



LOW COST WATER HEATER



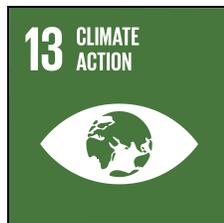
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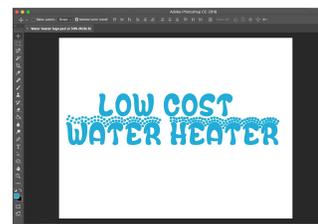
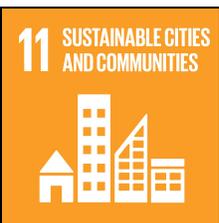
Project Aim: To create sustainable water heaters, these water heaters might help people who need them and they are less expensive to use than traditional gas heaters.

Background: In our environmental science class, we have been studying the UN's Sustainable and Developments goals since August 2019. Then, our teacher presented us with the UN contest. After that we started to see which goals we could tackle, and the teacher told us it was a good idea to develop a project with water. After this we came up with an idea for helping people with low resources to use. According to "Consejo Nacional de Evaluación de la Política de Desarrollo Social" (CONEVAL), in 2018, there were 2'337,600 people living in poverty, while 244,500 lived in extreme poverty. The first group has one social deficiency, and does not have sufficient income to cover their needs; the second, has three or more social deficiencies, and does not count with the income to cover the basket of goods.



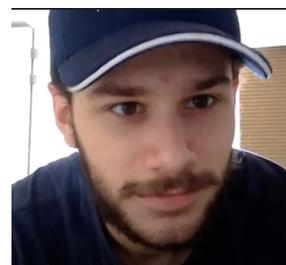
Our Contribution

Our project supports Goal 7, since the water heater will reduce the home's gas consumption, CO2 emissions, and the cost of using natural gas. We are tackling goal 11, because the project can be used in homes, making it a sustainable alternative to natural gas. As mentioned before, we can reduce the use of natural gas at homes, which causes CO2 emissions, one key contributor to climate change, which helps tackle SDG 13.



Getting to work

The building of the project was cancelled because of the Covid-19 situation. Still, we managed to gather some data from organizations like INEGI and SENER to make some calculations on the project. Since INEGI's data was not recent enough, we had to remove it from our research. Even in quarantine we worked on designing our report and digital submission. In order to do it, we arranged team meetings with google meets. We also designed a logo for our project using Photoshop, but since the name we were hoping to use is different from the one Global Social Leaders has registered, we decided to modify it just a little in order to be similar to it.





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Measuring the Impact

We found that the average home in Jalisco consumes 1 liter of natural gas a day, accounting for a production of 1.6 kg of CO₂. Assuming heating water accounts for half of a home's natural gas consumption: If 1 home uses our water heater in just 1 day, this will prevent the production of 0.8 kg CO₂.



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