PROJECT REPORT

ECO COOLER SYSTEM

Course: Business Management and Ethics

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INTRODUCTION

Summer is in full swing and many of us are complaining about the heat. But few places reach the scorching temperatures which residents of Pakistan experiences and air conditioning is simply not an option for most people living in rural areas. a clever DIY cooling system that doesn't need any electricity and is built from a common waste item: empty plastic soda bottles and we call it Eco Cooling System.

OBJECTIVE

The Objective of our project is to built a device which is not only smart in a sense that it do not consume electricity but in essence it is a way to recycle wasted raw material for sustainable development of our society by reducing environmental pollution as well as reduction in power usage.

SUSTAINABLE DEVELOPMENT GOALS

According to United Nations there are 17 different area on which people need to work on to transform our world into sustainably developed society. This Project comes under those goals on goal number 7 which is to ensure access to sustainable, reliable, affordable and modern energy for all.

PROJECT DESCRIPTION

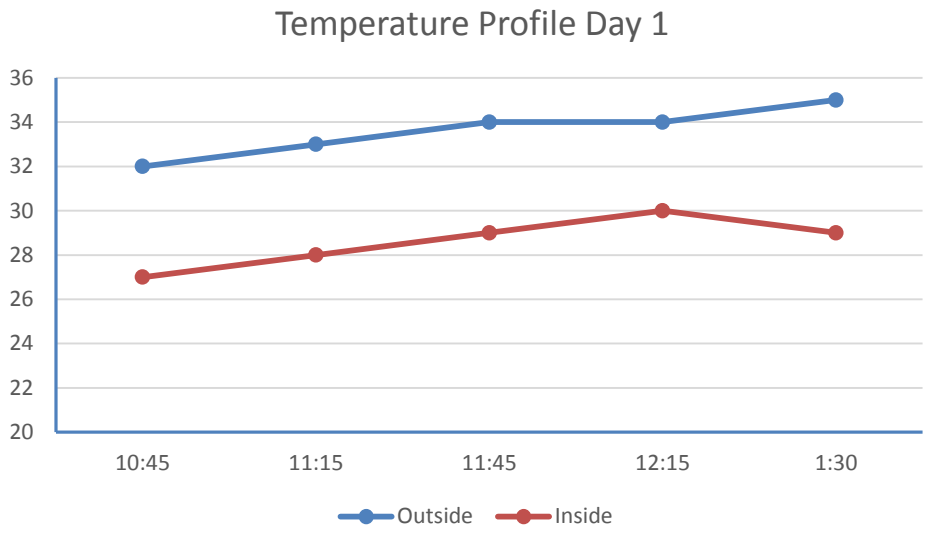
To make an Eco-Cooler we take a piece of board cut to the size of a window on your house. Then drill holes in the board big enough to push a plastic neck through. Gather some old plastic bottles and cut the bottoms off, then slide the neck of each bottle through the holes and secure them with the cap. Do this until the board is full. Hang the board on the window and watch the temperature inside drop.

PLANNING

The Planning phase of any project matters a lot as we draw the whole picture of its design, implementation and control within our planning phase. In our Case we planned to divide the project into each individual group partner. like one person of our group was given the task to collect used bottles from market and other was assigned to built the board of specific size as per the area of window on which the project was to be installed.

ORGANIZING

After the project was built we placed it on the window of our group partner's house for testing purpose. we used thermo hygro meter to measure the temperature difference between inside the room and outside. first the temperature was checked without placing the Eco Cooling system and then it was checked by installing it to test its effect. Graph show the results of temperature difference.


Temperature Profile Day 1
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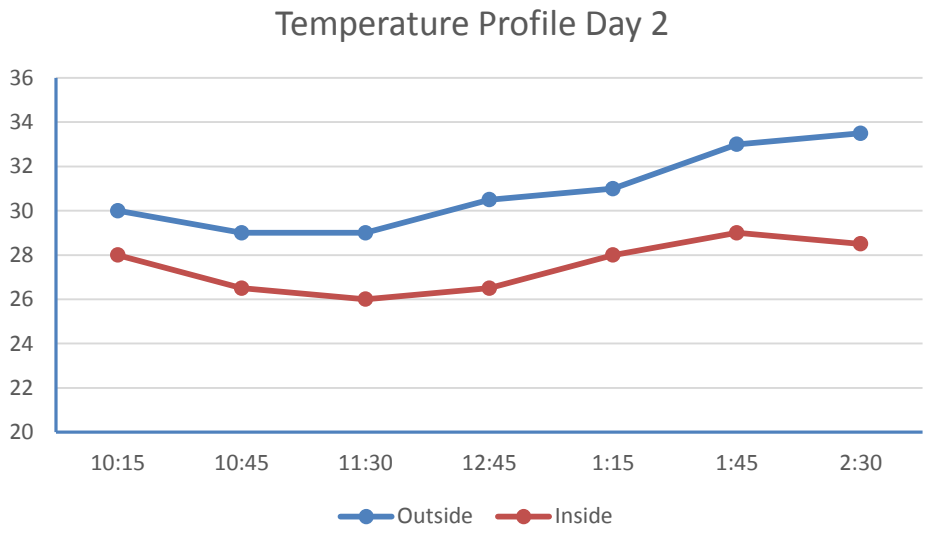
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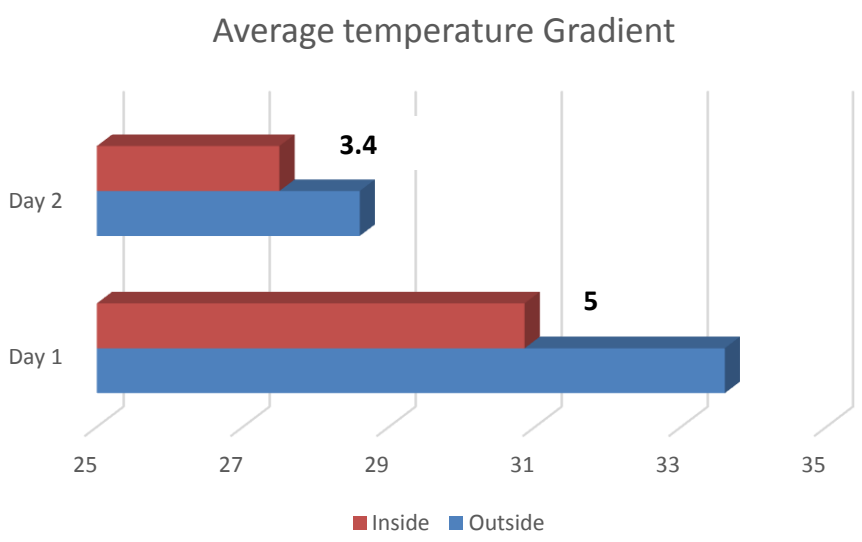

BUDGET:

Eco Cooling System is very cheap to built, the cost you can assume to built a 50" X 50" Eco System is within Rs. 500/-

Example: If 35 bottles are used at rate of Rs. 4 per bottle= Rs. 140/- and the Card Board purchased would cost around Rs. 200/- , the whole price you can assume including drilling the whole in card board is within Rs. 500/-

CHALLENGES

Every time we face different Challenges to cope up with the situations. In Our Project the main Challenges we faced were at the time of collection of bottles because used bottles aren't easily available in market. we visited different scrap yard shops and finally after striving a lot we bought those bottles from bottle street near saddar.

ACHIEVEMENT OF GOAL

As per out target to built the a device which cools the environment with 4 - 5 degrees without using electricity, we proudly say that we are successful on

achieving our goals hence now comes the point how to implement it on broader scale in Pakistan, as from last few years we see many people died in Pakistan due to heat stroke incidents either they were living below the poverty line or due to shortage of electricity, the people were unable to save their life. So this device would eventually be helpful for many people.

LONGEVITY:

As per Our discussion with an NGO, which is providing different volunteering services for the betterment of peoples in interior Sindh. Our further plan is to implement this project in rural areas of sindh where this could bring a better change in their lives with sustainability.