic support from Government: Rs 15/kg
- Civic Amenity Centres (CACs)



Plastic Recycling: Economic Aspect

Plastic management and recycling is not only an engineering problem, but also has economic & social implications

Plastic waste generation can reach up to 89 000 tons in case of 6% economic growth in 2030.

Plastic wastes (PET, HDPE) recycled into secondary products or additionally into finished products



Plastic Recycling: Current Situation Where we stand?

- Participation of local recyclers to produce finished products from recycled plastics
 - Based on level of contamination of plastics
- Working towards circular economy



Plastic Recycling: Present Challenges

Major issues:

- No segregation at source: mixed/commingled plastic wastes
- Collection and sorting of plastic wastes is a big hassle!
- Considerable amount of plastics are landfilled
- Recyclers recover plastic wastes through their network, collectors & transportation
 - At their own costs
- High investment costs (infrastructure, electricity, equipment)
- High level of contamination of mixed plastic wastes
- Market for recycled products not well established



Plastic Recycling: What do we want?

- Promote industrial symbiosis
- More research & development
 - Products design
- Effective recovery of plastics: Collection and Segregation of plastic wastes
- Creation of more job opportunities
- Ensure health hazards and safety of people involved in the plastic waste management process



Plastic Recycling: What do we want?

Correct management of plastic containers containing chemicals and hazardous components such as paint

Collaboration between private & public sectors for better management of plastic wastes

Clear & coordinated approach on roadmap



Plastic Recycling: How to achieve what we want?

- Promote segregation of plastic wastes at source
 - Facilitate collection of specific plastic streams
- Setting up of more CACs (in the future: La Laura, Roche Bois, Poudre D'or)
- Circular economy:
 - Develop strategies, policies and infrastructure for recycling
- Certification of recycled plastics
 - Promote use of recycled plastics instead of raw materials



Plastic Recycling: How to achieve what we want?

- Promote symbiosis among recyclers
- Provide financial assistance schemes for recycling
 - Leasing facilities on equipment & infrastructure
 - Attractive loan conditions for local recyclers
- Having a clear and coordinated roadmap
 - Agreed by all the stakeholders





Thank You for your attention