SOLAR TRACKING SYSTEM

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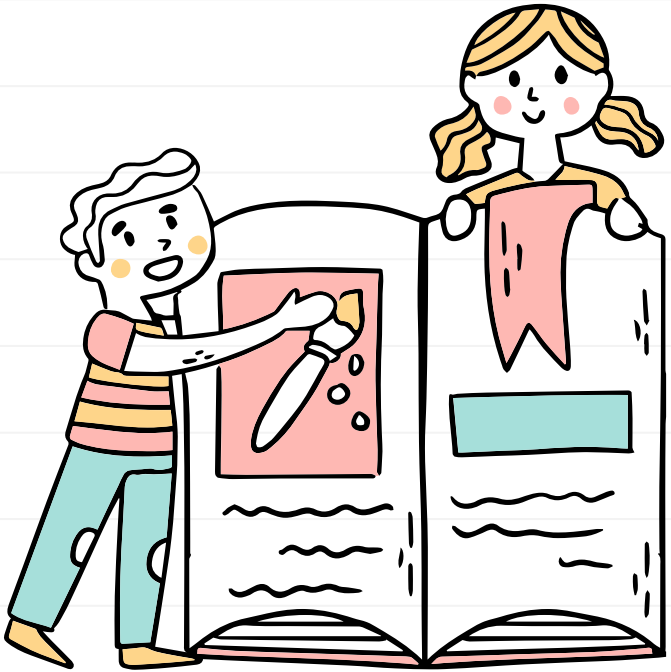
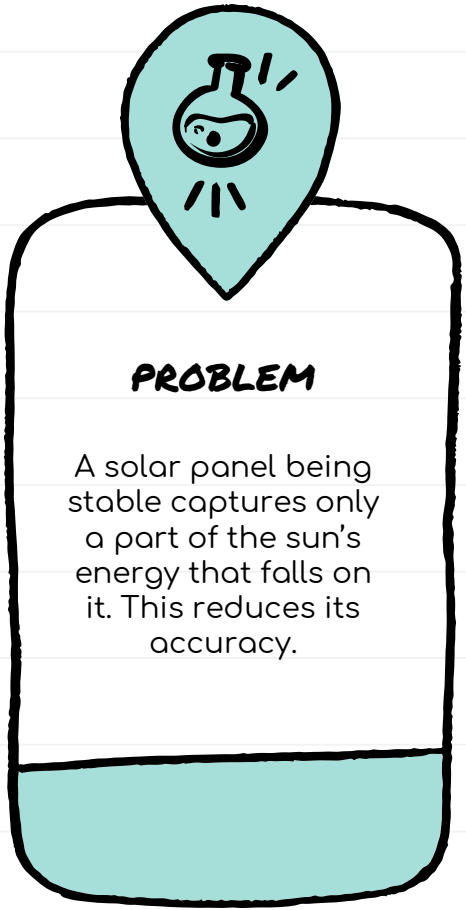
INTRODUCTION

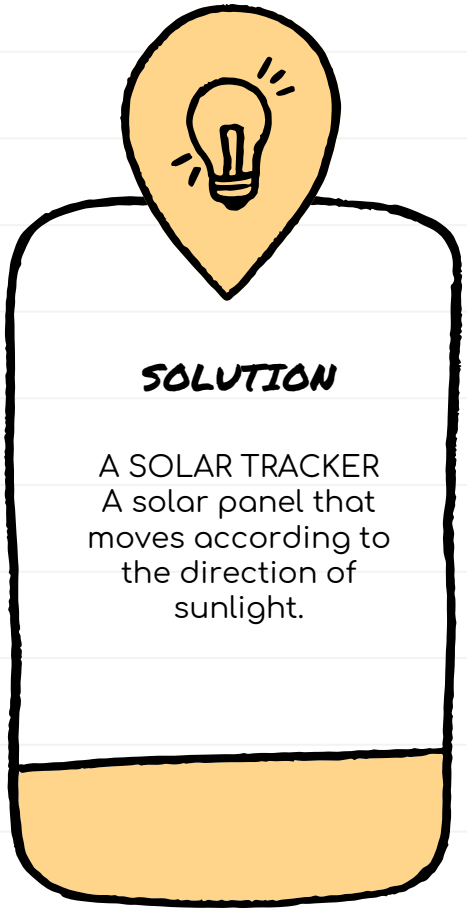
The sun moves across the sky, from east to west, every day. Yet, the solar panels we use to get energy from the sun are stable.
Why?
Shouldn't the solar panel move with the sun from east to west?





PROBLEM

A solar panel being stable captures only a part of the sun's energy that falls on it. This reduces its accuracy.



SOLUTION

A SOLAR TRACKER
A solar panel that moves according to the direction of sunlight.

PROTOTYPES

SINGLE AXIS SOLAR TRACKER

It is my first prototype, works on LDRs and moves according to the direction of light in a single axis.

DUAL AXIS SOLAR TRACKER

It works on the same concept as that of the single axis solar tracker, but it moves on two axes.

SINGLE AXIS SOLAR TRACKER - A

It is a modified and much more accurate version of the first model, but it does not work on sensors. It is a completely programmed model, making it efficient.

DUAL AXIS SOLAR TRACKER - A

This is a modified version of the second model. It does not work on LDRs but uses an accelerotmeter for higher accuracy.

MIRROR SOLAR TRACKER

This is my latest idea. I have not yet made it a prototype. The idea is to place mirrors on sides of solar panels so that light gets reflected off the mirrors onto the solar panel.

FEATURES OF THE TRACKER

VARIETY

There are various different prototypes to set to one's needs. This gives you a choice to select a one that fits you the best!

ACCURACY

The prototypes are themselves sufficiently accurate which gives a promising accuracy to the product itself.

SUSTAINABILITY

The product will be designed to sustain highwinds, high altitudes and other natural conditions such as rain.

ENVIRONMENT

Trackers will enhance the efficiency of solar panels and will make the user self susstainable on electricity grounds.

This is just the beginning of a long journey...

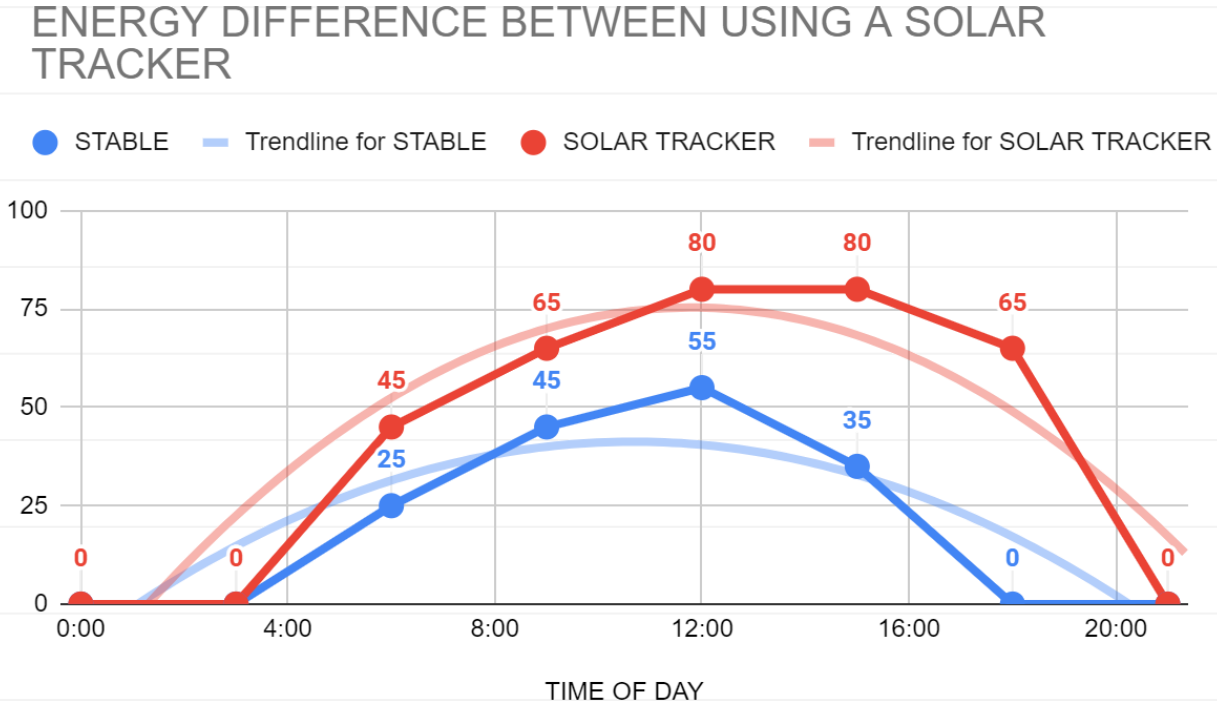
01 α-prototype
β-Prototype

02 Small scale manufacturing and minimum viable product

03 Then go for scaled up manufacturing and set up a market

Customer feedback is important to the modifications of the solar tracker. Hence, at each stage I am going to collect feedback and implement improvements whenever possible.

...AND DID YOU KNOW THIS?

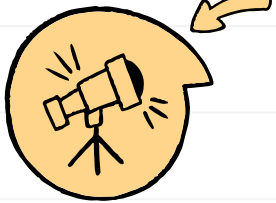


The difference in energy absorbtion when using a tracker and when without is significant.

SOLAR TRACKER

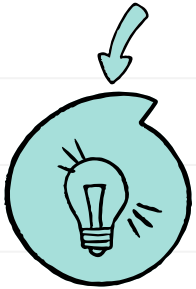
STABLE SOLAR PANEL

USES OF THE SOLAR TRACKER



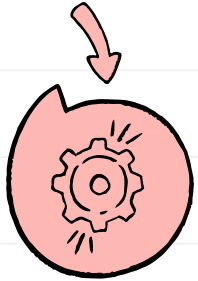
ON ROOF TOPS

Both models of the single axis solar tracker can be used efficiently on roof tops.



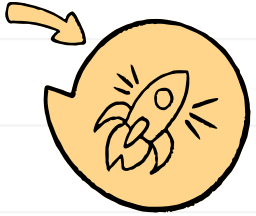
IN DESERTS

Deserts are one of the most barren places in the world. Yet they are highly arid and a lot of sunlight comes through.



ON TRAIN TOPS

Train moves on its own. But, the dual axis solar tracker has been made exactly for this purpose.



EVERYWHERE

Sunlight falls everywhere. Why not use solar panels everywhere?

We harness only 3% of the sun's energy cast upon us. The rest 97% is out there and if that could be harnessed we would not only be self sustainable but our reliance on carbon forms of energy would be zero, energy would be free for all and we would have all resources and energy of anything we have dreamt of!

This is not an "Innovation", It is a necessary REVOLUTION.

Thank you.