

Energy Saving Success Stories from Southern California 2011-2012



AN ALLIANCE
TO SAVE
ENERGY
PROGRAM



Students Leading the Way

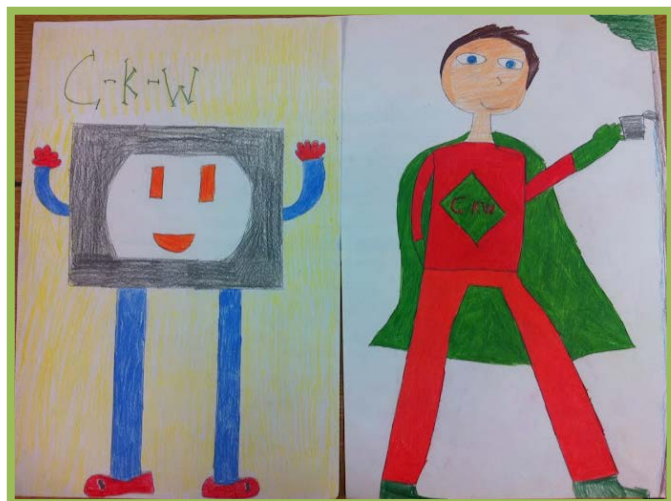
Sponsors

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Special Thanks

PowerSave Schools would like to thank our creative and energetic PowerSave Schools teachers for submitting such thoughtful descriptions and documentation of their 2011-2012 activities to help fill this Success Book. And another special thank you to the thousands of PowerSave Schools students whose optimism and perseverance to help build a more sustainability-conscious, energy efficient world is inspiring to us all!



Left: Products of the "Captain Kill-a-watt" art contest at Eisenhower Elementary School intended to illustrate a mascot character that encourages everyone how to save energy.

Right: El Cerrito Middle School PowerSave Team & Project Manager, Jennifer Alvarez pose for a group shot with their energy-saving tool kit devices

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Introduction

2011-2012 Achievements:

Despite the increasing popularity of energy efficiency concepts in public and private sectors in recent years, the need for energy efficiency at schools and at home is still very pressing. As the 2011-2012 academic year continued to witness steep budget cuts to education, increasing energy costs for families, and looming threats to our environment linked to climate change, the need for energy efficient practices at school and at home could not be more urgent. Thankfully, the 2011-2012 academic year proved highly successful for the Alliance to Save Energy's PowerSave Schools Program in reducing energy costs and educating students about energy efficiency in K-12 Schools. **As proof of a remarkable year for the program, 65 schools achieved the following benchmarks in 2011-2012:**

- **Reduced energy use by an average of 12%.**
- **Saved 3,277,566 kilowatt hours of electricity, equivalent to \$549,416, and preventing 2,260 tons of carbon dioxide from being emitted into the atmosphere.**
- **Hosted 103 community outreach events that reached more than 48,500 people;**
- **and hosted 65 career activities that reached more than 14,400 students.**

PowerSave Schools Program History and Goals

The Alliance to Save Energy established the PowerSave Schools Program (formerly known as the "Green Schools Program") in Los Angeles County in 1999, and inducts 65 new schools each year into an "alumni base" of over 800 K-12 schools that have participated in PowerSave Schools throughout Southern California. **The PowerSave Schools Program's two main goals are to:**

- 1. Educate students about energy efficiency, and**
- 2. Save energy in schools.**

To reach these two overarching goals, the program focuses on empowering school staff and students to:

- **Build pathways to green jobs for students of all backgrounds;**
- **Strengthen academic learning by engaging students in hands-on and real-world projects;**
- **Integrate energy efficiency into science and math lessons that encourage student leadership;**
- **Protect the environment through cooperative, school-wide behavior, operations, and maintenance changes;**
- **Save money by reducing energy costs; and**
- **Promote retrofits of more efficient equipment and appliances.**

How Students Led the Way

Students have proven to be the true leaders in forging the way to enact positive change and reduce the financial and environmental burdens that accompany wasteful energy consumption. Throughout the school year, students have found creative and innovative ways of engaging their schools, families, peers and the greater community to build energy awareness. For example, during the 2011-2012 school year, students participating in the PowerSave Schools Program have spread the message of energy efficiency by initiating energy-saving competitions, offering presentations and skits at schools assemblies to staff and students, researching and presenting on green careers, encouraging local business to reduce energy use, conducting energy audits at home with parents, and supporting each other to grow into articulate energy leaders.

During the 2011-2012 academic year, the PowerSave Schools Program significantly ramped up efforts to increase awareness and exploration of green careers that help to protect the environment. To spark interest in green jobs, PowerSave Schools students were exposed to numerous and varied green career opportunities through presentations by green professionals in the field, career fairs, research exercises in the classroom, and experiential, hands-on learning. By carrying out PowerSave Schools activities designed to reach every benchmark on the PowerSave Schools Road Map, students gained practical and professional development experience by learning both the technical and soft skills needed to conduct an energy audit, calculate and analyze data, present on results, share recommendations, and train and

educate their peers, school, and local communities about important energy efficiency and overlapping environmental issues.

The Alliance to Save Energy commends the 2011-2012 PowerSave Schools for their outstanding energy-saving accomplishments and for their contributions to *Students Leading the Way 2011-2012: Energy Saving Success Stories from California*. The Alliance to Save Energy is also excited to announce that the PowerSave Schools Program has adopted a new name for the program, the PowerSave Schools Program. We hope this new name will better capture the sense of energy, people power, and the power to effect change we promote as a program.



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California PowerSave Schools Management

The success of the PowerSave Schools Program is a testament to California Local Project Leaders Jennifer Alvarez, Lorraine Gutierrez, and Scott Thach who diligently helped expand and enrich PowerSave Schools programmatic efforts during the 2010-2011 school year. PowerSave Schools Local Project Leaders are a vital part of the success of our PowerSave Schools model, lending their time, encouragement, and endless support to teachers, students, custodians, and school administrators at each school and district, in-person and on-site.

California 2011-2012 PowerSave Schools Management Team:

Jo Tiffany, Senior Director or Education, Alliance to Save Energy

Jennifer Alvarez, Project Manager/Local Project Leader, Alliance to Save Energy

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Lorraine Gutierrez, Local Project Leader, Alliance to Save Energy

Scott Thach, Local Project Leader, Alliance to Save Energy



Benchmark Activity Highlights

from the PowerSave Schools Road Map Guide

1. Expand Team and Add Students

PowerSave Schools is primarily about **student leadership** and students' unique ability to influence energy behavior in their communities. The most important part of building excitement about the year of energy-saving activities ahead is to cultivate student membership in each school's core PowerSave Team, in accordance with the first benchmark on the PowerSave Schools Road Map – "Expand Team and Add Students." Through school-wide assemblies and creative activities, the following 2011-2012 PowerSave Teams engaged with their school community – from fellow classmates, to faculty, to district administrators – to spark an energy efficiency movement on their campuses.

Corona-Norco Unified School District

Vicentia Elementary School

Team Branding Goes a Long Way to Encourage Students

To promote student participation in energy awareness, Vicentia Elementary School's PowerSave Team developed a student club called the "Blackout Club." Every Tuesday, each team member sported a t-shirt with the club logo on it to remind their peers and teachers to eliminate energy waste on campus. The club also instituted "Blackout Days," during which the *entire* school was encouraged to wear all black to visually show the school's dedication to saving energy. The t-shirts attracted more students to join the "Blackout Club" and also made the team members more recognizable when they did classroom visits to conduct energy audits and recommend energy-saving tips. Throughout the year, the club conducted outreach activities such as performing their "Energy Efficient Christmas" musical, during the Winter Program and hosting a table at Family Night. Congratulations to Vicentia Elementary School for successfully branding their team to recruit students to support their energy efficiency cause.



A PowerSave School's first goal is to involve students in the initiative. Vicentia Elementary School's PowerSave Team achieved this goal by recruiting students to sing Christmas carols with an energy efficiency twist at their Winter Program.

Newport-Mesa Unified School District

Kaiser Elementary School:

Student Council Takes on Energy Efficiency

Kaiser Elementary School recruited its 3rd to 6th grade student council, with every classroom taking a leadership role in their energy efficiency campaign. One representative from each classroom attended student council meetings once a month, making saving energy an important topic of discussion. Each student council member acted as a classroom energy monitor, ensuring lights were turned off when the rooms were empty, and all appliances were shut off at the end of the day.

Mariners Elementary School:

Student Energy Commissioners Lead the Way

The Mariners Elementary Student Council knows the importance of making energy efficiency top on their list! On top of their Student Council taking the leadership role in their energy saving efforts for the second year in a row, the fall elections included the selection of 5th and 6th grade Energy Commissioners, the coveted offices in charge of patrolling classrooms to identify energy savings opportunities. Candidates for the position wrote and presented speeches to the

entire student body, explaining why each would be the best candidate for the job. Energy Commissioners took led the way to maximize energy savings efforts, resulting in impressive savings school wide!

2. Carry Out Immediate Energy-Saving Plan

Once the PowerSave Team is formed, educated, and motivated to make a difference in the school's current energy usage, a strategic plan is made to implement immediate measures to reduce energy and save money during the process. Often, with the help of an energy expert on staff, most notably a custodial team member or district energy manager, the PowerSave Team performs a school walk-through audit to identify areas of energy waste. During the walk-through, students keep track of possible building upgrades or behavioral measures that will lead to immediate energy savings, such as changing lighting fixtures and encouraging teachers to turn off all appliances at the end of the school day. Here are some of the highlights from a year full of great energy-saving ideas that found their stride with the PowerSave Schools' "Carry Out Immediate Energy-Saving Plan" benchmark.

Corona-Norco Unified School District

Auburndale Intermediate:

Students Find Energy-Savings Gold Mine in Computer Lab

Auburndale Intermediate's PowerSave students identified the computer lab as their top priority during their first walk-through audit. They identified three major problems in the lab: the lighting level was much brighter than necessary; the monitors remained on even when the computers were not in use; and the computer CPU's were left on 24 hours a day. Their initial savings came from using half-lighting in the lab, still providing more than adequate lighting for the space. Then they initiated a new policy asking students to turn off their monitors when they were done using the computers. The school's IT teacher made sure that monitors were turned off at the end of the day. Finally, the team worked with the IT teacher to make sure an automatic shutdown was placed on the computers, so that their CPU's went into sleep mode during the evening. These common sense changes inconvenienced no one, and saved the school a tremendous amount of energy.

Highland Elementary:

Student Sleuths Find Big Savings in Lighting

Highland Elementary began their energy-saving campaign by focusing on the biggest user of electricity at their school: classroom lighting. After conducting room audits with their light meter, and comparing classroom light levels to the Illuminating Engineering Society's recommended standards, the PowerSave students saw their biggest energy-saving opportunity in encouraging half-lighting. They stressed that half-lighting not only saved energy, but also created a better learning environment. By getting the message out early, the team realized big initial savings that continued to grow throughout the year.

Temescal Valley Elementary School:

WATT Killers Kill Energy Waste

To effectively launch their program, Temescal Valley teachers assigned a student WATT Killer in each classroom to monitor energy use on a daily basis. The WATT Killers turned off monitors, computers, and copiers and printers when they were not in use, closed the doors and windows when the air conditioner or heater was on, and encouraged each



The PowerSave Team at Mariners Elementary School involved students by creating two "Energy Commissioner" roles in their student council.



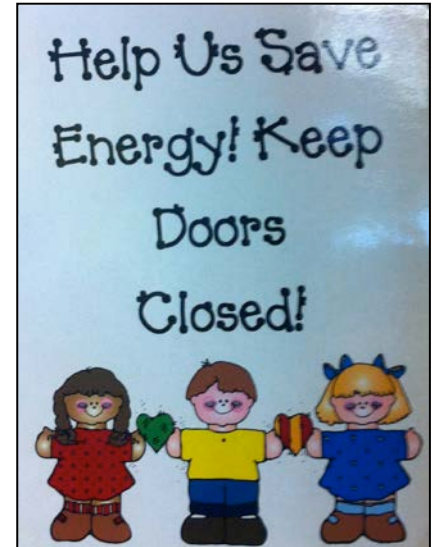
An Immediate Energy-Saving Plan demands focus on a schools largest energy hogs. Highland Elementary hit the mark with their focus on lighting.

classroom to use half lights on bright days and. To spread the energy efficiency message, office staff made weekly PA announcements to remind teachers to power down their classrooms at the end of the day. As a result, all Temescal Valley students and staff took a leading role to kill those unnecessary watts school wide!

VanderMolen Elementary:

Focusing on the Big Three Yields Big Dividends

VanderMolen Elementary's PowerSave team slashed their electrical usage by taking on all three of the school's biggest energy users: lighting, HVAC, and computers. To tackle lighting waste, they created signage for teachers' light switches that encourage a "Last Out, Lights Out!" policy. They reduced their air conditioning costs by asking students to close doors behind them—particularly those that open onto the outdoors. Lastly, students were assigned to patrol the computer lab at the end of the day to make sure monitors were turned off. These simple steps yielded huge energy savings for their school.



As part of their Immediate Energy-Saving Plan, VanderMolen Elementary School focused on heating, ventilation and cooling as they posted signs reminding staff and students to close doors behind them.

Newport-Mesa Unified School District

Mariners Elementary School:

PowerSave Team Achieves a 20% Energy Use Reduction

The Mariners Elementary PowerSave Team took their energy efficiency message to new heights by identifying major energy hogs throughout the school facility. The team replaced the old refrigerator in the staff lounge with a more efficient model, turned off lights/fans in bathrooms with windows, and put the energy intensive laminator on a schedule. The PowerSave Team purchased power strips for classes that did not have one and turned off appliances when they weren't in use. The team's dedication and hard work led to a nearly 20% reduction in energy use, doubling their savings compared to last year!

3. Train Students to Identify Energy Savings Opportunities

As the PowerSave Teams work to carry out their immediate energy-saving plans, they and their fellow students are primed to learn more about energy-saving opportunities from a technical, financial, and behavioral perspective. Building on this momentum, PowerSave Schools supports teachers and energy experts to "Train Students to Identify Energy Saving Opportunities" under this benchmark. Using diagnostic, energy auditing tool kits, students gain more advanced, hands-on experience by learning how to do energy audits of their schools and analyze data in order to make thoughtful recommendations for efficiency, including potential energy and cost savings numbers, to fellow classmates and adults alike.

Corona-Norco Unified School District

Kennedy High School:

ACE Assembly Draws Crowd for Tool Kit Training

Kennedy High School's PowerSave Team hosted an assembly by the Alliance for Climate Education (ACE). The assembly featured a live presenter backed up by an animated screen presentation, illustrating how fossil fuel use affects climate change. The entire



To train their students, Kennedy High School collaborated with the Alliance for Climate Education to hold an assembly that trained more than 50 new students to utilize the PowerSave energy audit tool kit.

student body attended the assembly. Afterward, PowerSave and ACE co-hosted a meeting, drawing more than 50 new student volunteers. These new recruits learned how to use the tool kit to conduct an energy audit, and were encouraged to attend the regular PowerSave meetings and to take the tool kits into their own homeroom classes.

McKinley Elementary:

Savvy Students Assess School Energy Use

PowerSave students at McKinley got hands-on energy-saving experience during their first tool kit training and energy walk-through. PowerSave Team student leaders learned to use the program's main tools: the light meter, temperature gun, Kill-A-Watt watt meter, and Flicker Checker. After learning the function of each tool, students put them to use, conducting an audit of the room. They also learned how to record their findings in the Walk-Through Assessment data sheet. Then they moved from their home classroom to visit other areas of the school, including the cafeteria and the library. The students were able to use the tools and assessment sheet to identify savings opportunities in each space. The skills they gained in this first introduction to the program helped them understand the way that electricity functions in their daily lives, and guided their subsequent energy-savings efforts.



Mr. Rodriguez, custodian at Todd Elementary Schools proudly shows off the green stars he awards to energy saving classes.

Todd Elementary School:

Half-lights Multiply!

The Todd Elementary PowerSave Team took energy savings to the next level by involving every class in their campaign. After learning about the benefits of using half-lights when a classroom is over-lit, the PowerSave Team placed a green sticker on one of the two light switches in classrooms to remind users to use only one switch. The PowerSave Team then conducted weekly energy patrols to check if half-lights were being used, and placed a green energy star on the door if they used only one light, or a red energy hog if they had all the lights on. To spread the word, the PowerSave Team presented the half-light campaign during morning video announcements. By the end-of-the year, ALL classrooms had green energy stars on their doors, showing they'd adopted good energy saving habits! By making their competition a school-wide affair, the campaign resulted in substantial energy savings.

Washington Elementary School:

School Uses Student Network to Expand Training

Washington Elementary used its "Pod" system to help extend energy audit training from its PowerSave Team students to the broader student body. The student body at Washington is divided into six pods, with four student leaders per pod. The PowerSave team's six student members each trained the pod leaders, so that they could conduct audits of individual classrooms. By "training the trainers" and letting students lead, Washington's PowerSave team was able to extend the audit training throughout the entire school without placing an undue burden on teachers or individual students.

Lake Elsinore Unified School District

Ortega High School:

Ortega High Mentors Auburndale Intermediate Students

The Ortega High PowerSave Team students mentored Auburndale Intermediate students in the Corona-Noroco Unified School District by training the team to use the tool kit and sharing ways to save energy around the school. Ortega High students designed a PowerSave Team t-shirt (pictured here) and to promote the program, created a friendly competition between classes. Classes that consistently turned off lights and power strips at the end of the day earn a PowerSave Team t-shirt, which teachers proudly adorned around the school. Ortega mentor students also worked one-on-one with Auburndale Intermediate students to audit several classrooms.

4. Lead Curricular Activity

The PowerSave Schools Program strengthens students' knowledge of the link between energy, the environment, and the economy while complimenting existing school districts' curricular objectives and state-based standards. Through hands-on lessons, students engage in energy-saving activities that link classroom learning to real world issues. PowerSave Schools lessons are multidisciplinary, affording academic learning in STEM (Science, Technology, Engineering and Math), as well as Language Arts and even Social Studies. Teachers are asked to select lessons that can be integrated into their curriculum in order to achieve the "Lead Curricular Activity" benchmark. Many teachers went even further to develop and present original lessons, which have been posted on the Alliance website so that teachers across the country can benefit from using them too!

Corona Norco Unified School District Adult Education Center

An Environmental Vocabulary Lesson

Teacher Thoibi Rublaitus at the Adult Education Center celebrated Earth Day with an environment-themed vocabulary lesson for her students learning English. Words on the class' vocabulary list included commonly used environmental terms such as "conservation," "natural resource," "reuse" and "renewable." Students used these words to fill in sentences such as, "*Reduce, _____, Recycle is a popular Earth Day slogan.*" Lastly, students wrote in journals to use their new words to answer questions like, "What is one thing you can do on Earth Day to help the planet?" Ms. Rublaitus' vocabulary lesson is a great example of how energy efficiency can be worked into language arts curriculum.

Buena Vista High School:

The History, Language and Science of Energy

Buena Vista High School's teachers incorporated energy into a diversity of classes including History, English and Science. History classes created a timeline of renewable energy sources. English classes researched green careers and wrote letters to cities, organizations and businesses about how to avoid energy waste. Lastly, science classes investigated the causes of global warming and the human impact on climate change related to energy consumption. Buena Vista High is a great example of how energy curriculum is not restricted to science and math classes.

Lincoln Alternative Elementary School

Student Research Leads to Action in the Classroom

Students at Lincoln Alternative Elementary learned about the history and types of energy sources in both social studies and science classes. Students were then given an assignment to see where humans are most wasteful with their energy and how they could utilize energy efficiency to reduce their dependence on fossil fuels. The students' findings led to the creation of the student "Energy Savers" role. "Energy Savers" are students assigned to reduce energy consumption in the classroom by turning of lights, turning off power strips, and closing doors upon exit. Hats off to Lincoln's students for putting their knowledge to use to produce energy savings!

El Cerrito Middle School:

Changing Our Ways

El Cerrito Middle School integrated the PowerSave Schools lessons into classes to inform students about the connection between energy and the environment. Using the Road Map Guide lesson "Changing Our Ways" to educate students about how much energy is used to produce items in our everyday lives, all 7th grade Life Management classes identified ways to better manage their energy use. Students then strategized ways to save energy, including recycling materials



Students on Ortega High School's PowerSave Team pose for a shot with their team t-shirts designed by the students themselves.

such as paper, plastic, and glass, and reducing their impact by turning of unnecessary lights and appliances. As a result of the exercise, students came away with the knowledge that energy is used in all aspects of our lives, but there are simple and easy ways to use our resources more efficiently.

Garretson Elementary School

Making Energy Visible with Circuits

The PowerSave Club at Garretson Elementary School learned about energy through a lesson about electrical circuits. Students even learned to make battery-powered circuits themselves. They then engaged in a discussion about energy usage during peak hours and how to use less energy during those hours. Teachers taught the same lesson at Gerretson's Family Science Night, where students, ranging from first to sixth-graders, made circuits with their families.

5. Compile Data & Upload to the Web

As each PowerSave Team begins to assemble their individual school's energy data, it's important to develop a streamlined way to synthesize and upload the information online to better share with the entire school community. While meeting the "Compile Data & Upload to the Web" benchmark, the PowerSave Teams below used technology to enhance how others can view their own energy use – from customizing their PowerSave Schools website, to creating new ways of cataloguing relevant data for each school.

Chino Valley Unified School District

Glenmeade Elementary School:

Spring Break Cuts Electricity by 39%!

Glenmeade Elementary School took advantage of the school's vacancy during spring break to reduce energy costs. Winning the Spring Break Unplugging Challenge, Glenmeade reduced electricity costs during spring break by a whopping 39.5% and uploaded the documentation to their PowerSave School website for everyone to see. The savings were made possible by turning off lights, unplugging appliances and adjusting thermostats while everyone was out of school. Glenmeade continued these great savings year-round, finishing the year strongly with a total average 24.5% percent reduction in energy use for the academic year.

Corona-Norco Unified School District

Eisenhower Elementary:

Team Customizes Data Sheets to Chart Their Success

After using the original data collection forms provided by the program, Eisenhower Elementary's PowerSave Team decided to design their own for charting the particular behavior changes they were seeking to instill. The PowerSave teaching team created new templates that helped students monitor which classrooms were using half-lighting, turning off lights when unoccupied, and shutting computers down at the end of the day. They



Students at Garretson Elementary School made electrical circuits at family Science Night as part of a lesson on energy.



As Eisenhower Elementary collected data during their energy audits (pictured above), the team used their own custom data sheets to collect information such as which classrooms were using half-lighting a shutting down computers at the end of the day.

also created custom forms to monitor energy usage in unique spaces like the computer lab and the laboratory. Students performed weekly patrols, and returned their completed audit sheet to their team leads. The resulting data helped focus their efforts and achieve exceptional energy savings.

Newport-Mesa Unified School District

Ensign Intermediate School:

PowerSave Team Online

The Ensign Energy Patrol knows there's something to being tech savvy! This year, the 7th grade Energy Patrol designed their very own website to spread the savings message to the student body. The site is student designed and managed, and includes information about activities, savings successes, and announcements with easy energy savings tips. Students asked visitors to take the short energy efficiency pledge, reaching 500 participants. Find their website at www.ensignenergypatrol.webs.com.



To compile their data and share online, the Ensign Energy Patrol (pictured here) designed their very own website.

6. Interpret Data and Develop Recommendations to Save Energy

Learning how to make meaning of the influx of energy data related to the school is a key component of PowerSave Schools, but figuring out how to share and encourage behavior change informed by the data is just as important! After the data gathered from student energy audits is compiled, organized, and uploaded to each school's website, students then "Interpret Data and Develop Recommendations to Save Energy" under this benchmark. The PowerSave Teams below demonstrate that the best foundation for getting others to pay attention, understand, and heed their recommendations for curbing energy appetites is solid data analysis!

Corona-Norco Unified School District

Norco Elementary:

Students Take Lead in Presenting PowerSave Program

Norco Elementary's PowerSave students created their own Powerpoint presentation to educate the rest of the student body about energy efficiency, and introduce them to the PowerSave program. The comprehensive presentation covered everything from the major sources of electrical power and their impacts on the environment, to the best ways to save energy at school and the particular policies the PowerSave team was spearheading. The students created slideshow themselves (based on information gathered from their Road Map Guide and from their own experience collecting data at their school), and presented to homeroom classes throughout the year.



Norco Elementary's PowerSave Team shared their recommendations to save energy via a multimedia PowerPoint presentation.

Newport-Mesa Unified School District

Costa Mesa High School:

Lamp Change Out Estimates Hundreds in Savings

Costa Mesa High School PowerSave team students discovered that by simply replacing 32W T-8 bulbs with their 28W equivalent, they could save the school a lot of money! After completing the Student Energy Audit Training workshop and taking a tour of the UC Irvine campus with facilities administrators, the PowerSave team realized that thousands of dollars are spent each year to light hundreds of bulbs in classrooms across the Costa Mesa campus. Students counted

approximately 4,400 bulbs and suggested replacing the standard 32W T-8 bulbs with 28W bulbs.. Their recommendations will be piloted in one classroom in the fall, and the school anticipates \$3,150 in savings as a result of the project!

7. Refine and Carry Out Energy-Saving Plan

Beginning the second half of each year, PowerSave Teams revisit and refine their initial energy-savings plans and come up with new ways to ramp up their savings in the spring. Now that they're more experienced, the teams can identify more advanced energy-saving areas of focus, such as scheduling HVAC or appliance use, encouraging computer power-down routines, or assessing potential lighting retrofits. Here are some examples of ways PowerSave Teams ramped up their energy saving plans in the second semester under this "Refine and Carry Out Energy-Saving Plan" benchmark.

Chino Valley Unified School District

Anna Borba Elementary School:

9% energy use reduction for shut down over Spring Break!

Team Lead Kara Sesma from Anna Borba Elementary School trained her 35 5th grade students to conduct classroom visits to remind teachers to curb energy consumption before long weekends or holidays when the school is vacant. Using a school map, teams of 2-3 students divvied up the classrooms to monitor. At each classroom, students encouraged teachers to unplug appliances, adjust thermostats, and turn off lights at the end of the day. To fine tune the project, Ms. Sesma recruited her after-school daycare students to visit rooms that weren't accessible during the school day. All the teachers responded positively to the classroom visits, commenting about how much they liked having personal reminders. And, the numbers support the success of the students' efforts – Anna Borba reduced electricity costs by 9% during Spring Break 2012, compared to the previous year!



Anna Borba Elementary School's PowerSave Team (pictured above) boosted their energy savings by shutting down lighting, HVAC and appliances over Spring Break.

Chino High School

PowerSave Team Uses Last Year's Dollar Savings to Invest in Their Future

Chino High School's PowerSave Team came full circle as they used funds from their 2010-11 energy savings to purchase programmable power strips to increase savings for 2011-12. The team purchased 100 power strips for a trial period. The power strips were programmed and installed in computer labs on campus, administrative office equipment, and a few classrooms to turn off appliances when they are not being used. For example, the power strips in the computer labs automatically turn off computers when school hours end. Who knows what energy efficiency technology Chino will invest in with their 2011-12 energy savings?

Corona-Norco Unified School District

Foothill Elementary School

Student Energy Patrols Give Green Stars to Energy Savers

Foothill Elementary recognized that a complete energy-saving plan demanded enforcement of energy-saving behaviors. To address this challenge, students were assigned to patrol classrooms to observe classroom behaviors. Researchers in environmental behavior have found positive reinforcement far more effective than negative feedback, so the patrols gave Green Star awards to classrooms that had positive results on their energy-saving check lists. These awards were placed prominently in classrooms to commend both staff and students on their energy savings and to motivate other classrooms to strive for the award.

Kennedy High School:

Custodian Helps Students Bump Up Energy Savings

Kennedy High School's PowerSave students got off to a strong start on their energy-savings program by targeting classroom lighting, but the involvement of their head custodian—and his awareness of the facilities systems—allowed them to achieve even greater savings in the second half of the year. By adjusting the settings of their HVAC system—having it come on a little later in the morning, and shut off a little earlier in the evening—he was able realize significant energy savings, without sacrificing the comfort of students or staff. The head custodian also noticed that the outdoor lighting was kept on all night, at considerable expense to the school. By setting the external lights to turn off after hours of use, he helped the school realize energy savings of over 20%!

Newport-Mesa Unified School District

Back Bay High School:

Energy Savings Revisited

The Back Bay High School PowerSave Team takes energy savings seriously. PowerSave students at Back Bay, a small continuation high school, achieved an impressive 20% energy reduction by visiting classes on a weekly basis and making a strong case with staff and faculty. Students convinced teachers to remove unnecessary appliances, such as personal refrigerators, from their classrooms by encouraging the use of the main fridge and enforcing weekly clean-up practices. Every class now uses half lights or no lights because some classrooms have enough daylight coming through the windows. Back Bay demonstrates that even small schools can achieve big savings!

Lake Elsinore Unified School District

William Collier Elementary School

Students Strategize a Demand Response

As an experienced PowerSave Mentor School, William Collier was prepared to refine their energy-savings plan and examine further ways to reduce energy-consumption beyond the strategies they were already using, such as turning off lights and closing doors when exiting a room. For example, students teamed up with their custodian to program the automatic turn-on and shut-off times on all computers. This action not only reduced computer phantom loads, but the custodian also staggered the times to decrease the school's electricity surge at the start of each school day. This decrease in demand helps Southern California Edison with their demand response goals, which ultimately means fewer power plants and fossil fuel emissions in the community.

Elsinore High School:

Upgrade the Lights, All of the Lights

Also a Mentor School, Elsinore High School's PowerSave Team utilized their 2 years of experience with the PowerSave Schools Program to go beyond behavior change and institute technological retrofits at their school. The team decided to focus on lighting and made recommendations to upgrade lighting around the library, lighting in the school's theater, and lighting in the restrooms to more efficient lamp types. Additionally, the team recommended outdoor security and football stadium lights to be powered by solar energy. Congratulations to Elsinore High for thinking big and bright and efficient!

8. Involve the Whole School

With energy-saving activities in full swing and energy use data collected and analyzed, it's time to share energy findings with the whole student body and inspire everyone to get involved. Here are a few of the countless ways that PowerSave Schools involved their school communities in their efforts to save energy and achieve the "Involve the Whole School" benchmark.

Corona-Norco Unified School District

Adams Elementary School:

Assembly Inspires Student to Write Energy Hog Play

One Adams Elementary PowerSave Team student was so inspired that she wrote an original short play about saving energy. After watching the Energy Hog assembly, 5th grader Izabella Petrosky wrote a short 3-minute play entitled “Energy Hog” to teach her peers that it’s not cool to waste energy. Five 5th and 6th grade PowerSave team students performed and filmed the play, which was circulated to all the school’s classes. Izabella and other Adams’ students used their creativity to enhance the effectiveness of their savings message!

Anthony Elementary:

Team Lead Shares Successes with Fellow Faculty

Anthony Elementary’s Team Lead didn’t keep her successes to herself; she used the regular faculty meeting to let her colleagues know about her team’s achievements. She shared the team’s initiatives, energy-savings tips, and the monthly savings numbers at the meetings. Keeping the whole school staff aware of the PowerSave Team’s efforts helped create buy-in among the whole staff.

Franklin Elementary:

Student’s Put Fun Face on Efficiency

Franklin Elementary’s PowerSave Team came up with a secret weapon to increase efficiency: FUN. They held a mascot contest, asking kids to create their own energy-saving heroes. Winners of the contest were chosen by the students, and they were then featured on posters for the program. They’re planning to use these characters in cartoons that will go home to parents.



Students at Franklin Elementary involved the whole school in their energy efforts through a poster competition to develop a cartoon mascot to promote energy saving efforts.

Norco Elementary:

700 Students and Teachers Reached with Energy Savings Tips!

Students in Norco Elementary’s PowerSave team took to the airwaves to spread their energy-saving message to faculty and fellow students. Focusing on the Big Three areas of energy savings (lighting, HVAC and plug load), Norco students used the school’s P.A. system to make quick weekly addresses about what each member of the school community could do to save the school energy and money. They stressed simple behaviors, such as: “Last Out, Lights Out” (making sure that the last person to leave a room turns off the lights), turning off computer monitors, and making sure that doors were closed when the air conditioning were running. The P.A. campaign not only raised awareness of the PowerSave Team’s efforts, but also contributed to the school’s first month savings of almost 10% (a number that continued to rise throughout the year).

Norco Intermediate

School Invites LPL to Discuss Career Opportunities

Norco Intermediate’s team didn’t have to go far to find an advocate for green careers—their own LPL was glad to help them spread the word. In a series of assemblies that reached the whole school, their LPL talked about what had led him into a green job, and then discussed the multiplicity of career opportunities that were open to them. Students also learned about which fields of study—especially STEM classes—would play the biggest roles in future green businesses.

Roosevelt High School:

PowerSave Students Partner with ACE for Biggest Loser Campaign

Roosevelt High School reinvigorated their program with an assembly by the Alliance for Climate Education (ACE). The presentation demonstrated the real-world impact of climate change on today's teenagers—and what they can do to address the problem. Inspired PowerSave students then signed up for ACE's Biggest Loser Contest, in which schools compete to see who can shed the most pounds of CO2 emissions. Roosevelt's team enlisted 17 teachers to change their behavior over a two week period—trying to curb energy waste through smart use of lighting and plug load management. The school's participation in contest helped bring attention to the schools PowerSave program, and increased energy-awareness school-wide.

Rosa Parks Elementary:

Energy Hog Puts Ugly Face on Energy Waste

Rosa Parks Elementary was one of many elementary schools that hosted an Energy Hog assembly. The assemblies, performed by PowerSave Local Project Leaders and PowerSave/Green Campus college interns, dramatize energy-wasting behaviors through the Alliance to Save Energy's Energy Hog character—a larger than life watt-swilling pig. Addressing the students as "Energy Hog Busters," the PowerSave staff taught kids to be on the lookout for "energy hogs," common energy-wasting behaviors that surround them every day, at home and at school. Students then cheered and jeered the appearance of actual Energy Hog, a five-foot incarnation of energy waste, and delighted in their new-found ability to ban the beast from their school.



Rosa Parks Elementary hosted an Energy Hog assembly, which features a gnarly, energy-wasting hog (featured above) who gets scolded by a "hog buster" who teaches students about the important of energy efficiency.



Sierra Vista's PowerSave Team posted these funny, ambiguous photos around school to build suspense before introducing the PowerSave program via a video broadcast.

Sierra Vista Elementary:

Exceptional Students Stage Spectacular Launch

Sierra Vista's Team Lead tapped into the incredible energy and imagination of her Intensive Intervention class to launch an outstanding program success. These special-needs students created a "Who is the Green Team?" campaign that captured the attention of the entire school. They wore elaborate green disguises, photographed themselves, and then created posters that asked fellow students to guess their true identities. After building suspense, the team revealed themselves in a video broadcast throughout the school, in which they also introduced the PowerSave program and the team's goals. Sierra Vista's stellar program launch demonstrates the student leadership opportunities provided by the PowerSave program.

Newport-Mesa Unified School District

Whittier Elementary School:

Energy Efficiency Finds a PAL at Whittier Elementary

The Whittier Supreme PowerSave Team went above and beyond to get the energy savings message out to the whole school. Achieving a 14% savings in its first year, the Whittier Supreme PowerSave Team utilized its 5th and 6th grade Peer Assisted Leadership (PAL) program to spread the energy savings message. Posters around school encouraged staff, faculty, and students to help reach the 15% goal to reduce energy waste. In spring, the team organized a Green Week complete with an energy efficiency skit, wear green to school day, and organized green games during lunch time to help students learn energy do's and don'ts. The team also held a Green Door contest to come up with the best energy conservation

message. Two prizes were awarded to the winners for grades K-3 and 4-6 classes. 95% of the student body participated, making the event a huge success!

Wilson Elementary School:

An Energy Efficient Holiday

To get the student body into the holiday AND energy efficient spirit, the “Go Green” Team at Wilson Elementary performed energy themed holiday songs. The 6th grade team memorized and performed songs like “Rudolph the Unplugged Reindeer” and “An Energy Efficient Holiday” to classrooms before the winter break. The songs were a great way to remind the school community to save energy, especially before they left for the month-long break. During this period, the school doubled their average savings, showing the importance of shutting down during breaks!

9. Involve Students in Green Career Activity

“Green” jobs that focus on environmental sustainability are increasing in number, and the time is ripe to train the next generation of energy professionals! PowerSave Schools students of all ages learn about the variety of green career opportunities available, through speaker presentations and research projects that focus on such topics as energy efficiency, renewable energy, transportation, green building, and waste management. By engaging in hands-on energy-saving projects, students learn important technical and non-technical skills that help prepare them to enter the green workforce. Here are a few examples of how schools exposed their students to green career opportunities as they worked to achieve the “Involve Students in Green Career Activity” benchmark on the PowerSave Schools Road Map.

Chino Valley Unified School District

Gerald F. Litel Elementary School:

Students Learn About Green Careers Related to Water Conservation

5th grade students at Gerald F. Litel Elementary visited the Chino Valley Water Basin for an Earth Day activity to learn about green careers related to water conservation. Students learned about water shortages in California and the consequent green careers related to drought tolerant plants, hydropower and water purification. Students also learned about the relationships between water and electricity, including how electricity is needed to move water and how dams can create electricity.

Newman Elementary School:

Guest Speakers Show Students the Path to Green Careers

Newman Elementary School’s PowerSave Team welcomed a flurry of guest speakers to discuss the paths to different types of green careers. On the topic of recycling, a guest speaker from the Chino Recycling center visited the school to discuss the recycling process and the careers it demands. Later in the year, a compost company visited students to discuss how compost is created from food waste and other materials. In addition, a representative from Southern California Edison visited a class to discuss how to reduce energy consumption at their homes and the careers related to electricity generation and efficiency.

Ramona Junior High School:

Career Day Helps Prepare the Workforce

Ramona Junior High School’s PowerSave Team hosted a Career Day with several presentations about green jobs. Participating organizations included Southern California Edison’s Planning and Development Department, Inland Empire Utilities Agency Water District, and Santa Ana Watershed Association. These organizations informed students of types of green careers in their respective fields and the education and skills required to attain such jobs. As legislatures strengthen environmental law standards in CA, demand for these jobs is rising, and Ramona Junior High School is helping to prepare the workforce.

Corona-Norco Unified School District

Prado View Elementary School:

150 4th-6th Graders Participated in the Green Jobs Scavenger Hunt

To celebrate Earth Day, PowerSave Team teacher, Katrina Mitchell designed a Green Job Scavenger Hunt to raise awareness about green professions. Using NASA's Climate Kids Green Careers page, Ms. Mitchell put together a short scavenger hunt assignment for 4th-6th graders. Students answered two basic questions about each green profession such as a Recycling Program Educator, Renewable Energy Scientist, and Home Energy Auditor, and answered each question to earn a small prize. Approximately 150 Prado View students participated, raising their overall awareness about opportunities in the green industry!

River Heights Intermediate:

Local Project Leader Gives Green Career Assemblies

River Heights Intermediate took advantage of Career Week to give their PowerSave Local Project Leader a chance to talk about his own path to a green career. He spoke about his work as an author, and how the experience of writing a book about seal made him appreciate the impact of our energy use on the natural world. After describing the scope of our energy challenges, he introduced students to a broad range of career opportunities in green energy, and the educational pathways that could lead them there. Students prepared questions, focusing in particular on the ways in which they could make their own dream jobs a little greener.



At River Heights Elementary, the PowerSave Local Project Leader gave a presentation on green careers and students prepared questions about how they could make their own dream jobs greener.

Newport-Mesa Unified School District

Adams Elementary School

PowerSave Students Educate Their Peers about Green Careers

The Adams Elementary PowerSave Team used their creativity to educate the school community about green careers! In the spring, 5th and 6th grade PowerSave Team students researched and designed a short Power Point presentation about a green career of their choosing. The most popular presentation, entitled "Trashion Fashion," focused on fashion designers who use recyclable materials or even trash as the material for their designs. Presentations were then shared with upper grade classes, building their own awareness as well as increasing the school's awareness of green careers.

Corona del Mar High School:

Green Campus Alumni Share Keys to Success

Three PowerSave Green Campus alumni, graduates of the university version of the PowerSave Schools program, presented to 90 AP Environmental Science students at Corona del Mar High School to share tips and tricks to get a job in the energy/environmental industry. Panelists talked about their profession and their career path, but also shared valuable lessons about college life. Students learned the keys to success post college are to obtain work experience through an internship/volunteer position, to do what you're most passionate about, and network with potential employers.



Alumni from the Alliance to Save Energy's PowerSave Green Campus Program at UC and CSU Universities visited Corona del Mar High School to discuss their path to green careers, including lessons about their college educations.

Costa Mesa High School:

800 Middle/High School Students Attend Green Career Fair and Panel

The Costa Mesa High School PowerSave Team hosted its first annual Green Career Fair welcoming 800 7th-12th grade students, and 500 students at the Green Career Panel! Featuring over 15 exhibits by local utilities companies, non-profit sustainability organizations, and local colleges and companies represented, the PowerSave team held a hugely successful event to introduce students to sustainability initiatives over the day-long affair. Students learned about solar heating, energy efficient bulbs, college preparatory courses, and utility practices to conserve and clean our water and reduce waste and energy consumption. The panel featured local businesses and a keynote from a UC Irvine professor. Due to the enormous success of the event, Costa Mesa High plans to host the event again next year.



At Newport Harbor High School, Sole Technology's Environment Affairs Representative gave a guest presentation to discuss her career path and how she developed a passion for energy efficiency.

Newport Harbor High School:

Sole Technology Engages Newport Harbor AP Environmental Science Students

May Chiu, Sole Technology Environmental Affairs Representative, spoke to 30 AP Environmental Science students about career opportunities in the sustainability field. A former PowerSave Green Campus intern, Ms. Chiu shared her career path, from working on energy efficiency programs at her alma mater, UC Irvine through her current role as environmental compliance specialist at Sole Technology, a surfer and skateboard apparel company. Highlighting the value of networking, gaining work experience, and choosing a field you are passionate about, Ms. Chiu emphasized strong academic performance and professional development opportunities.

Pomona Elementary School:

Local Gardener Educates Students about Organic Gardening

In early 2012, Pomona Elementary School received funds from the American Heart Association to plant a small fruit and vegetable garden on the school grounds. Each grade level was assigned a plot of land and plants to care for. The Pomona PowerSave Team invited the Assistant Manager from a local gardening store to speak to students about how to care for the fruits and vegetables, and shared what led her to her current career path. Students went home more knowledgeable about opportunities in the green field, and with greener thumbs!

Wilson Elementary School:

OCC Sustainability Coordinator Visits the "Go Green" Team

Mike Carey, Orange Coast College Sustainability Coordinator, paid the "Go Green" team at Wilson Elementary a special visit to educate 6th grade students about recycling and green careers. Mr. Carey informed students that the typical Orange County resident throws



To educate students about green careers, Pomona Elementary's PowerSave Team invited the Assistant Manager from the local gardening store to not only discuss her path to a green career, but to give the students tips on their own school garden.

away three times as much garbage as the average American, and that throwing away recyclables such as paper, plastic, and glass is another form of energy waste. He also informed the students that his role began as an intern for the Orange Coast College Recycling Center, which then developed into a full blown career as the Sustainability Coordinator due to his passion for protecting the environment. “Go Green” team students learned the valuable lesson that a small interest can grow into a lifelong career path.

10. Share Recommendations; Report on Savings and Achievements

As the school year comes to an end, there is no better time to celebrate the PowerSave Team’s accomplishments than to report savings and achievements to the whole school community. Here are some creative and innovative ways PowerSave Schools reported their successes and best practices from the school year while powering through the “Share Recommendations; Report on Savings & Achievements” benchmark.

Corona-Norco Unified School District

Pollard High School:

PowerSave Students Illuminate Administrators

Pollard’s administration was worried that PowerSave students’ lighting recommendations might jeopardize the school’s top priority: student learning. They were concerned that half-lighting could lead to half-learning. PowerSave students decided to research the issue. Consulting recommendations from the Department of Education and the Illuminating Engineering Society, the students constructed a report showing that half-lighting usually yields light levels that are closer to ideal than full lighting. They presented their findings to the administration, gaining a valuable experience in student leadership. Their experience shows that students armed with data are the most effective ambassadors of change.

Riverview Elementary:

PowerSave Student Council Members Share Success Stories

Riverview Elementary’s PowerSave team included many student council leaders. These students deliver weekly updates on student government activity to every class in the school. The PowerSave team decided to use this opportunity to keep their peers informed about the program, their recommendations, and their successes. Student council members shared energy-saving tips, and provided updates on the school’s total energy savings whenever the reports became available. Riverview’s example shows how partnering with existing school clubs and organizations and broaden the impact of a school’s program.

Corona-Norco Unified School District

Washington Elementary:

Schools Makes Energy Savings Graphic

Washington Elementary wanted to make sure everyone had a vivid understanding of how much money their program was saving the school. Knowing that a picture is worth a thousand words, they created an eye-catching “Piggy Bank” poster that displayed the schools savings numbers in a way that was clear and engaging. By prominently displaying the poster, they were able to give the whole school a tangible appreciation for the benefits of energy efficiency, and motivate the whole school community to strive for even greater savings.



To emphasize the monetary benefits of energy efficiency, Washington Elementary’s PowerSave Team designed the pigg-bank graphic featured above and posted it throughout their school.

11. Educate and Engage Parents and Community Members

Once PowerSave Schools students and staff have explored ways to save energy in school, they can take that information home and into the broader community, generating a powerful ripple effect for saving energy and money. Here are some ways that schools utilized their knowledge and skills for the good of their communities.

Chino Valley Unified School District

Rhodes Elementary School:

Rhodes Elementary Writes to the School Board for Support

While advancing their energy-savings plan, Rhodes Elementary School realized they needed the district on their side to continue to save more energy. The students decided to launch a letter writing campaign and wrote to the district superintendent and school board members. The PowerSave Team informed the district that Rhodes Elementary could save money and energy if they invested in energy efficient retrofits such as updating lighting. Congratulations to Rhodes Elementary for analyzing what installations could make their schools more energy efficient in addition to promoting energy efficient behavior.

Walnut Elementary School

Students Share Their Energy Knowledge with Parents

Walnut Elementary School's PowerSave Team took advantage of existing channels of communication at their school to share their success and encourage parents to support energy-efficiency activities at the school. One of these communication strategies was to include reminders for families to conserve energy to regular pre-recorded phone messages sent to parents. The PowerSave Team also created energy conservation flyers that were sent home to parents.

Corona Norco Unified School District

Corona Fundamental Intermediate School

PowerSave Team Reaches Out with Social Media

The PowerSave Team at Corona Fundamental cleverly tapped into social media to educate parents and community members about how to save energy, particularly during the hot summer months. The team posted energy-saving tips on the school's Facebook page, which is the school's go-to forum for students and parents and has over 1,000 frequent viewers. Six energy-saving tips were posted included adjusting thermostats as high as comfortably possible in the summer and opting for a 10-14% more efficient Energy Star replacement of their air conditioners if existing units were outdated.

Eisenhower Elementary:

Students Take Energy Savings Home with Them

Eisenhower Elementary's PowerSave Team came up with an innovative way to help their students save as much energy at home as they had at school. They created the Take-Home Energy Challenge—a competition that invited students to use the strategies the PowerSave team had employed at Eisenhower to reduce home electrical bills. Participating students helped their families adopt energy savings habits and, by comparing utility bills over several years, competed to see who could reduce their home energy use by the largest percent. The competition strengthened students' energy awareness, and extended the program into the community.

Jefferson Elementary:

PowerSave Schools Goes Bilingual

Jefferson Elementary's Local Project Leader, Lorraine Gutierrez, reached out to Spanish-speaking parents using her bilingual language skills at Parent-Teacher Association (PTA) meetings. At regular monthly meetings, Lorraine discussed the PowerSave students' progress and presented energy-savings strategies for parents to use at home. Lorraine

translated the information into Spanish for parents who would not understand the message otherwise, and she also answered their questions in Spanish.

Liberty Elementary School:

PowerSave Schools at the Grocery Store

Liberty Elementary's PowerSave Team advertised energy-saving tips on a very popular every-day item—grocery bags. Students worked with a local grocery store to write energy-saving tips directly on grocery bags given to customers. The team continued their work with local businesses as they wrote letters to inform businesses of what can be done to save energy at their offices. Congratulations to Liberty Elementary for spreading the energy efficiency message beyond the walls of their school!

Orange Elementary:

Students Show-off Savings for Proud Parents

The Orange Elementary PowerSave Team used their Parent Night as an opportunity to promote the success of the program, and share energy-saving tips with parents. PowerSave Team students created posters and presentations, and set up tables at which they talked with parents. They showed the energy savings that the school had achieved, and offered advice on saving energy at home.

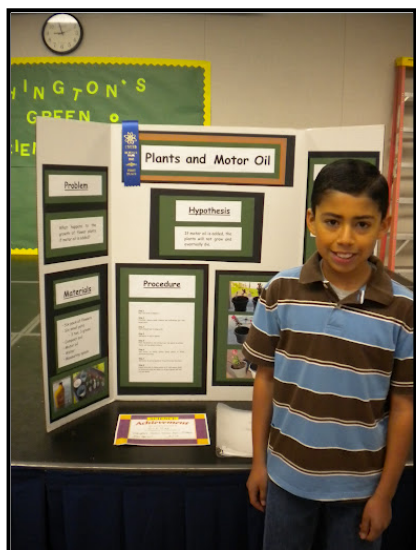
Orange Grove High:

PowerSave Team Plugs in to Community Events

Orange Grove High's PowerSave students took advantage of popular events, including Student Site Council meetings and Open Houses, to set up an informational table to spread their energy efficiency message. Students created a brochure and simple die-cut reminders to hand out to parents and community members. Tips included switching incandescent bulbs to compact fluorescents and closing doors and windows when heating or cooling equipment is running.



PowerSave students frequently educated parents and community members about energy efficiency at Back-to-School Nights, Parent Nights, and school performances. In this photo, Orange Elementary's PowerSave team promotes the success of the program and shares energy-saving tips with parents at their Parent Night.



Washington Elementary hosted their own Green Science Fair, which featured project such as the effects of motor oil on plant growth (pictured above).

Stallings Elementary:

Students Featured in PowerSave Schools Video

Students from the Stallings Elementary PowerSave Team were featured in the Alliance to Save Energy's PowerSave Schools Program promotional video, which will be featured on the Alliance to Save Energy's website at www.ase.org/programs/powersave-schools. Students in the video were filmed while conducting energy audits and eliminating phantom loads by turning off unnecessary appliances. Quotes from the video include, "I have the power to do an energy audit" and "I tell my friends to save energy." The video will be seen across the country as the Alliance to Save energy markets the program and recruits schools in other states.

Washington Elementary:

Students' Science Smarts Rewarded

Washington Elementary's lead teacher sponsored and created a Green Science Fair. Students were invited to submit projects that focused on sustainable practices and green technologies. The fair was a wild success, and the winning entries went on to

compete in the district science fair. One student won first place in the Environmental Education division for his project “Roof on Fire,” which explored how different roofing materials and colors can make a home more efficient. Their team lead was delighted, saying, “Thanks to the PowerSave program, these students had this wonderful opportunity to investigate environmental science and were publicly recognized for their success.”

Newport-Mesa Unified School District

Corona del Mar High School:

PowerSave Team earns \$1,625 through Home Energy Efficiency Survey (HEES) fundraiser

The Corona del Mar PowerSave Team participated in Southern California Edison’s Home Energy Efficiency Survey (HEES) program with a huge turnout. Students took home a brief questionnaire about home energy use, and for every survey returned, the school received a \$5 donation, while each family received a \$5 Cold Stone gift card and a home energy kit, complete with a LED night light, compact fluorescent bulb, faucet aerators, and low flow showerhead. Returning approximately 325 surveys, 65% of surveys distributed, the team earned the school \$1,625 in funds to support their program!



To involve the community in their energy-saving efforts, Corona del mar High School Participated in Southern California Edison’s Home Energy Efficiency Survey, which includes an energy efficiency retrofit kit for every participating house.

2011-2012 Energy Savings Data

Final Energy Savings Data Table:

The following table lists the energy-savings at each school made possible by no-cost behavior changes. 50% of the monetary savings are returned to the energy saving schools and 50% is returned to the school district.

School	Participation Period	Total kWh Saved	Metric Tons of CO2 Abated	Total \$ Saved	Total % Energy Use Change
Chino Valley Unified School District (CVUSD) 2nd Year Schools					
Anna A. Borba Elementary School	10/2011-6/2012	42,558	29	\$8,161	-17.8%
Buena Vista High School	10/2011-6/2012	36,073	25	\$6,202	-23.3%
Chino High School	10/2011-6/2012	85,651	59	\$10,177	-8.0%
Edwin Rhodes Elementary School	10/2010-6/2011	98,114	68	\$15,137	-26.0%
Gerald F. Litel Elementary School	10/2011-6/2012	56,878	39	\$8,979	-25.1%
Glenmeade Elementary School	10/2011-6/2012	44,997	31	\$9,042	-19.6%
Liberty Elementary School	10/2011-6/2012	84,179	58	\$12,022	-20.9%
Newman Elementary School	10/2011-6/2012	49,514	34	\$9,099	-22.6%
Ramona Junior High School	10/2011-6/2012	114,724	79	\$18,048	-28.5%
Walnut Ave Elementary School	10/2011-6/2012	19,500	13	\$3,260	-7.5%
CVUSD TOTAL	10/2011-6/2012	632,188	436	\$100,126	-17.7%
Corona Norco Unified School District (CNUSD) 1st Year Schools					
Auburndale Intermediate School	10/2011-6/2012	45,930	32	\$9,377	-12.6%
Benjamin Franklin Elementary School	10/2011-6/2012	37,528	26	\$8,261	-15.2%
Bernice Jameson Todd Elementary School	10/2011-6/2012	26,820	18	\$5,354	-8.4%
Citrus Hills Intermediate School	10/2010-6/2011	73,642	51	\$13,955	-9.1%
Corona Fundamental Intermediate School	10/2011-6/2012	24,729	17	\$4,380	-4.8%
Dwight D. Eisenhower Elementary School	10/2011-6/2012	60,708	42	\$11,894	-15.2%
El Cerrito Middle School	10/2011-6/2012	201,273	139	\$38,315	-23.9%
Eleanor Roosevelt High School	10/2011-6/2012	116,460	80	\$19,571	-4.5%
Foothill Elementary School	10/2011-6/2012	36,229	25	\$8,289	-9.1%
Garretson Elementary School	10/2011-6/2012	35,535	25	\$7,513	-9.8%
George Washington Elementary School	10/2011-6/2012	54,549	38	\$11,913	-15.8%
Highland Elementary School	10/2011-6/2012	16,346	11	\$3,648	-6.6%
Jefferson Elementary School	10/2011-6/2012	21,787	15	\$4,197	-6.7%
John Adams Elementary School	10/2010-6/2011	39,125	27	\$8,364	-16.1%
John F. Kennedy High School	10/2011-6/2012	111,186	77	\$20,182	-20.2%
John Stallings Elementary School	10/2011-6/2012	45,486	31	\$9,519	-14.1%
Lee V. Pollard High School	10/2011-6/2012	49,181	34	\$7,091	-9.0%
Lincoln Alternative Elementary School	10/2011-6/2012	6,702	5	\$1,580	-3.1%
Louis VanderMolen Fundamental School	10/2011-6/2012	74,131	51	\$13,599	-15.9%
Norco Elementary School	10/2011-6/2012	30,474	21	\$6,747	-13%
Norco Intermediate School	10/2011-6/2012	26,782	18	\$5,482	-9.7%

School	Participation Period	Total kWh Saved	Metric Tons of CO2 Abated	Total \$ Saved	Total % Energy Use Change
Corona Norco Unified School District (CNUSD) 1st Year Schools (continued from previous page)					
Orange Elementary School	10/2011-6/2012	90,068	62	\$17,878	-20.3%
Orange Grove High School & Adult Education Center	10/2011-6/2012	31,016	21	\$5,345	-3.9%
Prado View Elementary School	10/2011-6/2012	41,786	29	\$9,352	-13.4%
River Heights Intermediate School	10/2011-6/2012	117,680	81	\$22,451	-16.3%
Riverview Elementary School	10/2010-6/2011	20,435	14	\$3,938	-8.3%
Rosa Parks Elementary School	10/2011-6/2012	3,652	3	\$861	-0.9%
Sierra Vista Elementary School	10/2011-6/2012	15,047	10	\$2,889	-6.9%
Susan B. Anthony Elementary School	10/2011-6/2012	27,444	19	\$6,056	-10.5%
Temescal Valley Elementary School	10/2011-6/2012	35,344	24	\$6,972	-9.4%
Vicentia Elementary School	10/2011-6/2012	74,494	51	\$15,160	-20.9%
William McKinley Elementary School	10/2011-6/2012	4,171	3	\$1,074	-1.35
CNUSD TOTAL	10/2011-6/2012	1,546,282	1,066	\$302,447	-10.3%
Newport Mesa Unified School District (NMUSD) 1st Year Schools					
Back Bay High School	10/2011-6/2012	19,802	14	\$2,905	-18.5%
Corona Del Mar High School	10/2011-6/2012	185,401	128	\$17,144	-12.3%
Costa Mesa High School	10/2011-6/2012	89,539	62	\$8,184	-7.7%
Kaiser Elementary School	10/2011-6/2012	5,825	4	\$722	-3.1%
Newport Elementary School	10/2011-6/2012	4,555	3	\$645	-4.1%
Whittier Elementary School	10/2011-6/2012	36,601	25	\$5,851	-15.8%
Wilson Elementary School	10/2011-6/2012	10,482	7	\$1,612	-6.3%
Woodland Elementary School	10/2011-6/2012	6,397	4	\$963	-4.3%
NMUSD 1st Year Schools TOTAL	10/2011-6/2012	358,602	247	\$38,026	-9.9%
Newport Mesa Unified School District (NMUSD) 2nd Year Schools					
Adams Elementary School	10/2011-6/2012	22,178	15	\$3,323	-13.7%
Ensign Intermediate School	10/2011-6/2012	23,610	16	\$2,732	-8.2%
Harbor View Elementary School	10/2011-6/2012	24,719	17	\$3,402	-17.9%
Mariners Elementary School	10/2011-6/2012	35,652	25	\$4,705	-19.2%
Newport Harbor High School	10/2011-6/2012	169,864	117	\$15,271	-11.0%
Pomona Elementary School	10/2011-6/2012	21,043	15	\$3,266	-12.8%
NMUSD 2nd Year Schools TOTAL	10/2011-6/2012	297,066	205	\$32,699	-12.0%
Lake Elsinore Unified School District (LEUSD)					
Elsinore High School	10/2011-6/2012	396,182	273	\$68,456	-19.9%
Ortega High School	10/2011-6/2012	20,889	14	\$3,152	-7.5%
William Collier Elementary School	10/2011-6/2012	26,357	18	\$4,510	-7.7%
LEUSD TOTAL	10/2011-6/2012	443,428	306	\$76,118	-17.0%
TOTAL POWERSAVE SCHOOLS PROGRAM CUMULATIVE SAVINGS, 2011-2012					
All Schools	10/2011-6/2012	3,277,566	2,260	\$549,416	-12.0%

Note on Energy Savings Data

Electricity savings are calculated against a weather-normalized baseline of electricity use that is adjusted for changes in square footage, retrofits, and other factors that affect energy load at each school. Utility Management Services provides a well-documented model of possible savings based on actual utility bills, but it cannot account for all the differences between one year and the next.

