

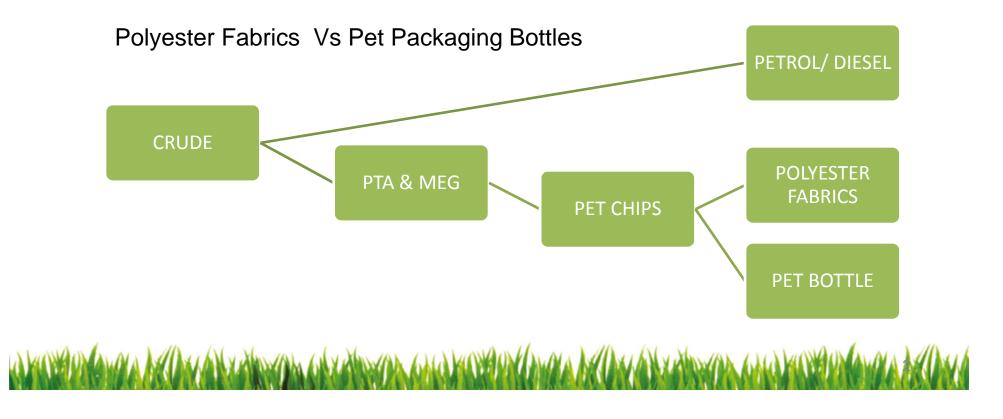


# PLASTIC BAN OR RECYCLING ??





Normal Human being is surrounded by n number of plastics







## **SOLUTION OF PLASTIC WASTE?**

■ Plastic Packaging:



- Cost Effective
- Easy to Handle

- Glass/Wood/Paper/Cork:
  - More Expensive
  - Extra Handling Cost
  - More Emission in processing

#### **NO ALTERNATE**

There is a need to find effective ways to COLLECT & RECYCLE plastic items with inclusion of all STAKE HOLDERS





### **PET RECYCLING**

- PET recycle industry is very well organized and at GOOD LEVEL in INDIA
- PET Bottle to RECYCLED POLYESTER STAPLE FIBER (RPSF) industry segment & Other Recyclers' segment's installed capacity 850KT Annually, equivalent to 420 Crores of PET Bottles per month
- Collection of these bottles, gives indirect employment to 2 lakh unskilled
   uneducated people







# **PET RECYCLING**

WE AT JB ECOTEX

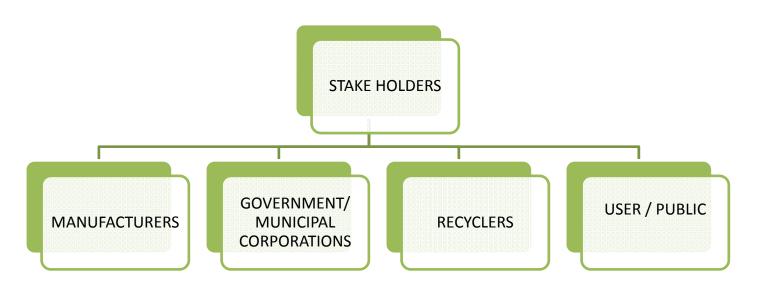
RECYCLES 200 TONNES PET WASTE PER DAY EQUIVALENT TO 1.2 Crore PET BOTTLES







# RESPONSIBLES FOR PLASTIC CHAIN







# **Plastic Product Manufacturers**

- Manufacturing plastic items using one type of plastic given no technical problem for example a toothbrush has 3-4 kind of materials which ultimately goes to land filling or burning
- Clear, printed or embossed name (English & Hindi) of the plastic along with it's recycle number
- Avoid using plastics which are recyclable but non collectable







- Use only single type of label for branding
  - At present Labels are of BOPP & PVC
  - Why can't PET, If not then BOPP can be standardized
- Standard Material and Color for Water or Cold drinks Bottle Caps
  - At present caps are of HD , LD & PP
  - Why can't PET , if not than make anyone as standard
- Big 20 liter water bottle of PET & PC, Why not only PET ?
- ■No Green & Blue bottles if not necessary



# Standard method to apply labels on bottles













- Incentivize recycling activities by means of followings: -
  - Refund of GST to recyclers and downstream chain
  - Subsidize cost of project (capital/interest/power etc)
  - Significant export incentives for recycled products
     Eg: In Asia, Bangladesh gives export incentives for pet flakes
     from recycling of waste pet bottles





**INCENTIVES** 

NEW RECYCLING INDUSTRIES MORE DEMAND OF PLASTIC WASTE MORE PRICE REALISATION TO RAG PICKER MORE PEOPLE COLLECTING WASTE

MORE COLLECTION OF WASTE





# Goverenments / Municipal Corporations

- Government research institutions for technology development to separate mixed content garments
- Compulsory use of certain % of recycled fiber/filament into garments
- Govt. Controlled Body with participation of all kind of plastic recyclers for
  - Standardization of material of different plastic products/packing methods
  - No Use of Non Recyclable/ Hard to Recycle/ Non Collectable material Eg: Milk pouches are of PE but gets mixed with household food waste, can't be segregated so unnecesarily goes to land fill sites



# Goverenments / Municipal Corporations

- WET WASTE ??
- DRY WASTE ??



Clear Nomenclature for Waste Separation





# Goverenments / Municipal Corporations RVMs (Reverse Vending Machines)

#### A ROUGH ESTIMATE OF SINGLE RVM

COST	3 Lakh
BOTTLES PER DAY	500 OR 8.5 KG OR INR 200
FIXED Employment to Unorganized Sector	NO

- Instead of RVMs, amount proposed for RVMs should be directly transferred to Recyclers / NGOs by some mechanism
- NO FLAKE OF PET BOTTLE ONLY COMPRESSION

10000 RVM = Rs.300 crores = 30000 tonnes annually INDIA's DOMESTIC CONSUMPTION AROUND 830,000 TONNES (2015-16)





Ratlam Railway Station

Actual

Reverse

Vending

Machine









# **General Public Awareness**

- Dedicated Government Wing for Awareness in General Public
  - Use of social media for awareness about recyclability of plastic waste
  - Dedicated one page in news papers & magazines explaining about recycling
  - Plastic waste awareness related videos/animated videos in Public Domain







#### Let Us All Pledge To Do The Following Wherever Possible

Reduce Usages

**Reuse Products** 

Recycle Maximum

Recover Energy From Whatever Is Not Recyclable

