





before it is too late.

disposal of e-waste poses a huge threat for

the future of our planet. Let's do something



### What is e-waste?

E-waste comprises of waste generated from used electronic devices and household appliances which are not fit for their original intended use and are destined for recovery. recycling or disposal. Such waste encompasses a wide range of electrical and electronic devices such as computers, handheld cellular phones, personal stereos, including large household appliances such as refrigerators, air conditioners etc. E-waste contain over 1000 different substances many of which are toxic and potentially hazardous to environment and human health - if not handled in an environmentally sound manner.

# Why is e-waste harmful?

Composition of e-waste is diverse and differs in products across different categories. It contains more than a 1000 different substances, which fall under "hazardous" and "non-hazardous" categories. Broadly, it consists of ferrous and non-ferrous metals, plastics, glass, wood & plywood, printed circuit boards, concrete and ceramics, rubber and other items. Iron and steel constitute about 50% of e-waste followed by plastics (21%), non-ferrous metals (13%) and other constituents. Non-ferrous metals consist of metals like copper, aluminium and precious metals eg. silver, gold, platinum, palladium etc. The presence of elements like lead, mercury, arsenic, cadmium, selenium, and hexavalent chromium and flame retardants beyond threshold quantities in e-waste classifies them as hazardous waste.

### General facts on e-waste

- The e-waste rate in India is expected to exceed 8,00,000 tonnes by 2012.
- 220 million tonnes of e-waste is generated annually around the world.

- The average life span of a computer is 2 years, many old computers are being abandoned.
- The volume of e-waste is rising 3-5% every year.
- It's energy efficient to rebuild old computers, but only about 2% of PCs ever find their way to a second user.
- Flat panel computer monitors and notebooks often contain small amounts of mercury in the bulbs used to light them.
- Cathode ray tubes in older TVs and computers typically contain about 4 lbs of lead and sometimes as much as 7 lbs.

### How to deal with it

Reduce: Maintain and keep equipment as long as possible. A typical computer's life span is 2 years, but can be extended by 1-2 years with some upgrading. Buy a good monitor; it can last 6-7 years or more, and keep it for use with your next computer. Consider leasing a computer so you can trade it in for a new one at the expiration of the lease. Be sure to always use a surge protector power strip with all electronic equipment.

**Reuse:** Reuse means hazardous materials that are used for the purpose of its original use or another use.

**Recycle:** Recycling means reclamation and reprocessing of hazardous materials from a production process in an environmentally sound manner for the original purpose or for other purposes.

# Facilities available at Technopark

The Technopark campus is an ISO 14000 certified facility. Considering the importance of proper management of e-waste, Technopark has appointed a Govt. authorized agency M/s Microage Network & Solutions, Kochi to collect e-waste from the companies in the campus as a facilitator. They visit the campus once in every three months to collect e-waste.



For further assistance/clarification, please contact: