

# ECOHOUSE

## Who we are?

As the Echoscinnno Team, we were established in 2020 within the body of Kultur Science High School. Our aim is to represent our country in national and international competitions in the best way possible. We completed the first step of the competition with the project (Ecohouse) we made in the International Global Social Leaders competition and we were entitled to move to the second step. We developed our project for the Teknofest competition. Our team consists of three people (Arina Nazeni Salk, Eyup Ramazan Gungor, Zeynep Cakir) and we have made our distribution well within the team, so we have done our work more regularly and in a shorter time. In addition, because the subjects were planned, everything was done on time. This helped us to develop our project.

## Members&Tasks

Eyup Ramazan Gungor: Compost Toilet & Farming Without Water

Zeynep Cakir: Modular Furniture & Project Plan

Arina Nazeni Salk: Heat & Sound Isolation

## Our Project: Ecohouse

Ecohouse is a smart home system that takes its energy from renewable sources, can be easily moved and installed anywhere. Arduino systems we use inside the house allow us to easily control every part of the house. Thanks to the wind turbine and solar panels on our house, it will be able to generate electricity everywhere without the need for electrical



connections. At the entrance of our house, there is a rotating LED light that welcomes everyone warmly and shows the room temperature, humidity and precipitation time inside. In addition, the sign on our door will welcome people. The materials inside the house are modular items and do not take up any space in the house. There is also an emergency aid kit in the house to assist the victims. Included in this aid kit are materials suitable to assist with minor to moderate wounds. The radio in the house turns on automatically when it sees people. This way, people inside will be able to listen to the news and get information about disasters. Thanks to the soilless agricultural equipment that can be built in the middle of two houses (leaving a small area between the houses), it is aimed that the victims and refugees produce their own food. Thanks to the rotating led at the entrance of the house, the humidity in the air and the time / amount of precipitation can be learned and the greenhouse can be turned off and on. Soilless agricultural equipment takes less space than normal agriculture and agriculture can be done more comfortably. Compost, which is the manifestation of an understanding that does not consider any organic matter created as garbage; In the simplest terms, it is the technique of recycling organic wastes. In compost application, all organic wastes are evaluated. This includes animal and human waste. Compost toilet helps to reduce the rate of water use in homes and help the waste to enter the nature faster.

Our main goal is to help survivors and asylum seekers. It is for the shelter and nutrition needs of survivors and asylum seekers on their own, without the need for government assistance. Requests from the governments for this project are enough land to build only these modular houses.,

## **Aims**

- To make our project for the benefit of our country in the Technofest Competition and to increase the use of renewable energy resources in the future all over the world and in our country.
- To show people how important such projects are in keeping the environment clean.
- Leaving the world cleaner for future generations.

## **Method To Be Used**

All products in Ecohouse work with renewable energy sources. It works with the electricity it receives from the solar panels on its top and according to the codes we write to Arduino. Since the use of Smart Homes will increase significantly today and in the coming years, we wanted to design a smart home with Arduino. For this reason, the house will be able to be controlled more easily from anywhere.

## **Target Audience/Group**

The target audience of our project is the victims whose houses have been damaged as a result of natural disasters in our country. While it is expected that natural disasters will increase along with the problems that global warming may bring to our country, we have determined such a target audience in order to minimize the damage this may cause to our country. Since ECOHOUSE is portable, it can be easily set up in disaster areas and thus the shelter needs of disaster victims will be met in a shorter time. For these reasons, the target audience of our project is disaster victims.

## **Social Media/Accounts**

In the time left from preparing our project, we started to be active on our Blog and Instagram pages, to make surveys where necessary, and we started to spread our project to people. We also contacted other schools and wanted to instill the use of renewable energy sources in our peers / minors in other schools. You can access our Instagram and Blog pages from the following QR codes.



<https://instagram.com/echoscinnokfl?igshid=rk6jkw5cnz4>

echoscinnokfl



Echoscinno

[echoscinno.blogspot.com](http://echoscinno.blogspot.com)