



E-WASTE MANAGEMENT POLICY 2017



Sri K. Taraka Rama Rao

Hon'ble Minister for IT, MA&UD
Industries & Commerce, Public Enterprises
Sugar, Mines & Geology, NRI Affairs
Government of Telangana

MESSAGE

As the world becomes more and more digital, thereby bringing progress and development in multiple spheres, it also brings with it the undesirable consequence of mounting e-Waste. In the last two and half decades or so, the use of electronic hardware both in offices and homes has rapidly multiplied. The ease these devices provide have made their usage ubiquitous, and regardless of social positions or income levels or rural versus city locations, everyone has access to and uses devices like mobile phones, tablets, computers and laptops, and their accessories. If we look into the manufacturing process and the material composition of these devices we notice the presence of many items that are non-biodegradable and even harmful. However, a common user typically is unaware of these aspects. e-Waste generation in India is rising at an alarming annual rate of 25%, with Hyderabad currently recording 25,000 MT per annum - the 6th largest generator in the country.

Government of Telangana is known for its sincerity in turning the state into the greenest and cleanest one in the country. Through Haritha Haram, the flagship program of Telangana, the Government envisages to increase the present 24% tree cover in the state to 33% of the total geographical area of the state. This objective is set to be achieved by taking a multi-pronged approach of rejuvenating degraded forests, ensuring more effective protection of forests against smuggling, encroachment, fire, grazing and intensive soil and moisture conservation measures following the watershed approach. The state, with active public support, is on its way to plant 230 crore saplings in Telangana. Further, Telangana has been at the forefront of Swachh Bharat Campaign. In addition to launching periodic drives for promoting cleanliness of general surroundings and water bodies, Telangana is successfully marching down the path of Open Defecation Free status. With 7 districts in the state already having been declared Open Defecation Free, Telangana aims to be an Open Defecation Free state by 2018. Having identified and addressed all the other forms of waste generated, the Government has now set its sights on e-Waste.

In our state, therefore, electronics waste remains the last frontier. If we are able to successfully tackle this problem then we will become a role model state. A very detailed policy is being brought out, based on consultation. Like every cleanliness program success depends on the participation of everyone. By taking a collaborative approach and collectively delivering on identified aspects, we can create a clean and green habitat for everyone.

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PREAMBLE AND VISION

Telangana has launched a comprehensive set of policies since early 2016 to drive development of various sectors of Information Technology and Electronics. Having one of the fastest growing technology sectors in the country also makes Telangana a leading consumer of electronic products. A recent study by ASSOCHAM estimates that India produces 13 Lakhs MT of e-Waste per annum with an annual growth rate of ~25%, with Hyderabad being the sixth largest generator amounting to 25,000 MT of e-Waste annually (2015). Therefore, it is imperative that certain measures be taken for the growth in our technology sector to be sustainable in the long run.

The Government of India, with a goal to protect the environment and the people working in e-Waste handling and management, has notified the e-Waste (Management) Rules, 2016. The rules are currently being enforced by the Central and State Pollution Control Boards. The Government of Telangana State wishes to strengthen its implementation by playing an active role in consultation with the Telangana State Pollution Control Board, mainly by creating awareness and nurturing a culture of reusing and recycling.

OUR VISION

- To create an aware society which plays an active role in managing e-Waste by segregating and channelizing end-of-life products to the right avenues
- To assist the highly unsafe unorganized sector transition into the organized sector through various initiatives
- To create a vibrant e-Waste refurbishing and recycling ecosystem in the State



STATE'S ROLE IN IMPLEMENTING E-WASTE (MANAGEMENT) RULES 2016

The Central Ministry of Environment and Forests has notified the e-Waste (Management) Rules, 2016 in March 2016. Extensive focus has been on Extended Producer Responsibility with clear responsibilities outlined for manufacturers, producers, consumers, bulk consumers, refurbishers, collection centres, dismantlers, recyclers, State Government, and urban local bodies. The Government aims to complement these rules by playing an active role in promoting refurbishing and recycling of electronic products through the right channels.

Until recently, the battle against e-Waste was fought single handedly by the CPCB and the SPCBs. Only in the e-Waste (Management) Rules, 2016 did the role of State Government in e-Waste Management be clearly outlined. The ITE&C Department, being an important stakeholder in this area with ties to both sell-side and buy-side, shall act as the nodal agency to fulfil the responsibilities mentioned in these rules.

In line with the responsibilities mentioned in these rules, the State Government shall undertake the following activities:

1. The State shall earmark industrial space or shed for e-Waste dismantling and recycling in the existing and upcoming industrial parks, estates and industrial clusters.
2. A mandatory registration process shall be notified for workers involved in dismantling and recycling after consultation with the Department of Labour, Employment Training and Factories.
3. Under the State Skills Development Mission, skills involved in dismantling and recycling shall be taken up as a priority area to ensure safety & health of the workers. TASK shall collaborate with the Skill Council for Green Jobs to develop and drive programs for these workers.
4. The Government shall prepare an integrated plan for effective implementation of these provisions.



FOR THE CONSUMERS OF ELECTRONIC PRODUCTS

The consumers of electronic products are the producers of e-Waste. The Government of Telangana State understands that initiatives targeting just the producers of electronic products will not suffice and shall take a slew of initiatives to raise awareness and incentivize consumers to channelize End-of-Life products through the intended chain.

FOR BULK CONSUMERS

Collaboration with Major Industry Organizations

The Government shall collaborate with major industry organizations such as HYSEA, NASSCOM etc. to further identify challenges in handling of e-Waste. Moreover, collective programs to refurbish and resell products will be launched.

Promotion of Refurbished Goods

All organizations, especially NGOs and other non-profit organizations, shall be promoted to procure refurbished goods. A subsidy shall be extended to all organization procuring refurbished goods, subject to proper handling of disposal. See Page 18 for further details.

Standard Operating Procedures

The State shall come up with a sample Standard Operating Procedure for handling of e-Waste which can be then be used by any company with minor modifications. This document shall take into account best practices from across the globe and the rules and regulations set by the e-Waste (Management) Rules 2016.

Government Handling of e-Waste

Maintaining a Standard Operating Procedure shall be mandated to all Government Departments and Offices. Moreover, a mandatory take-back clause shall be included in all Government procurement wherever plausible.

Records of e-Waste Generated

Bulk Consumers shall maintain records of e-Waste generated by them in Form-II and shall submit annual returns to the State Pollution Control Board before 30 June following the financial year to which that returns relates.

FOR RETAIL CONSUMERS

Awareness Campaigns

A portion of the ITE&C Budget shall be set aside for running an awareness campaign to educate citizens of the effects of irregular disposal and handling of e-Waste.

Mobile and Web Application

The Government shall set up an application to help citizens dispose e-Waste through the right channels and raise any other issue with respect to disposal and handling of e-Waste.

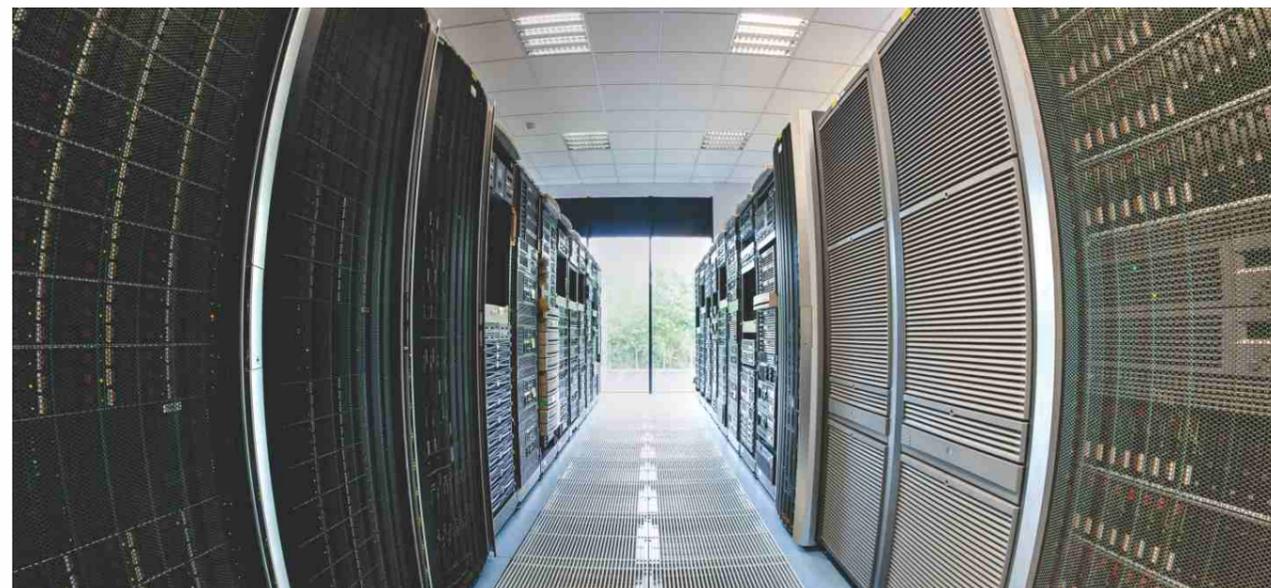
Collection Centres

In coordination with the State PCB and GHMC, collection centres shall be established in an appropriate number in residential areas, commercial complexes, retail outlets, customer care stores, educational and research institutes etc. These collection centres shall be a part of producers' collection and channelization plan under EPR. The hazardous waste collected by these centres shall be either sent for recycling, wherever possible, or transported to the Hazardous Waste Disposal Facility.

Extended Consumer Responsibility

It takes two hands to clap. The State recognizes the roles played by both producers and consumers to ensure the effective handling of e-Waste. In this regard, every consumer of electronics products is expected to fulfil the following duties to ensure products are recycled in an appropriate manner:

- Participate in take-back programs launched by the producers
- Channelize EOL products to authorized collection centres if there is no take-back program
- Ensure e-Waste isn't dumped with regular waste
- Educate fellow consumers on the harmful effects caused by irregular handling of EOL products



FOR THE PRODUCERS OF ELECTRONIC PRODUCTS

Telangana is witnessing a rapid growth in the manufacturing sector with numerous mobile manufacturers, Original Equipment Manufacturers (OEM) and Original Design Manufacturers (ODM) setting shop in the state. In addition to having bulk consumers from across the nation, these manufacturers record a significant consumption of manufactured goods within the state. The Government of Telangana, having realized the immense potential of creating a system of check at the source of production and sale, shall emphasize the responsibility manufacturers, producers and dealers share. Manufacturers, Producers and Dealers selling equipment in bulk to any non-individual entity such as a corporate, government office, NGO, NPO, startups, etc. will be required to take up the responsibility of collecting the equipment back after the stipulated End of Life (EoL) period. Further, with technology advancing rapidly, there is noticeable reduction in the EoL period. Individuals and offices are inclined towards continuous upgrading of devices. This further amplifies the responsibility of the manufacturer, producer and dealer to not only track the new equipment sold but also buy back or collect old and obsolete equipment. Manufacturers, producers and dealers shall be required to submit audited statements of equipment sold on an annual basis. These audited statements shall be cross-checked with audited statements submitted by the corporates, government offices, NGOs, NPOs, startups, etc. to ensure consistency. These measures, with continued cooperation from the manufacturing sector, shall lead to effective implementation of Extended Producer Responsibility (EPR) within the state. According to the EPR Plan, the phase wise collection target for e-Waste, which can either be in number or weight, shall be 30% of the quantity of waste generated during the first two years of implementation of rules followed by 40% during third and fourth years, 50% during the fifth and sixth year, and 70% from seventh year onwards.

The Government of Telangana understands that the implementation of EPR has been a challenging task for manufacturers and producers in the state. Establishment of widely visible collection and disposal channels has been an uphill task due to a variety of reasons. To overcome these challenges, and to encourage the setting up of collection and disposal channels, the Government of Telangana shall enter into partnerships with OEMs and ODMs in the state by providing financial and regulatory assistance.

While establishing a well laid system at source for collection of e-Waste is a defining step, it is also equally critical to reduce the usage of harmful chemicals and substances used for manufacturing equipment. Manufacturers with focused efforts on reducing usage of toxic material shall receive additional benefits apart from those already mentioned in the Electronics Policy 2016. Further, the manufacturer with the best efforts in this direction shall be recognized by the government on the following State Formation Day.

FOR THE GREEN WARRIORS



Green Warriors

As technology enabled solutions continue to become more and more intertwined with the day to day processes, the consumption and disposal of hardware is rising incessantly. It is, hence, imperative to not only ensure the collection of unused hardware, but also ascertain that every step in the value chain, from dismantling to recycling or refurbishing, follows the prescribed standards. The Government recognizes the efforts of every Green Warrior who has been a part of the recycling / refurbishing chain, and has contributed towards the successful implementation of measures to control e-pollution. Moving forward, the Government assures extensive support to Green Warriors to recognize their contributions and, also, encourage others to become a part of these joint efforts.

Collection, Dismantling and Recycling Units

Working at the processing end of electronic waste inadvertently exposes the Green Warriors to hazardous substances, which could, in a few cases, be life threatening. The Government of Telangana, in coordination with the State Pollution Control Board and Department of Factories, shall ensure strict adherence to provision of safety equipment by the processing unit to their staff. Moreover, to encourage establishment of more e-Waste processing units, the Government shall provide financial assistance to such units for procuring safety equipment and ensure a healthy set of working conditions. Moving forward, the Government shall explore the prospects of setting up an SPV to set up e-Waste Parks and a comprehensive material recycling complex.

Moreover, dismantlers/recyclers/manufacturers shall be required to obtain authorization from the SPCB and shall ensure that dismantling/recycling/manufacturing processes do not have any adverse effect on the health of workers or environment. Refurbishers shall be required to obtain one time authorization from SPCB.

Additionally, the Government shall provide performance based financial incentives to the e-Waste processing units, subject to submission of audited records. Detailed guidelines on eligibility and application procedure for these incentives can be found in the Operational Guidelines document.

Drive the Shift Towards Refurbishing

While the focus has predominantly been on recycling of unused electrical and electronic equipment, the Government intends to boost the idea of refurbishing activities in the state. Sale and use of refurbished goods is the proper way to truly realize the Reduce - Reuse - Recycle motto. In order to drive this shift towards refurbishing, the Government shall itself come forward as the anchor client by promising a minimum of 20% of the business to startups and SMEs in electrical and electronic equipment refurbishing.

Further, the Government shall actively encourage every large corporate and academic institution in the state to prefer local refurbishing establishments. To boost this area, the Government shall also consider bilaterally procuring electronic hardware for government schools and colleges from eligible refurbishing enterprises and organizations. Additionally, refurbished goods shall be given a higher preference over newer equipment in public tendering processes concerning light duty applications.

Moreover, the Government shall channelize second-grade recycled/refurbished products/components to State/Centre funded Research Institutes for performing research.

Conversion of Unorganized Sector to Organized Sector

Statistics pertaining to electrical and electronic waste processing point towards the largely unorganized recycling sector that, in many cases, also engages in hazardous activities such as metal extraction. About 95% of the recycling happens in the unorganized sector. This is a matter of concern primarily because of the life threatening risks individuals in the sector are exposed to. To curtail the rampant growth of the unorganized sector, and to provide formal, safer and better opportunities to the unorganized sector employees, the Government shall focus on the following-

1. **Awareness drives** - The Government, through collaborations with NGOs, Non-Profits and Industry Associations shall initiate an awareness drive to educate every employee in the unorganized sector about the adverse effects on their health due to unsafe practices
2. **Absorption into Organized Sector** - The Government shall introduce vocational training programs to rightly skill the current unorganized sector employees to ensure their smoother transition to working with organized sector recycling and refurbishing units that shall benefit from this policy. Moreover, the Government shall aim to create strong SHGs and conduct pilot programs such as providing workers in the unorganized sector with health cards etc. to absorb them into the organized sector.



INCENTIVES TO BOOST REFURBISHING AND RECYCLING

Incentives for Recyclers, Refurbishers, Dismantlers, and Collection Centres

- **Capital Investment Subsidy:** A subsidy of ₹ 1 Crore shall be provided for a minimum capital investment of ₹ 5 Crores for the first 5 recyclers and refurbishers. For dismantlers and collection centres, ₹ 30 Lakhs shall be provided as subsidy for a minimum capital investment of ₹ 1 Crore, for the first 5 collection centres and 5 dismantlers.
- **Subsidy on Lease Rentals:** 25% subsidy on lease rentals shall be applicable for each company for the first three years of operation. The maximum subsidy applicable shall be ₹ 5,00,000.
- **Training Subsidy:** Training subsidy of ₹ 1,000/month/person for 3 months shall be provided for a maximum of 1000 people.
- **Reimbursement of Municipal/Panchayat Taxes:** Reimbursement of municipal taxes for first three years of operation for first 5 units in each town.

Incentives for Bulk Consumers

- **Subsidy on purchase of refurbished products:** The Government of Telangana shall provide a subsidy of 10% of the total expenditure incurred on purchase of refurbished goods subject to a minimum of 100 units procured and maximum subsidy of ₹ 2,00,000.

For projects of strategic importance, a tailor-made package of incentives shall be designed.





Jayesh Ranjan IAS
Principal Secretary to Government

**Information Technology, Electronics
& Communications Department**
Government of Telangana
D - Block 2nd Floor Room No. 315A
Telangana Secretariat Hyderabad - 500 022
P: +91 40 2345 6401 F: +91 40 2345 0103
secy_itc@telangana.gov.in
jayesh_ranjan@hotmail.com

<http://it.telangana.gov.in>