

CARBONEERS

Background Information: The world is facing a crisis like never before, and a dire solution is imperative. It is up to us, the next generation to come up with ideas to resolve the problem of excess atmosphere CO2!

Our Approach: We have decided to take an approach that we find affordable, practical and has the potential to be applied on large scale.

We will be using the GREEN ROOF, an innovative method that involves placing a tray-like structure on the roof of cars or trucks in order to act like a carbon sink.

Why This method? (Pros)

- Grass is a great carbon sink.
- Grass is generally durable and requires little watering and maintenance.
- Car roofs (or trucks) are generally unused flat areas.
- There is a massive number of cars and trucks worldwide, which multiplies the efficiency of this technique.
- It is an affordable and arguably aesthetically appealing method, hence making it practical and applicable.

However, several cons are also presented, including the possibility errors in setup and usage which might damage the car, reduced efficiency of the car due to the grass causing slight friction, and the fact that it may not be so socially accepted at first. After all, why plant a green afro on that red-hot convertible you just bought?

How Does It Work?

A tray is secured to the roof of the car. We used metallic strap-ons for our model. Picture 1

A thin layer of soil is placed, and we planted different types of grass on the roof for variety. (One type also works, we have made a tray for that.) Picture 2a, 2b

The grass can be cut, and there is a drainage pipe for excess water. Picture 3

References:

Dr Shadi Hamadeh (Doctorate in Agricultural Engineering)

Mr. Nadim Rawda (Masters in Agricultural Engineering)

Dr Nadim Khoury (Doctorate in Soil Sciences)

Mr. Marco Torelli



P2a



P2b



P1



P3