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# Green Heart Action Plan

## Problem Definition/ Problem Statement

Our air is getting polluted, and our ozone layer is getting damaged because of the excess carbon emission worldwide. To stop or at least slow the carbon emissions, a car filter could reduce the carbon fumes from a car's exhaust pipe which would be stored for disposal later.

## Root Cause of the Problem

As the human population grows, more cars and factories are built. As more supplies for humans are produced, factories release more carbon dioxide. Usually, the trees and plants convert the carbon dioxide to oxygen, but due to deforestation, there won't be enough trees to convert the CO<sub>2</sub> to oxygen.

## List at Least Three Credible Resources that Support Your Problem Statement

1. [https://climate.nasa.gov/vital-signs/carbon-dioxide/?intent=l2l#:~:text=Carbon%20di%20xide%20\(CO2\)%20is,natural%20processes%20like%20volcanic%20eruptions.](https://climate.nasa.gov/vital-signs/carbon-dioxide/?intent=l2l#:~:text=Carbon%20di%20xide%20(CO2)%20is,natural%20processes%20like%20volcanic%20eruptions.)
2. <https://ourworldindata.org/co2-emissions>
3. <https://www.nyserda.ny.gov/Featured-Stories/Steps-to-Lower-Your-Carbon-Footprint>
4. <https://www.worldometers.info/co2-emissions/co2-emissions-by-country/>



## Proposed Solution

A car filter that will be able to trap carbon dioxide to be later reused for other purposes.

## How We Will Measure Our Success

We will measure our success by the amount of carbon dioxide contained in the car filter.

## Who are Decision Makers We Need to Reach

Some Decision Makers that need to be contacted may include:

- Fernbank Science Center
- Dunwoody Nature Center
- Atlanta Regional Commission' Climate Change & Resilience

## Our 3-5 Step Plan for Change

1. Use scrap metal to make a container and pipe attachment.
2. Add the exhaust pipe attachment and attach it to the car.
3. Test the car and see how much carbon dioxide is released in and outside the car.
4. Make adjustments as needed to provide safety to those in and around the car
5. Profit.



## Impact & Equity

By putting the car filter on, it will reduce the amount of carbon dioxide into the air, thus, reducing air pollution. And if testing is successful enough then it might be implemented by the government or used on gas cars to reduce their carbon footprint.

## What Help We Need to Be Successful

We need good access to the right materials, and tools, to make the car filter. We also need to have the proper place to make said car filter. We may also need adult supervision while making the car filter, to make sure that we don't hurt ourselves. We also may or may not need safety equipment depending on the materials we use.

