

## Service-Learning in the Sciences

Course: **Physics**

School: **Harold S. Vincent High School**

Community Partner:  
**University of Wisconsin–Milwaukee**

Project Name: **Using Solar Energy to Reduce Carbon Footprint**



### Project Snapshot

In an effort to diminish the school's carbon footprint, students partnered with researchers at the University of Wisconsin–Milwaukee to explore the efficacy of using solar energy. Several times each week, students gathered, recorded, and analyzed data from lux readings, using mathematical calculations. Students also researched costs for various types of solar panels and calculated the total expenditure needed for an array of an appropriate size for the school.

Students wrote up their findings in research papers, which they shared with school faculty and administration.

### Community Need/Issue Addressed

#### **Affordable and Clean Energy\***

Evidence shows that burning oil and coal produces greenhouse gas that contributes to global warming. Coal and oil are also non-renewable sources of energy.

Energy from sources like the sun, wind, waves, and water is renewable and also produces very small amounts of greenhouse gas—if any.

*\*from United Nations Global Goals for Sustainable Development <https://www.globalgoals.org>*