

EVS ASSIGNMENT -2

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The world's largest and fastest-growing manufacturing sector is electronics. It has taken on the responsibility of giving a developing society's socio-economic and technical advancement a powerful leverage over the past ten to fifteen years. The consumer-oriented growth it has, quick product discontinuance, and technological advances have resulted in a new environmental challenge. However, the waste produced in this sector has become a growing threat to the environment, which is made up of outdated electronic gadgets. Given the quantities of generated e-waste and the presence of both valuable and dangerous materials, it is a developing issue and a commercial opportunity of growing importance. The e-waste, particularly computer garbage, complicates India's already enormous challenge of managing solid waste. In the guise of free commerce, e-waste from industrialized nations can quickly enter developing nations, adding to the difficulties of trash management. However, all nations, particularly developing countries, are taking the required steps to manage the e-waste

produced in the electronics sector. Reducing the volume is the best way to deal with e-waste. The product created should be reusable, repairable, and upgradeable. The need to use less harmful, easily recoverable, recyclable materials that can be returned for refurbishment, remanufacturing, disassembly, and reuse should be emphasized. The next step of potential strategies to lessen e-waste is material recycling and reuse. The amount of e-waste can be decreased by recovering metals, plastic, glass, and other materials. These alternatives can save energy and prevent the release of harmful materials into the environment. The several vital factors shown must be addressed in an integrated manner by the manufacturers, consumers, regulators, municipal authorities, state governments, and policymakers. Policies, e-waste guidelines, and country-wide regulatory frameworks are vital for selling such operations. It is exceptional for the enterprise to begin collective coverage introduction simultaneously related to users. The effectiveness of series and recycling structures needs to be increased, and extra financing and superior recycling fees need to be constructed into the layout of e-waste control structures. The policies must cover every aspect, including technology transfers for recycling electronic trash, from production and trade to final disposal. To ensure the handling of e-waste in an environmentally sound manner and to control both legal and

illicit exports and imports, precise regulatory tools must be in place. To prevent the importation of e-waste from industrialized nations for disposal, it is also necessary to close the legal gaps that now exist. The focus should be on new product design, bans on materials and substances, including a strict ban on specific imports, more significant investigation of cross-border movements of electrical and electronic products and e-waste, increasing public awareness by labeling products as environmental hazards, and taking measures such as financial responsibility for actions and schemes.

Here, we talk about specific policies in places like Ghana and Taiwan. It includes "green procurement." Buyers can improve the environmental performance of goods and services by expressing their environmental preferences through green procurement. Participating in material reduction, reuse, and recycling constitutes ecological shopping. Through the acquisition of recyclable, reused, or recycled products, the procurement or purchasing decisions will affect the green supply chain. The pursuit of green product manufacturing greatly aids the reduction of environmental burdens. The use of green manufacturing helps to reduce waste and pollution since it is a manufacturing strategy intended to minimize the environmental impact of product manufacturing processes. By reducing their environmental impact and increasing efficiency, businesses can

achieve profit and market share goals by implementing GSCM practices, environmentally friendly manufacturing processes, and other related strategies.

So far we have discussed about electronic waste and its management. Another very important kind of waste that is generated is solar waste.

Solar photovoltaic systems are a valuable tool for lowering greenhouse gas emissions associated with electricity production. Due to their flexibility, lightweight, environmentally safe ingredients, and cheaper cost compared to silicon-based solar cells, polymer solar cells have become a focus of recent studies as the field of PV waste management has gradually expanded. The extensive use of solar PV modules causes unwanted waste to accumulate and harms the environment. Research on solar PV waste management is an emerging area that has gained increasing attention recently as a result of the rise in the amount of solar PV trash.

Bibliography-

1. <https://onlinelibrary.wiley.com/doi/abs/10.1002/clen.200700022>

(Research paper referred)