

RECYCLING OF PLASTICS FROM WASTE ELECTRICAL AND ELECTRONICS EQUIPMENT



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Solid Waste

INTRODUCTION

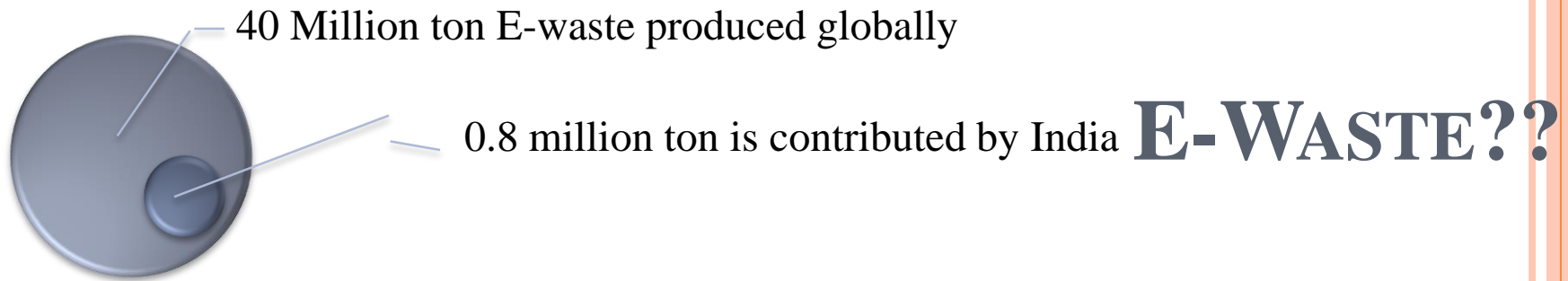
Municipal waste

Electronic waste

Biomedical waste

Industrial waste





E-Waste: Waste of electronics / electrical goods that have reached their end of life

Electronic products often contain hazardous and toxic materials and should not be dumped with other wastes.

Along with China, India is largest importer of E-waste from developed countries like US, UK and Japan.

In India 90% of mobile equipment are imported.

The rate of e-waste generation is increasing by 10% every year.

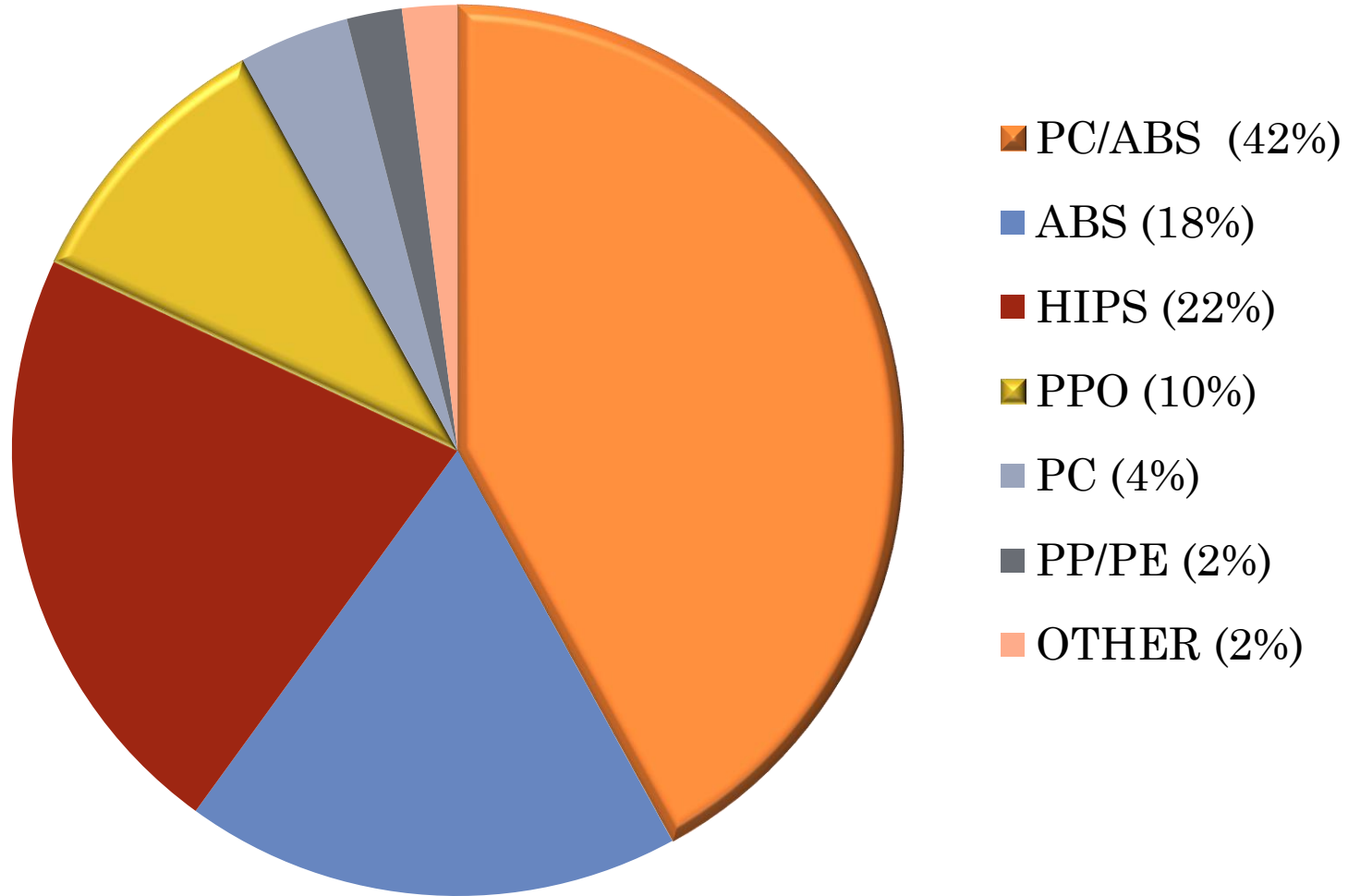


PLASTICS IN ELECTRICAL AND ELECTRONIC PRODUCTS

- Telecommunication Waste:
 - Mobile phones and Telephones
 - CD/DVD
 - Telephone exchanges Wireless Equipment cables and related scrap material
 - PC/Laptop and TV
- Electrical Waste:
 - Switches
 - Relays
 - Connectors and related Scrap Material.
- Electronic Waste:
 - Electronic – metal waste
 - Printed Circuit Boards
 - E – Equipment and Machinery
 - IC
 - Sockets Connectors.
- Cable Waste:
 - PVC
 - Pre Insulated Copper and Aluminium Cable waste.

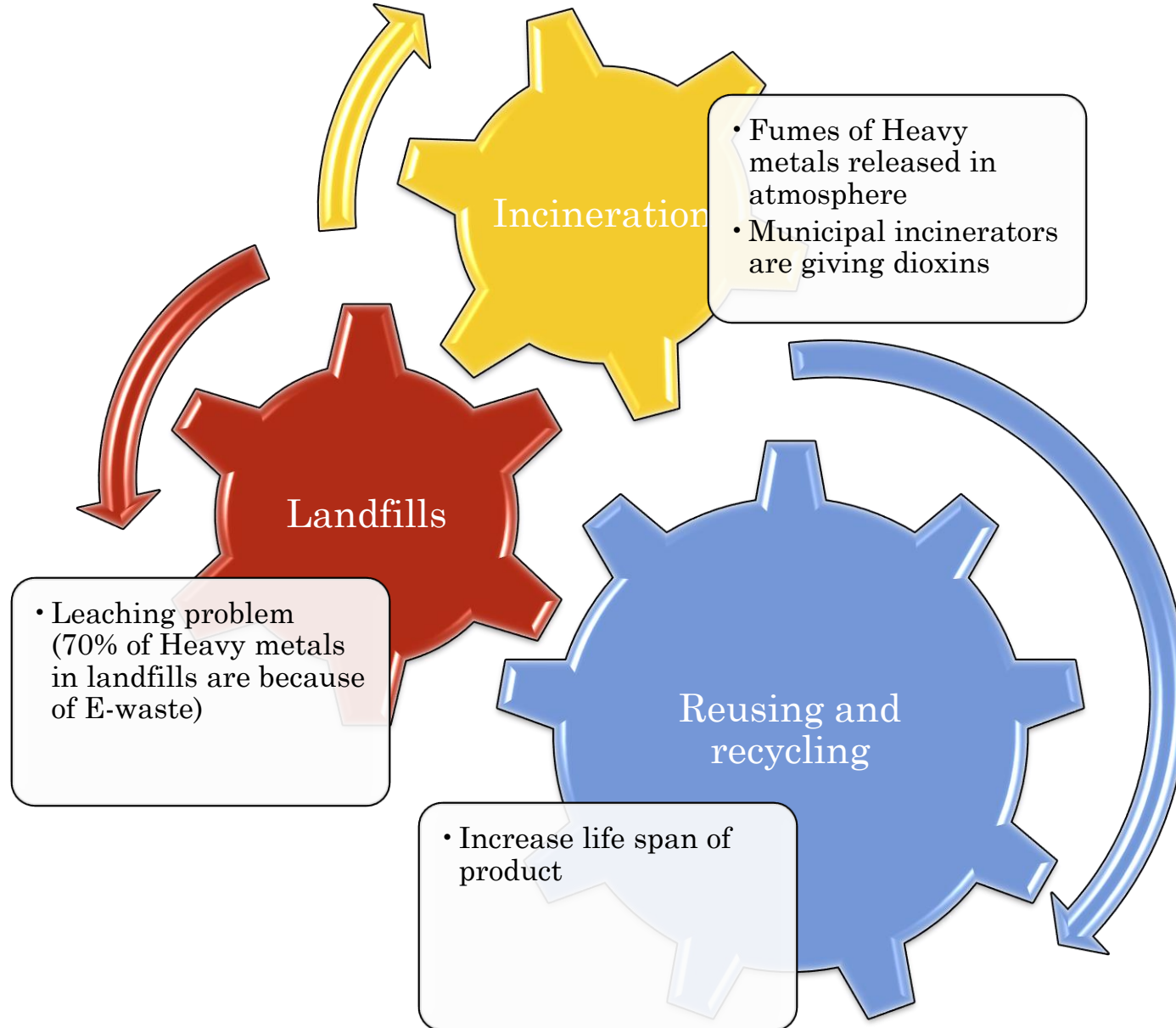


VARIOUS PLASTICS USED IN EEE





WAYS OF TREATING E-WASTE

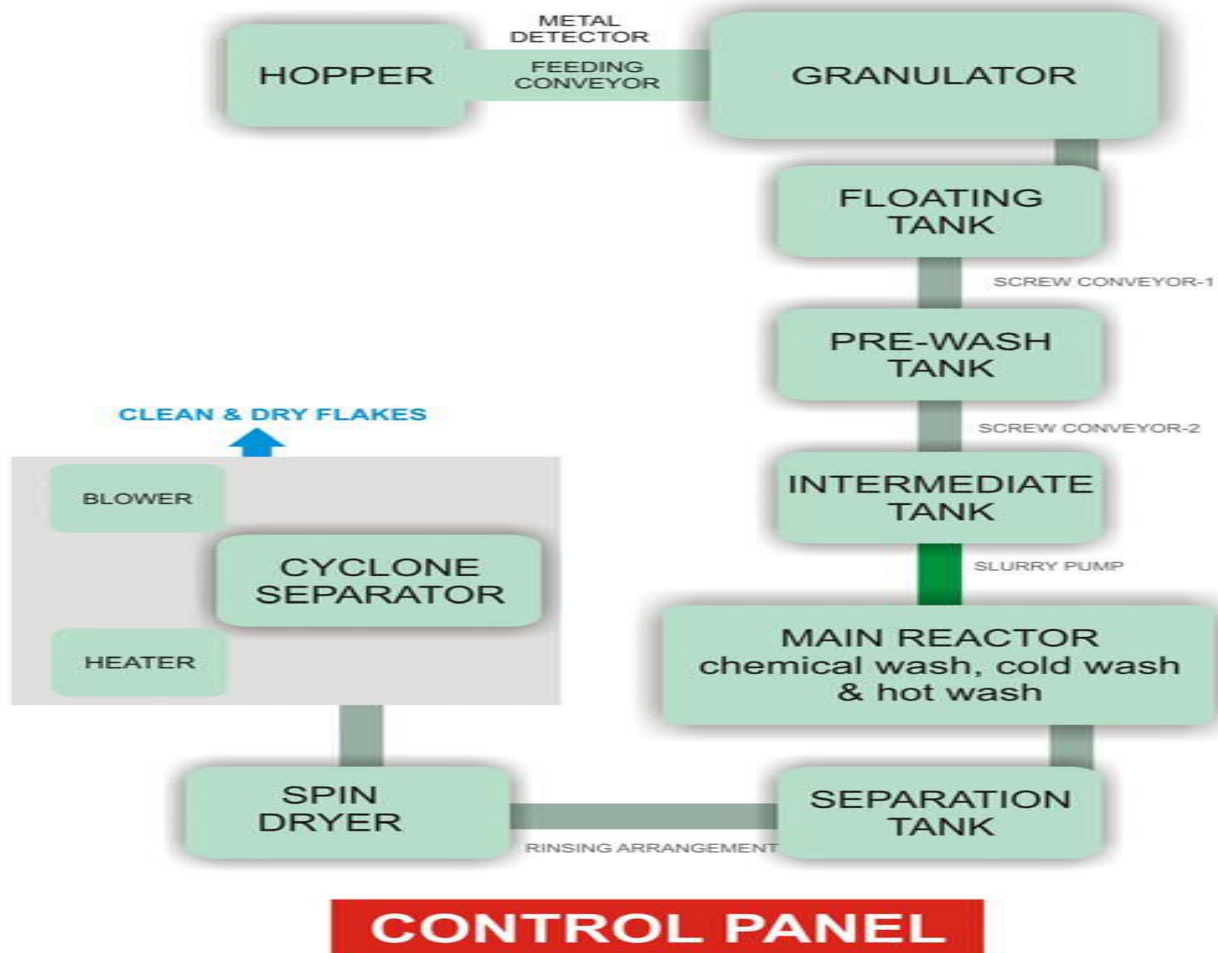


POLYCARBONATE RECYCLING FROM CD / DVDs



PROCESS LAYOUT

FLOW CHART - WASHING OF CD & DVD



EQUIPMENT DETAILS

- MATERIAL HOPPER
- BELT CONVEYOR
- WET GRINDING MACHINE
- FLOATING TANK
- SCREW CONVEYOR
- Pre-Wash
- Intermediate Tank
- CHEMICAL WASH REACTOR
- SCREW CONVEYOR
- Separation Tank
- RINSING SYSTEM
- SPIN Drying SYSTEM
- DRYER
- AIR BLOWER / CYCLONE SEPARATOR
- Electrical CONTROL PANEL

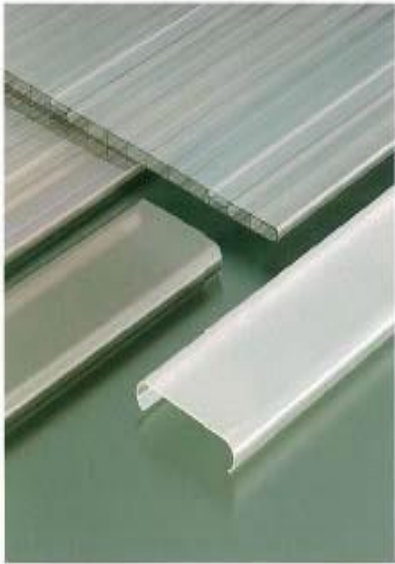


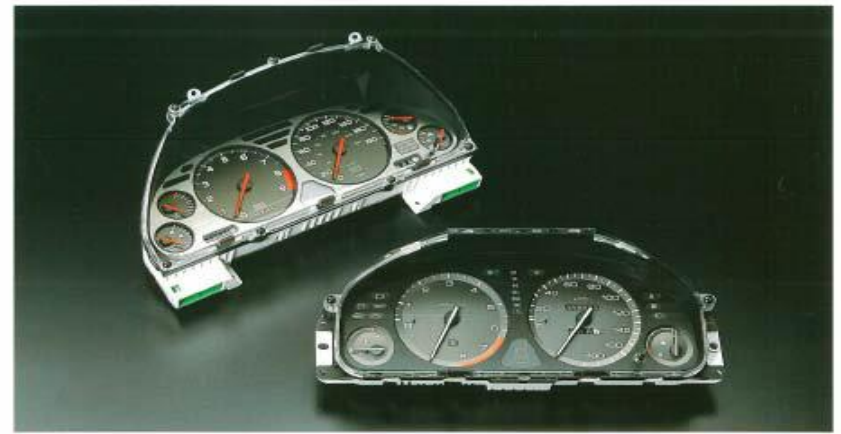
USAGE OF RECYCLED PC

PC Automotive Glazing



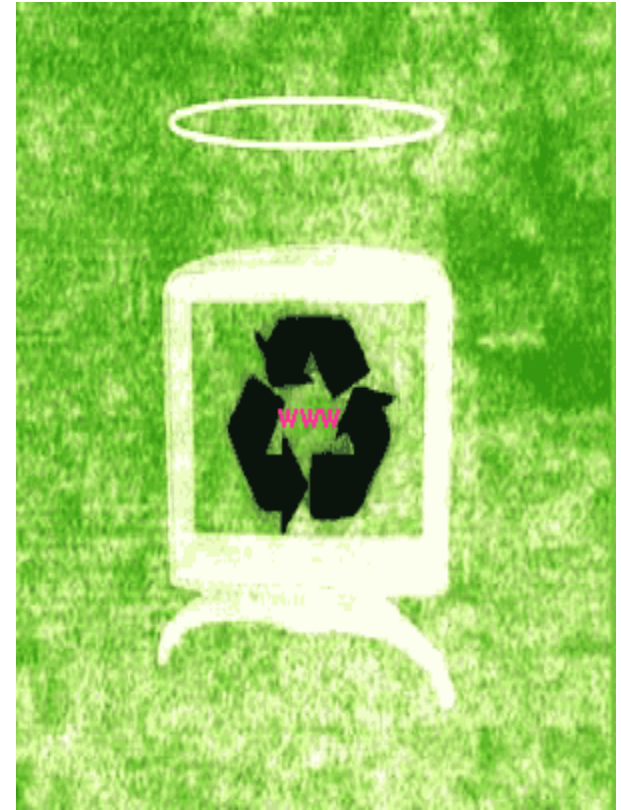
	Estimated start of production	
Roof modules	●	Running business
Fixed side windows	●	
Transparent rear body parts	●	
Backlites	●	2008e
Rear truck sliders	●	2009e
Moveable side windows	●	2012e






WHY PC RECYCLING ?


- **Growth Rate is very high**
- **More Specific Applications**
- **Higher Returns**
- **Less Competition**
- **Sound Technology**
- **Plenty of Options and Opportunities**




HOW TO DISPOSE E-WASTE



Donate working older equipment to schools colleges or government entities in need.



If PC are out of order then return it to the manufacturers. (HCL and Wipro in India has best take back service)



Send waste goods to authorised recycling facility for proper disposal.



PROBABLE SOLUTIONS

Need for stringent health standards and environmental protection laws in India,

Extended producer responsibility,

Import of waste under license,

Producer-public-government cooperation,

Awareness program, following safer and efficient methods

Choosing safer technology and cleaner substitute,

Monitoring of compliance rules,

Reduction of waste at source,

Investment opportunity in waste management sector and

Recognition to the unorganised sector in India.





Thank you

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