

SOUTH KOREA LAUNCHES INITIATIVES TO RECYCLE MORE E-WASTE AT LOCAL LEVEL

By Daysi Mamani Suaquita

South Korea is dealing with increasing amounts of waste from electronic devices. These useless or unwanted parts are often called “e-waste.” Tons of old computers, mobile phones and other devices are often taken to landfills and buried under the ground, but the old products may leak toxic or poisonous chemicals. The generation of E-waste in Korea, as in many other developed as well as developing countries, has been rapidly increased, due to economic growth and shortening life span of the products.



The e-waste problem in developing countries arises from the importation of electronic goods and e-waste from developed countries. Limited safeguards, legislation, policies and enforcement of the safe disposal of e-waste have led to serious human and environmental problems in these countries. For instance, e-waste disposal impacts on human health has become a serious issue that has already been noted in case studies from China. Concern arises not just from the large volume of e-waste imported into developing countries but also with the large range of toxic chemicals associated with this e-waste.



Considering the severity of social and human health problems, local communities are setting up in South Korea appropriate management options to handle e-wastes.

In particular, some local governments are launching special e-waste recycling programs. The city of Seoul throws out about 10 tons of e-waste each year. About 20 percent of that goes to the [Seoul Resource Center](#), also known as the SR Center. There, electronic devices are taken apart so that valuable metals like gold or copper can be extracted and reused. South Korean officials say metal extraction is a \$3.8 billion-dollar industry. The chief executive officer of the SR Center, stated that reusing electronic parts is not only about earning profits but to protect the environment. And about 90 percent of what is brought to the center will be used on other products.



Other cities in the country are considering the opportunity to implement Resources Centers to undertake e-waste recycling initiatives in order to protect the environment from harmful effects caused by unethical dismantling of electronic goods.



These initiatives have been possible thanks to the amendments of the South Korea's laws of management and disposal of e-waste. Moreover, some manufacturers of electronic goods have attempted to safely dispose of e-waste with advanced technologies. Problems associated with e-waste have been challenged by authorities, and steps were taken to alleviate them with the introduction of management tools and laws at the national and local level.

Korea deals today with e-waste according to a new *Producer recycling system*. The system emphasizes the role of manufacturers in e-waste recycling as a substantial one and includes the following items: television sets, washing machines, air conditioners and refrigerators; computers, audio equipments, mobile phones and OA equipment (printers/copy machines/faxes). Firstly, while considering the recent recycling performances and recycling quantities undergone by manufacturers, the Ministry of Environment (MOE) annually announces the item-specific (i.e.,

refrigerators, washing machines, etc) rates. Thus, in the case where a new appliance is purchased, manufacturers are obliged to collect the used home appliance per consumer's request. Each item has a certain recycling target within the range of 55 to 70% based on weight.

Each manufacturer can fulfill their legal obligation in one of three ways. One way is to construct their own recycling plant and do their own recycling. Another is to outsource the job to commercial recycling companies. The third is to join the Producer Responsibility Organization (PRO), pay the required fees, and have them do the recycling. Manufacturers can choose whichever option suits them best. Both individual responsibility and collective responsibility are possible under this system.

In the event that the manufacturers do not fulfill the mandatory recycling rates, they are obliged to pay a fee, the amount of which is inversely proportional to mandatory recycling rates. Furthermore, they must take on an additional financial burden by paying a recycling charge. The Korea Environment and Resource Corporation (ENVICO) is responsible for the overall duties associated with the running system, such as keeping records on product shipments for each manufacturer, investigating the state of recycling performance and levying a recycling charge.

The increase of e-waste is not only a concern in South Korea. The United Nations says millions of tons of e-waste end up in developing countries. Toxic materials like lead and mercury can create a severe health risk to the local population.

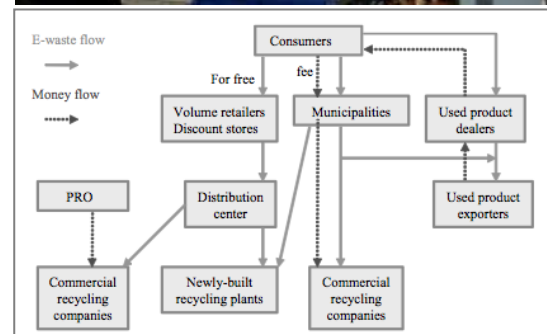


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<http://www.voanews.com/content/south-korea-launches-initiative-recycle-ewaste/2497782.html>

<http://www.ide.go.jp/English/Publish/Download/Spot/pdf/30/007.pdf>

<http://godelectronics.org/news-en/south-korea-launches-initiative-to-recycle-more-e-waste>



<http://www.lowtechmagazine.com/2009/06/embodied-energy-of-digital-technology.html>

<http://www.sciencedirect.com/science/article/pii/S0956053X13000147>

<http://blogs.wsj.com/korearealtime/2013/07/25/seoul-employs-elderly-to-tackle-phone-waste/>

<http://footage.framepool.com/en/shot/439116606-electronic-waste-electronics-recycling-urban-mining-forklift>

