

Ana Marie Sandoval School Shines Bright with Solar Energy

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by Neshama Abraham

Principal JoAnn Trujillo Hays believes it's curiosity that drives children to learn. She also believes in the learning ability of her elementary school, Ana Marie Sandoval, which on May 15, debuted the first photovoltaic (PV) monitoring system as a learning tool in the DPS system.

Called a "Flash Display," the computer screen is mounted in the lobby of Sandoval where it is easily accessible to children, teachers, and parents. The system provides a minute-by-minute and historic picture of energy usage and CO2 emissions that were prevented from entering the atmosphere.



The system was installed by SolSource, a Colorado solar company based in Denver, which also designed and installed the 58 Sharp solar panels PV array on the roof of the school. The Sandoval solar panels can produce 14,200 kilowatt hours of energy from the sun saving 28,161 pounds of CO2 emissions per year, equal to 2.9 acres of mature forest.

It was the pitched roof of the school which first excited Sandoval parent Jay Smith who initiated the project and raised funds from parent donations. Smith realized the angle of the Sandoval roof made it a perfect solar site. The panels are easily visible and they even produce energy at night from the streetlights.

SolSource also installed the 9.5 kW system of 44 solar panels on the roof of Foothills Elementary School in Lakewood where, on May 15th, Governor Bill Ritter signed Bill 1312 to help schools pay for renewable energy projects. The "Renewables for Schools" loan program will provide funds for solar, wind, geothermal energy projects, and electric or hybrid buses so that the resulting energy savings can go back to the classroom.

"Schools all across Colorado spend more money on their utility bills than on computers or books combined," said Governor Ritter during the Friday bill signing at Foothills Elementary.

The solar array at Sandoval has been active since January 2009. However it took Smith until this Spring to obtain the funds for the Flash Display, which SolSource provided to the school at cost. "I wrote letters to everyone I knew," said Smith whose children, Audrey, 10, and Walker, 7, attend Sandoval.

Principal Hays is excited about the learning opportunities from the solar monitoring system. "The display let's us see how much energy is saved, and this will help the kids become conscious of how to conserve energy. Once they understand about energy used for lighting and heating in the school, they can be more conscious in their home, and then about the world."

Sandoval staff recently had a two-hour training on the solar system provided by SolSource. Hays says next year the school will incorporate the solar system into the school curriculum. The Flash Display at Sandoval, created by California company Fat Spaniel, can be accessed via the web at <http://view2.fatspaniel.net/PV2Web/merge?&view=PV/standard/Simple&eid=157043>

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