Anteater Solar Heater

Heat Up Your Space without Electric Power or Fossil Fuels

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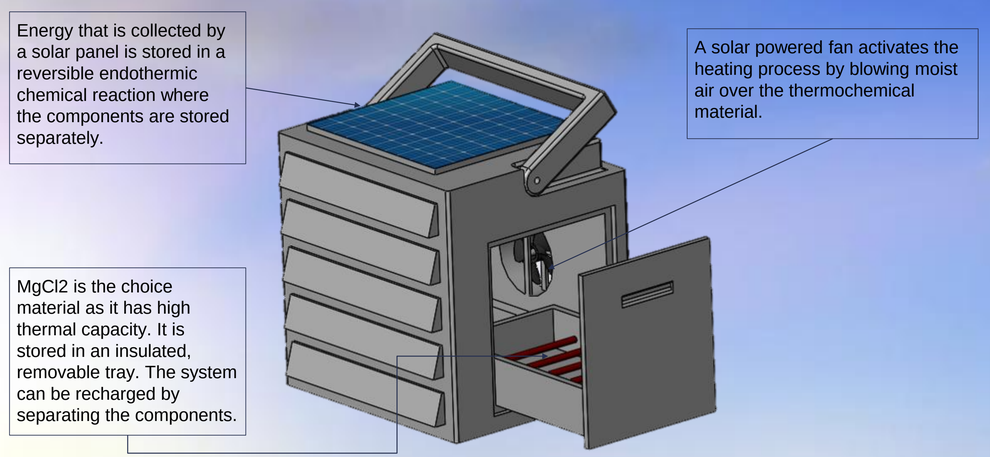
Background

Outdoor camping temperatures get cold at night. Campers need a safe heat source to use inside their tents to keep warm. Propane heaters are flammable and emit harmful gases. A solar-powered heater can provide a safe heat source that can be used inside a small, enclosed area.



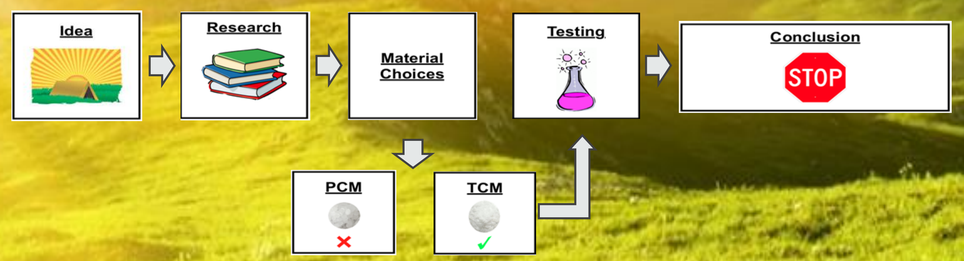
Lessons Learned

In our initial design, the humidity ratio of 0.00272 obtained during the experiment was very low and did not thoroughly activated the MgCl2+6H2O chemical reaction. The low humidity generated much less energy than expected to make the system functional.

Goals and Objectives

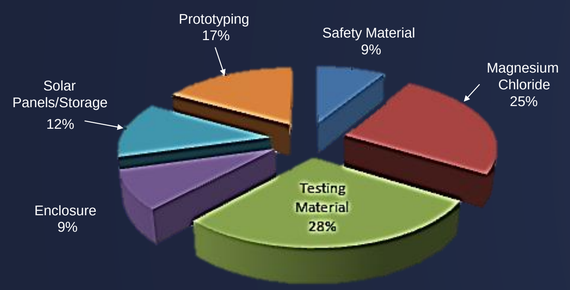
- Small enough to fit inside a camping tent.
- Heat up an area up to 100 sq. ft.
- Provides continuous heat for 4 hours
- Safe to operate without human interaction
- Weighs 20 - 50 lbs.

Our Journey

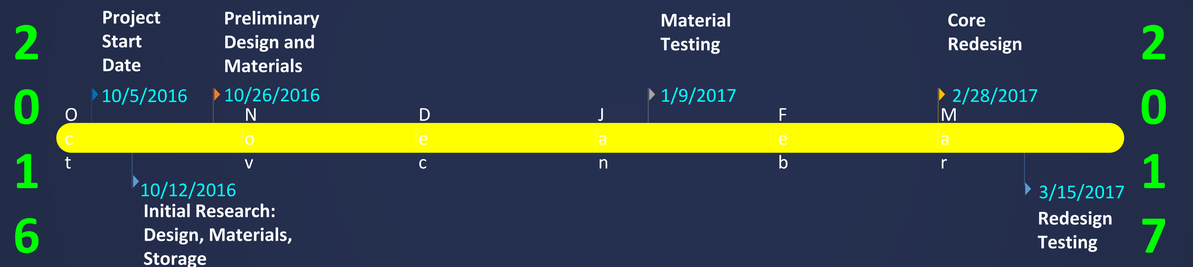


Next Steps

Budget



Timeline



Team

From left: Kunlong Yu, Alexander Torres, Jeremy Dang, Justin Cardona, Elizabeth Bou, Zachary Greensite, Roland Estropia, Darren Chan, William Chiang

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A.S.H. Webpage