

Managing Indian e-waste

May 25 2006

A combination of greater affordability and a constant turnover in new computer technology is contributing to an e-waste problem never before encountered in India, leading to some serious thinking on how to manage a solution, say experts.

"The subject of recycling itself is quite new in India; we don't have any formal industry which is doing this task," said K.V. Rajeshwari, a fellow in the energy-environment technology program at The Energy and Resources Institute, a prestigious environmental resource think tank in New Delhi.

In partnership with various non-governmental organizations, independent bodies and governmental bodies -- including the Indian Ministry of Environment and Forests as well as the Central Pollution Control Board -- TERI is responsible for kick-starting a program that lays out organizational procedures for e-waste recycling.

Due to rising salaries and greater purchasing power as well as an unbelievably fast turnover in India's technology scene, there are a lot of old computers lying around. Presently it is estimated that at least "every two years people discard their computers, which goes to recyclers who extract the metals from them and dispose the remaining material in landfill sites," said retired Colonel R. Johri, a fellow responsible for leading the e-waste management project at TERI.

The goal, according to experts at TERI, is to make recycling of computers more efficient -- ensuring that while no part of the computer



is wasted, standards will become more environmentally friendly. An additional factor is geared toward protecting those workers exposed to the various radioactive fumes emitting from the e-waste they are handling.

Beginning the project in December 2005, TERI has since brought in experts from Europe to begin training Indian institutions in efficient recycling practices. Johri said that the project has also partnered with advisers from the University of Dresden in Germany and the University of Crete in Greece.

"Firstly, we're trying to generate data in terms of generation and disposal," he said, which would enable the structuring of a more "scientific" program by which recycling can take place.

Currently, general data on disposal rates and methods has been gathered for two of the large Indian hi-tech hubs of Bangalore and Delhi. One independent recycler has already begun the process of organized erecycling in Bangalore -- Johri said this will serve as a model for setting up institutions for the same in Delhi.

Training programs have been started for major metropolitan cities, and as of yet the hinterlands remain unchecked in terms of how computers are being disposed of. The focus on metropolises is due to continue until December 2006, after which expansion programs will be planned, said Johri.

With rural electrification and Internet initiatives in full swing, it is certain that rural areas will soon begin to face some of the same problems as the cities in terms of how to discard old technology.

The informality in recovering e-waste also evidences the "market for economic re-use of the materials," said Rajeshwari. Precious base metals



such as gold and copper, glass and plastics are all valuable materials that are already being removed from used computers and sent to various industries. More efficient removal will also ensure less waste.

"Environmental and health hazards are a major issue," she said. Educating workers who remove components on how to do it without detriment to their own health and to the environment will be a hefty challenge, but not insurmountable, according to experts.

However, the only real debate left to determine how to win the battle of educating people to recycle their computers instead of dumping them in already overflowing landfills is establishing who is paying for it.

"We are working out a combination of means," said Rajeshwari, "manufacturing associations are involved -- but it should be both the producers and users of the products both taking responsibility for paying for it."

Emphasizing the need for each stakeholder to be beneficial throughout the process, she said that getting the government as well as manufacturing and information sectors is just a beginning to what will be an evolving discourse on what is to be the right path to take. Additionally, introduction of new and appropriate technologies will have an impact on balancing costs and efficiency.

There is a large amount of interest in organizing e-waste in India, said both experts at TERI. They anticipate having a plan of action that will actually be up and running within the next five years.

"If not now, it'll never happen," said Rajeshwari.

Copyright 2006 by United Press International



Citation: Managing Indian e-waste (2006, May 25) retrieved 27 April 2024 from <u>https://phys.org/news/2006-05-indian-e-waste.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.