

# The Greenhouse Effect: Combating the Production of Fossil Fuels with Renewable Energy Sources

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The greenhouse effect occurs when light from the sun passes through Earth's atmosphere and strikes the surface. The radiation from the atmosphere warms Earth's surface to temperature that could become higher than it would without an atmosphere. The objective of this experiment is to build a hydrogen generator and three miniature greenhouses which vary in materials and investigate which material best traps infrared radiation, and how they affect the temperature within. If the temperature outside of the greenhouse increases or decreases, then the temperature inside of the greenhouse will remain constant. If the material is light and durable, then it will best trap the infrared radiation. first, I hammered the four pieces of wood together to construct a square. I did the same for all three materials. then I placed a thermometer inside and outside of each greenhouse. Next, I placed a sheet of glass over each greenhouse. Record data by chart or graph over any period of time. Place the plastic conductor between the two pieces of metal. Then place the combination into the top of the plastic container. I concluded that the Styrofoam greenhouse trapped the most heat of all of the green houses. It was the best material to trap the infrared radiation. My first hypothesis was rejected and the second hypothesis was accepted ; the temperature inside of the green house did not remain constant. My future plans for the project is to gather different materials to see if there is another material that could trap the infrared radiation and heat better than the Styrofoam. I would also insert plant life into the green house to record the status of the plants. As of the hydrogen generator, I would like to build one on a larger scale to power a much larger battery on a larger scale.