

Review on Future Economic Potential Stems from Global Electronic Waste Generation and Sustainable Recycling Practices.

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Abstract : Abstract Global digital advances associated with consumer's strong inclination for the state of art digital technologies is causing overwhelming social and environmental challenges for global community. During recent years not only economic advances of electronic industries has taken place at steadfast rate, also the generation of e-waste outshined the growth of any other types of wastes. The estimated global e-waste volume is expected to reach 65.4 million tons annually by 2017. Formal recycling practices in developed countries are stemming economic liability, opening paths for illegal trafficking to developing countries. Informal crude management of large volume of e-waste is transforming into an emergent environmental and health challenge in. Contrariwise, in several studies formal and informal recycling of e-waste has also exhibited potentials for economic returns both in developed and developing countries. Some research on China illustrated that from large volume of e-wastes generation there are recycling potential in evolving from ~16 (10–22) billion US\$ in 2010, to an anticipated ~73.4 (44.5–103.4) billion US\$ by 2030. While in another study, researcher found from an economic analysis of 14 common categories of waste electric and electronic equipment (WEEE) the overall worth is calculated as €2.15 billion to European markets, with a potential rise to €3.67 billion as volumes increase. These economic returns and environmental protection approaches are feasible only when sustainable policy options are embraced with stricter regulatory mechanism. This study will critically review current researches to stipulate how global e-waste generation and sustainable e-waste recycling practices demonstrate future economic development potential in terms of both quantity and processing capacity, also triggering complex some environmental challenges.

Keywords : E-Waste, , Generation,, Economic Potential, Recycling

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