



### Arm yourself to fight e-waste

There are many ways to reduce the amount of e-waste generated. You can:

- @ Pass old computers and electronic equipment to friends, do not throw them away indiscriminately or sell them to *kabariwalas*.
- @ Make manufacturers responsible. Demand Extended Producer's Responsibility (EPR), and a 'take-back policy' from companies. Come together and submit petitions to relevant authorities.
- @ Do not throw electronic waste of any kind in the dustbin.
- @ Spread the word, tell all your friends to be more aware about e-waste.
- @ Think up interesting ways to reuse products. Your old fridge, for example, could become a handy cupboard.

### Polluting processors

A computer is an assembly of more than 1,000 materials, many of which are highly toxic, such as chlorinated and brominated substances, toxic gases, toxic metals, plastics and plastic additives.

**Don't tr@sh it. Reh@sh it.**

### Protect India from becoming a dump yard

To manage contaminating e-waste effectively, India has to deal with it in a sustainable and environmentally friendly way, starting with the 'Reduce, Reuse and Recycle' approach. We also need to promote 'Extended Producer's Responsibility' or EPR, which requires that companies be concerned not only with making their products, but also with what happens to them once they are not usable or are discarded. In several countries, manufacturers have to take back used products and recycle them under stringent regulations.

There are many international laws and conventions that are meant to restrict the flow of hazardous waste from one country to another. Some countries have refused to adopt these conventions because it does not suit their industry.

For more information, please visit:  
[www.toxicslink.org](http://www.toxicslink.org); [www.unep.fr/pc/sustain/](http://www.unep.fr/pc/sustain/) and [www.mpcb.mah.nic.in/](http://www.mpcb.mah.nic.in/)



Toxics Link  
for a toxics-free world



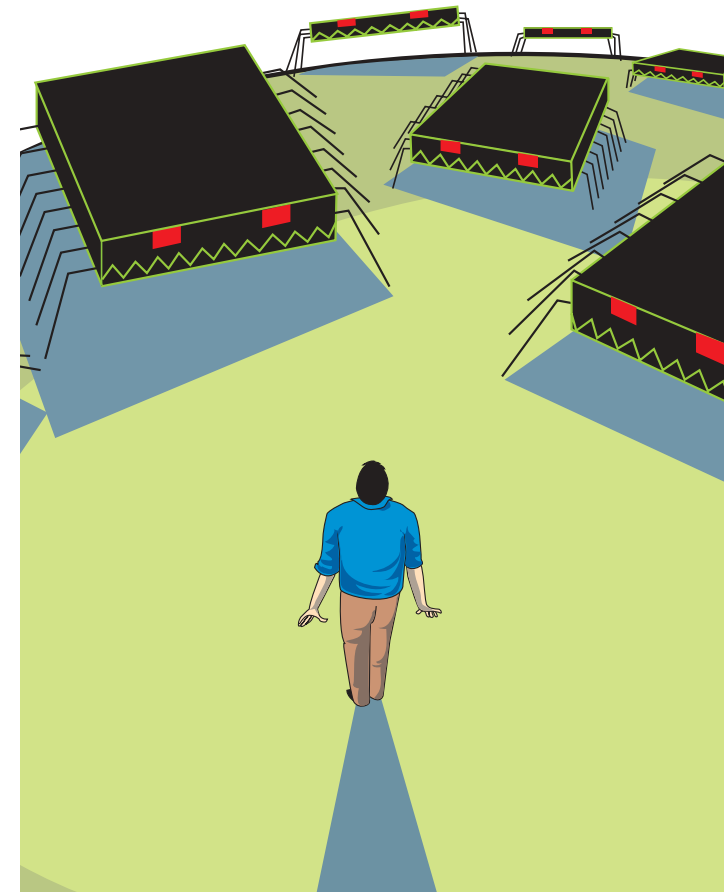
UNEP  
United Nations  
Environment Programme



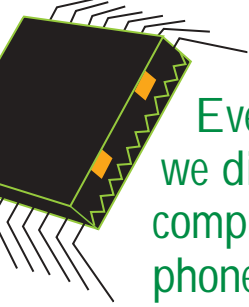
Maharashtra Pollution  
Control Board

# e-waste is scaree-waste

Join the fight against electronic waste and help curb toxins that are destroying our planet



SPLASHI



Every time that we discard a used computer, printer, mobile phone and other electrical or

electronic appliance and sell it to the local *kabariwala*, chances are that we are adding to the rising problem of e-waste. The volume of e-waste is rising thanks to the boom in consumerism and the phenomenal growth of the I.T. sector in India.

Electronic waste, or e-waste, as it is popularly called, is a collective terminology for the entire stream of electronic products such as TVs, refrigerators, computers, mobile phones, etc, which have lost their primary usage or have become obsolete. It also includes electrical waste such as wires. More recently, a much more refined term called Waste Electrical and Electronic Equipment or WEEE is used to indicate such stream of waste

### The key mischief-makers

E-waste contains lead, mercury, arsenic, cadmium, Poly Vinyl Chloride (PVC), Brominated Flame Retardants (BFRs) and other toxic and potentially hazardous substances. 1,000 such different toxic substances and chemicals are likely to create serious problems for the environment and human health if not handled properly.

Every discarded electrical and electronic gadget adds to the pollution and exposes millions of people to hazardous toxins.

### What are the sources?

E-waste is generated from two sources – domestic sources such as discarded electronics from households, offices, shops, business establishments, and import of discarded electronics for reuse. While some of the imported items are still functional, most of them are junk.

Presently, in India, most of these wastes end up in backyard recycling units where no occupational safety or environmental protection measures are adopted. This puts at risk the labourers involved in the recycling process. Although, e-waste recycling is a clandestine operation in India, tonnes of e-waste lie hidden behind fenced walls in Delhi, Mumbai, Chennai and Kolkata. With the rapid growth of the computer industry, recycling units are coming up in smaller towns as well.



Labourers in recycling units, many of whom are children, work shifts of 12 to 14 hours a day throughout the week, to recover metals, without any kind of protective gear such as gloves or masks.

### e-waste munches away at you and the environment

- @ **Lead** affects the development of brain in children. It also harms kidneys, the circulatory and reproductive systems. It accumulates in the environment and acutely effects plants, animals and micro-organisms.
- @ **Mercury**, a heavy metal, can damage the kidneys and the developing foetus, if pregnant mothers are exposed to it. Mercury, after coming in contact with water, converts into methylmercury, which becomes a part of the food chain.
- @ **Cadmium** can damage the kidneys.
- @ **Chromium**, a carcinogen, can easily pass through cell membranes to be absorbed into the body. It weakens the immune system and can alter genetic material.
- @ Short-term exposure to **beryllium, barium and BFRs** can cause serious health complications.
- @ Open burning of wires and plastics for metal recovery damages the environment.
- @ Haphazard disposal of waste contaminates water bodies and leaching of metals like lead and mercury poisons groundwater resources.

