

Warren Central Energy Management Club

Project Title: Let's educate and learn about solar energy

Advisor's name: Nathan Dick

During the 2021 to 2022 school year the Warren Central High School Energy Management Club wanted to teach others about solar energy and learn more about solar energy and energy conservation. After thought was given, it was decided that there was no better place to do this in our community than Richardsville Elementary School. So the club came up with a presentation and demonstrations to teach the students about solar energy.

Projects

- 1) **Visit to Richardsville Elementary School to learn and present about solar energy**
- 2) **Selling UV bracelets to educate students and others about solar energy**

Our Group



Bottom from left to right

Advisor Nathan Dick

Jacob Herndon

Top Left to Right

President Dewayne Kirby

Vice President James Foster

Secretary Michael Lay

Project summary

Members Of the Warren Central Energy Management club took a day away from classes to visit Richardsville Elementary School (the first net zero school in the nation), where we learned how a net zero school works and then taught their students about what a net zero school means and what solar energy is and how we use it in everyday life.



Goals of this project

For this project our goals were to tour the Building and see how a net zero school affects our community. We also wanted to show younger kids in the school and our community how being Energy efficient betters our community. With this we hoped the students we talked to would try and become a more energy efficient citizen for our community.

Solar Bracelets

One thing we did in order to educate students about solar energy was to show how uv solar beads change color when exposed to sunlight. The image on the top is before the bracelet was exposed to sunlight. The image on the bottom is the same bracelet after it was exposed to sunlight.



Solar Oven

In order to educate fellow students about how solar energy can be used to cook, we took a solar oven and showed it to various classes and explained how it works. We explained that it can be used to cook a simple meal such as melting marshmallows, melting cheese, or more depending on how hot the environment is.



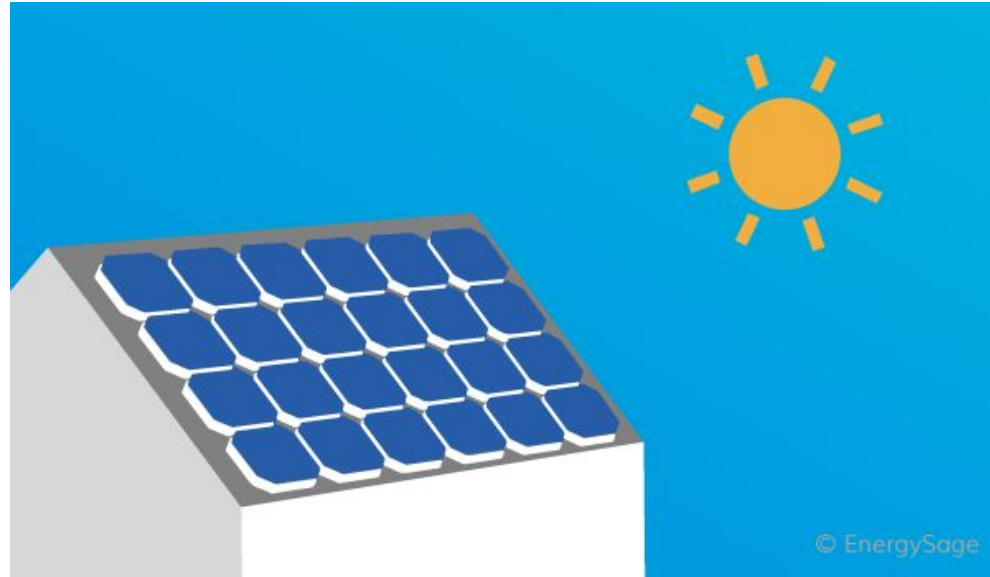
Solar panel

The club showed off solar panels to each class. These solar panels have a LED that lights up when the panel is getting enough light to give off a voltage. They were able to demonstrate turning on a light bulb with the setup.



What is Solar Energy?

Solar Energy is radiant light and heat from the sun that is harnessed with ever evolving technology such as Solar Panels, Solar Heater, and Solar Plants.



What Is Solar Energy Used for?

Scientists are always developing new technology to give the world a better use of the sun.

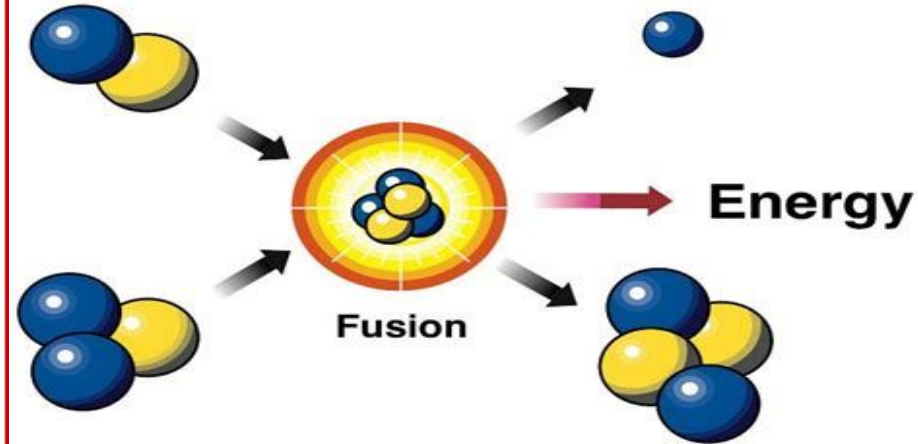
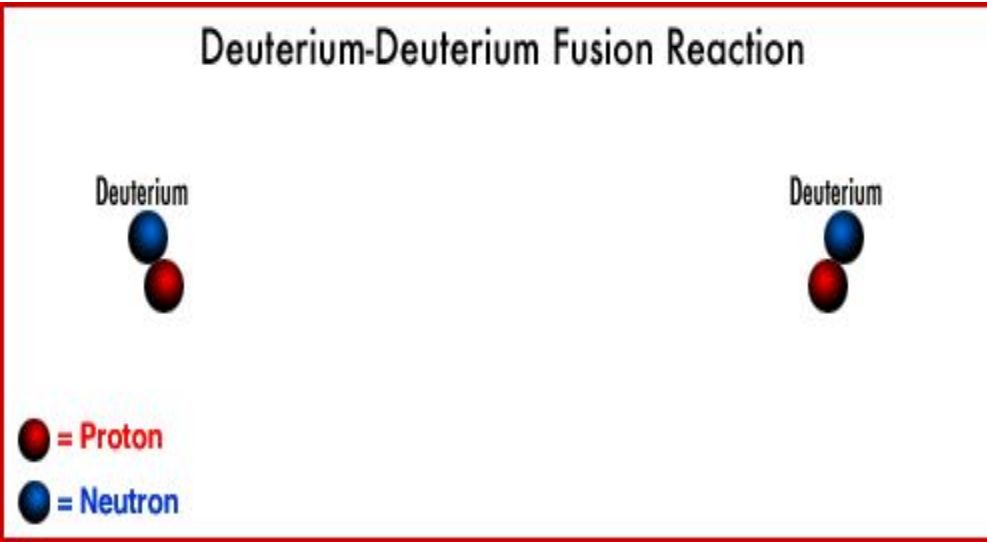
We use it for things like

- 1. Artificial Harvesting (greenhouse)**
- 2. Solar light into homes or public buildings**
- 3. Turning solar light into electricity**
- 4. Using sunlight to heat water**



How Solar Energy Is made

Solar energy is created by nuclear fusion that takes place in the sun. Fusion occurs when protons of hydrogen atoms violently collide in the sun's core and fuse to create a helium atom. This process, known as a PP (proton-proton) chain reaction, emits an enormous amount of energy.

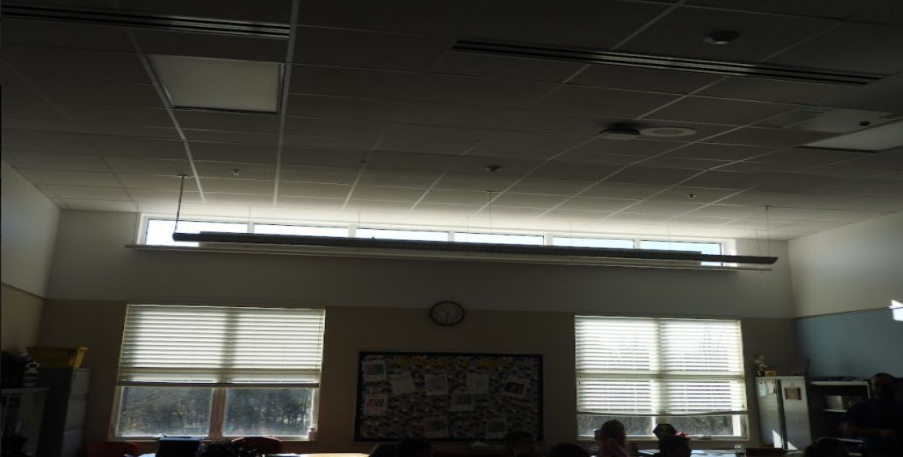


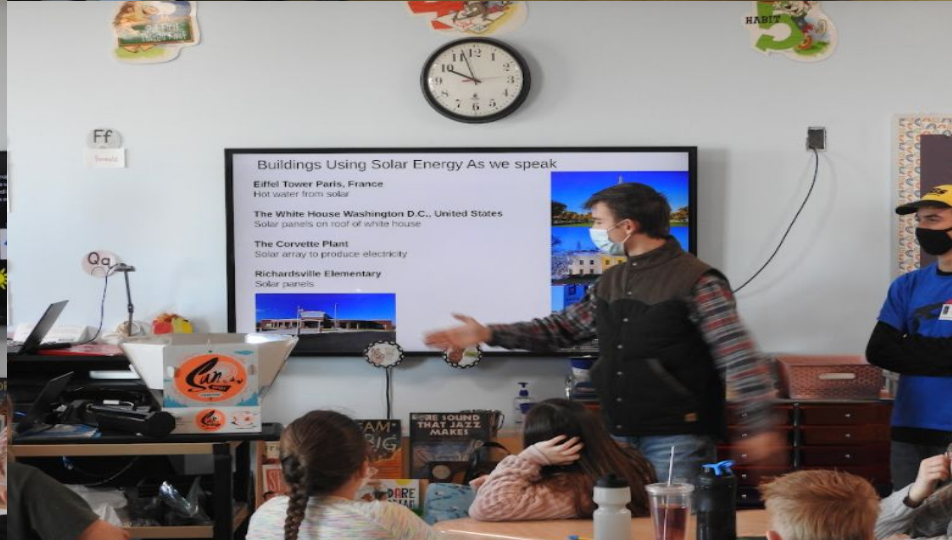
Why People use Solar Energy

People use Solar Energy for many reasons including

1. To save money on their electric bill
2. It can be used to help the environment by using the sun's rays instead of fossil fuels
3. It can illuminate (light) an area in a building

Pictures of Richardsville Elementary School being energy efficient





Special Thanks

We want to send a special thank to the faculty and staff at Richardsville Elementary School who graciously allowed us to visit the building and present to their students. Also for the special tour they gave us to parts of the facility.