



CALENDAR  
OF EVENTS

PRESS  
RELEASES

PRESENTATIONS

PUBLICATIONS

MEDIA  
COVERAGE

LINKS

GRANTS

INDEX

## Solar Schools Program

The Colorado Solar Schools Program supported learning about solar energy in Colorado public schools and demonstrating photovoltaic (PV) technology in communities. The program provided financial assistance to help pay the costs of purchasing and installing small grid-tied photovoltaic systems on Colorado public school facilities. Financial assistance was provided for half of the total costs incurred, up to \$9,000. The systems that schools installed under this program were not large enough to generate enough electricity to greatly reduce the schools' electricity bills. The intent of the program was to educate students, teachers, administrators and community members about PV, because Colorado has abundant solar energy resources, and PV may play an important role in providing electricity to our state in the future.

OEC funded 32 schools around the state for the solar schools program. Here is a description of the projects, their successes and lessons learned.

Most of the schools installed the PV units on the roofs of the main school buildings or on the Gyms. One school placed the PV unit on poles near the school buildings. The data monitoring systems were installed in classrooms.

Schools incorporated the information into curricula in various ways. In elementary schools, the students gathered temperature information and learned how the sun can help generate electricity. Students also studied electricity and how it is produced and is transmitted for use by consumers. Middle schools converted temperature and wind speed from Metric to English. Students graphed and analyzed the conditions that create optimal solar electric power. They conducted energy audits to determine how much of the school could be powered by the existing solar array.

High schools used the solar array for the study of photoelectric effects for physics. They incorporated the solar studies into physical science by conducting a real life observation of an alternative energy source in action and data to evaluate. In chemistry, they studied the transformation of energy from solar to electrical and studied the potential and efficiency of energy use.

Students also studied energy awareness, energy sources focusing on solar energy, energy alternatives, electricity, energy consumption, computer applications and technology tie-ins with an emphasis on graphing and weather.

Many of the schools are interacting with other schools across Colorado with similar PV systems.

Some schools ran into problems with snow on the PV array. This had to be cleared before readings could be taken.

Twenty one schools worked in conjunction with Altair Energy and Xcel Energy to install solar units.

**Century Middle School**  
**Adams Co. Sch. Dist. #12**  
Mike MacDonnell  
303-255-6960

**Dakota Ridge High School**  
**Jefferson Co. Public Schools**  
Tim MacDonnell  
303-982-1970

**Carbondale Community Charter School**  
**Roaring Fork School District**  
Betsy Bashant  
970-963-9647

**Horace Mann Middle School**  
**Denver Public Schools**  
Mary Fraguada  
303-433-2553

**Carbondale Elementary**  
**Roaring Fork School District**  
Bill Alley  
970-963-2815

**Silverheels Middle School**  
**Park County School District**  
Jan Toyne  
719-836-4417

**Summit Middle School**  
**Summit School District**  
Mark Clark  
970-668-5037 x 101

**Highland Elementary**  
**Littleton Public Schools**  
Debra Franks  
303-347-4525

**Beaver Valley Elementary School**  
**Brush School District**  
Gary Bloemker  
970-842-4794 x 113

**Montbello High School**  
**Denver School District #1**  
Cheryl Walters  
303-375-5703

**Maple Grove Elementary**  
**Jefferson County Public Schools**  
Linda Olson  
303-982-6831

**Rangeview High School**  
**Aurora Public Schools**  
William Chambers  
303-367-3000 x 28620

**South Park High School**  
**Park County School District**  
Randy Hinson  
719-836-2006

**Huron Middle School**  
**Adams 12 Five Star Schools**  
Lisa Joss  
303-452-5471

**Horizon High School**  
**Adams 12 Five Star Schools**  
Paul Mason  
303-450-5227 x 6149

**Ken Caryl Middle School**  
**Jefferson County Public Schools**  
Connie McLaughlin  
303-982-4684

**Sargent Junior/Senior High School**  
**Sargent School District**  
Dr. Patricia Sholar  
719-852-4023

**Crest View Elementary School**  
**Boulder Valley Public Schools**  
Elaine Eichel  
303-443-6363

**Jamestown Elementary School**  
**BoulderValley School District**  
Jim Ensign  
303-494-5533

**Everitt Middle School**  
**Jefferson Co. Public Schools**  
Jim Faes  
303-982-2412

**Dunstan Middle School**  
**Jefferson County Public Schools**  
Dutch Squires  
303-982-4684

Other Schools involved in the Solar School Program were:

**Yampa Mountain High School  
Glenwood Springs**  
Susy Ellison  
970-945-9463

**Career Development Center  
St. Vrain Valley School District**  
Ralph Bozella  
303-682-7363

**Moffat Consolidated School  
Moffat Consolidated School Dist. #2**  
Penelope Freel  
719-256-4710

**Center Consolidated School Dist.**  
Luron Singer  
719-589-5406

**North High School  
Denver School District #1**  
Lester Lurie  
303-964-2700

**Battle Mountain High School  
Eagle County School District**  
Wade Hill  
970-949-4490

**Aspen Community School  
Roaring Fork School District**  
Debra Winston  
970-923-4080

**Academy School District 20**  
Mark Bissell  
719-598-8863



**Drew Bolin, Executive Director**

Governor's Office of Energy Management and Conservation  
225 E. 16th Avenue, Suite 650, Denver, CO 80203  
303-866-2100 • 800-632-6662 • TDD: 800-659-2656 • Fax: 303-866-2930  
Send comments, suggestions or questions to: [oemc@state.co.us](mailto:oemc@state.co.us)

---

**Programs**

[Residential](#) | [Commercial & Institutional](#) | [Agricultural & Rural Prosperity](#) | [Distributed Generation](#)  
[Transportation & Alternative Fuels](#) | [Renewable Energy](#) | [Waste Management & Recycling](#)

[Calendar of Events](#) | [Press Releases](#) | [Presentations](#) | [Publications](#) | [Media Coverage](#) | [Links](#) | [Grants](#) | [Home](#)  
[What's New](#) | [How It Works](#) | [Success Stories](#)