## Waste of a Modern World

New gadgets are flooding the marketplace at an alarming rate, but what is even more alarming is the rate at which these gadgets are leaving the marketplace and filling landfills. We know that a large portion of the minerals and chemicals in use in a typical piece of technology are toxic, corrosive, or non-degradable, and yet we let them soak into our landfills. As much as it would seem to have an easy solution, the issue is much more complex than we would guess.

Managing technology waste is an ethical and social responsibility for manufacturers, retail, and consumers alike.

Managing technical waste is an ethical issue because of the harmful effects it can have in the environment and on people. In 2011, 41.5 million tons of electronic waste was generated, and approximately 70% of that waste is ending up in landfills. The concern is that electronics currently include various amounts of very dangerous chemicals, including mercury, cadmium, lead, arsenic, and beryllium. At a landfill, these chemicals eventually disperse into the land, but potentially end up in water supplies, as well as dangering the landfill's ecosystem and even workers. This is enough evidence to conclude that allowing such a large amount of dangerous waste into landfills can be harmful to people, making it an ethical issue that needs attention.

One primary party responsible for making a serious recycling effort is the manufacturers of electronic devices. Manufacturers should make products that are easier to recycle and provide consumers with opportunities to recycle. The problem is that the cost of recycling must be lower that the value of raw materials gained from recycling in order for recycling to be profitable and to sustain recycling efforts. With the advent of light, slim, and seamless technology, taking apart

the technology into recyclable pieces is more difficult and expensive, making it less likely that these products can be recycled. Not only that, excessive use of adhesives is common in small technology, and all adhesive must be removed for recycling, only increasing the cost. To keep recycling companies able to recycle, manufacturers must be responsible enough to reduce the cost of recycling their products.

Once the device is built and shipped, it lands in the retailer's possession. Retailers are the only guaranteed interaction with the customer, and are therefore responsible for informing customers of recycling their technology, as well as providing a means to recycle. It is a relatively simple and cheap task for retailers to ensure that the customer has at least been informed that there is a need to recycle electronics. Posters, signs at the checkout, or flyers in technology sections is not much to ask for, and could help inform the public of the need to recycle technology. Also, it is also relatively cheap to have a designated technology recycling area, where a recycler can come in and retrieve the waste. Even just a colored dumpster would suffice and would make a significant impact. Therefore, retailers can make that positive difference and should do so.

Now the device itself is with the consumer, going through normal use and wear. Once informed, the consumer is responsible for making sure the old device ends up in the recycling system. Hopefully, convenient locations for technology waste are available at local retailers, but not everyone remembers it or is willing to recycle. This can be overcome by consumers who are motivated to recycle grouping together and encouraging recycling technology waste by awareness campaigns or by making even more convenient solutions for others. This is an

ambiguous issue to overcome, but there is a responsibility of consumers as a community to recycle technology waste.

Waste is something our modern world never tires of producing. From disposable plates to disposable phones, we live in a world where it's easy to throw away and think about it no more. The problem is that advancing technology depends on chemicals that are hazardous, and could hurt people if not managed properly. We all have an ethical responsibility to keep our communities safe and healthy, and managing technical waste in a necessary facet of that responsibility.