

E-Waste Management: A Sustainable Future

Electronic waste or e-waste is one of the rapidly growing problems in the Maharashtra. E-waste comprises of a number of components, some contains toxic substances that can have harmful impact on human health, animals and the environment if handled informally. There are 20 to 50 million metric tons of E-waste from around the world that are disposed every year. Out of this number, only 13 percent is being recycled. This means that a huge percentage of E-waste ends up in landfills.



Image Source: <https://orissadiary.com/odisha-bmc-e-waste-management-project-start-june-city/>

In, India e-waste is a concern because India itself generated 8, 00,000 ton annually of e-waste and waste is also added by dumping of waste by developed countries. E-waste is a major problem in metro cities and also that time in undeveloped cities and villages which are having IT Hubs and industries, and also the small skill industries. Due to lack of proper infrastructure and technological setup for handling and management of e-waste in Maharashtra, it has become a problem and e-waste generation will be increasing at alarming rate in coming years, and is not a negotiable.

A recent report by India's Department of Scientific Industrial Research reveals that e-waste heading into India is increasing by 12% a year. The sad truth of this increase is that nearly all of it is heading into urban slums for unsafe disassembly – subsequently, a huge amount of toxins are hitting a huge number of people, and also the workers are from village and unskilled. That for they automatically make a way to unsecured life for self and others.

E-waste contains toxic substances such as lead, cadmium, mercury, plastic, PVC, barium, beryllium and carcinogens such as carbon black and heavy metals. If they are not recycled properly; this deadly mix can pose disastrous health and environmental problems. In the Slums

of Delhi discarded computers, monitors and keyboards are reduced to pieces. Areas such as Loni and Mandoli specialize in open burning and acid baths for extraction of metals and so on. The recycling of this hazardous waste should only ever take place in accredited recycling facilities where the proper safety precautions are in place. Its situation makes in Maharashtra is not any miracle because of the Maharashtra also goes to on same path.

As per hazard is concern E-waste contain variety of health as well as environment toxic substances. E-waste contains highly toxic chemicals like lead, cadmium, mercury, beryllium, BFR, polyvinyl chloride and phosphor compounds. Informal handling methods like open burning, chemical stripping that releases hazardous gases and when inhaled, effects adversely to health of the workers. As per treatment is concern recycling and recovery are best methods to treat the e-waste as it consist of precious metals like gold, silver and platinum. By recycling and recovery we are able to reduce load on landfill and heavy metal pollution and there will be revenue generation. Environmental sustainability and proper e-waste recycling practices go hand in hand. Without proper recycling practices in place, our ecosystem and environment are heavily impacted. So SMSL is looking forward to solve this problem and planning to setup an Integrated E-waste treatment facility at Maharashtra Enviro Power Limited at Ranjangaon, Dist. Pune. In future the proposed facility will be consisting of handling, storage, treatment and disposal units. It is a step toward a sustainable and bright future.