

Team Name:

Teacher Name:

Green Heart Action Plan

Problem Definition/ Problem Statement

The problem we want to solve is the inaccessibility to recycling and reusing smartphones. To prevent toxins from being released into the environment.

Root Cause of the Problem

The root cause of this problem is that the few electronic recycling facilities are out of the way for many people. Therefore they throw it in the trash because it is convenient.

List at Least Three Credible Resources that Support Your Problem Statement

-Your drawer full of old tech could have a new life-or start a fire. Here's how to handle it. (The Washington Post)

<https://img.washingtonpost.com/technology/2021/09/28/how-to-recycle-repurpose-e-waste/>

- E-waste: 5 billion phones to be thrown away in 2022 (BBC)

<https://www.bbc.com/news/science-environment-63245150>

-International E-Waste day: of 16 billion mobile phones possessed world wide, 5.3 billion will become waste in 2022 (Weeforum)

https://weee-forum.org/ws_news/of-16-billion-mobile-phones-posessed-worldwide-5-3-billion-will-become-waste-in-2022/

- Electronic Waste Disposal- Duke University

<https://sites.nicholas.duke.edu/loribennear/2012/11/15/electronic-waste-disposal/>

Proposed Solution

Once a month phone collection at city institutions such as schools, courts, gyms, and libraries.



In commonly visited facilities around the county we will implement old smart phone recycling procedures . You will be able to turn in old smartphones to employees at these facilities who will collect them. They will then place the smart phones in lithium ion storage containers. These will be collected and transported to an E-waste recycling facility.

How We Will Measure Our Success

At each facility employees would count the number of smartphones collected right before they are transported to the recycling facilities. We will analyze data from previous years of smart phone recycling and compare it to years when recycling plans are implemented

Who are Decision Makers We Need to Reach

We will reach out to county leaders about our plan and if approved we will communicate with management of establishments that may be interested in participating in our plan. We will also need a company that is willing to produce a small incentive for people who recycle their old smartphones.

Our 3-5 Step Plan for Change

1. Reach out to county leaders to educate and inform them of our plan
2. Reach out to management of institutions that support and would be willing to implimentour plan
3. Design easy to inform and advertise recycling phones at designated sites
4. Find a company that will take many smartphones

Impact & Equity

We hope our project will reduce the amount of harmful metals -such as lead and mercury- that end up in our environment and our drinking water. Because they are extremely difficult and time consuming to filter out. This will make not only people but also the environment we live in safer, because there will be less harmful metal that gets exposed to the environment due to throwing away old cell phones.



What Help We Need to Be Successful

- Money for poster advertisements to inform residents of the effects of throwing cell phones in the trash, and telling them where they can easily recycle them in the future.
- find companies that contribute an incentive for recycling a phone: ex. Food companies, gift cards
- We need community institutions that will participate, such as libraries, gyms and court houses, community centers
- Locate an E- Waste facility that has the ability and capacity to successfully recycle a higher volume of smartphones

