

Jed Zachary A. Golez  
12B15  
Ms. Mary Jill Janine de la Paz

Solution Study Paper  
November 12, 2015

### Trash Talk

Electronic gadgets have become an integral part of society. To illustrate, a survey by Microsoft reveals that the average Filipino family possesses ten different types of gadgets for communication only (Macanas). Clearly, technological innovations have a significant impact on the Filipino lifestyle, and consequently, the demand for electronic devices is high. To cater to this, the production rate of electric devices is increased.

Following further technological advancements that will allow more new gadgets to be released, older products will inevitably be thrown away and become e-waste. Electronic waste, more commonly referred to as e-waste, pertains to any electronic device deliberately discarded due to loss of functionality (United Nations University 12). The problem now lies in the fact that there is presently no law concerning the proper treatment of e-waste in the Philippines (Agarrado and Gutierrez 16). Unfortunately, not all recycling methods practised by waste management offices are guaranteed to be safe. In particular, unsafe methods such as incinerating and physical dismantling of appliances are examples of “informal recycling” (Agarrado and Gutierrez 10-12).

According to Agarrado and Gutierrez, the issue of improperly treated e-waste is a matter of “volume and toxicity” (17). The amount of e-waste, which already comprises a big fraction of Philippine landfills today, is still expected to grow over time, and when

mishandled, the dangerous chemicals which make up e-waste pose threats not only to the environment, but also to the health of people (Agarrado and Gutierrez 7-9).

All in all, the heightened demand for electronic devices causes an imbalance between the production rate of gadgets and the swelling amount of improperly managed e-waste. To prevent this issue of pollution from worsening, proper treatment of e-waste should be ensured. The lack of proper electrical waste management methods can be addressed by raising formal recycling awareness and implementing industrial take-back policies.

Formal recycling advocacies began in areas directly concerned with waste management. Agarrado and Gutierrez report that the Department of Environment and Natural Resources held formal recycling classes to teach waste scavengers in Pier 18 and Smokey Mountain what precautions to observe when dealing with dangerous substances. The practical know-how in properly handling e-wastes allowed the people to take better care of their condition and surroundings (15).

Similarly, American inmates under the Federal Prison Industries are involved in e-recycling programs (McCollum 96). The formal recycling business has yet to fully expand, so Aducci recommends the FPI to employ inmates as e-recycling plant workers in order to prevent clashes with private companies and at the same time, open opportunities for formal recycling (McCollum 96).

These efforts, however, cannot completely convince informal recyclers to stop. Compared to simply burning or crushing, formal recycling, which requires the proper laboratory with various apparatus, is distinguishably more costly. Consequently, formal

recycling does not appeal to waste scavengers, who seek a fast source of income. Agarrado and Gutierrez highlight the large number of impoverished people in the Philippines as a reason why informal recycling, due to convenience, is more prevalent (3).

Financial shortcomings were also observed in the prison recycling programs of the FPI. In 2007, the Department of Justice reported that due to the lack of a secure workplace and proper equipment, prisoners working in recycling plants were still vulnerable to harmful chemicals (Jones 51-52). Even with the awareness about formal recycling, people working in waste management areas are unable to apply their knowledge and, at the same time, remain exposed to toxic substances due to the lack of funds.

Aside from the waste management sector, public and private companies can also exercise their responsibility towards encouraging correct e-waste treatment by fulfilling industrial take-back procedures. Supporting this, the DENR has endorsed recycling companies and programs to guide people in properly segregating their e-wastes (Fabello). These accredited companies and programs follow a set standard that ensures credible e-recycling methods. According to the Consumer Reports, these recycling systems have provided people with “more opportunities than ever before to do the right thing and dispose of their old electronics responsibly” (61).

In addition to this, electric device manufacturers such as Apple and Dell set incentives like free recycling services to motivate their customers to participate in their e-recycling campaigns (Consumer Reports 65-66). Nokia, in particular, allocates

specialized trash bins for their customers in the Philippines to collect and then ship their obsolete products to Singapore for formal recycling methods (Agarrado and Gutierrez 15). Aside from this, requiring private companies to comply with take-back policies gives them a reason to produce longer lasting gadgets. Bearing in mind the idea that whatever they produce now will add to the e-waste they have to formally recycle in the future, e-device companies will focus on the production of durable devices (Shelton 54). As a result, gadgets with better quality will be supplied, and less e-waste will be collected.

Since the success of take-back procedures relies on the cooperation between gadget users and manufacturers, it is not very effective when one side fails to contribute their share. For instance, not all electronic device manufacturers in the United States were willing to comply with protocols requiring companies to collect and recycle their respective e-wastes at a minimum fee (Callahan 58). Likewise, gadget users are also less motivated to take part in recycling collections which are not free. Examples of these were found in California, where the recycling of television and computer screens cost at least six dollars (Consumer Reports 64). The hesitations of gadget manufacturers and buyers to join e-waste take-back programs are attributed to the fact that formal recycling comes with a high cost.

Furthermore, the expenses for formal recycling are not justified by the amount of recovered recyclables (Bhutta et al.). Because the value of all the materials extracted from formal recycling does not return profit, the potential sponsors for recycling programs are discouraged.

To address the urgent need for formal recycling awareness and participation, the government educated people from the informal waste management sector, and take-back procedures were observed by formal recycling companies and electronic device manufacturers. Despite these attempts, previous studies show that informal recycling remains to be the predominant method of treating e-waste in the country. This is due to the fact that formal recycling comes with a price. As such, an expensive and unprofitable system of handling e-waste is not perceived as a practical choice in a society where money is of great value.

What people fail to see is that informal recycling also has a cost. Patronizing unsanitary means of handling the e-waste today means putting the environment and the health of people at risk in the future.

In order to attain a balance between the production rate of e-devices and the sustainability of the environment, appropriate recycling should be recognized as an obligation, rather than an option. After all, the resources which compose the gadgets are just borrowed from the environment, and naturally, these resources must be returned through proper recycling.

## Works Cited

- Agarrado, Gabrielle and Richard Gutierrez. *The Vanishing E-Wastes of the Philippines*. EcoWaste Coalition, June 2011. Web. 11 Oct. 15. <<http://bantoxics.org/>>
- Bhutta, Khurram, Adnan Omar, and Xiaozhe Yang. "Electronic Waste: A Growing Concern in Today's Environment." *Economics Research International*. (2011): n. pag. Web. 2 Nov. 2015.
- Callahan, Rick. "Manufacturers Should Be Responsible for Their Products as E-Waste." *What Is the Impact of E-Waste?*. Tamara Thompson. Farmington Hills, MI: Greenhaven Press, 2012. 58. Print.
- Consumer Reports. "Consumers Should Dispose of Their E-Waste Properly." *What Is the Impact of E-Waste?*. Tamara Thompson. Farmington Hills, MI: Greenhaven Press, 2012. 61, 64, 65-66. Print.
- Fabello, Javy. "Re: E-Waste Management in the Philippines." Message to the author. 28 Oct. 2015. E-mail.
- Jones, Kristin. "Prison Recycling Programs Are Dangerous for Inmates." *What Is the Impact of E-Waste?*. Tamara Thompson. Farmington Hills, MI: Greenhaven Press, 2012. 51-52. Print.
- Macanas, Mark. *Is the Philippines the Gadget Capital of the World?*. 15 Nov. 2011. Web. 17 Oct. 15. <<http://www.techpinas.com/>>.

McCollum, William. *Options to Improve and Expand Federal Prison Industries: Hearing Before the Subcommittee on Crime of the Committee of the Judiciary House of Representatives*. Diane Publishing, 1997. *Google Books*. Web. 12 Oct. 2015.

Shelton, Randy. "E-Waste Recycling." *Innovation and Empowerment: SNU-Tulsa Research Journal* 3. 1 (2010): 54. Web. 7 Nov. 2015.

United Nations University. "Electronic Waste: An Overview." *What Is the Impact of E-Waste?*. Tamara Thompson. Farmington Hills, MI: Greenhaven Press, 2012. 12. Print.