



Solar power for our school
By: solar squad

Why we want to go solar

We are trying to change our school to solar power for two reasons: to save money and to reduce our carbon footprint. There are two types of energy in the world: renewable energy and nonrenewable energy. Renewable means it can be used more than once. Non-renewable means that it is used once and then it's gone.

How solar power works

Light shines on photovoltaic cells [solar cells]. A light sensitive diode then turns not the heat, but the light into electricity. We had a solar panel named REVTOS at our school. In one month it collected 8374 watt-hours of energy.



Our challenges

Money was one of our challenges. To make enough energy we need at least 100 solar panels. Each solar panel would cost our school \$44,000. The total cost would be \$4,400,000. Mrs. Trevett, our school financial officer, said that would be way too much money.

Space was another one of our challenges. Our expert Mr. Walsh, said we needed 3.5 acres for all of our solar panels. On our campus, that would cover our tennis courts and a practice soccer field!

Weather was another challenge. If it is cloudy or night time, we can't produce energy. In the warm seasons, we get lots of sun, but closer to winter it is more cloudy and we get snow.

Our ideas

Since we don't have enough money to power the whole school, we are proposing to get some solar panels for certain spots like the lounges, the library, the S.T.E.M room, the Design & Innovation lab, and the gymnasium.

We are also looking into joining up with nearby houses and a bordering golf course. If we partner, we could help build a large solar farm on someone else's land, and share costs and the energy produced.

Conclusion

We learned that solar power is very good for the environment, and it has its pros and cons. We will continue to work with our school to explore getting some solar panels.

Resources

<http://michaelbluejay.com/electricity/solar.html>

<http://www.solarcity.com/residential/solar-energy-faqs/solar-energy-production>

<http://www.all-recycling-facts.com/non-renewable-energy.html>

Experts:

Ms. Monica Trevett, our school CFO

Mr. Nick Walsh , SolarCity

Mr. Ray Istas, our school P.E. director

Special thanks to Mr. Jeffrey Stevens, Alfred State University, for loaning us the REVTOSS

..