E-WASTE- A BIG CHALLENGE TO ENVIRONMENTAL SUSTAINABILITY

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ABSTRACT

E-waste, or electronic waste, refers to discarded electronic devices such as computers, smartphones, and televisions. It is a growing problem as technology advances and people constantly upgrade to newer devices.

It can be harmful to the environment & human health if not properly, disposed of. These devices contain a variety of toxic materials, such as lead and mercury that can leach into the soil and groundwater if left in landfills. It is important for individuals and companies to properly recycle or dispose of e-waste to reduce its negative impact on the environment.

Additionally, e-waste can also be shipped to developing countries, where it is often handled in an unsafe and environmentally damaging manner. To address this issue, governments, businesses, and individuals can take steps to reduce e-waste, such as recycling or properly disposing of old devices, and supporting sustainable practices in the production and disposal of electronics

Key words: environment, e-waste, controlling ways, role of government,

1. INTRODUCTION

The present research paper highlights the major issue in today's world. The world is moving very fast towards technology. Each & everything related to human beings is related to technology. Already there were many issues existing in the environment. Under the tagline 'developed countries', we are doing many inventions and it is leading to trouble. It will not be wrong if we say creating trouble for ourselves. Electronic waste, or e-waste, is a growing problem worldwide due to the increasing use and disposal of electronic devices such as smart phones, computers, and televisions etc. These devices contain a variety of toxic materials, including lead, mercury, and cadmium, which can harm the environment and human health if not properly disposed of. Additionally, many e-waste items, such as smartphones and laptops, still have value and can be refurbished and reused, reducing the need for new devices to be manufactured. To address this issue, individuals and organizations can reduce their e-waste by properly disposing of old devices and purchasing products with a longer lifespan and can also be recycled.

Help keep electronic waste from growing.

Electronic waste, or e-waste, is a growing problem in today's society due to the increasing amount of electronic devices being produced and discarded. It is important for individuals and companies to properly dispose of their e-waste and for governments to implement regulations to encourage responsible e-waste management. Additionally, recycling and reusing e-waste can help to conserve resources and reduce pollution. E-waste is also a significant contributor to the depletion of natural resources, as many devices contain precious metals and other materials that are difficult to extract. To address this issue, many countries have implemented e-waste recycling programs and regulations to encourage the proper disposal of these devices. Individuals can take steps to reduce e-waste by buying durable products, repairing devices instead of replacing them, and properly disposing of e-waste when it is no longer needed.

How can we control e-waste?

There are several ways to control events and minimize its impact on the environment.

We need to promote awareness and educate ourselves and others about the importance of proper e- waste disposal. Many manufacturers and retailers offer tech- back programs where we can return old electronic devices for proper recycling. Encourage electronics manufacturers to take responsibility for the entire life cycle of their products. Take advantage of these initiatives. Advocate for stronger e-waste management regulations and policies at the local, national and international levels. Extend product lifespan and encourage the longer availability of electronic devices which can perform better considering regular maintenance and upgrading components instead of replacing entire devices. A reduced consumption is one of the most effective ways to control e-waste. We should participate in electronic recycling programs or take our old devices to certified e-waste recycling centres. These facilities ensure proper disposal and responsible recycling of electronic components. If we cannot recycle or donate our electronic device at least ensure proper disposal.

Some communities have designated electronic waste collection days or drop off points. We should avoid throwing e-waste into regular trash bins. It is better to encourage the repair and refurbishment of electronic devices. Support local repair shops and organizations that specialize in the refurbishing electronics. We need to educate others and increase awareness about the environmental impact of e-waste and the importance of responsible disposal as well as educate others on how to control e-waste and encourage them to adopt sustainable practices for their better future. Controlling e-waste requires a collective effort. We need to support the companies that prioritize sustainability and responsible e-waste management. We need to support and participate in various e-waste collection programs organized by local governments, NGO's or electronics manufacturers.

2. CONCLUSION

Reduce; reuse and recycle are the best practices to avoid e-waste. The best way to control e-waste is to reduce its generation at the very prior place. Extend the life of electronic devices by finding new uses for them. Donate or sell functional electronics that we no longer needed. Many electronics can be repaired economically, saving money and reducing e-waste. Companies should be prioritized eco- friendly design principles that are energy efficient, easily upgradable and made from sustainable materials. Consider purchasing second hand electronics when possible, it can be reduced the demand for new devices and it extends the lifespan of existing ones. We need to educate ourselves and others about the hazards of improper e-waste disposal and the importance of responsible recycling. We have to spread awareness about the impact of e-waste on the environment and encourage others to take action. Several countries have adopted WEEE (Waste Electrical and Electronic Equipment) directives that require producers, distributors and retailers to take responsibility for the collection and recycling of electronic waste. These directives also encourage the reduction of hazardous substances in electronic products. Generally, the waste electronics and electrical gadgets are from refrigerator, mobile phones and computers. These devices are the mixture of very hazardous chemical materials which causes environmental and health issues. Government may impose restrictions or bans on the use of hazardous substances in electronic products. For example, the Restriction of Hazardous Substances (RoHS) directive in the European Union prohibits the use of certain substances, such as lead, mercury, and cadmium, in electrical and electronic equipment. Recycling targets: Governments can set recycling targets to promote proper e-waste management. These targets may require manufacturers or recycling facilities to achieve specific recycling rates for electronic waste. Government can establish certification and licensing programs for e-waste recyclers to ensure that the recycling process meets environmental and safety standards. Certified recyclers are often required to follow specific guidelines and maintain records of their operations. Government should enforce e-waste regulations through inspections and audits to ensure compliance. Penalties and fines are imposed on individuals or organizations that violate e-waste management laws, serving as deterrents for improper disposal practices. By implementing these strategies, communities' governments and individuals can effectively control and manage e-waste by minimizing its environmental bad impact and promoting a more sustainable future for our safety.

It's important to note that specific rules and regulations may vary from country to country. Therefore, it's advisable to refer to the e-waste management regulations and policies of your specific region or country for accurate and up-to-date information.

3. REFERENCES

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