



GREEN CHRONICLE



One step from e-waste to e resource

E-WASTE POLICY NEEDS TEETH

DC CORRESPONDENT CHENNAI, APRIL 3

The Tamil Nadu government unveiled its policy on e-waste and management in 2010 with an objective of minimising e-waste generation and using e-waste for the beneficial purposes through environmentally sound recycling.

The policy, designed by the Elcot, also aimed at ensuring environmentally sound disposal of residual waste and create an efficient and uniform infrastructure for collection, utilisation and disposal of e-waste.

The policy made it mandatory for owners and generators of e-waste to properly recycle through recyclers, authorised by the state pollution control board and facilitate establishment of adequate numbers of adequate authorised e-waste collection centres.

It was also decided to support the development of markets for recyclable materials and insist for the submission of Restriction of Hazardous Substances (ROHS) by bidders in respect of tenders floated by the government/organisations.

The policy also aimed at creating awareness through information and education programmes on e-waste management to all sections of the society and create a data base on best global practices and failure analysis for development and deployment of efficacious e-waste management and disposal practices within the state.

It became mandatory for all electronic equipment manufacturers and bulk consumers of such equipments to maintain an inventory of all the individual component items received and despatched goods including the inventory of rejected items.

However, even after two years of the ambitious policy, there has not been much progress in disposing of the e-waste generated by households, software companies and manufacturing units and government departments.

With IT revolution in tier II and tier III towns in the state, e-waste has already put a strain in landfills in the state. Throwing e-waste in street bins is still considered as an easy method of disposal in many cities in the state.

What is your take on e-waste? Write to us chennai@deccanmail.com

DC takes the green initiative forward by discussing the prospects of safer disposal of e-waste aimed at safeguarding future generations

N. ARUN KUMAR | DC CHENNAI, APRIL 3

Don't call them e-waste, but e-resources. This is what students of Geography department at University of Madras said in reaction to Deccan Chronicle's e-waste campaign.

K. Arun Kumar, a second-year applied geology student, said look at foreign countries - they dismantle computers, monitors, cell phones and other electronic gadgets to produce a recycled, new product. So, it is not fair to call them e-waste as they become an excellent resource for producing gadgets, he argued.

"A small circuit could have gone wrong in a cell phone but another mobile may need the other parts of that cell phone. So, we can minimise e-waste by combining items," he said.

Adarsh, a second-year spatial information technology student at University of Madras, said in the current scenario, papers and other items cannot be termed as waste as they can be recycled. But it's difficult to recycle computers, cell phones and

other electronic items as they need special treatment and process to reprocess them.

"With every third person in the country having two cell phones and cell phones penetrating the rural areas also, we have a large pile of e-waste in every city and town in the country," he said.

Pointing out that it's difficult for an institution like Madras University to dispose of computers, scanners and printers, Adarsh said such electronic items become obsolete within six months, which makes it difficult for institutions to dump them in a safe manner.

Fellow student E. Varun said companies should encourage people to give their obsolete electronic goods for a nominal cost so that more people would get interested to join the initiative.

"As is being done in foreign countries, there should be a system to collect e-waste and give us money so that it would be easy for people to get rid of their e-waste rather than dump it in some dustbin," he said.

Time ripe to get things going

■ Although e-waste constitutes less than 1 per cent of the total wastes generated in India, it is growing at 2-3 per cent per year.

■ The mantra of 'reduce, reuse, and recycle' applies to e-waste as well.



Students of the department of geography at the Madras University discuss ways to dispose e-waste in a safe way. —DC

Come, let's find ways to dispose e-waste

Today's electronic gadgets are tomorrow's e-waste. E-waste encompasses refrigerators, air-conditioners, televisions, computers and mobile phones. E-waste disposal has become a major environmental concern in recent times.

Although e-waste constitutes less than 1 per cent of the total wastes generated in India, it is growing at 2-3 per cent per year, compared to other wastes.

E-waste comes from households, large and small businesses, institutions and government offices. Electronic equip-

ment are often discarded not because they are broken, but simply because new technology has left them outdated or undesirable.

E-wastes, especially computers, contain large quantities of toxic substances that pose health and environmental hazards. These toxic materials include lead, cadmium, barium, highly flammable plastic, mercury and gases. When thrown into the water - as we do with other waste - e-wastes kill fish and wildlife and damage people's health.

E-waste is most often



Nandita Krishna

Plain Talk

dumped in landfills where garbage is piled up and eventually covered with soil. Sometimes, it is burnt in incinerators or open pits. Burning of e-waste leads to formation of toxic

gases like dioxin and furan, which can contaminate the atmosphere. In developed countries, e-waste recycling takes place in recycling plants under controlled conditions. In India and other developing countries, there are no such controls. Recycling is done by hand in scrap yards, often by children.

Industrialised nations like USA, being the largest consumers of electronic goods, often dispose their e-waste by exporting them to underdeveloped nations. Thus, India along with other Asian and African countries is increasingly

becoming a dumping ground for hazardous e-waste due to cheap labour and lower disposal costs and lax or no enforcement of environmental laws.

There is also a need to promote eco-friendly techniques for the recovery and recycling of e-waste. Manufacturers should take responsibility and involve in a product take-back, remanufacturing and redesigning. The mantra of 'reduce, reuse, and recycle' applies to e-waste as well.

The writer is director, C.P.R Environmental Education Centre

HOW NATIONS FIGHT E-WASTE

UNITED STATES OF AMERICA

'National Strategy for Electronics Stewardship' in 2011, The U.S. government launched this strategy for responsible electronic design, purchasing, management and recycling in order to promote the burgeoning electronics recycling market. As outlined in the strategy report, the federal government said that it will:

- Promote the development of more efficient and sustainable electronic products
- Direct federal agencies to buy, use, reuse and recycle their electronics responsibly
- Support recycling options and systems for American consumers
- Strengthen America's role in the international electronics stewardship arena.

A new initiative called E-Cycling

'Leadership Initiative' is an industry-led effort launched in April 2011 to collect and recycle 1 billion pounds (450,000 tonnes) of electronics annually by 2016. It is coordinated by CEA (Consumer Electronics Association) and aims to bolster consumer education of e-Cycling and increase the number of recycling locations and infrastructure needed.

AUSTRALIA

As a developed country, Australia's e-waste statistics are surprisingly shocking.

- Computers are considered to be the most frequently upgraded electronic device and as such contribute greatly to the disastrous E-Waste statistics.
- Within Australia, 500,000 computers were recycled in the year 2006.
- While this may at first seem like a great figure, compare it to the 1.6 million simply thrown away, 1.8 million in storage and 5.3 million simply sitting unused on shelves and gathering dust. Add to this the estimated 2.4 million new computers Australians are estimated to buy each year and that gives a slight insight into the e-waste pandemic.

CHINA

Chain of recycling and disposal

- E-wastes are sold by producers to small peddlers (informal sectors)
- Secondhand products resold to the market for reusing
- Recovery of valuable items and metals, such as steel and iron, waste plastics, waste metal.

Key policy tools for e-wastes management

- Encouraging the formal collection system of e-wastes;
- Funding support for e-wastes sectors with good environmental performances and other economic instrument;
- Research on some key advanced technology of recycling of e-wastes;
- National demonstrations for eco-town construction in Qingdao, Shenzhen city, etc.

— Compiled by Manish Kumar