

How to Dispose of Old Electronics Responsibly in your Office Space

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ABSTRACT

Looking to dispose of old electronics responsibly in your office space? Find out the best methods and practices for environmentally friendly electronic waste management in our guide. Safeguard the planet while properly handling your outdated devices.

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Introduction

Today, in the information era, we rely heavily on technological devices for both our personal and professional endeavours. The way we work and talk has changed because of these things, like computers, smartphones, printers, and scanners. But as technology moves quickly forward, getting rid of electrical waste has become a bigger problem. Businesses and people must put responsible ways to get rid of electronic trash at the top of their lists in order to protect the earth and reduce the negative effects of improper disposal.

How Throwing Away Electronic Waste Wrong Affects the Environment

When electronic trash is thrown away in the wrong way, it causes big problems for the earth. Lead, mercury, cadmium, and brominated flame retardants are a few examples of the potentially hazardous components that may be found in electronic equipment. Other examples include antimony and phosphorus. As a result of the inappropriate disposal of these electronic devices, potentially toxic substances may leak into the ground and seep into the water, which is hazardous to both the health of people and the environment.



Environmental Effects of Electronic Waste

Soil and water contamination are one of the main environmental effects of not getting rid of electrical trash properly. When electronic devices are thrown away in dumps or burned, the heavy

metals and harmful chemicals they contain can seep into the soil and make it dirty. Over time, these poisons can get into the underground, harming drinking water sources and putting people's health at even more risk.

Old Electronic and Pollution

Improper dumping practices also add to air pollution. When old electronics are burned, dioxins, furans, and other dangerous chemicals and gases are released into the air. These toxic materials increase air pollution and hurt both health and world health.

Also, the problem of running out of resources is made worse by how people throw away their old electronics. When these gadgets aren't recycled or reused, important resources are wasted. The digging and gathering of these materials from the Earth's crust hurts the environment and uses up limited resources.

Stats About Electronic Waste

Consider the following numbers to show how important it is to get rid of things in a sensible way: The United Nations University says that the world produced about 53.6 million metric tonnes of electrical trash in 2020 alone. If we have no improvement in the system then it may be possible that this value will increase up to 38% in the next 10 years. Also, only 17.4% of the electronic trash made in 2019 was legally recorded as being collected and recycled in the right way.

This data shows how useful it is to get rid of electrical trash so that it reduces the effects on earth.

Choices for Getting Rid of Electronic Waste in a Responsible Way Recycling

Recycling is one of the best ways to get rid of electrical trash. It means getting rid of old electronics and cleaning them so that valuable materials can be recovered and the impact on the earth is lessened. When recycling electrical trash or IT and Computer recycling it is very important to choose a computer recycling centre with a good reputation that follows strict environmental and moral standards.

Look for certifications like R2 (Responsible Recycling) or e-Stewards when choosing a recycling centre. These certifications make sure that the recycling process is safe for the environment, that workers are healthy and safe, and that electrical trash isn't sent to developing countries with less strict rules.



Why it is Necessary to Recycle the Electronic Waste

There are many reasons to recycle electrical trash. Like it avoids dangerous chemicals from getting into the environment. Second, recycling saves valuable resources by collecting and reusing things like metals, plastics, and glass from tech devices. By getting these materials from recycled items, fewer raw materials are needed to make new products, which puts less pressure on the Earth's resources.

To make recycling easier, it's important to get electronics ready for recycling in the right way. Remove any private information or secret data from the devices before you recycle them. This keeps your information private and safe and keeps people from getting into private data without permission. Different recycling centres remove your data so it is better to do it yourself.

Overall, reusing electrical trash is a good way to reduce damage to the environment, save resources, and help create a circular economy.

Donating or Repurposing

Donating or reusing electronics is another way to get rid of them in an ethical way. Many groups, charities, and schools will take gifts of working gadgets that can be used again. Make sure the devices work well before you give them away, and think about wiping the data to protect your private information.

When you give away electronics, you extend their useful life and let other people use them. It is important to study and find donation options that fit with the goals and values of your organization. Look for organisations that have a history of taking care of given technology in a responsible way, and make sure that the items will be put to good use or recycled properly if they can't be used again.

Reusing and Recycling

Reusing or recycling is the best way to handle older things. Older gadgets can be used in the offices so think carefully before throwing them away. Tablets can be turned into digital signs or used to keep track of goods, for example. You can use an old smartphone as a remote control or a gadget made just for one job. By giving your electronics a new user, you can get more use out of them and make less trash.

By giving away or reusing old electronics, you not only help the environment, but you also help social causes and close the digital gap by giving impoverished communities access to technology.

How to Keep Private Information Safe on Electronic Devices

When getting rid of electronic gadgets, it is important to put protecting private information first. Whether it's personal data, private business information, or secret customer information, not properly deleting data from electronic devices can lead to privacy leaks and identity theft.

To make sure that data is securely erased, you can't just delete files or do a hard restart. These ways might leave traces of data that could be used to get the information back. Instead, use strong methods that replace the data multiple times, making it almost impossible to get back. In the industry, there are multiple tools to clean the data and make it so easy to avoid the data on different devices. Most of the time, these tools use complex algorithms to overwrite current data with random patterns. It may be very hard to get the evidence of the original data. Some software tools even let you check to see if the data-wiping process was done correctly.



Along with securely deleting data, it is important to think about data security laws and standards. There are specific laws and rules to get rid of different devices. You can learn more from the resources like General Data Protection Regulation or your business's data protection standard.

Data Destruction

Also, if your business works with highly secret data or you're afraid of data security, it might be a good idea to talk to a professional data destruction service provider. These companies are experts at destroying computer data in a safe way. It may be onsite or off-site but depends upon the needs. They usually follow the best practices in the business and can give you a certificate of destruction as proof that your trash was thrown away properly.

Conclusion

This is the era of technology so it is important to handle electronic waste in a suitable way. Electronic wastes are thrown away in the wrong way not only damaging the environment but also using up valuable resources. By using responsible ways to get rid of electronic waste, like recycling, giving, or reusing it, and by keeping private information safe, we can reduce the damage that electronic waste does to the environment and encourage green practices in our offices. It is a crucial step to take care of the office's electronic material in a suitable way. It is important that we take care of our office's electronic trash in a reasonable way and encourage others to do the same. By doing this we can make the society healthier and cleaner [1-20].

References

1. Sthiannopkao S, Wong M H, Bo L (2013) Electronic Waste Management: A Review on Sources, Environmental Hazards, and Management Strategies. Environmental Science and Pollution Research 20: 2828-2841.
2. Robinson BH (2009) Electronic Waste: A Growing Concern in Today's Environment. Waste Management 29: 1437-1440.

3. Song Q, Li J, Li J (2015) Environmental and Health Impacts of E-Waste: A Systematic Review. *Environment International* 79: 22-32.
4. Puckett J, Byster L, Westervelt S, Gutierrez R, Davis S, et al. (2002) Electronic Waste: An Emerging Threat to the Environment and Public Health. *Environmental Health Perspectives* 11: 347-358.
5. Sinha Khetriwal D, Kraeuchi P, Schnellmann M (2005) E-Waste Management and the Role of Extended Producer Responsibility: A Comparative Analysis of India and Switzerland. *Journal of Industrial Ecology* 9: 189-209.
6. Vanessa Forti, Cornelis Peter Baldé, Ruediger Kuehr, Garam Bel (2020) The Global E-waste Monitor 2020: Quantities, flows, and the circular economy potential. United Nations University. https://www.itu.int/en/ITU-Environment/Documents/Toolbox/GEM_2020_def.pdf.
7. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. (1989) <https://www.basel.int/Portals/4/Basel%20Convention/docs/text/BaselConventionText-e.pdf>.
8. Responsible Recycling (R2) Standard (2021) Retrieved from <https://sustainableelectronics.org/r2-standard>.
9. e-Stewards Certification (2021) Retrieved from <https://e-stewards.org/>.
10. General Data Protection Regulation (GDPR) (2016) Retrieved from <https://gdpr.eu/>.
11. Williams E, Kahhat R, Allenby B, Kavazanjian E, Kim J (2005) Electronic Waste Recycling: A Review of U.S. Infrastructure and Technology Options. *Environmental Science & Technology* 39: 670-684.
12. Sthiannopkao S, Wong MH (2013) Environmental and Human Health Impacts of E-Waste: A Systematic Review of Epidemiological Studies. *The Science of the Total Environment* 463-464, 1147-1159.
13. Kahhat R, Williams E, Allenby B, Kim J, Xu M, et al. (2008) Economic and Environmental Benefits of Electronic Waste Recycling: A Case Study of Televisions in California. *Environmental Science & Technology* 42: 2165-2170.
14. Ali M, Wang W, Chaudhry N, Gao S, Yue D (2017) E-Waste Recycling and Management: Present Scenarios and Environmental Issues. *Environmental Science and Pollution Research* 24: 18083-18109.
15. Zeng X, Eastin J (2012) Promoting Extended Producer Responsibility for Electronic Waste: A Review of Implementation Measures. *Journal of Cleaner Production* 37: 361-370.
16. Alam MS, Muniyadi K, Ahmed Y (2020) E-Waste Recycling Practices and Disposal Regulations Implementations: A Review. *Environmental Science and Pollution Research* 27: 28984-28999.
17. Li J, Wu C, Liu G (2006) Electrical and Electronic Waste Management in China: Progress and the Barriers to Overcome. *Waste Management* 26: 1179-1189.
18. Song Q, Li J, Gao Y, Guo M (2020) E-Waste Recycling: Where Does It Go from Here?. *Environmental Science and Pollution Research* 27: 26252-26255.
19. Iacusso F, Zanetti MC, Rech S, Mathieux F (2020) The Economic Potential of Electronic Waste: Exploring the Case of Mexico. *Journal of Cleaner Production* 272: 122632.
20. Liu L, Wang Q, Liu H, Chen Y, Huang Y (2019) Environmental and Socio-economic Performance of E-Waste Recycling: A Review of Recent Life Cycle Assessments. *Journal of Cleaner Production* 231: 1264-1278.

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