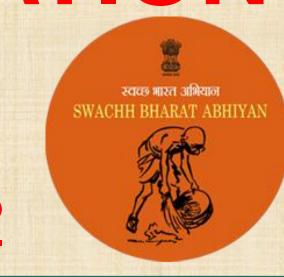


# UTILIZATION OF PLASTIC RECIRCULATE IN END USE APPLICATION

T.KASIKUMAR, M.E CAD/CAM





CENTRAL INSTITUTE OF PLASTICS ENGINEERING AND TECHNOLOGY, CHENNAI-32

#### Overview

More production equals more waste, more waste creates environmental concerns of toxic threat. An economical viable solution to this problem should include utilization of waste plastic materials for new products which in turn minimize the heavy burden on the nation's landfills. Recycling of waste construction materials saves natural resources, saves energy, reduces solid waste, reduces air and water pollutants and reduces greenhouse gases. "The aim of this Poster presentation is to create awareness of plastics among children and educate them about the positive attributes of plastics and the responsible use and disposal thereof. As future custodians of the earth, they have the chance to make a difference in their homes, schools and environment"

#### Introduction

Eco-friendly - Environment - Greener options - Reduced Carbon footprint... Companies are under continuous pressure to improve the triple bottom line. One method of measuring the environmental impact of the plastics industry, and in particular the plastics packaging industry is to track the recycling rate of its products. We use plastic products to help make our lives cleaner, easier, safer and more enjoyable. Plastics are a 21st century material driving the development of pioneering innovations to meet society's biggest challenges. They help improve resource efficiency with smarter, more efficient and sustainable use of natural resources. Plastics play a major role in delivering and sustaining the quality, comfort and safety of modern lifestyles. Its impressive ratio of cost to performance also means that people of all income groups can enjoy these benefits and the plastics industry continues to innovate in order to advance its contribution to society.

#### Recycle

Recycling is good for the environment, in the sense, we are using old and waste products which are of no use and then converting them back to same new products. Since we are saving resources and are sending less trash to the landfills, it helps in reducing air and water pollution. Energy saving is important if we are to reduce the future effects of global warming.

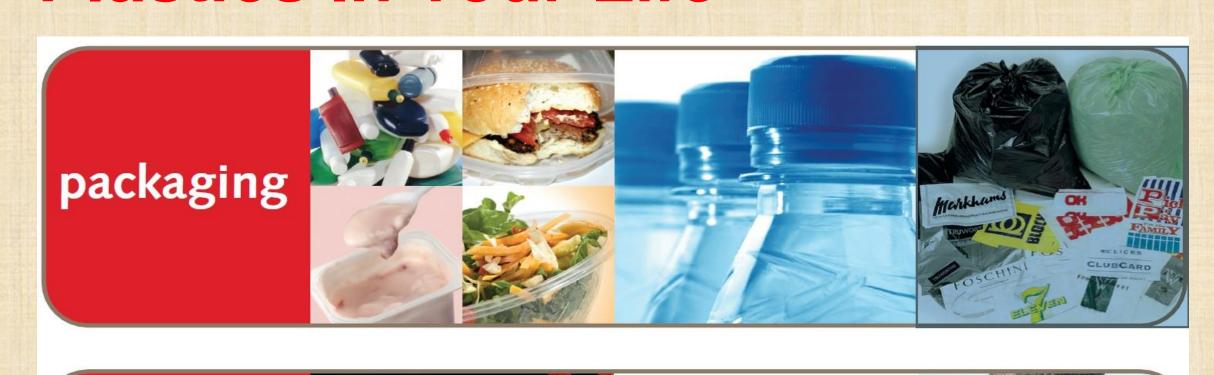
Recycling serve 2 purpose: First, it avoid landfills and helps in reducing air and water pollution and secondly, valuable material like aluminium cans and plastic and glass are reused in other forms and not wasted.







#### **Plastics In Your Life**



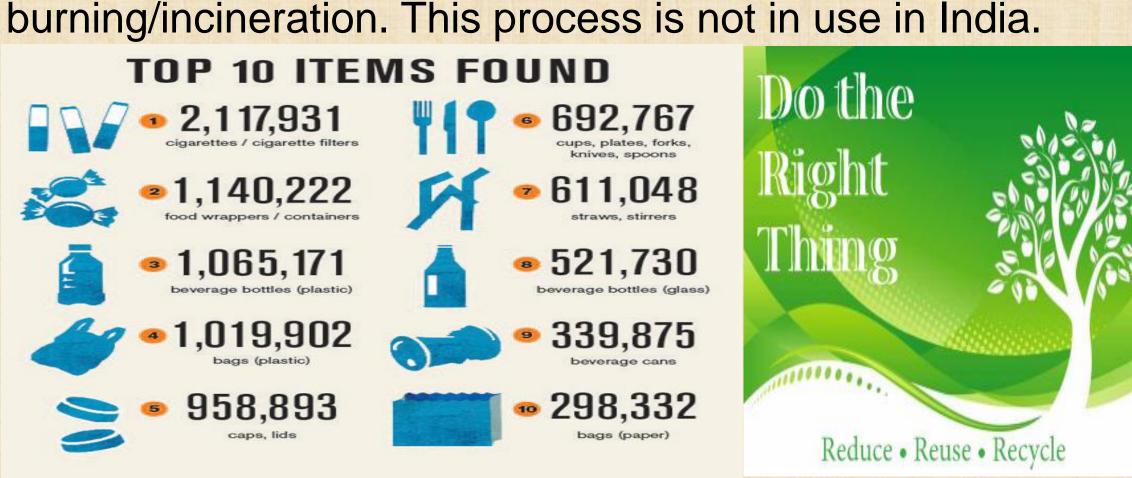






# Recycling Of Plastics Through Environmentally Sound Manner

Recycling of plastics should be carried in such a manner to minimize the pollution level during the process and as a result to enhance the efficiency of the process and conserve the energy. Primary recycling involves processing of a waste/scrap into a product with characteristics similar to those of original product. Secondary recycling involves processing of waste/scrap plastics into materials that have characteristics different from those of original plastics product. Tertiary recycling involves the production of basic chemicals and fuels from plastics waste/scrap as part of the municipal waste stream or as a segregated waste. Quaternary recycling retrieves the of waste/scrap plastics content





## Importance Of Plastic Recycle

Recycling is important in today's world if we want to leave this planet for our future generations. It is good for the environment, since we are making new products from the old products which are of no use to us. Recycling begins at home. If you are not throwing away any of your old product and instead utilizing it for something new then you are actually recycling. When you think of recycling you should really think about the whole idea; reduce, reuse and recycle We've been careless up to this point with the way we've treated the Earth and it's time to change; not just the way we do things but the way we think.

#### We should recycle because

- ✓ To Make Environment Clean
- ✓ Conservation of Materials
- ✓ Reduce Garbage in Landfills

#### **Advantages Of Recycling**

Protects Environment
Reduces Energy Consumption
Reduces Pollution
Reduces Global Warming
Judicial and Sustainable use of Resources
Conserves Natural Resources
Reduces Amount of Waste to Landfills
Create Green Jobs

### Disadvantages Of Recycling

Not always Cost Effective
Recycled Products May not Last for Long
Unsafe and Unhygienic Recycling Sites
Not widespread on Large Scale
High Initial Cost

Less than 1% of Bags are recycled. It costs more to recycle a bag than to produce a new one



#### Conclusion

Recycled and Recirculated plastics play a pivotal role from minimizing the extraction of new raw materials for products making. This often results increase in energy consumption and creates the gate way for dumping more plastic wastes on earth. So each and every earthling should aware of their role in preserving the environment and should take their foot forward in making strong print against littering the plastics product on the go. Plastics processing industries should follow the norms framed by the governments while making plastic products and must play some sociological role to give the safe living earth for coming future generation.

#### You can make a difference!

Plastic bottles are not trash. So find a collection point to recycle them.

When recyclable materials, like PET, are sent to landfill they become completely useless. Keep them out of the waste stream by recycling them. Here's the list of the collection points in your area.

# Let's Support Our National Environmental Day's



